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# LIMITS TO THE EXERCISE OF MONETARY SOVEREIGNTY IN PERIPHERAL COUNTRIES

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## Abstract

The objective of this monograph is to analyze the limits to the exercise of monetary sovereignty in peripheral countries. The existence of a hierarchy of currencies in the international monetary system and its possible consequences for the management of exchange rate, monetary and fiscal policies in peripheral countries is discussed. It is argued that the peripheral condition is not immutable. And that when a country is recognized as being in an unfavorable position in the hierarchy of currencies, at least two paths may be adopted: accept that it is up to this country to continue presenting low international relevance, high poverty rates and a production structure focused on primary-export activities with low added value; or investigate what measures need to be adopted for the country to assume greater international relevance, offer better living conditions for its population and develop a more diversified and technologically sophisticated production structure.

**Keywords:** monetary sovereignty, currency hierarchy, peripheral countries, development.

**JEL Classification:** E62, E63, O23.

# SUMMARY

## INTRODUCTION

Knowledge about the potential and limitations of public finances has advanced significantly since the global financial crisis of 2008. To avoid a major depression, central banks in the most economically advanced countries have increased the monetary base on an unprecedented scale. Since then, the countries supported by quantitative easing have had base interest rates and inflation rates close to zero. This observation provoked an international debate on the need to improve the theoretical models that had been guiding the formulation of macroeconomic policies until then.

This debate gained relevance in Brazil as of January 2019, through a series of articles published by André Lara Resende in the newspaper Valor Econômico. The fact that the author of the articles is a former president of the Central Bank of Brazil with extensive experience in the financial market and recognized academic competence provoked the curiosity of audiences broader than those usually interested in the subject. However, a relevant question has arisen in this debate: to what extent can countries such as Brazil, which do not issue widely circulating international currency, adopt expansionist fiscal and monetary policies without this resulting in accelerated inflation and loss of control in the management of the distributional costs of the public debt?

It is in this context that this paper aims to analyze the limits to the exercise of monetary sovereignty in peripheral countries. We start from the understanding that a government is monetarily sovereign when it issues its own currency[1], but the full exercise of this sovereignty is hindered by limits that need to be evaluated ex-ante by economic policy makers. Otherwise, ill-conceived experimentalism can provoke setbacks with serious economic and social consequences.

The first section of the paper discusses the existence of a hierarchy of currencies in the international monetary system, which would be reflected in different risk premiums assigned to national currencies. At the highest levels of this hierarchy would be the central countries (especially the issuer of the international key currency), which enjoy broad autonomy to set interest rates on their public bonds in accordance with their own development interests. At the lowest level would be the peripheral countries. Since they issue currencies that are not very liquid internationally, they need to pay interest rates that are higher than those practiced by central countries. Otherwise, economic agents would hardly be interested in maintaining in their portfolios public bonds issued in currencies with low international demand. From this monetary and financial asymmetry would result a greater vulnerability of the peripheral countries to the volatility of capital flows and the tendency of these countries to indebt themselves in foreign currency and dollarize their economies.

1 More precisely, a monetarily sovereign government is one that has the following legal prerogatives: i. to determine the official currency of account; ii. to exercise a monopoly over the issuance of money issued in the official currency of account; iii. to establish non-reciprocal obligations (mainly taxes, but also fines, fees, tariffs, among others); and iv. to decide what it will hand over for payments and transfers to the private sector. This is not the case, for example, of European Union member states, which have renounced their monetary sovereignty in favor of the European Central Bank, or of Brazilian subnational entities (states and municipalities), which are users of the currency issued by the Union (DALTO et al, 2020, p.100).

From this perspective, the second section addresses the limits of exchange rate policy in peripheral countries. It is argued that in the absence of international agreements and institutions capable of containing sudden movements of capital inflows and outflows, adopting a flexible exchange rate regime with occasional interventions (dirty floating) to contain excess volatility tends to be the least costly exchange rate regime option, even for peripheral countries. It is assumed that the floating exchange rate regime tends to offer countries that adopt it more freedom to exercise their monetary sovereignty functionally, because it does not establish a commitment to convertibility of the state currency into other currencies or commodities. Thus, there is no risk that the government will default on a promise of its own, because there is simply no promise to convert. Since the floating regime does not need to achieve a determined exchange rate, monetary and fiscal policies can be conducted with a focus on promoting development, reducing the need for very large amounts of foreign exchange reserves and excessive rigidity in controlling public spending to ensure exchange rate stability, avoiding disruptive imbalances in the Balance of Payments.

The third section argues that peripheral countries also face specific difficulties in managing monetary policy. In addition to having to keep basic interest rates above those of central countries, peripheral economies generally have greater structural problems on the supply side. This requires extensive government coordination to deal with the various types of cost inflation, such as wage inflation, profit inflation, imported inflation, and inflation from sectoral supply bottlenecks. If, instead, the government limits itself to controlling inflation on the demand side by manipulating public spending and the interest rate in a way that causes involuntary unemployment of the labor force, the concrete causes of cost increases are not addressed and the result is high unemployment and poverty.

The fourth section addresses the limits of fiscal policy in peripheral countries. It is argued that while monetarily sovereign governments do not depend on prior revenue to spend in the currency they issue, this does not mean that they can or should spend without limits. Spending decisions need to pay attention to at least three crucial aspects: the risk of accelerating inflation, self-imposed constraints by budget laws, and external constraints.

Regarding the risk of acceleration of inflation, it should be noted that the monetary authority alone does not have sufficient instruments to ensure monetary stability. There must be planning and coordination of all government actions, so that public policies may converge towards the implementation of a previously defined development strategy that deals not only with demand inflation, but also with the different types of cost inflation.

In relation to the self-imposed restrictions by the budget laws, the difficulties in instituting an institutional framework for planning and budget management that is functional from the economic point of view, while at the same time favoring cooperation between the branches of government and the federated entities in the processes of elaboration, implementation, monitoring, and evaluation of public policies, are discussed.

As for external restrictions, it is argued that the most difficult challenge to be overcome by the peripheral countries consists in the implementation of public policies with sufficient scope and duration to promote the diversification and technological complexification of their productive activities.

The fifth section deals precisely with the need for policies to promote productive and regional development that offer countries more favorable conditions for the exercise of their monetary sovereignty. It is noted that the peripheral condition is not immutable. Therefore, when recognizing that a country is in an unfavorable position in the hierarchy of currencies of the international monetary system, at least two paths may be taken: accept that it is up to this country to continue presenting low international relevance, high poverty rates and a production structure focused on primary export activities with low added value; or investigate what measures need to be adopted for the country to assume greater international relevance, offer better living conditions for its population and develop a more diversified and technologically sophisticated production structure.

Then a concluding section concludes the paper.

## INTERNATIONAL MONETARY SYSTEM CURRENCY HIERARCHY

Fritz, Paula and Prates (2016) argue that in the international monetary system, currencies are hierarchically positioned according to their degree of liquidity, which derives from the ability to perform the three functions of currency at the international level: medium of exchange; unit of account and denomination of contracts; and store of value. The national currency that performs these three functions at the international level is considered the key currency and is therefore positioned at the top of the hierarchy. The currencies issued by the other advanced countries partially fulfill these functions: Since they have a lower degree of liquidity than the key currency, they are in an intermediate position in the hierarchy of currencies. At the lowest level of this hierarchy are the currencies issued by peripheral countries: these are considered illiquid currencies, because they do not fulfill any of the functions of money in the international sphere.

This hierarchical character of the international monetary system was pointed out by Keynes (1930) in his Treatise on Money; and resumed in his contributions to the Bretton Woods Conference. As pointed out by Skidelsky (2000), during the preparations for Bretton Woods, Keynes was especially concerned about England's condition as a debtor country in the post-World War II period. This concern led him to propose the creation of an international currency (Bancor) and a kind of International Central Bank (International Clearing Union).

Keynes' recommendations were only superficially contemplated with the creation of the International Monetary Fund in 1945. The international monetary system remained hierarchical and asymmetric, with the US dollar assuming the role of key international currency in the post-war period. This situation worsened after the end of the gold standard in 1971, when the Americans announced that their currency would no longer be backed by previously defined quantities of gold.

By announcing the unilateral abandonment of the gold standard, the United States reinforced its condition of hegemon. As observed by Teixeira (2000, p. 9-10):

> By imposing on the world the sovereignty of the dollar (and of a dollar de-linked from gold), the American economy moved to a situation where it is no longer subject to balance of payments restrictions. It can import freely and, in this way, restructure its industrial park, running huge trade deficits: the rest of the world is the problem. It can adopt the strategies it pleases, with a view to maintaining its internal growth, unaware - if it so chooses - of the problems it creates for its partners; let them adjust as best they can. And, in the face of any external threat, it can reactivate the magic formula for salvation, raising interest rates and refluxing the net wealth scattered around the world into dollar-denominated assets.

With the fiat dollar[2] the international monetary system became more dependent on the economic policy choices of the country issuing the international key currency, which intensified the volatility of capital flows in a world economy characterized by the subordination of production systems to the financial logic of business.

This trend of detachment between productive and financial dynamics had already been observed by Veblen (1899, 1904, 1914, 1921). The American economist noted that in the early stages of modern mechanical industry, while mechanized processes were still isolated and small-scale, entrepreneurs were the owners and direct supervisors of industrial equipment (often they were the inventors or innovators themselves), and they were also responsible for supervising the financial transactions of their businesses. As mechanized industry grew, due to progressively more complex techniques, and the concatenation of the various industrial processes and markets became present, the business conjunctures became more varied and more systemic.

The financial aspect of the enterprises began to require greater attention as possibilities for profit or loss arose through purely commercial expedients, regardless of the industrial and technological efficiency of the company. In this way, the production system became increasingly susceptible to cunning manipulation. After all, the main objective of businessmen gradually shifted from the management of industrial processes to a shrewd redistribution of investments from less profitable companies to more profitable ones, and also to the control of commercial conjunctures through investments and coalitions.

Veblen points out that it is often in the interest of businessmen that the natural flow necessary for the efficient conservation of the industrial system is disturbed, because then they can make higher profits. This includes forcing fluctuations in the prices of stocks and government bonds according to their buying or selling interests, regardless of the consequences for the real economy and people's lives.

2 That is, without ballast in physical objects (such as gold) that attest to its value.

This is especially worrisome for countries that issue currencies with low international acceptance. As noted by Fritz, Paula, and Prates (2016), the main characteristics of the current international monetary system are: the fiat dollar as the key currency at the top of the currency hierarchy; the floating exchange rate regime; and free capital mobility. In this system, the interaction between the fiat key currency and the high capital mobility environment has driven the integration of domestic financial markets and financial innovations (securitization, derivatives, etc.), which have resulted in the financial globalization environment, characterized by high volatility - with capital flows, exchange rates, interest rates, and asset prices subject to large short-term fluctuations - and a high degree of contagion.

A system with such characteristics is highly unstable, with profound impacts especially on the economies of the peripheral countries. After all, if on the one hand economic agents find it easier to diversify their investment portfolios, keeping in their portfolios financial assets denominated in different currencies, on the other hand these same agents can easily withdraw significant volumes of investments denominated in the currency of a country that is under speculative attack. And since the currencies issued by peripheral countries have lower liquidity than those of central countries, it is the peripheral countries that suffer most from abrupt movements of capital inflows and outflows, especially during periods of crisis when agents seek to increase liquidity and reduce the risk of their investments.

In the current hierarchy of currencies, only the dollar fully performs the three functions of currency at the international level. The dollar is the currency most used in monetary (means of exchange) and financial transactions (unit of denomination of contracts), as well as being the most liquid and secure asset, and thus the most desired by agents as a reserve asset in the face of economic uncertainties.

Prates (2002) points out that the currencies of other central countries are also used as a means of denomination of contracts at the international level, in addition to being demanded, in a secondary manner, as a reserve asset in the portfolios of international investors. This distinguishes them from the currencies of the peripheral countries, which are rarely used in international contracts and kept as reserve assets in the portfolios of non-residents.

This monetary asymmetry is reflected in different risk premiums assigned to currencies. At the highest levels of this hierarchy are the central countries (especially the issuer of the international key currency), which enjoy wide autonomy to set interest rates on their government bonds according to their own development interests. At the lowest level are the peripheral countries. Being issuers of currencies that are not convertible internationally, they need to pay, when issuing public bonds, higher interest rates than those practiced by the central countries. Otherwise, economic agents will hardly be interested in maintaining in their portfolios public bonds issued in currencies with low international demand.

As will be discussed later, monetarily sovereign governments do not depend on prior revenue collection or the issuance of government bonds to spend in the currencies they issue. Even so, the ability of peripheral countries to exercise their monetary sovereignty is affected by decisions made by central country governments. For example, if a peripheral country issues public bonds with interest rates equal to or lower than those of US bonds, the tendency of economic agents (including residents in the peripheral country itself) will be to direct a larger portion of their investments to US bonds. This will tend to cause a devaluation of the peripheral country's currency in relation to the dollar, with possibly undesirable consequences in terms of controlling domestic inflation and maintaining the real purchasing power of its residents.

Another example: when central countries are in recession or with low interest rates, economic agents are stimulated to direct a larger portion of their investments to peripheral countries. This is what often occurs with the reinvestment of profits by companies headquartered in central countries, but which have subsidiaries in peripheral countries. However, at times of greater dynamism in central countries, or when their monetary authorities decide to increase the reference interest rates of their economies, or even when there is an increase in the preference for liquidity (due to increased uncertainties in the world economy, for example), economic agents tend to redirect investments that had been diversified to peripheral countries to central countries. Such movements often occur independently of the macro and microeconomic fundamentals of the economies of the peripheral countries and the balance sheets of their companies.

The destabilizing effects of these flows became explicit in the financial crises of the 1990s. Prates (2002) notes that these crises mainly affected the so-called emerging countries, i.e., the peripheral countries that were inserted in the contemporary international monetary and financial system from the end of the 1980s, through the liberalization of their financial systems and capital accounts, becoming emerging markets. The author argues that the form of insertion of these countries in an intrinsically unstable environment - in which the fiat dollar is the key currency, liberalized and globalized market finance is dominant, and financialization is the systemic pattern of wealth management - has made them more vulnerable to financial crises.

The recurrence of financial crises (foreign exchange, banking, domestic financial, etc.) is a phenomenon characteristic of the liberalized and globalized system of finance, in which shocks are easily transmitted across borders (and thus manifest themselves in foreign exchange markets) and from one market to another (capital and credit markets), resulting in strong fluctuations in capital flows, asset prices and exchange rates. However, Prates (2002) points out, in the case of emerging countries the currency crises were more frequent and the banking crises more severe. Moreover, banking crises tended to turn into currency crises, just as the latter threatened the stability of domestic financial systems.

It is important to note that the so-called failures of financial markets (imperfect and/or asymmetric information) and the phenomena arising from them (credit rationing, panic situations, and herd behavior) are intrinsic aspects of contemporary economies (MINSKY, 2013).

In this intrinsically unstable context, the volatility of capital flows in search of appreciation in the financial sphere is problematic especially for the peripheral countries. The absorption of these capitals originated or fed credit cycles and consumption bubbles (Latin American countries) or speculative bubbles in the asset market (Asian countries), resulting, in most cases, in the weakening of both external accounts and domestic financial systems.

In general, the financial crises in emerging countries were generated from the absorption of intense capital flows attracted by interest rate differentials, associated with restrictive monetary policies and managed exchange rate regimes, in a context of financial liberalization and excess international liquidity. These capital flows resulted in exchange rate appreciation in emerging countries, deficits in their current accounts, weakening of the banking system, deterioration of the financial situation of their companies, and consumption or speculative bubbles in asset markets.

As observed by Prates (2002), an additional factor of instability in emerging countries stems from the fact that several of these countries allow bank loans in (or denominated in) foreign currency. This allows banks to transfer the exchange rate risk to domestic borrowers, since the funds raised in the international financial market can be passed on either in the same currency in which they were raised or with exchange rate adjustment. When these loans are directed to non-tradable sectors (such as services and construction) or to the acquisition of assets (stocks, real estate) or consumer goods, the exchange rate risk is not actually neutralized. It becomes a greater credit risk because a devaluation has deleterious impacts on the payment capacity of the borrowers, who usually do not have revenues in foreign currency.

The apparent lower risk implicit in foreign currency loans motivates banks to expand this type of credit, finding support in the demand from companies and households due to the underestimation of the exchange rate risk (given the context of stability or appreciation of the exchange rate). Consequently, the volume of transactions with currency mismatch increases and, thus, there is greater financial fragility of the economy to the exchange rate devaluations that usually accompany the reversal of these flows.

Sudden reversals in flows can cause large financial crises, as the accompanying exchange rate devaluation causes an automatic increase in the financial fragility of banks, firms and households with foreign currency liabilities, which reinforces the exchange rate crisis, as efforts to pay off foreign debt or hedge uncovered foreign currency positions accentuate pressures on the exchange rate. Besides this, the traditional policy instruments to contain or minimize exchange rate crises, such as interest rate increases and exchange rate devaluation, lose their effectiveness, as they end up worsening the financial situation of these agents.

Despite the specificities that distinguish the crises faced by Latin American and Asian countries, Prates (2002) observes the existence of points in common both in relation to their origin (the form of insertion in the globalized international financial system) and with regard to their internal dynamics (the interaction between exchange rate crises and domestic banking crises, resulting in the outbreak of the so-called twin crises). Among the explanatory factors for the occurrence of these crises, the following stand out: the destabilizing potential of capital flows; foreign indebtedness; and the denomination in foreign currency of domestic financial transactions, which create the link between the exchange rate and banking crises.

However, these aspects are not sufficient to explain the causes of the greater vulnerability of the peripheral countries in relation to the central countries in facing the instability of the monetary and financial system. The greater vulnerability of these countries to the systemic instability that characterizes the financial globalization environment is associated with their subordinate and peripheral position in the international monetary system. According to Prates (2002), it is the monetary and financial asymmetries of this system that explain not only the greater vulnerability of the peripheral countries to the volatility intrinsic to capital flows, but also the tendency of these countries to indebt themselves in foreign currency and dollarize their economies. These two factors would result, in turn, in currency mismatches and in reciprocal feedbacks between exchange rate and banking crises, which would explain the predominantly twin character of financial crises in these countries, unlike what occurs in central countries.

In the absence of international agreements and institutions capable of containing the sudden movements of capital inflows and outflows, the instruments available to peripheral countries to defend their economies would be more limited than in central countries.

Starting from this reflection on the existence of a hierarchy of currencies in the international monetary system, the next sections will discuss possible limits faced by peripheral countries in managing their exchange rate, monetary and fiscal policies.

## LIMITS OF EXCHANGE RATE POLICY IN PERIPHERAL COUNTRIES

A crucial aspect of economic policymaking in all countries is the definition of the exchange rate regime to be adopted. Opting for the fixed exchange rate regime means promising the conversion of the state currency into something that is not created by the state: usually a quantity of a physical object (such as gold) or a currency issued by another country. Countries that choose this path usually do so: in the expectation of benefiting from greater acceptance of their currency by internal and external economic agents; to use their exchange rate policy as an instrument to control inflation; or to mitigate uncertainties arising from exchange rate volatility.

Vernengo and Caldentey (2019) recall that the accelerated growth of Latin American countries in the 1950s and 1960s occurred with relatively rigid and appreciated exchange rates, which contributed to lower prices of imported machinery and higher real wages.

However, since the end of the gold standard in 1971, the exchange rate regime most used in the world is the floating one[3]. This occurs in large part because, in the absence of institutions that perform the functions of Central Bank and Treasury at the international level, as unsuccessfully proposed by Keynes during the Bretton Woods Conference, the maintenance of fixed exchange rate regimes is highly problematic. Either very high surpluses in current transactions are obtained (as currently practiced by China, mobilizing a huge amount of people to produce goods and services that will be enjoyed in other countries), or recessive adjustments are implemented (which tend to provoke a vicious circle of rising unemployment and falling domestic income).

As discussed in the previous section, the main characteristics of the current international monetary system are the fiat dollar as the key currency at the top of the currency hierarchy, the floating exchange rate regime, and free capital mobility. In a system with such characteristics, the cost of adopting a fixed exchange rate regime tends to be high.

The problem with the fixed exchange rate regime is that it requires the accumulation of sufficient foreign exchange reserves (such as gold and foreign currencies) to suppress mistrust about the government's ability to keep its conversion promise. Since national economies are subject to various uncertainties, this mistrust can quickly turn into a rush by holders of the domestic currency to convert it before the country's foreign exchange reserves are exhausted, which can make it difficult or even impossible to maintain exchange parity.

As noted by Dalto et al (2020), to accumulate the foreign exchange reserves needed to maintain the fixed exchange rate regime when the exchange rate is appreciated there are basically two alternatives:

- obtain a surplus in current transactions; and/or
- to raise loans abroad.

3 It is important to note that the challenge of fixing the exchange rate only occurs when this rate is artificially valued, that is, below its level in the absence of foreign exchange intervention. In this case, it is necessary for the intervening monetary authority to increase the supply and/or reduce the demand for/of foreign currency, which it does not issue, in the foreign exchange market. To do this, the government can reduce its reserves to the limit of their depletion, offer sufficiently attractive financial assets (usually paying exceptionally high interest rates), or reduce the income of importers. A government seeking the opposite result, exchange rate devaluation, by fixing the exchange rate does not face the same type of difficulties. After all, this objective can be much more easily achieved through the supply of domestic currency that the intervening monetary authority creates. This is the case of China, for example, whose development strategy included the state accumulation of international reserves. For this accumulation of reserves to be possible, the development of an extremely competitive export sector was necessary, combined with foreign exchange intervention through the public purchase of reserves. On the one hand, the demand for exceptionally cheap Chinese goods for foreign consumers generated a generous and persistent supply of dollars in exchange for Chinese remimbis. On the other, the Chinese Central Bank's purchase of dollars represented an infinitely price elastic supply of remimbis at a price perfectly knowable to anyone who wanted to buy them with dollars. Since the vast majority of remimbis obtained in exchange for dollars were used to purchase Chinese goods, the accumulation of reserves by the Chinese Central Bank manifested itself as Chinese trade surplus (and U.S. trade deficit). Finally, it is important to note that the mere accumulation of foreign currencies in exchange for commodities materially valuable to the country issuing the foreign currency has no way of configuring, in and of itself, a functional economic development strategy. The functionality of this strategy is manifested in the use given to these international reserves. In the Chinese case, the high reserves were constituted for the eventual acquisition of productive resources unavailable in Chinese territory and indispensable to the economic development of that country (such as fertile land, energy and mineral reserves), purchasable only in foreign currencies. Other materially richer countries certainly do not need such extreme sacrifices as in the Chinese case, since the accumulation of international reserves is not necessary for the acquisition of domestically available productive resources.

It turns out that achieving a surplus in current transactions involves complex structural issues, such as export capacity, import requirements, and net income sent/received from abroad. Faced with a possible race to convert domestic currency, the usual solution is usually to adopt monetary and fiscal policies that slow economic growth in order to reduce the need for imports and thus generate a surplus in current transactions. But this tends to keep a significant portion of the population in a situation of involuntary unemployment and generate low economic growth, in a recessionary cycle that causes more unemployment and less economic growth.

Borrowing abroad, in turn, requires that financial institutions or other governments be willing to lend. And even when this happens, the borrowing government is subject to the risk that it will not be able to honor the debt incurred in the currency it does not issue.

Faced with these difficulties, a third alternative is for the government to change the rate at which it guarantees the conversion of its currency. The government can deliberately and unilaterally announce a devaluation of its currency against all others, so that the same amount of domestic currency will be converted for a smaller amount of foreign currency. The problem with this alternative is that it tends to generate even greater distrust about the government's ability to honor the convertibility, which may accelerate the race to convert and, consequently, make it even more difficult to maintain the foreign reserves necessary to keep the exchange rate fixed.

Fritz, Paula and Prates (2016) observe that the managed exchange rate policies - in fixed or semi-fixed exchange rate regimes - adopted by emerging peripheral countries in the 1990s proved vulnerable to speculative attacks, which culminated in successive currency crises. As the currencies of these countries are positioned at the lower end of the currency hierarchy, the volatility of capital flows is higher than in the case of central countries. Moreover, these flows are even more sensitive to the monetary policies adopted in central countries, as discussed in the previous section. Since exchange rates tend to be more volatile in peripheral countries, interventions by central banks are often necessary, which reinforces the interaction between exchange rates and interest rates.

There are other possibilities for exchange rate regimes, such as:

- Exchange rate bands - the monetary authority establishes a range within which it accepts exchange rate fluctuation. Adopted in Brazil soon after the Real Plan, until 1999;
- Currency board - stricter form of fixed exchange rate, in which the government guarantees convertibility at a fixed exchange rate by committing to issue domestic currency only to the extent of foreign currency inflows. Adopted by Argentina in the 1990s;
- Dolarization - adoption of foreign currency for direct domestic use. As currently occurs in Ecuador; and
- Monetary union - a group of countries give up their monetary sovereignty in favor of a supranational entity. Currently practiced by the European Union.

However, the floating exchange rate regime tends to offer countries that adopt it greater ability to exercise their monetary sovereignty, because it does not establish convertibility of the state currency into other currencies or commodities. Thus, there is no risk that the government will fail to deliver on its promise to convert, because there is simply no such promise.

In practice, most of the current governments practice the so-called dirty floating. That is, the government announces that its exchange rate regime is flexible, but adopts regulatory and capital flow control measures, besides carrying out, via the Central Bank, occasional interventions in the exchange rate market, with the intention of avoiding:

- Excessive exchange rate volatility
- Reduction in real wages and increase in the costs of importing goods and services, in the case of strong currency devaluation movements; or
- Deflationary pressures and loss of competitiveness of its products and services in relation to similar international products and services, in the case of strong exchange rate appreciation movements.

Given that the global political system is characterized by competition and warfare (including by unconventional means) between states and national economies (FIORI, 2007, 2014), governments cannot be expected to be fully transparent about the strategies and instruments they adopt in defending the interests of their population (or specific social segments of their population).

Therefore, although it is recognized that since the end of the gold standard the floating exchange rate regime is the most practiced in the world, it must also be acknowledged that the governments of the countries that adopt this regime frequently make interventions in the exchange market, besides eventually using regulatory measures and control of capital flows to meet their development objectives.

It is not reasonable to assume, however, that in the face of the high volatility of international capital flows the monetary authorities should publicly commit themselves to pursuing rigid parameters to guide their interventions in the capital market.

Governments maintain foreign exchange reserves and make occasional interventions in the exchange market, but without establishing a fixed conversion rate (the sale/purchase of foreign exchange reserves is done at the market price). Since the floating exchange rate regime does not need to reach a fixed exchange rate, monetary and fiscal policies can be conducted according to objectives other than that of accumulating foreign exchange reserves. With a flexible (or dirty floating) exchange rate regime, maintaining high stocks of foreign exchange reserves basically acts as insurance against speculative attacks. The stocks of reserves needed to guarantee this security tend to be smaller, however, than those that would be needed to guarantee the maintenance of the fixed exchange rate regime.

Another important way for countries to guard against speculative attacks against their currencies is to avoid getting into debt in currencies issued by other countries. Depending on the financing conditions (interest rates charged and payment terms), loans in foreign currencies can be an interesting alternative to enable the import of machinery and equipment that will increase the national production structure, expanding the export capacity and/or reducing future import needs. It is recommended to avoid foreign indebtedness, however, when the activities to be contemplated do not contribute to the increase of the national productive structure, or when the financing conditions available to make this increase feasible are not attractive. After all, the government that borrows in the currency it issues itself enjoys greater autonomy to manage its economic policy than the government that borrows in currencies issued by others.

In summary, in the absence of international agreements and institutions capable of containing sudden movements of capital inflows and outflows, and while the international monetary system continues with its current characteristics, adopting a flexible exchange rate regime with occasional interventions (dirty floating) to contain excess volatility tends to be the most interesting option for an exchange rate regime, including for the peripheral countries.

Still, as we will see below, there are limits to monetary and fiscal policy that need to be observed by economic policy makers.

## LIMITS OF MONETARY POLICY IN PERIPHERAL COUNTRIES

Moderate inflation (of up to 5% per year, for example) is a recurring phenomenon in complex economies. Identifying those who may have benefited or been harmed by inflationary processes demands specific analyses for each sector of the economy, so that one can consider in what proportion each social segment appropriated certain price increases, as well as how much this may have impacted the cost of living[4] or production costs in each sector.[5]

What is of greater concern, due to the impacts they may provoke on the economy as a whole, are the extreme situations of deflation and hyperinflation.[6] Both rarely occur in reality, but the fear that they may happen is capable of impacting the investment and consumption decisions of private agents.

After all, if in a given economy there is a general perception that the general price level tends to fall (deflation), the tendency of private agents is to postpone their spending decisions, so that they can benefit from lower prices in the future. In addition, investment in the production of goods and servi-

4 See, for example, IPEA's Conjuncture Letters on inflation by income bracket, available at https://www.ipea.gov.br/cartadeconjuntura/index.php/tag/inflacao-por-faixa-de-renda/.

5 See Modenesi (2005, 2008), Modenesi and Pimentel (2020), Wray (2003, 2015), Mitchell, Wray and Watts (2019), Dalto et al (2020) and Kelton (2020).

6 Hyperinflations are rare phenomena, associated with political and/or institutional ruptures as, for example, in the case of post-World War I Europe. Since the 2008 financial crisis, the risk of deflation has been of greater concern than that of hyperinflation.

ces becomes less profitable, since it represents the future acquisition of saleable goods that are cheaper and cheaper. If this perceived downward price trend is too high, the macroeconomic impact turns out to be recessionary. This causes unemployment to rise, which further reduces aggregate demand and so on.

At the other extreme, when there is a widespread perception that prices in an economy will increase rapidly and continuously, this tends to raise the degree of uncertainty about the future, which also leads economic agents to postpone bolder consumption or investment decisions (such as financing the purchase of a property or acquiring equipment to expand the installed capacity of a company), which also increases unemployment, reduces aggregate demand, and so on.

This is why governments generally work to run their economies at moderate levels of inflation, so as to stimulate consumption and investment decisions in business environments with some predictability.

In the rare situations in which a country's economy finds itself with full employment of its productive forces, its government is expected to manage public spending and stimulus to private spending in such a way as to avoid undesirable accelerations in inflation due to excess demand. Such situations are rare, for when companies are close to the maximum occupation of their installed capacity, the expectation of being able to expand their sales motivates the expansion of this capacity, contributing to the formation of a virtuous circle of growth.

In these cases, with full employment of the labor force, the public sector can reduce some expenses (such as unemployment insurance and cash transfers to the poorest), besides increasing the rates of certain taxes (which reduces the disposable income of agents) and increasing the economy's basic interest rate and the interest rates charged by public banks (which raises the cost of new consumption and investment decisions, slowing them down).

Note that both increased public and private spending can have inflationary impacts in an economy operating at full employment. This is why, from a macroeconomic point of view, public spending and the stimulus to private spending need to be calibrated by aiming at full employment of the labor force. That is, aiming at the level at which everyone who is willing and able to work in exchange for a certain minimum wage politically agreed upon in that society can find decent work opportunities in the private or public sector.

It is not desirable to stimulate the expansion of spending (public or private) in situations of full employment, as this will tend to generate demand inflation. Nor is it desirable to manage the general level of spending (public and private) of an economy at levels below full employment, since this means an under-utilization of the productive capacity of that society, with undesirable social consequences: involuntary unemployment, poverty, etc.

With varying degrees of concern about the impact of monetary policy on employment, since the early 1990s several countries have adopted inflation targeting regimes (IMRs) to keep inflation low. A numerical inflation target with a predetermined time frame is publicly announced, and the Central Bank is charged with managing interest rates to ensure compliance with this pre-defined inflation target.

Although this regime contributes to the convergence of expectations about future inflation, there are practical difficulties (and consequences) that need to be considered. A first aspect to be highlighted is that a nominal appreciation of the currency is more convenient for a central bank committed to inflation targeting than a depreciation, because of the negative effect the latter tends to have on inflation. This leads economic agents to internalize the expectation that central banks in countries that adopt RMI will be more tolerant to exchange rate appreciation movements than to depreciation movements, which ends up reinforcing exchange rate appreciation movements.

Fritz, Paula, and Prates (2016) warn that peripheral countries in particular face specific challenges when adopting RMI:

- The pass-through of exchange rate variation to inflation tends to be higher in peripheral country economies. Since exchange rate movements play a more crucial role in peripheral countries than in advanced economies, central banks often resort to interest rate changes to contain exchange rate volatility
- In peripheral countries there is greater difficulty in forecasting inflation, because the shocks are larger and have stronger effects, productive diversification is smaller, and domestic financial markets are less developed
- The external liabilities of most peripheral countries are predominantly denominated in foreign currency, creating the problem of "fear of floating";
- The credibility of monetary policy is usually questioned with greater emphasis in peripheral countries; and
- The impact of external shocks on domestic inflation is more intense in peripheral economies, which may contribute to higher inflation compared to central economies.

Situations like these lead peripheral countries to adopt generally tighter monetary policies than central countries. The problem is that the traditional instruments of monetary policy operate asymmetrically. Keynes used the metaphor of the rope to illustrate this asymmetry: monetary policy is usually efficient in pulling the economy back (retrenching economic activity); however, it alone is unable to push the economy forward (stimulating economic activity).

As observed by Modenesi and Pimentel (2020), the guarantee of employment cannot be obtained simply by maintaining the basic interest rate stabilized at low levels. Even in the face of low funding costs (resulting from low interest rates), investment will not necessarily expand. To stimulate economic activity, fiscal policy is more powerful than monetary policy. Increasing public spending in areas where there is pent-up demand makes it possible to meet concrete social needs, while at the same time raising the income level of families and companies. This motivates entrepreneurs to expand their investments, in the expectation that they will find buyers (public or private) for the goods and services they offer.

However, when the simultaneous occurrence of an appreciated exchange rate with restrictive monetary and fiscal policies is verified, the result ends up being low growth, high unemployment, and loss of competitiveness of companies in the peripheral countries against their competitors in the central countries.

Moreover, controlling aggregate demand is not enough to control inflation. Especially in peripheral countries it is necessary to pay attention to the supply side. After all, in these countries cost inflation is usually more relevant than demand inflation. Examples of cost inflation include wage inflation; profit inflation; imported inflation; and inflation of sectoral supply bottlenecks (MODENESI, 2005; 2008; MODENESI and PIMENTEL, 2020).

Wage inflation is the result of persistent nominal wage increases. Two variables are central to this occurrence: workers' wage aspiration and bargaining power between workers and employers. The first variable refers to the remuneration that workers consider fair for their work. The second relates to their ability to obtain the desired wage. Since average wages in peripheral countries are significantly lower than in central countries, it is natural that economic growth acceleration cycles are accompanied by some increase in wages, as a result of the combination of greater ability of employers to pay (due to the observed and/or expected increase in their revenues) and the increase in the relative bargaining power of workers (who now have a greater variety and better job offers).

Although at first this may put pressure on the costs of labor-intensive activities, it is a good problem. After all, higher wages contribute to greater social inclusion and the strengthening of the domestic market, which enables the expansion of production scales with productivity gains that reduce the unit cost of goods and services offered. In other words, they benefit both salaried workers and private employers since the latter can increase their profits and reduce unit production costs as their sales grow.

Nevertheless, as noted by Kalecki (1943), the biggest obstacle to achieving full employment is not technical, but political. For various motivations, and not always consciously, many employers prefer to preserve the social status that the power to dismiss provides; instead of profiting more in a full employment regime, in which dismissal ceases to play the role of a disciplinary measure of social hierarchy. This is one of the reasons why the state needs to act deliberately to promote full employment, in the face of resistance from that part of private employers that is committed to preventing this from happening, if a truly inclusive society is to be built.

Profit inflation, in turn, is related to the market structure and the competitive regime. Since the price elasticity of goods traded in oligopolistic markets is lower, producers can pass on cost shocks to prices more freely. By favoring the expansion of profit margins, oligopoly power can generate inflationary pressures. Combating this type of inflation requires antitrust policies that curb anti-competitive practices (such as cartelization and collusion in price formation) with transparent criteria for price adjustments that preserve the purchasing power of citizens in cases where there are natural monopolies or oligopolies in the supply of services (as in the sanitation and electricity sectors, for example).

Imported inflation, on the other hand, is related to the prices of goods and services (intermediate and final) that each country imports. It depends both on the cost structures of imported goods and services and on the prevailing exchange rate. As discussed in the previous sections, in the current international monetary system peripheral countries are more vulnerable than central countries to price variations arising from exchange rate shocks. As sustaining a fixed exchange rate regime in this system requires a huge accumulation of foreign exchange reserves to face possible speculative attacks, the most advisable is to combine a flexible exchange rate regime with capital flow controls and occasional interventions by the Central Bank to prevent excess volatility. Furthermore, as will be discussed below, the fight against imported inflation requires long term planning and incentives for the technological sophistication of the goods and services produced, so that we can gradually export goods and services with greater technological complexity, at the same time avoiding that the growth of imports occurs faster than the growth of exports.

Inflation of sectoral supply bottlenecks, in turn, occurs when there is an insufficient supply of a certain good or service that is essential to the economy as a whole. This is what happens, for example, when there is a crop failure or an electricity blackout, whether or not caused by natural causes. To combat this type of inflation it is necessary to manage regulatory stocks of strategic products and services, such as food and energy. Since economic growth processes are usually accompanied by sectoral imbalances, without government planning and coordination, it is to be expected that bottlenecks will appear in specific sectors, which can cause price increases with the potential to impact other sectors of the economy.

Expensive and low-quality infrastructure services and tax systems that are more heavily levied on production and consumption than on assets and income are examples of situations in which the lack (or insufficiency) of government planning directly impacts the cost structure of specific sectors or the economy as a whole. Without adequate planning, economies become vulnerable to the emergence of productive bottlenecks, difficulty in accessing credit lines, the formation of cartels, supply crises, energy blackouts, insufficient infrastructure for transportation and logistics, etc. All this directly impacts production costs, which are largely passed on to intermediate and final consumers.

To prevent this from occurring, governments need to identify and act on the causes of each potential factor generating inflationary pressures. This can be done from a regulatory point of view (by establishing certain legal parameters to be observed by private agents), through tax and/or credit incentives (by meeting targets of collective interest that justify such incentives), or even through direct action by state-owned companies and/or parastatal corporations (focusing on infrastructure and technological frontier activities, for example).

Note that none of this can be done by the monetary authority alone. Price stability depends on the planning and coordination of all government actions, so that public policies may converge towards the implementation of a previously defined development strategy. This is why governments (not only, but especially in peripheral countries) need to diversify their instruments to control inflation, which includes measures such as

• In the flexible exchange rate regime, implement capital flow controls and carry out interventions in the exchange market to prevent excess volatility and speculative attacks against the national currency
• Prevent abusive price increases in sectors that require administrative regulation, such as those subject to monopolies, oligopolies and cartel formation
• To ensure the maintenance of stocks of food and other essential goods at levels that prevent abusive price increases in periods of lower supply than demand
• Continuous spending on economic and social infrastructure at levels sufficient to reduce the costs of production and livelihoods
• Adopt a progressive tax system, with higher direct taxes on the wealth and income of the super-rich and lower rates on the production and consumption of essential goods and services; and
• Maintain the basic interest rate and the interest rates charged by public banks at levels slightly above those practiced in the country issuing the international key currency, preferably with more advantageous financing conditions for cooperatives and micro, small and medium-sized companies, as well as for companies of any size that take on counterparts in terms of technological sophistication, job creation and environmental sustainability practices.

If, instead, the government limits itself to controlling inflation by manipulating public spending and the basic interest rate in such a way as to cause involuntary unemployment of the labor force, the concrete causes of cost increases are no longer addressed, and the social cost of this choice of economic policy ends up being too high. After all, besides making the formation of dynamic internal markets unfeasible, allowing economic activities to expand their scales of production, contributing to the strengthening of productive chains and inter-sector and territorial synergies, high unemployment rates generate multiple problems that affect society as a whole.

## LIMITS OF FISCAL POLICY IN PERIPHERAL COUNTRIES

As demonstrated by Lerner (1943, 1947), Wray (2003, 2015), Mitchell, Wray and Watts (2019), Dalto et al (2020) and Kelton (2020), monetarily sovereign governments do not rely on prior collection to spend on the currency they issue themselves. This was clearer until about 200 years ago, when kings ordered the minting of coins to spend them and then collect them back through the collection of tribute.

With the creation of central banks and the separation of the fiscal (making state payments and collecting taxes) and monetary (issuing the state currency and regulating the monetary and financial system) authorities, this sequence of events is no longer so evident. However, although today's monetary system is more sophisticated, and to a large extent dispenses with the use of physical objects such as coins, the basic concepts have remained the same for the last four millennia: in order for the sovereign to collect the coins it issues as taxes, it must first put these coins into circulation by purchasing goods and services from the local population. From a logical point of view, the opposite is not possible, because in this case private agents would have no way of obtaining the currency to return it in the form of taxes to the government that created it.

Minsky (2013) used to say that while anyone can create currency, the problem lies in it being accepted by other people. What makes state currency widely accepted is the fact that it is required for the payment of taxes collected by the government.

The primary function of taxes is not to finance public spending; it is to create demand for state currency. Since the non-payment of taxes can result in various sanctions, such as the levying of fines, confiscation of property, or even imprisonment of the debtor, the demand for the state currency makes it widely accepted within the domains of that state. In addition, taxes are also important for:

- Reduce the income of economic agents to reduce inflationary pressures due to excess demand[7];
- Reduce extreme inequalities in wealth and income by taxing more those who have more; and
- Stimulating certain economic activities to the detriment of others, by taxing more, for example, goods and services that are harmful to health or the environment, when consumed in excess[8].

7 Since the total amount collected by tax policy usually cannot be determined ex ante, especially when the State sets tax rates on income flows, the effectiveness of monetary policy as a tool to regulate aggregate demand tends to be reduced, and certainly lower than adjustments in government spending itself, which is much more easily scalable and targetable.

8 Here too, care must be taken to ensure that the use of taxes as a tool to discourage undesirable behavior does not have even more undesirable consequences. For example, instead of promoting a reduction in unhealthy behaviors, taxes that make it more expensive to consume substances harmful to health (cigarettes and alcoholic beverages) can cause the substitution of superior quality products for inferior products that are even more harmful to health. Moreover, in economically unequal societies, they disproportionately undermine the purchasing power of poorer consumers forced to deal with cruel allocative dilemmas (such as someone deciding to eat less or to stop buying medicine in order to continue buying cigarettes or alcohol) nonexistent for wealthier consumers.

Recalling a basic accounting principle is fundamental to understanding how public spending by monetarily sovereign governments works: every financial asset corresponds to a financial liability. In a closed economy, this means that the surplus obtained by the public sector necessarily corresponds to a deficit in the private sector, and vice versa. When the external sector is included in the analysis, the reasoning is the same. Considering as "rest of the world" the governments, firms, and households of the countries with which a given country has a financial relationship, we have the following identity:

| private domestic balance sheet + public domestic balance sheet + external balance sheet = 0 |
|---|

Therefore, at least one of these sectors must show expenses greater than revenues for some other sector to show revenues greater than expenses. Since it is not possible for these three sectors to have higher revenues than expenses in the same period, in order for there to be an increase in private financial wealth (that is, of households and firms) there must be an equivalent deficit in the public sector (assuming that the external balance is balanced, for simplicity's sake).

Does this mean that monetarily sovereign governments can or should spend without limit? Absolutely not! Spending decisions need to pay attention to at least three crucial aspects: the external constraints; the risk of accelerating and runaway inflation; and the self-imposed constraints of the budget laws.

We have seen in the previous sections that governments of peripheral countries face greater difficulties in managing their economic policies than central countries. We have also seen that peripheral countries that adopt floating exchange rate regimes, accumulate foreign exchange reserves and issue public bonds denominated in their own currencies will have more favorable conditions to deal with the challenges imposed by the current international monetary system. We have also seen that, in relation to external accounts, the most difficult challenge to be overcome by the peripheral countries consists in the implementation of public policies with sufficient scope and duration to promote the diversification and technological complexification of their productive activities. This point will be discussed in greater depth in the next section.

Regarding the risk of accelerating inflation, it should be kept in mind that the monetary authority alone does not have sufficient instruments to ensure monetary stability. As discussed in the previous section, there is a need for planning and coordination of all governmental actions, so that public policies may converge towards the implementation of a previously defined development strategy. This strategy needs to consider, especially in peripheral countries, the existence of different types of cost inflation: wage inflation, profit inflation, imported inflation, and inflation from sectoral supply bottlenecks.

Conducting exchange rate and monetary policy in line with the concerns listed here, the inflationary limits to sovereign development focus on how to manage the scarcity of real resources (labor force, natural resources, technologies, and management capacity) without causing unwanted pressures on the price level.

Briefly, one can say that if a financial obligation is owed in Reais, for example, the Brazilian federal government always has the financial means to pay it. Congress must authorize the National Treasury and the Central Bank to make the deposits, but it only depends on a command from the Union to make the Reais necessary for such payments to be made.

However, if a country does not have the actual resources it needs, such as a vaccine that needs to be imported, it may not be able to use its own currency to pay for those needs because those resources may not be available for sale in that country's currency. In such cases, the government needs foreign currencies, usually obtained through the export of goods and services. In the same way that a country that doesn't produce a vaccine is unable to make it appear simply by creating currency, there are a number of other real-world constraints that need to be considered before deciding on a particular public expenditure.

To illustrate this point, let's say that the Brazilian government decides to hire a million workers to build a network of underground tunnels integrating all the capitals of the country. We will call this initiative the Minhocão Program[9]. The first consideration to be made is whether there are a million workers available for hire with the necessary skills to make such an undertaking feasible. Next, we need to know if the necessary inputs, infrastructure, technology, and knowledge are available to achieve the program's objective. Assuming that these conditions are met, it is necessary to analyze the opportunity cost of hiring one million workers for this initiative. That is, to evaluate the alternatives available for the use of the same resources.

If these one million workers are unemployed, the opportunity cost of hiring them will be close to zero. However, it is likely that many are already working in other activities. Since the Brazilian government does not face a financial constraint like private agents, it can win a price war against private employers if it so chooses. In this case, the wages of workers with the skills needed for the Minhocão Program may increase so much that the private sector will need to seek workers with other credentials, or private companies will close. The impacts on the private sector could be complex - likely leading to higher wages, higher product costs, and lower output in the sectors that demand workers with skills similar to those displaced to the government's miraculous program. At the very least, the Minhocão Program could lead to bottlenecks (relative scarcity of key resources) and some price increases. Therefore, public policy must consider the opportunity cost of hiring these one million workers for the "Minhocão" program, taking them away from other jobs.

In addition, other wages and prices may be increased as a result of the knock-on effects. In the absence of rationing and/or wage and price control mechanisms, programs like this can put pressure

9 Analogy with "Mission Pluto," mentioned by Wray (2015) to exemplify the need for governments to be judicious in defining the spending they will undertake.

on the price level to the point of causing widespread inflation. At the same time, high domestic employment and income can - in some circumstances - lead to a trade deficit as domestic demand for imports increases relative to foreign demand for exports. This can also put pressure on the exchange rate, although the correlation between trade deficits and exchange rate depreciation depends on other factors[10].

The example of the Minhocão Program aims to emphasize the importance that the processes of formulation, expansion, or reformulation of each public policy undergo careful evaluations, as indicated in the Practical Guide to Ex ante Analysis (BRASIL, 2018). This is necessary not because monetarily sovereign governments lack the conditions to finance public policies that require the contracting of goods and services that are for sale in the currency issued by the government itself. It is because real resources (labor, natural resources, technologies, and management capacity) are scarce and, therefore, need to be managed sparingly so as not to: mobilize real resources that could be better used in other ways; nor provoke undesired effects on the price level and the Balance of Payments.

That is why government planning is so important as a guide to define the amounts of resources that public budgets will allocate to each activity. In other words, although from a financial point of view the monetarily sovereign government can, in theory, always spend more in the currency it creates itself, this does not mean that any and all public spending is desirable. After all, programs that do not meet society's concrete needs mobilize real resources that could be better employed in other activities.

The same can be said of budgets made in an inertial manner, which limit themselves to projecting past expenditures into the future, without technical evaluations of the convenience of maintaining those expenses. This often hinders the mobilization of the real resources necessary for the implementation of other programs that can generate more concrete results for society. This is a technical problem, considering the need for studies and evaluations to support the decision-making processes, but also a political one, since the definition of priorities for the allocation of public resources implies subjective choices about which initiatives should receive more or less government support.

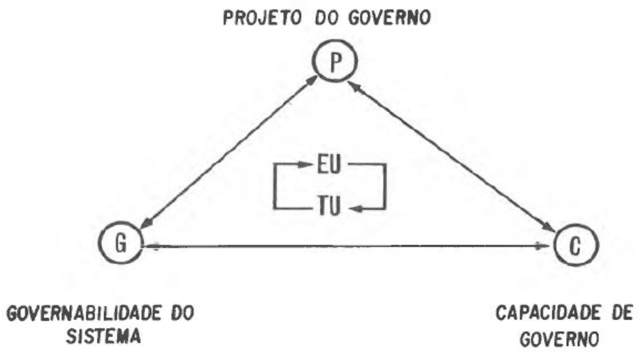
This brings us to the third point previously mentioned as limiting public spending: the self-imposed restrictions by the budget laws. It is a matter here of considering the difficulties of establishing an institutional framework for planning and budget management that is functional from the economic point of view, while fostering cooperation between the branches of the Republic and the fede-

10 The exchange rate impact of an unbalanced increase in the demand for dollars to purchase imported goods due to an increase in the level of income/output in the economy will depend on the behavior of the supply of dollars in the foreign exchange market, determined not only by the demand for domestic products, but also by assets purchasable in domestic currency. Even in the absence of export growth it is possible to supplement the supply of dollars to meet a growing demand for imported goods by increasing the balance of the capital and financial account. However, different compositions of the capital and financial account can prove substantially more or less sustainable. For example, an increase in the capital and financial account balance resulting from the sale of debts denominated in foreign currencies will almost inevitably be unsustainable, since it will lead to future increases in the demand for the foreign currencies needed to meet the contracted obligations. On the other hand, an increase in the same balance resulting from an increase in foreign direct investment may prove to be sustainable, especially during periods of economic growth capable of guaranteeing rates of return more than sufficient to compensate for eventual exchange devaluations (mitigated by the foreign direct investment itself).

rated entities in the processes of elaboration, implementation, monitoring and evaluation of public policies[11].

Following the approach proposed by Matus (1993, 2007), planning will be understood here as the calculation that precedes and presides over action. In this formulation it is important to highlight the term presides, because it indicates the need for an effective commitment of the leaders and their collaborators to what was planned. For planning to precede, but also preside over action, it is indispensable that the government plan or project considers the political-institutional and management aspects that limit the possibilities of its implementation. As illustrated in Figure 1, the government triangle proposed by Matus (1993) is composed of three vertices: government project, system governability, and government capacity.

**Figure 1** – Governance Triangle




Source: Matus (1993).

The government's project indicates the transformations that the governor intends to implement, considering the governability of the system and the government's capacity. The governability of the system refers to the variables the government controls and those it does not control. And the governing capacity refers to the resources required to carry out the government project: team skills, work methods and techniques, information systems, etc.

Government projects that do not pay attention to the limits of governability and government capacity tend to be perceived as generic statements of intent, without sufficient clarity and/or commitment from leaders to identify and address the obstacles affecting their implementation. As a result, relevant decisions are made without cause and effect relationships being properly considered. To prevent this from happening, government projects need to be ambitious, but feasible to be carried out in the timeframe to which they refer. And they must rely on structured monitoring and evaluation

11 Given that there is a great variety of forms of political-institutional organization among countries, we chose in this monograph to deal with this theme based on the Brazilian reality. However, most of what will be discussed below can be adapted to countries with other forms of political-institutional organization.

processes that provide the necessary subsidies to adjust the conduct of actions as new obstacles and opportunities arise. This means that planning cannot be understood as a mere uncompromising wish list, much less as something static, supposedly able to be achieved without the effective commitment of the actors necessary for its implementation.

It should be noted that both the formulation and the implementation of government planning initiatives require the continued cooperation of social actors with often distinct worldviews and priorities, even within the same ruling group. Consequently, difficulties of a political nature tend to limit the possibilities for action. Some examples: no governor, however wise and well-intentioned he/she may be, has unlimited time and political support; besides having to deal with normative/legal restrictions and several practical difficulties beyond his/her control, in order to govern it is necessary to make political compromises and carry out short-term deliveries that are not always consistent with medium and long-term plans; and advanced levels of transparency and technical rigor in dealing with sensitive issues tend to generate negative news, which can be used by opponents to undermine the leadership capacity of the governor.

Add to this the practical difficulties of coordination among the federates and the powers of the Republic, and the result ends up being a complex set of practical and legal restrictions on government action. The legal restrictions in particular are understandable from a republican point of view (they institute mechanisms of checks and balances in the relations between powers) and from a federalist point of view (they share powers and attributions among entities that operate in the same territory). On the other hand, such legal restrictions create a series of embarrassments, including financial ones, for the implementation of the government plan or project.

As discussed by Barcelos (2012), the set of rules (formal and informal institutions) that guide the political, economic, and social relationships underlying the process of resource allocation in the public sector establishes constraints and incentives for the employment of public resources. Since these rules are conceived, implemented, and enforced by human beings, there may be several ways to interpret them. If, for example, budgetary resources are not made available in sufficient amounts, or if they do not reach the organizations involved in their realization in a timely manner, then the objectives intended by the state can hardly be achieved. Whose responsibility is it when situations like these occur? What should be done to prevent them from happening?

Answering these questions is not a simple task. After all, the various actors involved in budgetary processes usually have different concerns and start from different theoretical assumptions about the nature of money and public spending in contemporary societies.

For adherents of neoclassical theories, for example, governments should focus their efforts on promoting a state of confidence in the solvency of their public debts and a favorable business environment, which would contribute to economic growth driven by the investment decisions of private agents.[12] In this perspective, money plays the role of a medium of exchange only and exclusively: it is a mere facilitator of economic transactions. If the State does not hinder the free operation of markets, say the neoclassicals, full employment will be achieved and there will be no recessions. Therefore, it would be desirable to set certain financial limits on public spending, even if this prevents the full fulfillment of the institutional duties of certain governmental organizations.

However, instead of presenting evaluations and technical studies that demonstrate that it is possible to reduce certain budget allocations without harming the quality of public policies funded by them, so that public debates can be held with transparency based on empirical evidence, the usual solution of neoclassicals is to advocate the adoption of self-imposed fiscal constraints that prevent the increase in public spending or force its reduction. The assumption is that this will induce political and technical agents to be more selective and judicious in their allocative processes. The problem is that this type of conduct tends to affect especially the financing of public policies that serve diffuse interests and do not count on organized groups capable of exerting political pressure on the executive and legislative branches of government to make available sufficient budget appropriations for the proper implementation of programs and actions under their responsibility.

A different perspective is offered by supporters of the Keynesian approach. They point out that in addition to being a medium of exchange that facilitates economic transactions, money performs two other functions of great importance: store of value; and unit of account and denomination of contracts[13]. As we have seen in the first section of this monograph, it is precisely because it performs these three functions with greater ease at the international level that the US dollar is at the top of the hierarchy of currencies in the current international monetary system. Recognizing the importance of these other functions of money implies accepting that the hoarding of money is not an irrational act. Since money is the most liquid asset in the economy[14], this preference for liquidity in situations of uncertainty motivates the hoarding or retention of money, which can inhibit both consumption and investment.

In this perspective, it makes no sense to assume that in the exchange equation $M^s V \equiv PY$, the velocity-rent of money in circulation (V) is stable, calculable or predictable. The perception of uncertainty leads economic agents to wish to protect themselves. And to do so they retain money, precisely because money is the most liquid asset in the economy. Therefore, whenever the money supply ($M^s$) grows, there will not necessarily be growth in prices (P), that is, inflation, and even less in the same proportion, because output (Y) also tends to grow.

12 See Fisher (1911), Hayek (1948), and Friedman (1956). For more recent discussions of expansionary austerity, see Alesina, Favero, and Giavazzi (2019) .

13 See Keynes (1964), Lerner (1943, 1947), Wray (2003, 2015), Mitchell, Wray and Watts (2019), Dalto et al (2020) and Kelton (2020).

14 Currency can be exchanged for any good or service or real or financial asset at any time, without the transaction prices changing because of the speed of the operation.

Moreover, every payment by the central government is inevitably accompanied by money creation, as is every new loan by a commercial bank. Contrary to what neoclassical logic suggests, not every government payment or bank loan has an inflationary impact, just as not every tax payment and bank loan repayment has a deflationary impact. The truth is that any increase in aggregate demand, whether or not this increase is accompanied by an increase in the economy's money stock, depends on its relation to the behavior of the supply of goods and services.

Therefore, the neoclassical assumption that government actions aimed at stimulating economies that are operating below full employment of their productive forces necessarily cause an increase in inflation, because they tend to be accompanied by increases in output itself, is illogical.

As we saw earlier, controlling aggregate demand is not enough to control inflation. Especially in peripheral countries, the different types of cost inflation arising from structural economic problems on the supply side usually impact the price level more than aggregate demand.

Note that the investment decisions of private agents depend on their expectations of future returns being greater than the returns provided by current interest rates. When uncertainty is high, the marginal efficiency of capital falls, the value of liquidity increases, and with it the interest rate rises (if there is no government action to the contrary). As a result, investment is inhibited and employment and income in the economy cease to grow or even fall.

When we recognize that private investment depends fundamentally on two factors (marginal efficiency of capital > interest rate), both related to uncertainty, we must recognize that we are dealing with a volatile decision, which means that production, income and employment are also somewhat unstable.

In situations of economic recession, for example, private agents significantly reduce their impetus for investment and consumption. The less people invest and consume, the scarcer the opportunities to sell goods profitably become, which makes private investment less attractive and reinforces the contractionary trend. A scenario of falling incomes and social and political instability accentuates the unpredictability of the economic environment, making the liquidity of money increasingly valuable. Since in this context it is necessary to remobilize the idle capacity formed during the recession, new private investments tend to be postponed.

This is one reason why markets do not function well without government action to dampen business cycles. Economic policy needs to ensure that employment and production do not fall in a multiplied way and that, on the contrary, they can grow, mitigating unemployment problems by expanding investment, multiplying production and income.

Especially when the expected return on capital is low, indicating pessimism among private investors, the government needs to increase its spending. It can and should do so, because it does not have the profit motive of private enterprise, and therefore does not need to compare the marginal efficiency of capital with the interest rate. On the contrary, one of the main objectives of government action is precisely to deal with problems that the market alone cannot solve, in particular unemployment.

By spending, the state multiplies income and employment, which helps to reverse the pessimism of private investors. After all, they now expect greater demand for their products, because employment and income are growing. This raises the profitability they expect from investment, which starts to exceed the interest rate, and private investment expands. Thus, it is possible to resume economic growth, job creation, and, consequently, increase tax collection.

However, although it provides a more adequate theoretical framework for the understanding of contemporary economies than the neoclassical theories, following the Keynesian approach implies a challenge that few political and technical actors involved in budgetary processes are willing to face: to assume that a large part of the decisions to reduce or increase public spending lack evaluations and technical studies to justify them.

Which is simpler: to treat the public budget in an inertial manner, defining spending limits for each agency based on past execution corrected for inflation, or to structure transparent planning and management processes that make explicit the reasons why each public policy will receive a certain budget allocation? There is no doubt that the first alternative is simpler, even though it results in non-transparent decision-making processes and low-quality government programs.

As noted by Paul Samuelson, one of the leading liberal economists of the 20th century, the belief that it is always necessary to balance the fiscal budget is a superstition, a myth, whose function is more or less the same as that of primitive religions: to scare people into behaving in a manner compatible with civilized life. According to Samuelson (1998), once this superstition is debunked, there would tend to be an increase in political and social pressures for increased public spending, which could drive expenditures of questionable necessity.

This monograph is based on a different premise: for public spending to be more efficient, effective, and efficient, it needs to be guided by continuous efforts to improve planning and management tools and activities, which includes encouraging initiatives for federative articulation, transparency, and social participation in the preparation and execution of public budgets.

In this sense, recognizing that monetarily sovereign governments are not subject to the same financial constraints as households and businesses is a necessary but not sufficient condition for the responsible handling of public affairs.

It must be recognized, for example, that a Parliament that does not make sufficient appropriations available in its budget laws for the proper execution of certain public policies makes it impossible in practice to comply with the laws passed by that same Parliament. However, as it is common in the political game for there to be players who create difficulties to sell facilities, the search for institutional frameworks for planning and budget management that are functional from the economic point of view is not trivial.

The complexity of the challenge cannot be treated, however, as a justification for not facing it. It is the responsibility of those effectively interested in contributing to the improvement of the quality of public services to study in depth and debate with intellectual honesty and technical rigor the alternatives for normative and managerial improvements that can be implemented in each country.

## PRODUCTIVE AND REGIONAL DEVELOPMENT

When analyzing the limits to the exercise of monetary sovereignty in peripheral countries, it is necessary to observe that the peripheral condition is not immutable. Faced with the recognition that a country is in an unfavorable position in the hierarchy of currencies of the international monetary system, at least two paths may be taken: accept that it is up to this country to continue presenting low international relevance, high poverty rates and a production structure focused on primary export activities with low added value; or investigate what measures need to be adopted for the country to assume greater international relevance, offer better living conditions for its population and develop a more diversified and technologically sophisticated production structure.

When the United States emerged as an independent country, for example, its capacity to exercise its monetary sovereignty was much lower than it is today. It is not enough to note that, as the issuer of the international key currency, the United States has a greater capacity to exercise its monetary sovereignty than the peripheral countries. It is necessary to understand how the United States and the other central countries have built development paths that allow them to exercise their respective monetary sovereignty in a more intense way today. This includes analyzing the economic policies actually used by these countries in their development trajectories, which do not necessarily coincide with the policies they recommend to the peripheral countries.

Moving forward in this line of inquiry requires us to recognize that the world political system is characterized by competition and war (conventional and unconventional) among its states and national economies (FIORI, 2007, 2014).

On the economic front, this involves permanent efforts to conceal the strategies and instruments adopted by each country in defense of the interests of its population. Since the current practice in this game is "do what I say, but don't do what I do," national governments cannot be expected to be fully transparent about the objectives that guide their economic policies.

This analytical posture is necessary in the face of a world political system in which there are no satisfied countries; all are always trying to increase their power and wealth, and, in this sense, all are expansive - particularly the great powers that already occupy the top of the hierarchy of world power and wealth. All the great powers have been expansive from the moment they consolidated their internal centers of power and have used their national economies as instruments of power in the service of their political strategies. That is, they defined the major goals of their national economies and their own economic policy from strategic objectives situated in the field of power. Therefore, the struggle of these powers is directly linked to the continuous expansion of their supranational economic territories and the monopolistic control of new markets. (FIORI, 2007, 2014)

England, for example, since the late 15th century used export tariffs on local raw materials as a way to make the production of textiles in other countries more expensive and thus make its own industry more competitive. As noted by Reinert (2016), as wool manufacturing grew in England, export tariffs were increased until the country was able to process all the wool produced. Various incentives were created to attract skilled professionals from locations such as Venice and Holland. In addition, newly established wool manufacturers in England were granted tax exemptions for a certain period of time and a monopoly in certain regions. Also noteworthy were the Navigation Acts (issued soon after the Revolution of 1648, closing English ports to foreign ships), control of the Bank of England, nationalization of customs and the nationalization of finance and credit, which added to the permanent mobilization for war and the creation of systems of public debt and state taxation as fundamental factors in the success of England's military and economic power.

The British only relaxed their protectionist practices in the 19th century when they already exercised broad leadership in the interstate political system.

Like the British, the Americans have used and continue to use military power to impose their interests on other countries (or persuade them to submit to their interests). Since 1783, the United States has waged or participated in approximately 85 wars. On average, one every three years: the same pattern as England, which fought or participated in approximately 110 wars between the late 17th century and the mid-20th century. (FIORI, 2014)

Since its origin as an independent country, the United States guided its economic policy by Alexander Hamilton's recommendations. In 1791, in his report to the President of the House of Representatives (HAMILTON, 1995), the first United States Secretary of the Treasury listed a series of arguments for the government to support the development of national manufacturing activities, in order to make the country independent from other nations in its military and essential goods supply.

Hamilton found that the most prosperous countries subsidized the export of manufactured goods. Therefore, in order to compete on a level playing field, the initiators of new manufacturing activities in the United States would need to count on the support of their own government. Hamilton suggested emulating incentives that had proved successful in England and elsewhere, such as:

- Protectionist customs tariffs on foreign articles rivaling the domestic products they are intended to promote
- Ban on the import of rival items or impose import tariffs equivalent to a ban
- Veto on the export of raw materials needed for manufacturing
- Cash subsidies to domestic producers
- Cash and honorary awards to national producers that show some special superiority or excellence

• Tariff exemption for raw materials (or reinstatement of collected tariffs) needed in manufacturing activities
• Encouragement of new inventions and discoveries made in the country and introduction of those made in other countries, particularly those relating to machinery; and
• Streamlining the transportation of goods.

However, a crucial question needed to be faced: how could the United States, which was then a mere former primary-exporting colony, finance the efforts required for its technological advancement and the raising of its population's standard of living? It certainly would not be by relying on the goodwill of its former colonizers. Hamilton's answer to this question was that the United States should follow the British example, using public spending to stimulate national productive diversification. And it was by following the recommendations of its first Secretary of the Treasury that the United States became, about a century and a half after its founding, the world's greatest power.

The maxim in vogue in 19th century America, "don't do as the English tell you to do, do as the English did" can now be updated to "don't do as the Americans tell you to do, do as they did." It was in this spirit that List (1986) stated that the most advanced countries often kick the ladder they have climbed. That is, they recommend to other countries policies different from those they have practiced in their own development trajectories.

Mindful of the importance of the national scale, List highlighted the differences between private economy, cosmopolitical economy, and political economy, warning that each of these domains has specific logics.

Private economics would be that practiced by families, in the management of domestic income and expenses. Cosmopolitical economics would investigate how humanity can achieve prosperity, assuming that all nations live in peace and possess the same military power, in which case free international trade would be equally advantageous to all nations. Political economy, on the other hand, would investigate how each nation, given its specific conditions and circumstances, and those prevailing in the world, can provide greater prosperity for its population by promoting synergies between national productive forces.

The thesis disseminated by Adam Smith, according to which each individual, in pursuing his own objectives and interests, necessarily promotes the interests of the community, is understood by List as a confusion between the principles of private economy and those of national economy. The German economist agrees that each individual, insofar as he knows his local circumstances better and is more attentive to his occupation, is better able to judge how best to invest his capital profitably than could be done by the statesman or the legislator. But he points out that in promoting their private economies, individuals fail to consider factors such as the defense of the country, public safety, the needs of future centuries, and other objectives that can only be achieved with the help of the community.

Therefore, it would be up to the state to establish certain norms and restrictions on trade, as well as to protect and stimulate domestic producers.

By bringing nations closer together in terms of the degree of industry and power, the protectionist system would be the most effective means to foster the effective union of nations, creating the necessary conditions so that trade opening processes do not result in the de-structuring of less advanced economies. Hence the importance of calibrating the intensity, scope, and duration of state stimulus to domestic producers until they can compete on equal terms with their international competitors.

As pointed out by Perroux (1967), each state seeks to exploit, for the exclusive or main benefit of its nationals, the poles of growth that they have at their disposal in their territory or that they have conquered outside of it. To this end, each state uses the means at its disposal to keep competitors away from the advantages it intends to extract from the exclusive control of certain poles. After all, large economic units (firms, industries, poles) are among the main instruments of prosperity of national states; and the growth of these units depends on imports, exports, supply centers, and markets outside the national territory, which are conquered or manipulated through political and military actions.

The French economist points out that economic growth manifests itself with varying intensities, at points or poles of growth, and spreads throughout the economy along different paths and with varying effects. Perroux argues that the birth of a new industry is always the result of anticipation. One or several economic subjects conceive a new situation, think that it is possible, and assume the risks of its realization. To the extent that these plans are or become compatible with the plans of other economic agents, the anticipation becomes creative and contributes to increased production and productivity in the economy.

Since a new industry does not usually arise by itself, and since the growths of new industries are related to each other, the increase in output results from the volume of products added by the new industries plus the volume of additional products induced by the emergence of the new industries. In other words, the emergence of new industries contributes to the creation of a favorable environment for growth and economic progress. The innovations offered by certain economic agents function as motivating examples for other agents, who seek to imitate and perfect the original innovations.

Thus, the industrial pole transforms its immediate geographic environment and, when it has the power to do so, the entire structure of the national economy. When the state is successful in its efforts to connect two or more of these poles, extensive transformations manifest themselves, impacting the plans of producers and consumers. However, Perroux warns that technical transformations, political circumstances and the orientation of world traffic currents between major poles may favor or disadvantage minor poles. That is, when its inhabitants lose the capacity to follow and anticipate innovations, a center of prosperity and progress can quickly become a center of stagnation.

Perroux sees nations as structured economic sets, which present constellations of development poles with their means of propagation, combining active and passive (or driven) driving units. He stresses that in any system, capitalist or otherwise, government planners conceive development axes that connect development poles located at different points in the territory. According to Perroux, the development of nations and their regions will not be achieved by the spontaneity of markets alone; but by the conscious organization of the means of spreading the effects of the development poles. For this to happen, argues the French economist, national states need to promote full employment of their material and human resources, articulating a homogeneous network of prices, flows and information on the national territory, and creating institutions that favor innovation and the cumulative and lasting growth of economic activities.

Myrdal (1972) follows the same line by pointing out that the play of market forces tends to increase, not decrease, regional inequalities. This is because, from an initial agglomeration verified in a given locality, economies of scale and technological externalities occur, attracting new resources that circularly reinforce the expansion of the market. The first entrepreneur creates facilities for the implementation of new ventures, contributing to the success of subsequent initiatives.

Myrdal found that this circular causation tends to reinforce regional asymmetries, since the growth of a region produces propulsive effects, but also regressive effects in the peripheral areas. That is why certain localities present continuous growth, while in others stagnation or even regression prevails. Since industrialization is the dynamic force in this process, peripheral regions tend to remain specialized in agricultural activities if they do not take steps to diversify their productive activities.

Myrdal states that propulsive effects arise from increased purchases of raw materials, food, and other products from the peripheral regions made by the central regions, which benefit from migratory movements, capital movement, and trade. These driving effects would act in a centrifugal way, spreading from the centers of economic expansion to adjacent regions. However, due to the unequal exchange between richer regions, exporters of manufactured goods, and poorer regions, exporters of primary goods, the latter end up suffering regressive effects, resulting in capital outflows, job losses, and losses of more qualified workers, who tend to prefer the better job opportunities offered in the central regions.

As a result of the greater dynamism of the central regions, migration processes tend to be selective, attracting the most skilled and the youngest of working age. In the expanding centers, the increase in demand drives investment, which in turn raises incomes and demand, causing a second flow of investment, and so on. Meanwhile, in the peripheral regions, the lack of expansionary momentum has the consequence that the demand for capital remains constrained, with the banking system draining its savings to the richer regions where the return on capital tends to be higher or at least more secure.

The higher the level of development a country achieves, the stronger the driving effects tend to be a high average level of development is accompanied by better transportation and communications, higher educational standards, and a more dynamic communion of ideas and values, all of which are likely to strengthen the forces for the centrifugal diffusion of economic expansion or remove the obstacles to its action. With the extinction of poverty, there is a more comprehensive utilization of workers' potentialities. Meanwhile, in peripheral regions and countries, where poverty and underutilization of human potentials prevail, the propulsive effects tend to be weak.

The Swedish economist points out that poor countries have remained in this situation because of insufficient national integration efforts, while in rich countries these efforts are more intense and persistent. Myrdal recalls that the policies aimed at economic development are as old as the national states themselves, which soon took upon themselves the responsibility of providing public services, building roads, and raising the technological level of backward regions.

State intervention would be justified to potentiate the propulsive effects and mitigate the regressive effects, creating favorable conditions for less advanced regions through regional policies and institutions, or even getting involved directly or indirectly in physical and techno-scientific production. Otherwise, abandoned to their fate, underdeveloped regions cannot maintain an adequate supply of public services (energy, transportation, health, education, etc.), perpetuating their unfavorable conditions.

For Myrdal, the most important change to be made in underdeveloped countries is to understand the need for a national development policy. The author warns that there is a generalized confusion when seeking to counterpose state planning to free enterprise, as if economic development planning were not fundamental to generate opportunities for private initiative. According to him, the main purpose of national development plans is precisely to encourage investments and define the means by which they will be made, so as to foster the strength of the propulsive effects of development impulses and mitigate their regressive effects.

In the absence of a global state, Myrdal points out, it is up to nation-states to seek national economic integration aiming at a “created harmony”, that is, a harmony that is the result of political interference from organized society, by manipulating market forces that, left to themselves, would have led to disharmony. Myrdal points out that this was the recipe used by countries that reached advanced levels of development and warns that the advice often given to underdeveloped countries to avoid interfering in foreign trade is, in many cases, equivalent to a recommendation not to take care of their own development.

Schumpeter (1934, 1939, 1942, 2002) contributes to this debate by arguing that economic development is linked to the emergence of “new combinations” (or innovations, as we say nowadays) that disturb the economic equilibrium. From the entrepreneur's point of view, the goal of introducing new combinations is the creation of monopoly rents. According to this approach, promoting economic development requires moving the economy away from a static Pareto-efficient market equilibrium.

Put another way, if the role of the state is limited to correcting market failures by eliminating monopoly rents, the concrete result will be economic stagnation (REINERT, 2016).

This is precisely why competition between states and national economies often transfers the negative effects of monopoly rents obtained by companies based in the central countries to the backward countries.

Analyzing these questions, Prebisch (2000a) noted that the international division of labor in force in the 19th century relegated to the periphery of the world economic system the specific role of producing food and raw materials for the large industrial centers. In this scheme, the benefits of increased productivity seen in the central countries did not reach the peripheral countries, perpetuating the unequal conditions of trade. However, after two world wars, with a deep economic crisis in between, the peripheral countries had the opportunity and the need to develop their own industrial activities. It is in this context that the Argentine economist highlights the importance of industrialization of Latin American countries as a necessary condition for them to benefit from technical progress and raise the standard of living of their populations.

Prebisch warns, however, that the industrialization process demands imports of capital goods, which in turn require the availability of international currency. To obtain such foreign exchange, Latin American countries would need to expand their exports of primary products, which would be possible with the advance of agricultural mechanization, which also depends to some extent on the import of capital goods:

> The industrialization of Latin America is not incompatible with the efficient development of primary production. On the contrary, one of the essential conditions for the development of industry to fulfill the social objective of raising the standard of living is to have the best equipment in terms of machinery and instruments, and to take advantage of the progress of technique in its systematic renewal. Mechanization of agriculture implies the same requirement. We need a considerable import of capital goods, and we also need to export primary products to achieve this.
>
> The more active Latin America's foreign trade is, the greater the possibilities of increasing the productivity of its labor through an intense capital formation. The solution is not to grow at the expense of foreign trade, but to know how to extract from an increasing foreign trade the driving elements for economic development (PREBISCH, 2000a, p. 73).

To solve this impasse, Prebisch (2000a, p. 75) argues that "it would be prudent to direct investments to productive applications that, by directly or indirectly reducing imports in dollars, would make it possible to regularly attend to financial services. This import substitution would be important even to occupy with industrial jobs the people who are unemployed or underemployed, in order to boost productivity improvements while stimulating the expansion of income in the peripheral countries.

According to Prebisch (2000a, p. 76):

> It is a fact, as has been stated, that high employment increases imports. But it is no less true that the excessive growth of circulating money has in many cases unduly increased pressure on the balance of payments, causing foreign exchange to be employed in ways that do not always meet the genuine requirements of economic development.
> (...) It is clear (...) that monetary expansion does not have the virtue of increasing the foreign exchange needed to import capital goods.
> (...) The raising of the standard of living of the masses depends, in the last instance, on a significant amount of capital per worker employed in industry, transport and primary production, and on the ability to manage it well.

Hence the need to reconcile the export of primary products with the strengthening of the domestic market. According to Prebisch, this would be possible through the advance of technical progress associated with the industrialization process, combined with social legislation that would ensure the gradual increase of real wages.

In a complementary manner, the Argentine economist suggests measures to restrict or discourage non-essential imports, as well as the diversification of trade partners. Thus, if a peripheral country A increases its trade with another peripheral country B, and these exchanges are referenced in the currencies issued by countries A and B, both countries will be subject to fewer external restrictions than those verified when A and B depend exclusively (or mainly) on trade with (the use of the currency issued by) a central country C.

It is in this sense that Prebisch (2000b) defends the increase of trade between Latin American countries. The creation of a Latin American common market is defended by the Argentinean economist as a way to provide the necessary gains of scale and specialization to enable the deepening of industrialization of the countries in the region, allowing them to export industrial products both to their neighbors and to countries outside the region. It is not a matter, therefore, of denying the importance of trade between peripheral and central countries. But rather to emphasize the need for the peripheral countries to reduce their external vulnerability through the diversification of their export baskets and trade partners.

It happens that the implementation of such a program is far from being trivial, since it contradicts interests established in the central countries. In this regard, Furtado (2000) points out that the expansion of the European industrial economy over previously occupied regions resulted in most cases in hybrid structures, in which capitalist logic coexists in a superimposed manner with pre-existing economic and social structures. For Furtado, the underdevelopment phenomenon is an autonomous historical process, resulting from this type of dualist economy, and not a stage through which economies that have already reached a higher degree of development have necessarily passed.

One of the main challenges of the peripheral countries is to ensure that the growth of their imports does not occur at a greater rate than that of their exports, or at least that eventual commercial imbalances are sustained by the attraction of quality capital, committed to the development of the peripheral economies and not very reactive to change (for example, by increasing foreign direct investment), or that they are corrected by economically tolerable exchange devaluations, without triggering disruptive inflationary processes.[15] This requires the adoption of governmental stimuli[16] to private activities, so that economic growth and the technological sophistication of the national productive structure are not hindered by limitations on the capacity to import goods and services. Such limitations may be circumvented either by reducing the need to import or by increasing the capacity to export. In both cases, government planning is fundamental to direct government stimuli in such a way as to make structural transformations feasible that enable the technological sophistication of national productive activities.

Expansion of investments in infrastructure and multi-year government procurement programs that stimulate technological innovations are examples of initiatives that can contribute in a concrete way to increasing productivity and promoting structural changes towards more technologically sophisticated and environmentally sustainable patterns of production and consumption. The same can be said of the tax structure and the criteria adopted for financing productive activities.

This does not mean that any and all imports of goods or services must necessarily be replaced by domestically produced goods and services. It is necessary to calibrate the intensity, scope and duration of each government stimulus through mechanisms of incentives and punishments to private entrepreneurs, according to the goals that are established by government planning. As a rule, international partnerships in specific niches can be advantageous to accelerate the efforts of technological sophistication. This is what the most advanced countries have done and continue to do.

As the case studies analyzed by Mazzucato (2014) demonstrate, government agencies supported the design and enabling investments that made possible the emergence of general-purpose technologies, such as the U.S. mass production system, aviation technologies, space technologies, communication and information technologies, the Internet, and nuclear energy. In other words, entrepreneurial states, motivated by their strategic interests, have driven and continue to drive their economies toward more advanced development trajectories.

With an addendum: in contemporary economies, often the control over the immaterial attributes of business is more important than the possession of tangible objects such as land, buildings and machinery (COMMONS, 2009). This means that the entrepreneurial state, to be truly entrepreneurial,

15 This is of no concern to the international key-currency issuing country, which at present is the United States. In this case, current account deficits can be sustained at least as long as there is a growing global appetite for dollars.

16 We are also referring here to punishments in case targets for technological sophistication, job creation, and others that may be defined by the government as counterparts for the receipt of government incentives by private and mixed-economy companies are not met.

needs to stimulate the aggregation of value also in its immaterial dimension, observing the potentialities and regional specificities.

All advanced economy countries have been and continue to be committed to stimulating their companies (private, mixed economy, and state-owned) to incorporate more efficient production and management techniques that allow them to achieve better economic performance, better living conditions for their population, and greater geopolitical influence.

Today, the technological frontier is found in industrial and service activities related to the so-called "Fourth Industrial Revolution": artificial intelligence, robotics, cyber-physical systems, 3D printing, drones, nanotechnology, biotechnology, data storage, clean energy, autonomous vehicles, new materials, cloud computing, and the Internet of Things are examples of scientific and technological advances that are profoundly transforming production chains.

The challenge facing the peripheral countries is to keep up with the speed of innovations underway in the central countries while extending to their entire populations the benefits of previous industrial revolutions: the use of machines powered by steam and water engines; mass production associated with electrification and the chemical industry; and the digital revolution driven by the advance of computing and industrial automation integrating mechanical and electronic systems.

The peripheral countries that do not advance simultaneously towards the technological frontier and the social inclusion of their populations as a whole will remain specialized in primary export activities with low aggregate value, widening the technological gap and the distance that separates them from the central countries in terms of per capita income and access to better quality services.

## CONCLUSION

We argue in this paper that although monetarily sovereign governments do not depend on prior revenue collection to spend in the currency they issue, this does not mean that they can or should spend without limits. Proper allocative planning of society's material resources needs to pay attention to at least three crucial aspects: the external constraints, the risk of accelerating inflation, and the self-imposed constraints of the budget laws.

We have seen that the current international monetary system is characterized by the fiat dollar as the key currency at the top of the hierarchy of currencies; by the predominance of the floating exchange rate regime; and by the tendency to free capital mobility. A system with such characteristics is highly unstable, with profound impacts especially on the economies of the peripheral countries. After all, these are the economies that suffer most from the high volatility of capital flows in search of appreciation in the financial sphere.

As they issue currencies that have low international demand, peripheral countries would need to pay interest rates higher than those practiced by central countries. Otherwise, economic agents would hardly be interested in maintaining in their portfolios public bonds issued in currencies with low international demand.

Another important limitation for economic policies in peripheral countries concerns the exchange rate regime. In the current international monetary system, the floating exchange rate regime tends to offer countries that adopt it greater capacity to exercise their monetary sovereignty, because it does not establish convertibility of the state currency into other currencies or commodities. Thus, there is no risk that the government will fail to deliver on its promise to convert, because there is simply no such promise.

In practice, most of the current governments practice the so-called dirty floating. That is, the government announces that its exchange rate regime is flexible, but adopts regulatory measures and control of capital flows, besides carrying out, via the Central Bank, occasional interventions in the exchange rate market, with the intention of avoiding: excesses of exchange rate volatility; the reduction of real wages and the increase in the costs of importing goods and services, in the case of strong exchange rate devaluation movements; or deflationary pressures and loss of competitiveness of its products and services in relation to similar international ones, in the case of strong exchange rate appreciation movements.

We argue that with a flexible (or dirty floating) exchange rate regime, maintaining high stocks of foreign exchange reserves basically acts as insurance against speculative attacks. The stocks of reserves needed to guarantee this security tend to be smaller, however, than those that would be needed to guarantee the maintenance of the fixed exchange rate regime.

One way for peripheral countries to guard against speculative attacks is to avoid getting indebted in currencies issued by other countries when the activities to be contemplated do not contribute to an increase in the national productive structure, or when the financing conditions available to make this increase feasible are not attractive. After all, the government that borrows in the currency it issues itself enjoys greater autonomy to manage its economic policy than the government that borrows in currencies issued by other governments.

We maintain, as to external restrictions, that the most difficult challenge to be overcome by the peripheral countries consists in the implementation of public policies with sufficient scope and duration to promote the diversification and technological complexification of their productive activities. After all, as discussed in this paper, the peripheral condition is not immutable.

Faced with the recognition that a country is in an unfavorable position in the hierarchy of currencies of the international monetary system, at least two paths may be taken: accept that it is up to this country to continue presenting low international relevance, high poverty rates and a production structure focused on primary export activities with low added value; or investigate what measures need to be adopted for the country to assume greater international relevance, offer better living conditions for its population and develop a more diversified and technologically sophisticated production structure.

The productive structure of the peripheral countries needs to be diversified and to have its productive chains strengthened, based on technological innovation policies and with attention paid to social, regional and environmental needs. In a highly competitive international environment, countries that are timid in the implementation of productive and regional development policies face greater difficulties in exercising their monetary sovereignty than those that make an effort to offer their nationals the necessary support so that they can compete on equal terms with their international competitors.

Consolidating the systems of innovation and social welfare allows synergies to emerge that can improve the quality of life for the entire population. Better health and nutrition conditions and access to information and education result in improvements in learning capacity and labor productivity. Greater economic efficiency, in turn, allows technological advances to be used in public policies that meet concrete social demands.

A country's ability to exercise its monetary sovereignty is directly related, therefore, to its commitment and persistence in implementing development strategies that contribute to technological sophistication and the generation of synergies that benefit its population as a whole.

To the extent that a country inserts itself in a more sovereign manner in the international arena, the demand for its currency tends to grow, which gradually expands the possibilities of using exchange rate, monetary and fiscal policies in the service of its development strategy. This is a two-way movement: economic policies that promote full employment of the national productive forces, with attention to external and inflationary restrictions, contribute to increase the capacity of that country to exercise its monetary sovereignty; at the same time, countries that have more favorable conditions for the exercise of their monetary sovereignty can use their exchange, monetary and fiscal policies with greater ease to achieve their development objectives.

In relation to the risks of accelerating inflation, we observe that public spending and the stimulus to private spending need to be calibrated by aiming at full employment of the labor force. That is, aiming at a level in which everyone who is willing and able to work in exchange for a certain minimum wage politically agreed upon in that society can find decent work opportunities in the private or public sector. It is not desirable to encourage increased spending (public or private) in situations of full employment, as this will tend to generate demand inflation. Nor is it desirable to manage the general level of spending (public and private) of an economy at levels below full employment, since this means an under-utilization of the productive capacity of that society, with undesirable social consequences: involuntary unemployment, poverty, etc.

In this regard, we argue that full employment cannot be achieved simply by keeping the basic interest rate stabilized at low levels. Even with a low cost of borrowing (due to low interest rates), investment will not necessarily expand, because the traditional instruments of monetary policy operate asymmetrically: monetary policy is usually efficient in pulling the economy back (retracting economic activity), but it alone is incapable of pushing the economy forward (stimulating economic activity). To stimulate economic activity, fiscal policy is more powerful than monetary policy.

Similarly, we have seen that controlling aggregate demand is not enough to control inflation. Especially in peripheral countries, it is necessary to pay attention to the supply side. After all, in these countries cost inflation is usually more relevant than demand inflation. This requires extensive government coordination to deal with the various types of cost inflation, such as wage inflation, profit inflation, imported inflation, and inflation from sectoral supply bottlenecks.

If, instead, the government limits itself to controlling inflation on the demand side by manipulating public spending and the interest rate in a way that causes involuntary unemployment of the labor force, the concrete causes of cost increases are not addressed, and the result is high unemployment and poverty. This leads to problems from a social and economic point of view, but also in fiscal terms: besides reducing tax collection as a consequence of low economic growth, involuntary unemployment and poverty put pressure on spending in areas such as social assistance and public security.

In relation to the self-imposed restrictions by the budget laws, the difficulties in instituting an institutional framework for planning and budget management that is functional from the economic point of view, while at the same time favoring cooperation between the branches of government and the federated entities in the processes of elaboration, implementation, monitoring, and evaluation of public policies, were discussed.

It has been said that recognizing that monetarily sovereign governments are not subject to the same financial constraints as households and businesses is a necessary but not sufficient condition for the responsible handling of public affairs.

In this sense, government projects that do not pay attention to the limits of governability and government capacity tend to be perceived as generic statements of intent, without sufficient clarity and/or commitment from the leaders to identify and face the obstacles that affect their implementation. As a result, budgets are often prepared in an inertial way, limiting themselves to projecting past spending into the future, without technical evaluations of the convenience of maintaining those expenses, which ends up hindering the mobilization of the real resources necessary for the implementation of other programs that can generate more concrete results for society.

That is why it is fundamental to identify in each country the limits that need to be evaluated ex-ante in the formulation of government planning, preventing poorly conceived experimentalism from causing economic and social setbacks.

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