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Conventions and the Brazilian Fiscal Policy to Face the Aftermath of the COVID-19 Economic Crisis: a Post Keynesian view

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Abstract

With the exception of 2020, when Brazilian GDP fell because of COVID-19, the policy of 'expansionary fiscal austerity' has been implemented in Brazil since 2015, but with poor results in terms of economic growth. From the Post-Keynesian perspective, sustainable economic growth depends on investment and the latter depends on optimistic conventions. This article analyses the feasibility of a Keynesian fiscal policy to resume Brazilian economic growth and the role of conventions for the success of fiscal policy.

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1. Introduction

In the second half of the 2000s, the Brazilian economy achieved sustainable growth, with annual average growth of 4.5 per cent. From 2011 to 2014, when President Rousseff served her first term, the forces that pushed the economy in the 2000s were no longer in place, thereby, the annual average growth rate decreased to 2.35 per cent (Resende and Terra 2017).

The New Consensus Macroeconomics (NCM) tripod (Inflation Targeting Regime, fiscal regime, and flexible exchange rate regime) was implemented in Brazil in 1999, but economic growth during the 2000s decade was not pushed by private investments as had been expected by NCM supporters. It was the rise in commodities prices and in exports, alongside policies adopted to stimulate consumption (income transfer policies, credit policy and real wage increases) and, after 2006, a rise in public investment, that boosted the economy (Resende and Terra 2017). The tight monetary policy and flexible exchange rate regime adopted in the NCM context drove the basic interest rate to high levels and, consequently, a continuous exchange rate appreciation put inflation under control at the same time that a deindustrialisation process in the Brazilian economy was stimulated. On the other hand, NCM was put aside right after the Great Financial Crisis, in 2009–2010, with a broad variety of

countercyclical economic measures (Arestis and Terra 2015). After a small recession in 2009 (–0.2 per cent of GDP), economic activity recovered sharply in 2010: GDP increased by 7.5 per cent (IBGE 2022).

During Rousseff's first term (2011–2014) the external scene changed, as well as the economic policies implemented. NCM policies were not totally restored and more expansionary fiscal and monetary policies and greater intervention in the foreign exchange market were adopted. Nonetheless, fiscal, monetary and exchange rate policies mistakes were made (Carvalho 2018; Resende and Terra 2020). The outcome was complete disarray in terms of expectations, and, as a result, the investment rate remained stagnant from 2010 to 2013 and fell from 2014 onwards.

Following Arestis *et al* (2022), the main reasons for the Brazilian economic downturn was not the nature of economic policies adopted, which represented a NCM tripod flexibilisation, with a less tight fiscal target, a more depreciated Brazilian *Real* in relation to the US dollar and a lower basic interest rate. The problem was the misleading manner by which Rousseff and her economic team guided the economic policy. To Resende and Terra (2020), a consequence of these policy mistakes was a decrease in the annual average growth rate from 4.5 per cent in 2006–2010 to 2.35 per cent in the 2011–2014 period.

In the last year of Roussef's term, 2014, the 'Car Wash Lawsuit' (*Operação Lava Jato* in Portuguese)[2] took place, pushing the Brazilian economy downwards as it worsened economic agents' expectations and hit some of the biggest Brazilian companies. The latter included the greatest, Petrobras, and the biggest contractor firms in the country, responsible for building infrastructure investments. Brazilian GDP increased only by 0.5 per cent in 2014 (IBGE 2022).

In 2015 Roussef was elected for a second term and decided to make a complete turn to tackle the crisis, bringing back a tighter version of the NCM tripod. A huge short-term fiscal adjustment was implemented based on 'expansionary fiscal austerity'.[3] According to SPE (2018), fiscal policy had a –1.2 per cent impact on GDP. Notwithstanding the fiscal austerity, monetary policy followed orthodox guidelines. The SELIC base rate set by the Central Bank of Brazil increased to control inflation, reaching 14.25 per cent in December 2015 while Brazilian GDP was falling by 3.5 per cent. The economic policy mistakes and the shock given by the Car Wash Lawsuit leaded to a deep Brazilian recession in 2015 and 2016 – Brazilian GDP fell 3.3 per cent in 2016. On the other hand, President Roussef was removed from office in August/2016 – she was charged with violating the Brazilian Fiscal Responsibility Law during her first term.

Vice-President Temer became president in Roussef's place for the remainder of the term (2016–2018) and implemented stronger fiscal austerity than Rousseff's administration, along with structural reforms. At the same time, tight monetary policy continued to be applied. In October 2018, Bolsonaro was elected President and the expansionary fiscal austerity policy was kept, despite the policy's failure to promote growth. Brazil's annual average growth rate was

0.26 per cent from 2016 to 2019. In 2020 GDP fell 3.3 per cent because of COVID-19 (IBGE 2022).

From 2015 onwards fiscal austerity was implemented, but there was no reaction, either from consumption or from private investment. Given high levels of indebtedness, as well as unemployment of households, consumption remained stagnant. Without the stimulus from consumption and from government expenditures, in particular public investment, entrepreneurs' expectations remained pessimistic, since exports were not able to boost the economy, at around 13 per cent of GDP. Consequently, private investment did not react.

From the Post Keynesian viewpoint, economic dynamics depend on investment and the latter relies heavily on optimistic expectations grounded upon conventions (Keynes 2013a). Moreover, as Keynes (2013a) argued, the state must complement, not compete with, the private sector in the context of the 'the socialisation of investment'. In this sense, Kregel (1985, 1995) highlights Keynesian long-run stabilisation policy to stimulate investment, whereas Carvalho (1992) calls for an enhanced role for fiscal policy to signal to private agents the safe level of income they should include in their expectations as to the future. From this standpoint, Brazilian fiscal policy is far from the long-run stabilisation policy that is needed to stimulate investment; so, it is doomed to fail in its goal of restoring growth. For this purpose, the 'socialisation of investment' alongside optimistic convention is central (Resende and Terra 2017).

This article analyses the feasibility of a Keynesian fiscal policy for the resumption of the Brazilian economy, as well as the role of conventions for the success of fiscal policy. Although conventions are central in influencing private investment in Keynes' model, the role of conventions often does not receive the necessary attention in the Post Keynesian literature. The optimistic convention is not a sufficient condition, but it is a necessary condition to stimulate and sustain private investment, as was pointed out by Keynes (2013a, Chapter 12). On the other hand, the relevance of conventions is noticed when one realises that it is part of what Keynes called 'socialisation of investment': Ferrari-Filho and Conceição (2005) and Arestis *et al* (2016) interpreted Keynes' 'socialisation of investment', concerning the government's role in providing institutional mechanisms to mitigate uncertainty and stimulate investment. According to Arestis *et al* (2019), entrepreneurs' expectations are formed on the basis of 'direct knowledge' and conventions are part of it: 'The data from which individuals acquire direct knowledge include this belief shared with other individuals — that is, conventions' (Arestis *et al* 2019 p 189). Thus, this article also intends to show the crucial role of optimistic conventions for the success of a Keynesian long-run stabilisation policy, i.e. to stimulate investment.

To that end, Section 2 discusses the role of conventions in the formation of expectations, which serves as the theoretical framework for the proposal for a new Brazilian fiscal policy. Section 3 presents and discusses Brazilian fiscal

policy implemented in recent years. Based on a Post Keynesian approach, the fiscal policy and its finance sources that are needed to resume Brazilian economic growth are outlined. Section 4 summarises and concludes.

2. Conventions and the State of Confidence

According to Keynes (2013c, Preface) 'The subject matter of this book was first broached in the brain of Leibniz, who (...) conceived of Probability as a branch of Logic'. Keynes was searching for rational methods of decision whereby a choice would be made of a sequel that could be shown to be a logical consequence of a given proposition or premisses. However, in many cases certainty could not be reached by logic alone and probability became the basis for a decision to be made. According to Keynes (2013c p 339), '(...) the probable is the hyphothesis on which it is rational for us to act'. Keynes (2013c) wanted to understand human reasoning and his ideas on decision making gradually changed from the focus on probability to a focus on uncertainty in his *General Theory of Employment, Interest and Money* (Keynes, 2013a). Arestis *et al* (2019 pp 188-189) stated that 'Keynes made it clear that economics is a moral science and thus deals with human behaviour. In the *Treatise on Probability* (TP), Keynes (2013c) went as far as to present an epistemological model to understand human reasoning, at least at the individual decision-making level.

It is in this respect that conventions influence expectations (...) In order to address that task, Keynes developed an epistemological analysis in the TP upon which it is possible to understand the "Keynesian entrepreneur" of the GT [*General Theory of Employment, Interest and Money*]'. Therefore, Post Keynesians are concerned with individual behaviour as a way (or foundation) of understanding the formation of expectations, conventions and collective behaviour, as explained below. On the other hand, collective behaviour is founded on conventions and the success of a Keynesian fiscal policy depends partly on conventions, as argued in this article.

In *A Treatise on Probability,* Keynes (2013c) explained how a degree of belief could be rational. Keynes (2013c) argued that probability is not the outcome of statistical frequencies, but an objective-logic within a subjective rational relation between some premisses and conclusions (Carvalho 1992). To Keynes (2013c), knowledge is obtained by a process that starts with direct understanding. It results from human faculties that enable the ability of learning. Direct understanding builds the second step of knowledge, direct knowledge, that is, the set of premisses from which a conclusion will be reached.

The conclusion is, in turn, called indirect knowledge by Keynes (2013c), the endpoint of the process of obtaining knowledge. Since the conclusion is a logical derivation of the premisses, belief in the conclusion is rational because it depends only on criteria of consistency with formal logic. If the premisses are true and the arguments are logically derived, the degree of rational belief in the conclusions depends on the degree of the completeness of the set of premisses. Later, Keynes brought this approach to the *The General Theory of Employment,*

Interest and Money (GT) and, in his study of decision making, shifted his focus from probability (degree of rational belief) to uncertainty.

In the Post Keynesian literature, 'fundamental uncertainty' stems from a scenario in which the information set is not enough that a unique, additive and reliable probability distribution be reached, at the moment of decision (Dequech 1999). Knowledge about the future would not be possible as the set of premisses is not complete. Formal logic can sustain robust expectations only if we trust the set of premisses to be correct and complete. If the set of the available information is not complete, the decision-maker has to fill in the voids. Conjectures are needed in the way of reaching conclusions (indirect knowledge), since the missing premisses just not do exist at the moment of decision. Consequently, based upon the same initial and incomplete set of premisses, different outcomes (indirect knowledge) are possible when the imagined premisses by two or more individuals are not the same. Even though the outcomes achieved by two or more individuals are different, all represent rational behaviour under fundamental uncertainty.[4]

Uncertainty emerges and the 'weight of arguments' becomes relevant because of the consciousness of the extent to which ignorance leads to imagination substituting for knowledge as the basis to establish premisses. According to Keynes (2013c p 77), the weight of an argument is not determined by a comparison 'between the favorable and unfavorable evidence, but between the absolute amounts of relevant knowledge and of relevant ignorance respectively'. Imagined premisses do not change a probability, but rather the degree of confidence in a conclusion, i.e. the degree of confidence in a proposition (conclusion/indirect knowledge) depends on the weight of arguments, which is defined by the degree of completeness of the premisses (Dequech 1999).

Since the weight of arguments is linked to the degree of belief (confidence) in the indirect knowledge, then it is linked to uncertainty. 'Uncertainty pertains to the premisses and from them it spreads to the outcomes' (Carvalho 1992 p 62).[5] If the premisses are true knowledge and the set of premisses is complete, certainty on conclusion is in place. If the premisses are true knowledge and the set of premisses is incomplete, the weight of arguments does not change the probability linked to the conclusion derived from the incomplete set of premisses. However, if the premisses are partially imagined in order to complete the set of necessary data, the degree of confidence in a proposition (conclusion) depends on the weight of arguments. Thereby, fundamental uncertainty is in place.

So, Keynes' ideas on decision making changed from the focus on probability in the *Treatise on Probability* to a focus on uncertainty in his GT, since rational belief should depend not only on true premisses and on their degree of completeness, but also on the confidence in the premisses themselves. Expectations are derived from the conclusions (indirect knowledge), thereby, expectations depend not only on the set of premisses, but also on the agent's confidence in conclusions, something that Keynes (2013a) called 'the state of confidence'.

Why is the set of premisses not complete at the moment of decision? Decisions are crucial in the Post Keynesian view. The very act of executing a plan may destroy the environment in which it was performed. The variables that work as premisses may be influenced by the very decision the agent has to make in the present. Investments belong with this cruciality (Carvalho 1992). For instance, income and customers' conduct as well as entrepreneurs' conduct are premisses that are influenced by investment decisions which, in turn, depends on these premisses, making it impossible for the agent to know at the moment of decision the variations of premisses and the new premisses that may emerge. The insufficiency of premisses is rooted in objective features of actual social processes and economic decisions are taken out of a set of incomplete information. Therefore, creativity of individuals and unpredictable structural changes are allowed (Dequech 2000).[6]

Consequently, economic processes are not time-independent (not ergodic), and economic events related to the long run are usually not able to be replicated. Thus, the conditions for calculating reliable probabilities do not exist. This disables agents from assuming 'rational expectations' and 'maximising behaviour', making it impossible for automatic market forces to correct deviations of the economy from an optimal long-term equilibrium (Resende and Terra 2017). Therefore, there is a significant indeterminacy of the yet-to-be-created future.

If there are no pre-defined paths to the 'monetary economy', its future trajectory depends on the set of agents' actions. Spending decisions depend on the agents' uncertainty and liquidity preference and, at the same time, determine the path to the economy, i.e. the economy is driven by demand.[7] Therefore, the formation of expectations requires each agent to observe other agents' opinions about their spending decisions in order to conjecture on the future path to the economy, which is needed to subsidise their own wealth allocation decision. The result of this process is the emergence of a shared belief by agents, that is, a convention.

Although expectations are subjectively and independently formed, belief is shared by individuals. What promotes this convergence? The coexistence of a large number of independent decision units at a given point in time makes it necessary for each decision-maker to form expectations about others' expectations. Plans are made individually, but if each decision-maker does not account for others' expectations, plans may not succeed and expectations would be frustrated. 'Consequently, there is convergence of expectations, giving room for convention as a belief shared by many individuals and which they consider for their state of confidence upon which they reason prospects' (Resende and Terra 2017 p 248).

Conventions can be understood as a collective rule of behaviour (Dequech 1999), or a mimetic behaviour (Plihon 1995), and are characterised as being 'as interactive, as is confidence, individual and collective' (Davis 1997 p xiii). Arestis *et al* (2019), Resende and Terra (2017), Carvalho (2014), among others,

define convention as a shared belief that prevails over some time. Also, among the data from which individuals acquire direct knowledge, and which is used to form expectations, are conventions; therefore, the state of confidence of agents also depends on them (Arestis *et al* 2019). A convention increases the degree of completeness of the set of premisses and as a consequence it influences the weight of arguments and the agent's confidence in conclusions (indirect knowledge).

Further, as a shared belief by a certain number of individuals, convention reduces uncertainty by allowing one to anticipate the behaviour of other agents, who share the same belief (Carvalho 2014). In other words, convention reduces uncertainty at the individual level and may anchor expectations because it leads each individual to believe that others who share the same belief will act according to this belief. Since the future path of the economy results from the set of agents' actions, confidence on the conjectured scenario (expectations) increases when it stems from the prevailing convention. In this sense, convention plays a role in trust for decision making. It is not a generator of absolute certainty, but it is a powerful trigger with regard to what is believed to be true. Thus, convention is a confidence-inducing mechanism that play a crucial role in shaping private agents' expectations and their decisions to invest. In short, convention is a relevant premise to frame expectations and to increase confidence in them, thereby playing the role of a powerful device to induce action (investment) in an uncertain world.

2.1. The role of conventions for the success of a Keynesian fiscal policy

Although convention matters for the agents' state of confidence and investment decisions, shared beliefs may change over time, showing the fragile basis upon which individuals form expectations under uncertainty. As Keynes states, 'a conventional valuation […] is liable to change violently as the result of a sudden fluctuation of opinion […]' (Keynes 2013a p 154). Then, if conventions change, which are the forces that guide or influence them?

To Keynes (2013a), the State has a role to face the insufficiency of effective demand in a context that conventional behaviour is central. According to Resende and Terra (2017 p 249), 'the government can frame economic conventions as it plays the following roles: (i) it issues exogenous money and affects the creation of endogenous money; (ii) it stipulates taxes and gathers revenues; (iii) it undertakes a wide scope of public policies; (iv) it establishes laws which builds the society's institutional structure; and (v) it has the legal jurisdiction to reinforce the power of law'. Arestis *et al* (2019 p 189) enlightens the idea: 'governments, which are the greatest social entity and have the power of creating and enforcing public policy, play a key role in forming conventions and consequently in establishing expectations'. Fraga and Resende (2022) state that Minsky's 'Big Government' and 'Big Bank' are institutions which affect conventions and ensure economic stability, while Kregel (1985, 1995) highlights Keynesian long-run stabilisation policy to stimulate investment.

Keynes (2013a) highlighted the relevance of state intervention for the stimulus on investment. To him, the socialisation of investment is central to a long-run stabilisation policy and monetary policy should be adapted to achieve that end: 'I should regard state intervention to encourage investment as probably a more important factor than low rates of interest taken in isolation' (Keynes 2013b p 350). However, 'State intervention to encourage investment' does not mean direct state operation (Kregel, 1985). The signals issued by the government to coordinate expectations also matter and, therefore, conventions, which are influenced by these signals, should be considered as part of Keynesian economic policy.

To make matters clear, some quotes from GT are useful: 'I expect to see the State (...) taking an ever greater responsibility for directly organising investment' (Keynes 2013a p 164). Also, 'I conclude that the duty of ordering the current volume of investment cannot safely be left in private hands' (Keynes 2013a p 320). Still,

> I conceive, therefore, that a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation to full employment; though this need not exclude all manner of compromises and of devices by which public authority will co-operate with private initiative (...) It is not the ownership of the instruments of production which it is important for the State to assume. If the State is able to determine the aggregate amount of resources devoted to augmenting the instruments and the basic rate of reward to those who own them, it will have accomplished all that is necessary (Keynes 2013a p 378).

Ferrari-Filho and Conceição (2005) interpreted Keynes' 'socialisation of investment', concerning the government role in providing institutional mechanisms to mitigate uncertainty and stimulate investment. In this sense, Keynesian fiscal policy takes part of the picture. Concerned with a 'defensive' policy to defend full employment conditions, in 1942, after analysing *The Beveridge Report* Keynes proposed introducing a budget split into 'ordinary' and 'capital' to establish a stable long-term programme. According to Keynes, 'the ordinary Budget should be balanced at all times [while] [...] the capital Budget [...] should fluctuate with the demand for employment' (Keynes 2013b p 225).

In Keynes' view, the capital budget serves to offset cyclical changes in investment spending in a long-term investment plan, i.e. it should be a device to smooth economic cycles. In order to stabilise investment as a proportion of national output, Keynes (2013a) suggested that a substantial government control of investment is needed to achieve that end. It should be from one-third to three-quarters of total investment spending. 'Although Keynes' recommendations for the share of state-controlled investment [...] were high, this did not mean direct state operation; rather a combination of state, semi-autonomous and socialised joint stock forms' (Kregel 1985 p 37).

Fraga and Resende (2022) highlight that the stable long-term programme is a device whose role is twofold: 'prevent large fluctuations in aggregate demand directly through capital spending (state-controlled investment) and indirectly through the influence on conventions and expectations the long-term programme should exert' (Fraga and Resende 2022 p 3). The last point is also highlighted by Resende and Terra (2017) and Carvalho (1992): 'The State's long-term plan coordinates the agents' conventions, as it is a long-run commitment to accomplish and sustain an adequate level of aggregate demand' (Resende and Terra 2017 p 252). 'There should be reserved for fiscal policy the role of smoothing the trade cycle and, thus, for signalling to private agents the safe level of income they should include in their expectations as to the future' (Carvalho 1992 p 213). Accordingly, Marcuzzo (2010) argues that Keynes' suggestions on fiscal policy account for stabilising confidence – that is, conventions.

In an uncertain world, private investment depends on agents' optimistic expectations grounded upon conventions. So, a long-term investment plan in stimulating optimistic conventions is crucial for Keynesian fiscal policy. Moreover, the task of preventing large investment fluctuations by a stable long-term programme should be complemented by short-term macroeconomic policies, which in a context of coordination and discretion should foster investment.

Further, the success of economic policies depends on how proper and pervasive is a convention. 'A convention is a tool deployed to coordinate expectations that inform each agent what the other ones expect from a given stimulus' (Carvalho 2014 p 257). The effectiveness of economic policies rests on how many individuals are confident that the others share the same belief in the way that not only each one considers that economic policies are in the right way, but also that people believe it and, consequently, will give a positive response to it. Agents are more sensible in responding to economic policies when they have a shared belief, which leads a great number of agents to give a similar response to a governmental stimulus (Carvalho 2014). The more sensitive agents are to economic policy, the more effective it will be.

Therefore, it is the role of the State to contribute to the formation and strengthening of an optimistic convention. Government can provide both the rules of markets' operation and the signals that markets fail to offer by means of governmental plans, economic and social policies, speeches, and so forth. If uncertainty is pervasive, to a considerable degree agents ground expectations in the signals issued by government (Resende and Terra 2017). It follows from this observation that the government budget and public debt are tools to boost the economy that should be used with care, as explained below.

2.2. Government Budget, Public Debt and Conventions

There is a role for government budget and public debt as a tool for stabilising investment. The analysis of Keynes' views on long-run stabilisation policy is

useful to explain the point. Keynes proposed introducing a government budget split into 'ordinary' and 'capital'. According to Kregel (1995, 265), 'Looked at over time, both the ordinary and capital account should be roughly in balance'. Further, Kregel argues that 'Keynes himself did not ever directly recommend government deficits as a tool of stabilisation policy […] Keynes warned against "confusing the fundamental idea of the capital budget with the particular, rather desperate expedient of deficit financing" […]' (Kregel 1985 p 32-33). The following quotation strengthens this passage:

> if, for one reason or another, the volume of planned investment fails to produce equilibrium, the lack of balance would be met by unbalancing one way or the other the current Budget. Admittedly this would be a last resort, only to come into play if the machinery of capital budgetting had broken down (Keynes 2013b p 352).

Budget equilibrium and a stable public debt trajectory matter for a successful fiscal policy because they influence conventions. Optimistic expectations and conventions that anchor them become central for entrepreneurs to go ahead with their investments, but a public debt trajectory that seems out of control may mitigate investment. There are two main reasons for the importance of a balanced government budget, as explained next.

First, a balanced government budget makes it easier to adopt economic policies which are expected by entrepreneurs, such as countercyclical fiscal policy which, in turn, is central to bear optimistic conventions. For instance, Minsky's Big Bank and Big Government were desired to act during the Great Financial crisis of 2008 or the COVID-19 pandemic period. Following Terra (2019 p 66),[8] 'If expectations are too unstable, Keynes makes it clear that economic policy needs to be just the opposite: as stable as possible, thus functioning as the surest support available to the entrepreneur'. On the other hand, governments should seek fiscal responsibility, as Keynes (2013b) recommended, although this should not be pursued as an end in itself, but on the criterion of countercyclical fiscal policy management. Fiscal policy needs to be expansionist in periods of crisis and recession, and neutral in times of economic growth. After all, conventions matter. When the automatic stabilisation of the fiscal policy fails and recession emerges, fiscal deficits are expected, though Keynes (2013b: 353-4) deemed it a 'desperate expedient'. Nonetheless, if there are fiscal deficits for any reason, any further fiscal equilibrium should be chased gradually over time.

Second, an unsustainable debt may foster the expectation of a tax increase, which may mitigate optimistic conventions and investment decisions, or feed the expectation of government debt monetisation, which, in turn, may put inflation out of control. To the Post Keynesian view, there is a web of contracts in the economy aiming to reduce uncertainty. Contracts require a unit of account whose value is stable. In the Keynesian literature, money supply is scarce in view of its demand, given its negligible elasticities of production and

substitution. Monetary policy takes care of maintaining money's scarcity relative to constant demand, which contributes to the stability of its value. Because it is relatively scarce, and not because it is absolutely scarce as claimed by mainstream economics, money becomes a unit of account for contracts ensuring its function as a means of exchange. Consequently, money also becomes a reserve of value and bears the maximum liquidity in the economy. At the same time, contracts reinforce the stability of its value, and make prices fairly rigid in the short-term.

However, contracts are not a full guarantee against inflation. The stability of a currency's value is also a social convention (Terra 2019). Agents only lose their faith in money when its supply is bigger relative to its demand. In this situation, money is disregarded as a means to protect wealth over time, leading to a rush to purchase goods and other assets, such as real estate and foreign money, which will result in inflation. So, bad conventions concerning the management of money by central banks creates expectations of inflation and in a self-fulfilling prophecy, inflation emerges.

There are other reasons why inflation occurs. For instance, Keynes (2013a, chapter 21) highlighted cost-push inflation. Nevertheless, conventions also matter for inflation. Under normal conditions, in which there is no expected or installed recession, uncontrolled creation of money, that is, a supply of money that breaks down the principle of negligible elasticities of production and substitution of money, may stimulate inflation instead of economic growth. Within a recession, money creation helps to lower interest rates as well as reducing the risk agents perceive and that makes them hoard money. If their interest object, money, is reached more easily, their liquidity preference may soften.

Thus, governments should chase a stable debt-to-GDP ratio. However, the question is not its level, but rather the *confidence* in its stability. The standard debt dynamics equation may be useful to analyse the question:

$$\frac{(Debt)}{(GDP)^{t}} - \frac{(Debt)}{(GDP)^{t-1}} \approx (r_t - g_t)\frac{(Debt)}{(GDP)^{t-1}} + \frac{(Primary\ Deficit)}{(GDP)^{t}} \quad (1)$$

where r is the real interest rate, g is the real growth rate of GDP, and the primary deficit is the difference between non-interest spending and revenues. The condition for debt-to-GDP ratio stability is met when $r_t \leq g_t$. In a context of a balanced budget, the condition becomes $r_t = g_t$. Thus, an expansionary fiscal policy may result in a rise in the debt-to-GDP ratio without jeopardising its stability and optimistic conventions. Moreover, the latter may be strenghtened by fiscal policy when it is needed to stimulate a stagnant economy. Table 1 shows many countries with high debt-to-GDP ratios that do not see a flight-to-quality debt crisis taking place.

Table 1: Debt-to-GDP Ratios, Selected Countries

País	Dívida Pública/PIB	Data	Dívida Pública/PIB	Data
Venezuela	233%	Dez.2019	350%	Dez.2020
Japão	238%	Dez.2019	266%	Dez.2020
Sudão	202%	Dez.2019	259%	Dez.2020
Grécia	181%	Dez.2019	206%	Dez.2020
Líbano	175%	Dez.2019	172%	Dez.2020
Itália	135%	Dez.2019	156%	Dez.2020
Portugal	117%	Dez.2019	134%	Dez.2020
Singapura	126%	Dez.2019	131%	Dez.2020
Barein	103%	Dez.2019	128%	Dez.2020
Cabo Verde	125%	Dez.2018	125%	Dez.2019
Butão	112%	Dez.2018	122%	Dez.2019
Angola	111%	Dez.2019	120%	Dez.2020
Espanha	96%	Dez.2019	120%	Dez.2020
Chipre	94%	Dez.2019	118%	Dez.2020
França	98%	Dez.2019	116%	Dez.2020
Bélgica	98%	Dez.2019	114%	Dez.2020
Moçambique	108%	Dez.2019	114%	Dez.2020
Jamaica	95%	Dez.2019	110%	Dez.2020
Estados Unidos	107%	Dez.2019	108%	Dez.2020
Reino Unido	84%	Dez.2019	100%	Dez.2020
São Tomé e Príncipe	72%	Dez.2018	93%	Dez.2019
Jordânia	90%	Dez.2018	92%	Dez.2019
Zambia	77%	Dez.2018	92%	Dez.2019
Brasil	77%	Dez.2018	76%	Dez.2019

Fonte: Trade Economics – www.tradeeconomics.com/country-list/government-debt-to-gdp

A fiscal impulse may be financed by an increase in the public debt, but a convention that the increase in debt-to-GDP ratio is temporary and that it will be stabilised at a highest level is needed. Otherwise, an increase in the debt-to-GDP ratio that is conventionally seen as dangerous or prohibitive may cause uncertainty about fiscal stability and an increase in the risk premium (r) for financing government debt will take place. As a consequence, $r_t > g_t$, expectations become pessimistic and investment goes down.

3. The long Brazilian economic crisis and fiscal policy

In 2020 and 2021, many governments and Central Banks (CBs) adopted expansionary fiscal and monetary policies to mitigate the COVID-19 pandemic crisis. Despite the fact that the fiscal and monetary measures differed between

countries, in general they increased the public debt-to-GDP ratio, reduced the base interest rate, and either adopted or deepened some kind of non-conventional monetary policy (IMF 2020).

Even though this policy arrangement was undertaken by many countries, some authors argued at the time that these measures would not be sufficient (Botta *et al* 2020; Couppey-Soubeyran, 2020; Galí, 2020). Perhaps they were right, as many countries recorded drops in their GDP. According to these authors, it would have needed even more aggressive fiscal and monetary policies, and money creation should have taken place as an important tool to mitigate economic crisis, as it provides a direct transfer of cash from CBs to households, companies and national treasuries.

In Brazil, many measures were taken to takle the economic crisis in 2020. In what follows, we briefly present the economic policy measures adopted in 2020 and what fiscal policy measures should currently be adopted to overcome the Brazilian economic crisis.

3.1 Economic and social policies adopted to tackle the COVID-19 crisis in Brazil

At the beginning of March 2020, the Minister of Finance of Brazil declared that the main policies to mitigate the economic impact of the COVID-19 crisis were boosting structural reforms and maintaining austerity policies. Notwithstanding this initial proposal by the Minister of Finance, pressure from both the Brazilian Congress and wider society led government to adopt expansionary fiscal and monetary policies from March onwards. Federal Government actions represented an aid of 4.0 per cent of GDP (Arestis *et al* 2022).

The main fiscal measures implemented by the Economic Authorities in 2020 were: (i) a package to help states and municipalities, but which was only partially sufficient to offset their tax revenue losses; (ii) auxiliary income, paid to around 63 million people, of a monthly payment of R$ 600.00 from April to October 2020 and of R$ 300.00 from November to December 2020 (Brazilian *Real*/US Dollar exchange rate was approximately at R$ 5.36 per US dollar in July 2020); (iii) anticipation of spending and postponement of tax gathering; and, iv) the creation of the 'Emergency Employment Support Programme' (*Programa Emergencial de Suporte a Empregos*), to help firms to retain their workers, but which only reached 15 million jobs out of the intended 29 million (IFI, 2020).[9]

Moreover, the Central Bank of Brazil (CBB) released R$ 1.2 trillion through the measures of capital and liquidity assistance to ensure financial stability and expand credit supply to the economy. More specifically, to prevent an increase in risk aversion, the regulatory requirements of capital and provisions for the financial institutions were temporarily reduced. Further, in order to preserve the regular operations of the financial institutions, CBB provided additional liquidity to the financial system to attend credit demand from families and companies, at a moment of a sharp drop in economic activity and scarcity of liquid resources. However, although these measures were important to address the systemic risk in the financial system, they did not boost credit

to consumers and entrepreneurs, given that liquidity preference in financial markets rose strongly.

In terms of monetary policy, three plans to help micro and small firms were tried, but all were unsuccessful (Arestis *et al* 2022). The Brazilian National Treasury, as well as the CBB, are forbidden from granting money directly to non-financial firms, so that they need to use the banking system to lend credit to them. However, in a stressful situation of crisis, firms are not keen to borrow money because they are neither selling as much as needed to accept elevating their debt, nor are they having regular working hours, given the need of social distancing. Nevertheless, banks in crisis prefer liquidity and restrict credit, even with the Brazilian Treasury offering collateral on the loans they make to micro and small firms. In this context, the CBB was authorised to operate in the secondary markets of public and private debt; something Central Banks of advanced countries largely have undertaken since 2008. Still, in the Brazilian case this permission means, in the public debt market, the control of the yield curve and debt twist operation, which are important economic policy tools; in the private debt market it is the deleverage of financial institutions balance sheet. These measures are welcome; however, they do not reach the real side of the economy (Arestis *et al* 2022).

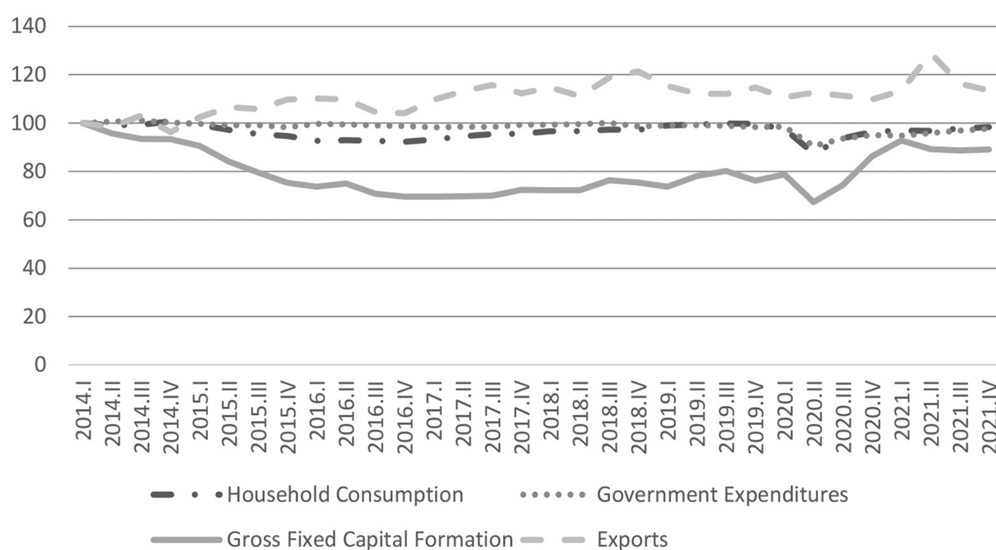
After a deep Brazilian recession in 2015 and 2016 – Brazilian GDP fell 3.5 per cent and 3.3 per cent, respectively – the economy remained stagnant from 2017 to 2019, during which time GDP only grew 1.4 per cent on average. Another deep fall in GDP, by 3.3 per cent, was observed in 2020. Since then, GDP grew by 4.6 per cent in 2021, with expected growth rates around 2.8 per cent and 0.8 per cent in 2022 and 2023, respectively. Significantly, 2022 was a presidential election year, which saw a huge increase in government spending. The economic policy based on the New Consensus Macroeconomics tripod and fiscal austerity, adopted since 2015 onwards – with the exception to 2020 and 2022 – did not bring growth.

Based upon the Post Keynesian approach, Resende and Terra (2017) and Arestis *et al* (2022) debate the economic policies that should have been undertaken to ensure sustainable growth in Brazil, but these measures were not adopted. In what follows, we are concerned just with connections between fiscal policy and conventions and the fiscal agenda that is needed to restore sustainable economic growth in Brazil.

3.2 A Fiscal agenda to restore sustainable economic growth in Brazil

From the Post Keynesian approach, economies are driven by demand. In the Brazilian economy, from 2014 onwards, household consumption, gross fixed capital formation and government expenditures have fallen and not recovered (Figure 1). Only exports have performed well. After a deep recession in 2015-2016, what we saw was a stagnant economy before another slump in 2020. The recovery of the economy in 2021 was ephemeral as a growth rate around 0.8 per cent is expected for 2023.

Figure 1: Demand in the Brazilian Economy, 2014.1–2021.4 (2014.1 = 100)



Source: IBGE.

All channels through which demand flows, are clogged – exports excepted. The unemplyment rate is high, around 9 per cent, as well as household debt, so the economy could not be boosted from an increase in consumption. In December 2016, the Brazilian Congress approved a bill which was designed to deliver very tight fiscal consolidation, since the primary expenses of the federal budget from 2017 to 2037 could only grow by as much as the annual variation of the consumer price index, that is, the prior year's inflation. It is called the 'Expenditure Ceiling Law'. The idea was that fiscal consolidation could be reached since government's revenues would grow *pari passu* with GDP growth whereas government expenditure would be fixed in real terms. It thus constrained public spending, government investments included. Consequently, government expenditures are not able to foster economic growth until this law be repealed.

Exports have performed well in recent years given the rise in commodities prices, but in the short run they depend, to a large extent, on world income and commodity prices, which are exogenous to domestic economic policy. Moreover, exports are not able to boost the economy as they are only around 13 per cent of GDP. Lastly, private investment depends on optimistic expectations, which in turn are jeopardised by the expected low levels of government expenditure and household consumption, alongside a troubled external scenario. Private investment is unlikely to grow, therefore.

Keynes (2013a, 2013b) called for significant government control of investment, as well as a countercyclical capital budget, in order to establish a long-term investment plan. However, policy makers in Brazil have not follow Keynes' recommendations, in recent years. From 2015 onwards, given the 'expansionary fiscal austerity' idea, Brazilian economic policy produced barriers to demand instead of giving stimulus to it (Arestis *et al* 2019, 2022). The result was a long period of falls or stagnation in GDP. Nonetheless, government investment is the component of demand that is able to lead the resumption and sustainability of Brazilian economic growth, since the other channels through which demand flows are clogged, and the multiplier of government expenditures on consumption is lower than on public investment.

The rise in government investments in the context of a stable long-term programme depends on changes in some fiscal rules, such as the repeal of the 'Expenditure Ceiling Law'. After that, Brazilian policy makers have to be concerned with the debt-to-GDP ratio insofar as it should increase to finance government investment.

To Keynes (2013a), investment is unstable as it depends on conventions and optimistic expectations. Conventions and expectations are unstable in the sense that they swing from optimism to pessimism when peoples' opinions change. Therefore, the increase in government debt levels, when it is necessary, may be done, albeit with care in order not to disturb optimistc expectations. As Minsky (1986) pointed out:

> Debts embody [...] promises to make payments. For these promises to have value any debtor has to be able to generate a positive cash flow in its favor [...] "Has to be able" does not mean does. A unit may have negative cash flows for a considerable period and its liabilities would still be of value because it is accepted that the negative cash flows are transitory [...] There is nothing special about government debt, and a flight from government debt can occur. For a foreign-held debt such a flight will lead to a deterioration of the currency on the exchanges; for a domestic debt the flight can lead to inflation and a need to pay ever higher interest rates to have the debt held [...] Any deviation from a government budget that is balanced or in surplus must be understood as transitory. (Minsky 1986 p 336-338)

A balanced government budget is necessary because this makes it easier to adopt countercyclical fiscal policy which, in turn, is central to bear optimistic conventions. Further, unsustainable government debt may foster the expectation of tax increases as well as its monetisation. The former may mitigate optimistic conventions. The latter may break down the principle of negligible elasticities of production and substitution of money, thereby, putting inflation out of control and jeopardising investment decisions.

Thus, the debt-to-GDP ratio must be seen to be sustainable. The question is not its level, but rather agents' trust in its stability. An increase in the debt-to-GDP ratio without jeopardising its stability is possible if $r_t \leq g_t$. DeLong and

Summers (2012) go further and argue that a fiscal impulse should result in GDP increasing by more than it increases debt, resulting in a reduction in the debt-to-GDP ratio, an argument supported by empirical evidence in Auerbach and Gorodnichenko (2017).

The agentes should be convinced, as a shared belief, that the debt-to-GDP ratio increasing is just transitory and its stability will be reached at a higher level. Consequently, a flight from government debt will not occur and pessimistic expectations will not be stimulated. However, if agents distrust this scenario, an increase in the risk premium (r) for financing government debt should take place. Consequently, the govenrment debt trajectory may go out of control ($r_t > g_t$), expectations become pessimistic and investment goes down. Hence, it is up to the government to ensure creditworthiness and good communications with society, showing that its fiscal plan is consistent with the stabilisation of the debt-to-GDP ratio, albeit at a higher level.

Therefore, it is possible to raise public debt to finance a Keynesian long-run stabilisation policy to stimulate investment in Brazil. The Brazilian government must have the political ability to convince agents that the increase in public debt will be temporary, insofar as:

A After the increase in the debt-to-GDP ratio, $r_t \leq g_t$;
B public investments, which show a high fiscal multiplier, will stimulate the denominator of the debt-to-GDP ratio;
C the increase in GDP will raise public revenues, which may be used for reducing the debt-to-GDP numerator;
D Existing Constitutional Funds in Brazil may be used for public investment financing. In addition, a progressive tax reform, which should aim at increasing the tax burden on income and property of individuals, should be implemented. Both policies will reduce the need to increase public debt to public investment financing.

Current government investments are in their lowest level ever in Brazil, less than 2 per cent of GDP. Following Bresser-Pereira and Marconi (2021), it should grow by up to 5 per cent of GDP. After the Presidential election in October 2022, in Brazil, in the first year of the new President’s term, the new administration will have the political capital to repeal the ‘Expenditure Ceiling Law’, adopt new fiscal rules, carry out a tax reform and an amendment to the constitution in order to use constitutional funds to government investments financing (constitutional funds are around R$120 billion, i.e. US$ 25 billion in May 2022).

The substitution of a new convention for the existing expansionary fiscal austerity convention is needed in Brazil. A developmental convention, linked to the idea of effectiveness of state intervention, should prevail. The consensus that Keynesian investment promotion policies can be effective is something that would have disappeared with the prevalence of the fiscal austerity convention since the 1990s, in Brazil. As Carvalho (2014) highlighted, there is an increase in the effectiveness of economic policy when the current convention

is consistent with it. The sensitivity of agents to the stimuli launched by government policies grows if it is believed that others will also be responding to the signals from policies. Changing the convention is a tool for coordinating expectations. Therein lies its relevance: to send out the signals that the market is not capable of, to guide wealth allocation decisions and stimulate private investment. The new government must build this new (developmental) convention that the resumption of growth depends on public investment, as well as that the increase in debt-to-GDP ratio will be temporary. The agents should be convinced that government fiscal plan is consistent with these ideas in order to foster investment.

Since expected inflation in Brazil is around 6 per cent in 2022, the current CBB base interest rate (SELIC) is too high, at 13.75 per cent. So, Brazilian inflation should be tackled in 2022 and 2023 enabling a reduction in the SELIC from 2024 ownwards. At the same time, a tax reform and an amendment to the constitution in order to use constitutional funds for public investment financing should be carried out in 2023, as well as the 'Expenditure Ceiling Law' being repealed. So, debt-to-GDP stabilisation condition, $r_t \leq g_t$, would be met from 2024 onwards. Thus, a Keynesian long-run stabilisation policy to stimulate investment in Brazil could be launched in 2024.

After the resumption of growth, public investment would have sources of revenue (taxes) linked to pre-determined sectoral expenditures and would not be computed as primary expenditure, to be used in what Resende (2020) called an 'Investment Agency'. The link between government revenues and expenditures helps to avoid fostering a negative convention on the government budget equilibrium. The Investment Agency should work as a Capital Budget, with a countercyclical and intertemporally balanced character and, above all, with a positive effect on entrepreneurs' expectations, able to strengthening an optimistic convention and animal spirits.

4. Conclusion

From the Post Keynesian view, demand matters. However, all channels through which demand flows, are clogged by economic policies, in Brazil, exports excepted. Nonetheless, government investment is the component of demand that is able to lead the resumption of the Brazilian economy and deliver sustainability of growth.

Keynes argued for a substantial government control of investment, as well as a countercyclical capital budget, in order to establish a stable long-term programme. Keynes also highlighted the relevance of conventions to foster private investment. In this sense, governments should seek fiscal responsibility, although this should not be pursued as an end in itself, but be based on the criterion of countercyclical fiscal policy management. After all, conventions matter.

A balanced government budget is necessary because that makes it easier to adopt a countercyclical fiscal policy which, in turn, is central to bearing optimistic conventions. Further, an unsustainable government debt may foster

the expectation of tax increases, as well as its monetisation. The former may damage optimistic conventions. The latter may break down the principle of negligible elasticities of production and substitution of money and, thereby, put inflation out of control and jeopardise investment.

A long term stabilisation plan is possible in Brazil by means of increasing government debt for public investment financing, once the 'Expenditure Ceiling Law' is repealed. To reduce the burden on public debt for investment financing, a tax reform and an amendment to the constitution in order to use constitutional funds for public investment financing should be carried out.

It is up to the government to build a new (developmental) convention that the resumption of growth depends on public investment, as well as the increase in the debt-to-GDP ratio will be temporary. Agents should be convinced that government fiscal plan are consistent with these ideas in order to foster optmistic expectations and private investment. Inflation control, a tax reform and constitutional funds would help to meet the debt-to-GDP stability condition, $r_t \leq g_t$. Nevertheless, from the Post Keynesian perspective, all economic policies and the overall institutional environment are relevant to reach growth and the former should be coherently coordinated to construct good conventions about the economy's future trajectory (Resende and Terra 2017).

Keynesian long-run stabilisation policy, which is needed to stimulate investment in Brazil, should be conducted by what Resende (2020) called an 'Investment Agency'. It would have the technical competence to evaluate public investments and the appropriate speed of execution. Further, the Investment Agency would be linked to what Keynes called the Capital Budget, with a countercyclical and intertemporally balanced character and, above all, with a positive effect on entrepreneurs' expectations and animal spirits.

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Endnotes

1. Department of Economics, Federal University of Minas Gerais – Brazil; researcher at the National Council for Scientific and Technological Development, Brazil. E-mail: resende@cedeplar.ufmg.br. I gratefully acknowledge valuable comments on earlier versions of the paper from two anonymous referees and from conference participants at SOAS University of London.

2. A criminal investigation by the Federal Police and Justice to investigate money laundering and corruption in public enterprises, such as Petrobras (Brazil's largest corporation) was undertaken. The investigation grew into a major scandal, and implicated politicians and leading entrepreneurs in important private companies. It revealed structural corruption in the political and economic system.

3. On expansionary fiscal austerity, see Alesina *et al* (2006), Reinhart and Rogoff (2010) and Reinhart *et al* (2012). Concerning the critics on the expansionary fiscal austerity view, see, for instance, Panizza and Presbitero (2012) and Herndon *et al* (2013).

4. In the context of fundamental uncertainty, people are not as rational as believed by neoclassical theories.

5. According to Carvalho (1992 p 61), 'the awareness by the agent of being at least partially ignorant of the influencing elements in a given process will be a crucial feature distinguishing behaviour on Post Keynesian and neoclassical models'.

6. 'Social reality has an existence external to the mind of the observer but not independent of agents' views and behaviours [...] It is the acknowledgement that action oriented by perceptions and mental elaborations is not impotent that makes uncertainty a feature of reality rather than just of knowledge' (Carvalho 1992 p 63).

7. Liquidity preference and conventional behaviour are manifestations of agents' attempts to achieve protection against losses from disappointment of their expectations (Keynes 2013a).

8. Translated into English by the author.

9. During the validity of the Programme, work contracts could be suspended, and the workday could be reduced with a proportional decline in wages, both up to four months. In both cases, workers could not be fired and they could access an amount of unemployment insurance.

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