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Abstract

Over the past half-century, the adoption of fiscal rules has become common among both developed and developing economies. Still, the focus in the literature has been on deficit or balanced-budget positions, while the political economy of primary surpluses and the role of income distribution in affecting growth and debt stability have largely been absent from the debate. This article argues that fiscal policy is, fundamentally, an instrument of class conflict, and that expenditures which guarantee income redistribution can be compatible with debt stability. To formalize this claim, we develop a neo-Kaleckian model that incorporates a fiscal rule designed to ensure a government surplus, along with supply-side constraints. The model shows that, in the long run, there are two possible trajectories for the debt-to-capital ratio, depending on the strength of crowding-out effects associated with public debt, the level of income distribution, the size of the government surplus and the interest rate. In both trajectories, debt stability is possible, meaning that the size of the surplus and the particular arrangement of income distribution promoted are choices of the government. A government pursuing a redistributive fiscal policy to promote social change is not necessarily incompatible with long-run debt stability.

Keywords: Fiscal Rule, Class Conflict, Debt Stabilization

J.E.L. Classification Codes: B22, E12, H62, H63

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1 Introduction

Fiscal rules are budgetary constraints designed to control the trajectory of public expenditures and public debt. Their conception derives from the understanding that governments are politically motivated to run public deficits, and that the so-called *deficit bias* should be controlled via institutional restrictions that reduce political influence on public expenditures (Wyplosz, 2012). With that, policymakers would commit to fiscal sustainability and reinforce mechanisms that indicate in a more transparent way the trajectory of fiscal policy (Mathieu and Sterdyniak, 2013; Eyraud et al., 2018).

However, the effectiveness of fiscal rules has been largely discussed in the literature. While empirical evidence suggests that rule-based fiscal policies are associated with greater budgetary discipline, whether this reflects a direct consequence of the fiscal framework remains debatable (Heinemann et al., 2018; Brändle and Elsener, 2024). Considering this, it is remarkable that fiscal rules, despite being designed to be long-lasting, have been frequently revised and redesigned, especially due to unexpected shocks. This happened, for example, following the impact of the Great Financial Crisis, especially among developed economies. By prioritizing simplicity, most fiscal rules were proved unable to accommodate pressures coming from fiscal deterioration, and countries experienced increases in debt levels (Yared, 2019; Heimbberger, 2023).

Multilateral institutions therefore began to recommend more flexible frameworks, adaptable to unstable contexts. Fiscal rules, for instance, should improve the ability of automatic stabilizers to operate and separate balancing long-term fiscal sustain-

ability from short-term fiscal cost to reassess the role of public investments. Even so, reassessments conducted in the late 2010s concluded that mechanisms to allow flexibility might have increased the complexity of rules and reduced their ability to guide fiscal policy effectively (Eyraud et al., 2018). More recently, again, the COVID-19 pandemic has led to the suspension of several fiscal rules and exposed the limitations of the existing frameworks as, in general, deficits and debt levels exceeded predefined limits (Alonso-Albarran et al., 2025). Non-compliance, which “was already widespread [...], often proved persistent, as many countries lack credible adjustment paths to return to rule limits” (Acalin et al., 2025).

Despite this complex debate, fiscal rules have been increasingly adopted worldwide. While they only existed in a few locations in the 1990s, recent figures indicate that at least one type of fiscal rule is in force in more than 100 countries (International Monetary Fund, 2025). Developing economies have concentrated this proliferation since the early 2000s, fostered by an overall effort to increase fiscal compliance (Budina et al., 2012). Recent compilations suggest the persistence of this trend, driven mainly by expenditure rules that establish explicit limits on government spending (World Bank, 2026). However, despite specifying clear fiscal objectives with expected outcomes for debt levels, expenditure rules exhibit lower compliance rates than other frameworks, especially in developing economies (Ulloa-Suarez and Valencia, 2022). Moreover, its growing implementation has been accompanied by fewer surges in debt levels, but it did not seem to alter the pace of debt accumulation in these countries (World Bank, 2026). Some of the potential explanations refer to the higher level of interest rates practiced among these countries or the already elevated debt level at

the time of rule implementation.

Considering the debate above, this article aims to discuss debt stabilization under rule-based fiscal policy by considering not only that different institutional frameworks might imply distinct results to each case, but also emphasizing the importance of income distribution and growth trajectory to the final outcome. This has been a growing concern among the post-Keynesian modeling tradition (Tavani and Zamparelli, 2017; Ribeiro and Lima, 2019), but these efforts, such as those that traditionally relate government spending and public debt dynamics with income distribution (You and Dutt, 1996; Ko, 2019; Dutt, 2013), have analyzed the issue by putting a lens on balanced-budget and deficit positions. Our approach proposes a different perspective that seeks to highlight the realities of developing economies, where tolerance for deficits tends to be particularly low.

The model presented here, therefore, specifically analyzes the case in which fiscal rules are deliberately designed to produce surpluses. It is inspired by the latest reform in Brazil's fiscal rule, which led to the implementation of a surplus-led framework (Brenck and Marques, 2023). Results stemming from our model equilibrium dynamics recall that the rationale behind the widespread adoption of fiscal rules is, above all, a matter of political economy. They suggest that governments have different policy alternatives to achieve debt stability, which imply distinct choices regarding surplus levels and income distribution. This channel, when reinterpreted within the post-Keynesian framework, brings back Kalecki's view that class conflict remains at the core of fiscal policy. Capitalists tend to contain distributive pressures coming from the state by forging pro-austerity coalitions.

The article is organized as follows. In the next section, we provide a brief overview of the literature on post-Keynesian models that incorporate fiscal variables, including government spending, debt dynamics, and the role of fiscal rules. Our model is presented in Section 3. The last section discusses its main contribution to the political economy of “surplus-led fiscal rules”.

2 Bringing the government in: post-Keynesian models with fiscal policy and fiscal rules

Fiscal policy has long been established as a key feature in growth and distribution models. In the short run, government spending and taxation impact the dynamics of income distribution and conditions aggregate demand growth. In the long run, fiscal policy not only influences the trajectories of economic growth and capital accumulation but also determines the path of public indebtedness, a key variable for ensuring steady-state growth under the post-Keynesian framework.

In the mid-1990s, You and Dutt (1996) recognized that the relationship between public debt and income distribution had been understated in the literature and proposed a model to examine that complex interaction, motivated by empirical evidence characterizing the US macroeconomic landscape at the time. By considering two classes - capitalists and workers - and a government sector whose deficits could only be financed via debt issuance, the model indicated that a rising debt-to-capital ratio could produce a negative impact on income distribution in the short-run. Contrary to what could be expected, this result does not stem from the government’s role

in redirecting revenues from workers' taxation toward capitalists' interest gains. In fact, it is possible even with increases in after-tax workers' income, as long as interest payments to capitalists grow faster than wages. In that case, it is worth noting that a growing public debt implies larger interest payments to capitalists and potential expansionary effects on aggregate demand associated with more consumption of that class.

In the long run, when You and Dutt (1996) allow other factors to vary with the debt-to-capital ratio, other equilibrium possibilities arise, despite the prevalence of scenarios that promote income concentration. They argue, for example, that expansionary fiscal policies can improve income distribution even with a rising debt-to-capital ratio. More importantly to the problematic discussed here, the model shows that attempts to bring the debt-to-capital ratio back to its initial value, which implies contractionary fiscal policy, could amplify inequality between capitalists and workers in both the short and the long-run.

Building on his previous work with Jong-Il You, Dutt (2013) proposes a model that incorporates public investment into the fiscal policy equation, in addition to government consumption. In this way, the government directly contributes to growth by accumulating capital. A crowding-in effect is considered, in which private investment responds positively to public investment. Nonetheless, despite being a demand-led model, the author also considers supply constraints, including a financial crowding-out effect in which government indebtedness negatively affects private investment. Even assuming the possibility of financial crowding out, Dutt (2013) shows that the direct and indirect effects of public investment on economic activity can still lead to

economic growth and a stable public debt-to-capital ratio. This positive effect may persist in the long run if productivity also responds to public investment.

Ko (2019) proposed a reassessment of You and Dutt's (1996) model that was also inspired by developments in the US macroeconomic landscape. Specifically, Ko (2019) was concerned with the rising deficits in the US economy after 2008, which led to debates over debt sustainability. Because of that, the model considers the deficit-to-income ratio as a key indicator of fiscal policy and determines that the government's policy goal is to control the debt-to-income ratio trajectory by accounting for the moves in the deficit-to-income ratio.

Ko (2019) analyzes the short-run equilibrium by considering two different scenarios. First, he follows You and Dutt's (1996) structure, in which the government's expenditures are discretionary and real spending represents a constant proportion of the capital stock. Results are similar to those found by the latter: rising interest rates or increases in the debt-to-capital ratio increase utilization capacity due to their positive impact on capitalists' income and consumption expenditure. Then, the model is adapted to take into account a fixed deficit-to-income ratio, which serves as an indicator to the government that allows it to influence the debt-to-capital ratio. In other words, Ko (2019) introduces a scenario in which the government is potentially subjected to a fiscal rule associated with the deficit-to-income ratio. Consequently, expenditures become conditioned to tax revenues, borrowing level, and interest payments.

Results for this short-run equilibrium are similar to the previous case, but a fixed deficit-to-income ratio affects the way fiscal policy operates. Once the government's

expenditures are no longer discretionary, their size depends on tax revenues collected from workers and capitalists. While the tax rate affecting workers' income does not impact the utilization level (since workers consume all their post-tax income and the government spends all tax revenues), the same is not true for capitalists. In this case, an increase in the tax rate reduces capitalists' consumption, but the overall impact on demand is more than compensated by government spending coming from these revenues. The model therefore demonstrates that when fiscal policy is somehow constrained, the dynamics of income distribution are key to conditioning its impact on aggregate demand.

In the long run, despite focusing more on growth than on debt trajectories, Ko (2019) finds no significant differences between the two scenarios discussed above. Results indicate that whenever equilibrium is obtained at a higher growth rate, it also implies a higher debt-to-capital ratio. This is the case, for example, when considering the impact of an increase in autonomous investment. Nevertheless, fiscal expansions, represented by an increase in the deficit-to-income ratio, yield ambiguous results. While fostering demand via government borrowing, it also negatively contributes to it by amplifying government debt. Long-run equilibrium, therefore, depends on how the growth rate interacts with the interest rate and parameters that affect the allocation of capitalists' income.

In a similar tone, Tavani and Zamparelli (2017) present a two-class model that emphasizes different roles for government expenditures, a productive and an unproductive one. The first case refers to traditional public investment in infrastructure capital and points to the expansion of production possibilities. The second, in con-

trast, refers to its role as an employer of public employees, which entails an influence on the size of the economy's labor share and therefore on demand activity. Tavani and Zamparelli's (2017) discussion also refers to concrete macroeconomic policy developments: the back and forth around the fiscal debate following the deterioration of public finances in OECD countries in the early 2010s, between a more austere and a more relaxed discourse.

Considering this, the model addresses the explicit role of fiscal policy in the long-run and highlights the importance of the government's expenditure composition between productive and unproductive spending to aggregate demand, productivity growth and income distribution. Akin to Ko (2019), Tavani and Zamparelli (2017) consider two scenarios of government spending, one that preserves a balanced budget position and another that allows deficits and debt accumulation. Results indicate that, in the long-run, there is a growth-maximizing ratio between productive and unproductive spending that increases with a higher wage share. Moreover, regardless of its composition, government spending affects growth positively, with debt accumulation crowding-in growth in the short-run and not affecting it in the long-run. Finally, the stability of the long-run equilibrium with public debt depends on the simple condition of the economy growing faster than the interest rate.

Although the previous models allude to the functioning of a fiscal rule, they do not address it explicitly. Ribeiro and Lima (2019), in contrast, advance to consistently discuss the theoretical foundations and practical goals of a rule-based fiscal policy, introducing it in a neo-Kaleckian model. Also motivated by the role played by the austerity discourse in the fiscal debate, their model aims to address the effects

of adopting an expenditure ceiling due to academic and political consensus around its adequacy in terms of representing the “best way to ensure long-run public debt sustainability and growth” with greater compliance (p.366). Especially because it differentiates developed from developing economies and focuses specifically on the case of an expenditure ceiling, the discussion might have been related to the macroeconomic debate around the Brazilian fiscal policy at the time (Brenck and Marques, 2023).

Ribeiro and Lima’s (2019) argument focuses on the impact of the adoption of an expenditure ceiling on debt stability by looking at the debt-to-income ratio. Their model differentiates developed and developing economies by the relative size of the interest rate in comparison with the autonomous component of the neo-Kaleckian investment function. Their results suggest that the implementation of a fiscal rule like an expenditure ceiling may not be sufficient to lead to a stable trajectory of the public debt-to-income ratio, especially in developing economies, as they present relatively higher interest rates and more regressive tax systems. Moreover, they indicate that when the debt-to-income trajectory is already increasing, an expenditure ceiling appears much less effective when the former is already stable.

In the next section, we contribute to the discussion inaugurated by Ribeiro and Lima’s (2019) framework by building a neo-Kaleckian model that also gives centrality to a rule-based fiscal policy. Specifically, instead of focusing on an expenditure rule (ceiling), we discuss another type of institutional design: a “surplus-led” fiscal rule, which is set to avoid either deficits or balance-budget positions. The goal is to discuss the consequences of its implementation for growth, income distribution and

debt stability. As demonstrated in this section, post-Keynesian models have mostly focused on investigating the differences stemming from deficits and balanced-budget positions to debt stability, growth, and inequality. We propose to look at fiscal policy through different lens, fundamentally inspired by strict institutional regimes commonly adopted in developing economies: what are the consequences of fiscal rules that promote long-term fiscal surpluses to short-run growth and long-run debt-stability? Since fiscal policy is subject to class disputes, the design of fiscal rules might reflect distinct political priorities that could be at odds with the expected outcomes envisioned by their implementation.

3 Theoretical Model

Considering the question stated above, we extend Dutt's (2013) model to highlight the functional distribution of income and consider the possibility of a surplus-oriented fiscal rule. The model is composed of two classes: workers, who receive only wage income, and capitalists, who earn both profits and interest income on government debt. Capitalists' income is subjected to a progressive tax policy expressed by the equation below, where τ is the tax rate on capitalists' income, Π is total profits, i is the interest rate¹, and D is the government debt level. Workers' income is not taxed.

$$T = \tau(\Pi + iD) \tag{1}$$

The government spends according to a surplus-led fiscal rule, which allows it to

¹We do not consider price changes in the model. Hence, if we treat income in nominal terms, interest rates are also nominal.

mobilize only a fraction (ϕ) of tax revenues collected:

$$G = \phi T \quad (2)$$

We assume that $0 < \phi < 1$, which implies the mandatory occurrence of a primary surplus. Following this, the evolution of the government's debt is expressed by:

$$\dot{D} = G - T + iD \quad (3)$$

Workers consume all their income and capitalists save a fraction $0 < s < 1$ of their disposable income, so that the aggregate consumption function is:

$$C = WN + (1 - s)(1 - \tau)(\Pi + iD) \quad (4)$$

Where W is the nominal wage and N is the number of workers employed, so that WN is the wage bill.

Investment follows a traditional neo-Kaleckian structure, depending on an autonomous component and on the rate of capacity utilization (u). However, as in Dutt's (2013), we also allow for financial crowding-out effects in investment, in which high debt rates from the government can negatively affect private investment:

$$\frac{I}{K} = \gamma_0 + \gamma_1 u - \gamma_2 \delta \quad (5)$$

In the equation above, γ_0 is the autonomous component of investment, such as “animal spirits”, γ_1 is the sensitivity of investment to the rate of capacity utilization

($u = Y/K$, normalizing capital productivity to one), and γ_2 represents the strength of the crowding-out effect of public debt on private investment. Finally, $\delta = D/K$ is the public debt to capital ratio.

Financial crowding-out effects occur when rising public debt increases the long-run interest rate, leading to lower private capital accumulation (Elmendorf and Mankiw, 1999). Despite the conflicting evidence on the existence of such effects (Sharpe, 2013), we consider that it is relevant to the key issue addressed in this model. The possibility of crowding-out effects is still largely resorted to as an argument to support the rhetorical defense of strict fiscal rules and austerity policies to lower debt-to-GDP ratios. Hence, by including it, we are accounting for a supply-side constraint that is often ignored by demand-led models.

Short-run equilibrium

The short-run equilibrium is given by the equilibrium in the goods market:

$$Y = C + I + G \tag{6}$$

At any point in time, the debt-to-capital ratio δ is constant, so we solve the short run equilibrium for capacity utilization. Now, dividing equation (6) by the stock of private capital and defining $\Pi/K = \pi u$ and $WN/K = \omega u = (1 - \pi)u$, where π and ω are the profit and wage shares, respectively, we get the equilibrium level of capacity utilization (u^*):

$$u^* = \frac{\gamma_0 + \delta[i((1-s)(1-\tau) + \phi\tau) - \gamma_2]}{\pi(s(1-\tau) + \tau(1-\phi)) - \gamma_1} \quad (7)$$

The Keynesian Stability condition states that the denominator of equation (7) is positive, that is, the response of savings to any increment in income is stronger than the response of investment². What is interesting to note in this case is that the surplus-oriented fiscal rule adds a term that “helps” the Keynesian Stability condition to be satisfied (the term $\tau(1-\phi) > 0$). The reasoning behind this stems from the nature of the rule: since it does not allow expenditures to equal revenues, it always guarantees a positive primary saving for the government.

Once the short-run equilibrium is found, some comparative static exercises can be discussed. First, we look at the impact of a changing debt-to-capital ratio on capacity utilization:

$$\frac{\partial u^*}{\partial \delta} = \frac{i((1-s)(1-\tau) + \phi\tau) - \gamma_2}{\pi(s(1-\tau) + \tau(1-\phi)) - \gamma_1} \quad (8)$$

As in Dutt (2013), the effect of changes in the debt-to-capital ratio on capacity utilization is ambiguous due to the presence of crowding-out effects ($\gamma_2 > 0$). A common result in demand-led models is to have this effect positive, as public debt is also a source of demand. However, in this case, the consideration of crowding-out effects imposes a supply-side constraint: because of financial portfolio choices, investment can decrease after an increase in debt, even if that means higher demand

²For the equilibrium rate of capacity utilization to be positive we also need the numerator to be positive, if we assume that Keynesian stability condition holds. In this case, it is necessary that the crowding-out effect is not too strong so that $\gamma_0 + \delta[i((1-s)(1-\tau) + \phi\tau)] > \gamma_2\delta$.

in the short run. Even so, the existence of such financial crowding-out does not mean that increasing debt will necessarily reduce growth.

Second, we look at the impact of changes in the parameter on capacity utilization:

$$\frac{\partial u^*}{\partial \phi} = \frac{\delta i \tau \{\pi(s(1-\tau) + \tau(1-\phi)) - \gamma_1\} + \pi \tau \{\gamma_0 + \delta[i((1-s)(1-\tau) + \phi\tau) - \gamma_2]\}}{[\pi(s(1-\tau) + \tau(1-\phi)) - \gamma_1]^2} \quad (9)$$

The impact of an increase in the parameter ϕ , which represents the share of tax revenues that will be spent (or the government's propensity to spend), is unambiguously positive³. The reasoning behind this is directly related to the model's demand-led character: higher government spending means lower public savings.

Rising interest rates, on the other hand, imply an expansionary effect in the short run, since we allow for consumption and taxation out of the interest payments:

$$\frac{\partial u^*}{\partial i} = \frac{\delta((1-s)(1-\tau) + \phi\tau)}{\pi(s(1-\tau) + \tau(1-\phi)) - \gamma_1} \quad (10)$$

The dual effect of changing interest rates affecting debt accumulation on the one hand and growth on the other will be further discussed when long-run dynamics are considered.

Next, we analyze the demand regime of this economy:

$$\frac{\partial u^*}{\partial \pi} = -[s(1-\tau) + \tau(1-\phi)] \left\{ \frac{\gamma_0 + \delta[i((1-s)(1-\tau) + \phi\tau) - \gamma_2]}{[\pi(s(1-\tau) + \tau(1-\phi)) - \gamma_1]^2} \right\} < 0 \quad (11)$$

³The two terms in brackets are positive since they are the numerator and denominator of u^* , respectively.

The response of capacity utilization to the profit share indicates that this economy is wage-led, as the sign of (11) is negative. This result relates to the traditional neo-Kaleckian model: with workers' propensity to save equal to zero, eventual transfers from capitalists to workers increase total demand. An interesting point here is that, unlike in usual balanced-budget models, this derivative is unambiguously negative because the reduction in government spending, due to lower tax revenues following an increase in the wage-share, is not strong enough to offset the increase in workers' consumption driven by income redistribution. In other words, the parameter ϕ can be understood as the government's propensity to spend (Hein, 2018; Serrano and Pimentel, 2019), which is lower than the workers' propensity to spend. Finally, we look at the effect of changes in the tax rate on capacity utilization:

$$\frac{\partial u^*}{\partial \tau} = \frac{-((1-s) - \phi)[\delta i(\gamma_1 + \pi) + \pi(\gamma_0 - \gamma_2 \delta)]}{[\pi(s(1-\tau) + \tau(1-\phi)) - \gamma_1]^2} \quad (12)$$

The sign is ambiguous and depends on the parameter values s and ϕ . If the government's propensity to consume ϕ is higher than the capitalist's propensity to consume $(1-s)$, then an increase in taxes would increase capacity utilization. In this case, a higher tax rate means an income transfer from a class with a lower propensity to save (capitalists) to an agent with a higher propensity to save (the government), thereby increasing demand.

Long-run equilibrium

In the long run, the debt-to-capital ratio is allowed to vary, and equilibrium is achieved when debt and capital stock grow at the same rate. In other words, a

steady state is when the debt-to-capital ratio is constant. The dynamics will be given by⁴:

$$\hat{\delta} = \hat{D} - \hat{K} \quad (13)$$

By definition,

$$\hat{D} = \frac{\dot{D}}{D} = \frac{[G - T + iD]}{D} \quad (14)$$

and

$$\hat{K} = I/K \quad (15)$$

Substituting equations (1) and (2) and making the proper arrangements, we get:

$$\hat{\delta} = i[1 - (1 - \phi)\tau] + \frac{u}{\delta}[(1 - \phi)\tau\pi] - \gamma_0 - \gamma_1 u + \gamma_2 \delta \quad (16)$$

Substituting the short-run equilibrium for capacity utilization given by equation (6) and using the definition $\dot{\delta} = \hat{\delta}\delta$, we get:

$$\dot{\delta} = \frac{\gamma_0}{\Delta}(1 - \phi)\tau\pi + \delta[i(1 - (1 - \phi)\tau) - \frac{\Gamma}{\Delta}[(1 - \phi)\tau\pi] - \gamma_0 - \frac{\gamma_0\gamma_1}{\Delta}] + \delta^2[\gamma_2 - \frac{\Gamma}{\Delta}\gamma_1] \quad (17)$$

where

⁴Where variables with a hat represent growth rates and the dot represents the date of change. In other words, for any variable x , $\dot{x} = \frac{\partial x}{\partial t}$ and $\hat{x} = \frac{\partial x}{\partial t} \frac{1}{x}$

$$\Gamma = i[(1-s)(1-\tau) + \phi\tau] - \gamma_2$$

$$\Delta = \pi[s(1-\tau) + \tau(1-\phi)] - \gamma_1 > 0$$

The long-run equilibrium of the debt-to-capital ratio occurs when $\dot{\delta} = 0$. Given that equation (17) is quadratic on δ , the concavity and the equilibrium values of the debt-to-capital ratio will depend on the parameters, and hence it is an empirical question. However, there are some parameter combinations that bring light to different potential results and are worth discussing. Going back to equation (17), we observe three terms that determine the behavior of $\dot{\delta}$, which we simplify in what follows as A_0 , A_1 , and A_2 . The first (A_0) is a constant, the second (A_1) multiplies δ and the third (A_2) multiplies δ^2 . Hence, the sign of A_2 will determine the concavity of the parabola.

$$\dot{\delta} = A_0 + A_1\delta + A_2\delta^2 \tag{18}$$

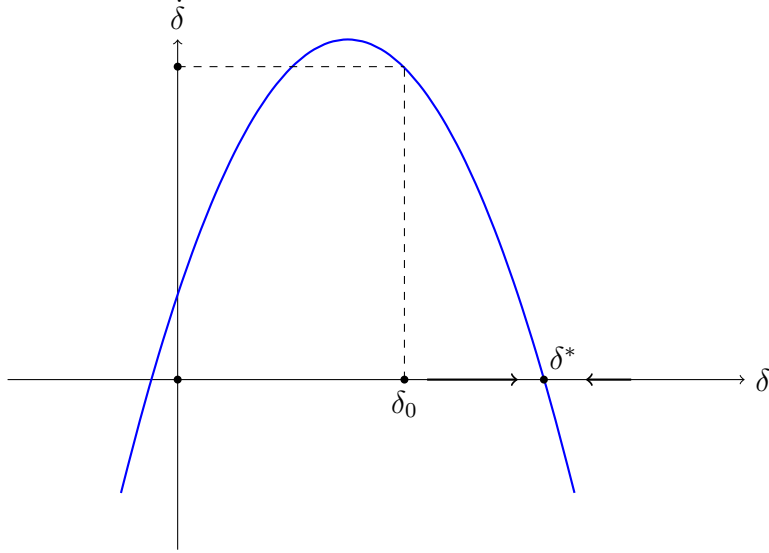
As equation (17) shows, the term A_2 can be written as:

$$A_2 = \frac{\gamma_2\pi[s(1-\tau) + \tau(1-\phi)] - \gamma_1i[(1-s)(1-\tau) + \phi\tau]}{\pi(s(1-\tau) + \tau(1-\phi)) - \gamma_1} \tag{19}$$

Concave Trajectory

If A_2 is negative, the curve is concave, and there will be only one economically meaningful equilibrium value for δ , which is stable, given that $A_0 = \frac{\gamma_0}{\Delta}(1-\phi)\tau\pi$ is

Figure 1: Concave Trajectory of the Debt-to-Capital Ratio



positive. Following Dutt (2013), we assume that the economy starts from a point where debt is growing ($\dot{\delta} > 0$), which is often used as an argument to implement fiscal rules or alter existing ones. Hence, suppose that we start at point δ_0 in Figure 1, to the left of equilibrium δ^* , where $\dot{\delta} > 0$. At this point, the debt-to-capital ratio is positive and growing, moving towards the equilibrium.

From equation (19), a lower profit-share, together with a higher government spending parameter (ϕ) and a higher interest rate, makes it more likely that the trajectory will be concave. Starting at δ_0 , the economy is at a point where the interest rate on debt is high enough that debt growth outpaces capital accumulation, increasing δ . If crowding-out effects are not strong and workers benefit from functional income distribution, the economy continues to grow at a pace that allows the government to collect enough taxes to lower the debt-to-capital rate of change, until it reaches equilibrium. This means that the stricter the surplus-oriented fiscal

rule, the more relevant becomes an equitable income distribution to counterbalance contractions originating from fiscal policy and sustain the growth path. In that case, long-run debt stability stems from the ability to increase revenues, which is intrinsically linked to the path of economic growth. Here, it is important to stress the dual role of interest rates: even though they directly contribute to the growth of debt, they also positively impact economic growth (see equation (10)) as, in our model, capitalists consume out of interest received from the government - which is also, in part, collected in the form of taxes⁵.

Convex Trajectory

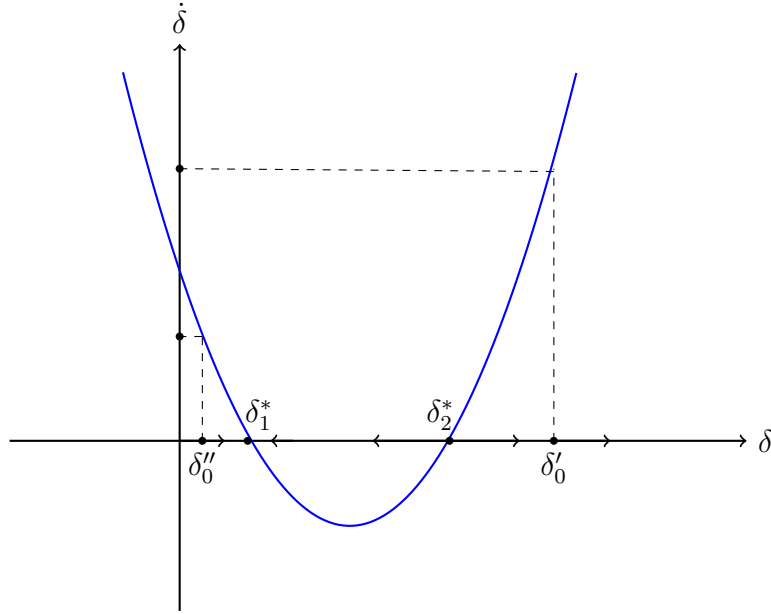
If A_2 is positive, the curve $\dot{\delta}$ will be convex, and there will be two economically meaningful equilibrium values for δ , with only one of them stable (see Figure 2).

For the curve to be convex, crowding-out effects must be strong, with a higher profit-share and a lower ϕ . A lower interest rate also contributes to the curve being convex.

If, as in the previous case, we start from a point where debt is growing, such as point δ'_0 , to the right of δ_2^* , the debt-to-capital ratio will continue to grow over time and not stabilize. This means that stronger fiscal adjustments do not necessarily lead the economy to debt-to-capital ratio stability if debt levels are already too high. Due to the negative impact on demand, a stronger fiscal adjustment will harm growth, which, together with a functional distribution of income in favor of profits and high crowding-out effects, will lead to insufficient growth to restore stability.

⁵Interest rates can also impact income distribution in the long run, but we abstract from this mechanism in this model to stress the role of the surplus-rule instead.

Figure 2: Convex Trajectory of the Debt-to-Capital Ratio



On the other hand, if the economy starts from a point where the debt-to-capital ratio is still low enough, such as point δ_0'' , the crowding-out effect might not significantly affect growth, allowing the debt-to-capital ratio to remain stable. The lower interest rates might also help in this scenario, since they will not lead to debt payments large enough to be unpayable. Hence, in this case, economic growth is sufficient to generate government revenues to stabilize δ .

The existence of two possible trajectories for the debt-to-capital ratio — concave and convex — shows that the government has a choice regarding the combination of fiscal and redistributive policies. Even though many parameters of the model are of empirical investigation, important variables - such as the interest rate, the profit share, and the fiscal rule parameter - also impact the trajectory and equilibrium value of the debt-to-capital ratio. In addition, if the adoption of a surplus-led fiscal

rule necessitates expenditure cuts, and if those cuts are made in areas that can shift income distribution from workers to capitalists (by changing minimum-wage policies or income transfers, for example), the trajectory can shift from concave to convex. If debt levels are too high when such a policy is adopted, it can lead to further growth in the debt-to-capital ratio.

4 Concluding Remarks

The proliferation of fiscal rules across the globe has proceeded largely on technical grounds, while the role of distributive conflict in shaping fiscal frameworks has been systematically overlooked. While existing post-Keynesian models have explored the relationship between government spending, debt dynamics, and fiscal rules, few consider persistent government surplus positions. This is particularly consequential for developing economies, where persistent surplus requirements coexist with high interest rates and low tolerance for deficits, and where fiscal consolidation has often been implemented through cuts in spending that can directly affect income distribution.

This article develops a neo-Kaleckian model that incorporates supply-side constraints and a surplus-oriented fiscal rule. Short-run results align with the post-Keynesian literature, which suggests that income transfers to classes that spend a higher share of their income would increase demand and generate growth. In the short run, debt is also a source of demand; therefore, higher public expenditures and indebtedness increase capacity utilization. In the long run, the model identifies two possible trajectories for the debt-to-capital ratio, shaped by the interaction of

crowding-out effects, income distribution, the size of the surplus, and interest rates. In both trajectories, debt stability is possible, meaning that the government’s choice is the size of the surplus and the type of income distribution it promotes. A redistributive fiscal policy, one aimed at shifting income toward workers and promoting social change, is not structurally incompatible with long-run debt sustainability.

The debate around fiscal rules has too often been framed as though a single, neutral path to debt stabilization exists, avoiding discussion of the type and scale of state provision required when social and economic development is on the horizon. While developing countries have converged in adapting their rule-based fiscal policies to international standards, this may also have increased barriers to pursuing redistributive growth trajectories by reinforcing a narrative that links fiscal policy to the need to tame instability through automatic stabilizers.

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