Institute for New Economic Thinking

Working Papers
ineteconomics.org/workingpapers

Inflationary Inertia as a Result of Unfulfilled Aspirations

Nicolás M. Burotto[†]

Working Paper No. 235

June 25th, 2025

Abstract

I develop a discrete-time Keynesian D/Z model in which inflationary inertia arises from distributional conflict between firms and workers. The mechanism centers on aspiration gaps—the divergence between actual real wages and income targets—which, when combined with strong bargaining power, generate persistent inflation even after conventional macroeconomic gaps close. The model shows that equilibrium in real wages does not guarantee distributional balance, and that market mechanisms alone cannot restore stability. This underscores the need for a "social consensus" that moderates aspiration dynamics and defuses conflict-driven inflationary pressures.

https://doi.org/10.36687/inetwp235

JEL codes: E12, E25, E31.

Keywords: inflation inertia; distributional conflict; aspiration gaps; effective demand; wage-price dynamics.

[†] School of Economics and Business, Universidad Andrés Bello. nburottor@hotmail.com.

I am very grateful to my advisors, Professors Luiz Fernando de Paula and Karsten Köhler, for their helpful discussions and valuable suggestions. I thank Rolando Gárciga Otero, Gilberto T. Lima, Carolina Román and Giuliano T. Yajima for their thoughtful comments. I also thank the participants of the 2023 Structural Change, Social Inclusion, and Environmental Sustainability conference at UdelaR, Montevideo, Uruguay, and the 25th Annual Conference of the Association for Heterodox Economics, hosted by the Cambridge Political Economy Society (CPES) at Anglia Ruskin University, Cambridge, UK, for their insightful feedback. This research was supported by CNPq (the National Council for Scientific and Technological Development) and CAPES (the Coordination for the Improvement of Higher Education Personnel), Brazil.

1 Introduction

The persistence of inflation following the COVID-19 pandemic has reopened longstanding debates about the drivers of price instability.[1] In many economies (both developed and emerging), central banks initially assumed that the inflationary spike would be temporary and caused by supply chain bottlenecks or one-off fiscal expansions. However, when inflation remained stubbornly high even after labor markets stabilized and monetary tightening took effect, conventional explanations began to fall short. While post-pandemic inflation dynamics have varied across countries, several cases have raised the possibility that deeper structural and social forces—such as distributional conflict between firms and workers—may be at play.

How could this bargaining channel contribute to persistent inflation, even once conventional macroeconomic gaps appear to have closed? Could conflict-driven inflation inertia be more pronounced in certain institutional or economic contexts?

In this paper, I develop a macroeconomic model of inflationary inertia grounded in distributional conflict to investigate these questions. Building on the aspiration gap tradition dating back to Rowthorn (1977), I formalize how unfulfilled aspirations—and not just expectations or rigid contracts[2]—can sustain inflation over time. The model is particularly relevant given the renewed interest in wage-price dynamics, bargaining asymmetries, and the role of institutions in shaping inflationary outcomes in the post-pandemic world.

To examine this channel formally, I develop a macroeconomic model based on Keynes (1936)'s fundamental aggregates, sometimes referred to as the D/Z framework. I employ this model in a closed economy and adapt Davidson (2011)'s "farm" economy as a simple vehicle for analyzing trial-and-error dynamics. This framework allows me to illustrate in a stylized but intuitive way how firms and workers modify output, prices, and wages in response to demand shocks and aspiration gaps. This setup forms the base scenario for my analysis. It allows me to first illustrate a conflict-free adjustment process under demand shocks, and then to introduce distributional conflict as a key mechanism driving inflationary inertia.

The iterative process between firms and workers reacts to deviations between expected and actual demand, which are assumed to be the result of autonomous demand shocks. In response, firms revise their production by changing the demand for labor, renegotiating wages, and setting new prices. Employment adjusts accordingly, but with a certain rigidity in each market round—corrections only occur in subsequent iterations. Over time, this iterative process between firms

[1]Discussions on this issue were unfolding precisely as the COVID-19 crisis emerged. For an analysis of the Argentinian particular case, see Reinhart (2019); for a broader, global perspective, see Goodhart and Pradhan (2020). Following the inflationary surge caused by the pandemic, Cevik (2022) examines eurozone (UZ) economies, Pill (2023) focuses on the United Kingdom, Schwartzman (2023) on the United States (US), and Afrouzi et al. (2024) offer insights at the global level. Hilscher, Raviv, and Reis (2024) show that inflation expectations have become unanchored in both the US and the EZ, with "inflationary disasters" expected in the coming years, especially in the EZ.

[2]See, for example, Bacha (1988), Carvalho (1993), and Heymann and Leijonhufvud (1995).

and workers continues until aggregate demand and aggregate supply reach equilibrium, known as the point of effective demand.

The trial-and-error process leaves the distribution of income unchanged, as prices and wages move evenly in response to the autonomous demand shock. This simplifies the convergence process. Equilibrium is reached when the deviation between expected and actual demand disappears. However, convergence is made considerably more difficult by an iterative, conflict-ridden process. Firms and workers react not only to demand shocks but also toward their aspirational income targets. These responses vary depending on the bargaining power of each group, which leads to shifts in income distribution. Significant bargaining power within a group can lead to autonomous inflationary inertia that is difficult to eliminate. This inertia can persist even when supply and demand have reached overall equilibrium and aspirational gaps have temporarily closed.

This points to a crucial insight: the aspirational dimension runs parallel to the expectational one, suggesting that convergence to the point of effective demand equilibrium does not necessarily stabilize the system, as aspirations may remain unfulfilled. For those who assume that an effective demand equilibrium involves both expectations and aspirations (as posited by Millar, 1972, and Hartwig, 2007), the realization of such an equilibrium is clearly hindered by conflict. For those who adhere to the traditional view that the equilibrium of effective demand is simply where expected and realized demand coincide (ignoring aspirations), the introduction of conflict means that this intersection no longer contains "all information" about prices, wages, and employment for the next period of production. In both cases, distributional conflict tends to pull the economy away from the equilibrium of effective demand.

To integrate conflict into this simple economy, I make several key adaptations that form the core contributions of this model. First, following Olivera (1991), I conceptualize the aspiration gaps[3] of both groups as a form of *social equilibrium*, defined as the state in which these gaps are closed. These gaps capture the difference between the actual real wage and the level aspired to by each group. By contrast, I treat *market equilibrium* as the point of effective demand, with a market gap arising when an autonomous demand shock exceeds autonomous supply. As a starting point, I equate the aspiration gap with the market gap to explore how the system responds to autonomous demand shocks. This framework embeds market logic into the antagonistic price-setting behavior of firms and workers.[4] I begin with a "pure" equilibrium that excludes bargaining power as a disturbance, and then show how its introduction pushes the system toward inflationary inertia—especially when that power is asymmetrically strong.

[3]Originally conceptualized by Rowthorn (1977) and later popularized by Dutt (1987) in such a way that this model exists in a standard form widely recognized in contemporary conflicting-inflation literature.

[4]Antagonistic adjustments, in which the gains of one group directly correspond to the losses of the other, resemble zero-sum games. For a more detailed explanation, see Kolaja (1968).

Second, I define conflict-driven price and wage setting as weighted averages of the actual real wage and each group's aspirations.[5] Unlike the standard approach—which models adjustment as a linear and proportional response to the aspiration gap (e.g. Blecker and Setterfield, 2019)—this formulation allows the relative weight of aspirations versus outcomes to vary with the size of the gap. The mechanism is asymmetric across groups and introduces a richer, nonlinear response structure. While asymmetric aspiration gaps are not new to conflict models, this framework differs by endogenizing how the weight placed on aspirations shifts over time. The supraindices serve as responsiveness parameters, enabling the model to simulate a range of inflationary dynamics under different institutional regimes (see Section 3).

Third, I derive a single equation for the actual real wage, which synthesizes separate subequations for firms and workers. This real wage exhibits cyclical (oscillatory) behavior, reminiscent of the sawtooth pattern associated with contractual indexation (e.g., Carvalho, 1993), though in this model it stems from the business cycle. The key autoregressive coefficient in this equation acts as a composite elasticity, capturing the combined bargaining power of both groups. Its dual structure allows one group to initiate an inflationary inertial episode—even when the overall real wage remains stable—if it holds disproportionate power. This feature is essential: it shows how the social equilibrium can diverge from the market one, generating systemic instability. Under certain conditions, the resulting inertia becomes self-sustaining and difficult to reverse. I argue that non-market mechanisms are needed to contain this kind of inflationary pressure. This leads to the concept of a *consensus-led regime*, which I show is the only context that ensures long-term stability and convergence to effective demand equilibrium under conflict. Section 4 develops this point in greater detail, and Section 5 presents numerical examples that illustrate the model's flexibility.

Related literature

This paper integrates and extends several strands of the literature on conflict-driven inflation. First, it contributes to a long-standing tradition that emphasizes distributional conflict between firms and workers—independent of monetary factors or expectations—as a key driver of price and wage modifications through bargaining power. In this view, inflationary episodes arise as a result of these distributional struggles. The seminal contributions of Kalecki (1943), Robinson (1962), Sylos-Labini (1974), Scitovsky (1978), Rowthorn (1980) and Skott (1989), to name a few, have provided important perspectives on distributional conflict. Recent studies by Hein (2024), Lavoie (2024), Rowthorn (2024), Sawyer (2024), and Skott (2024) have revitalized this tradition, renewing the discussion and providing new insights into its implications.

Second, this paper addresses a branch of the literature that uses the distributional conflict hy-

[5] A similar approach to price and wage setting is discussed in chapter 2 of Taylor (2009) and Martin (2023).

pothesis to shed light on the origins of inflationary inertia, particularly within the Latin American structuralist tradition. Seminal contributions include Simonsen (1983), Frenkel (1986), Bresser-Pereira and Nakano (1987), Bacha (1988), Ros (1989), Ros (1993), Carvalho (1993), and Heymann and Leijonhufvud (1995), among others.[6] These works argue that wage contracts are indexed with a time lag, which leads to a loss of purchasing power that must be made up in ever shorter periods. This dynamic leads to the autonomous persistence of inflation, independent of macroeconomic fundamentals. Studies by Taylor (2009), Serrano (2010), Vera (2013), Hein (2023), and Serrano, Summa, and Morlin (2024) contribute to a contemporary discussion of the inertial phenomenon, which is rooted in distributional conflict.

Third, this paper draws on the aspiration-gap framework to formalize conflict through the antagonistic adjustment of prices and wages. This mechanism has been studied in a broad strand of the literature, starting with Rowthorn (1977)'s seminal work and later extended by Marglin (1984), Dutt (1987), Olivera (1991), Sen and Dutt (1995), and Hein and Stockhammer (2009) for closed economies, as well as Blecker (2011) and Wildauer et al. (2023) for open economies. Setterfield (2023) also applies this framework to explain the recent COVID-19 crisis. This mechanism has gained considerable traction in the recent literature and has become a canonical model found in many textbooks and recognized as a standard framework in the field (e.g. Blecker and Setterfield, 2019; Lavoie, 2022; Hein, 2023). This paper attempts to reinforce the link between aspirations and inertia by showing how unfulfilled aspirations can give rise to persistent inflationary dynamics. It is emphasized that such dissatisfaction results from social equilibrium. The distinction between social equilibrium and market equilibrium is crucial, as an exclusive focus on the market and its path to (effective demand) equilibrium overlooks the broader social dynamics that can generate general equilibrium effects—in particular, dissatisfaction with aspirations.

Finally, this paper addresses a strand of Keynesian literature that emphasizes the failure of Keynes and traditional Keynesian economics to address distributional conflict. Notable contributions include Skidelsky (2013), Palley (2023), Palley (2024), Heise (2024), and Heise (2024a). Building on this critique, I aim to explicitly incorporate social conflict into the macroeconomic aggregates of Keynes' *General Theory*, offering a clearer and more formal representation.

2 A D/Z Keynesian Model

Basic framework

This model draws on the basic macroeconomic aggregates of Keynes (1936) and adopts the "farm economy" framework of Davidson (2011) and the corresponding Keynesian chapters in Mitchell,

[6] Also noteworthy is the important work of Blanchard (1986), who models inertia through expectations and nominal rigidities rather than contractual causes. Lorenzoni and Werning (2023) build on this expectation-based approach and incorporate the aspiration gap mechanism.

Wray, and Watts (2019). It models a closed economy operating in discrete time, with periods indexed by $t \geq 0$. The economy consists of two groups: firms, which produce tomatoes as their only output Y_t, and workers, who consume tomatoes and provide (effective) labor N_t as their only input. Thus, output follows a simple linear structure: $Y_t = N_t$. The production lifespan of tomatoes is limited to a single period as they spoil at the end of each cycle. This assumption avoids inventory accumulation and resets the production cycle each period, simplifying the model.

The aggregate supply function, $Z_t = \Phi(N_t, t)$, reflects the relationship between the expected future revenues of entrepreneurs (farmers) and the current employment level N_t required to produce tomatoes that meet these expectations. On the other hand, the aggregate demand function $D_t = D(N_t, t)$ describes how high the expected demand in the economy will be at different employment levels N_t and (implicit) income levels. I assume that the money supply is endogenous and adapts to individuals' demand for transactions in each period. Although the model lacks an explicit money market, this assumption ensures a consistent response to money demand.

I introduce the discrete-time sequence to illustrate in a comprehensible way the trial-and-error process that leads the economy to an effective demand equilibrium. It captures the lagged responses and gradual adjustments to exogenous shocks and their impact on production and decision making on a period-by-period basis. This framework clarifies lag effects and helps illustrate how inertia arises—a topic explored in Section 3. This approach addresses Keynes' omission of temporal dynamics in the General Theory. Kregel (1976) and Possas (1986) explicitly point out the negative effects of this omission on Keynes' analytical abilities.[7]

Employment. From a Keynesian perspective, workers set only the nominal wage W_t—not the real wage.[8] However, this does not mean that fluctuations in real wages are ignored. As for the price level, I assume that prices are set according to a fixed real markup m on labor costs, so that

$$P_t = (1 + m)W_t, \tag{1}$$

where (average) labor productivity is constant and normalized to one.

In this economy, the supply of labor exceeds the quantity demanded, indicating that involuntary unemployment can coexist. Consequently, the quantity of labor demanded determines the current effective number of employed workers N_t. Despite the oversupply of labor in this simple tomato-farming context, workers are able to set wages because firms want to attract and retain skilled labor (e.g., those with more experience in harvesting) to ensure uninterrupted production.

Labor demand reflects firms' production decisions based on expected sales and profitability

[7] According to Possas (1986), Keynes deliberately refrains from a dynamic analysis from period to period in order to explain in the simplest possible way that involuntary unemployment is not an imbalance. To support this explanation, Keynes assumes that firms' short-term sales expectations are always fulfilled.

[8] As far as wages are concerned, I will use the terms "money wage" and "nominal wage" interchangeably throughout this document.

associated with the expected prices for tomatoes and the expected demand for them. For the sake of tractability, from the point of view of firms I assume that the expected prices correspond to the current price P_t and that the expected demand for goods is primarily related to the autonomous component. While money wages reflect demand dependent on income, they also represent a cost. The demand for labor is therefore a function $N(P_t, W_t)$, and the effective employment level in tomato production is given by

$$N_t \;=\; N(P_t, W_t). \tag{2}$$

All other things being equal, an increase in prices (i.e. revenues) stimulates production $\frac{\Delta N_t}{\Delta P_t} > 0$, while an increase in production costs reduces it $\frac{\Delta N_t}{\Delta W_t} < 0$. Moreover, changes in prices and wages are influenced by *unexpected* shifts in autonomous demand, so it is impossible to determine a priori whether the change in N_t will be positive or negative; this depends on the elasticities of price and wage with respect to employment. These results can be summarized in the following proposition:

Proposition 1 (Effective demand equilibrium: price and wage adjustments). *The rate of change of equilibrium prices $\hat{P}_t$ and money wages $\hat{W}_t$ can be expressed as a function of the difference between the unexpected autonomous expansion of aggregate demand δ and aggregate supply ς. This rate is divided by the product of two factors:*

1. *The difference between price and money wage elasticities of employment volume, $\varrho - \omega$, and*
2. *The difference between aggregate supply and aggregate demand elasticities of employment volume, $\sigma - \varepsilon$.*

While the production process, which is based on expected demand, constantly reacts to actual market demand, I assume that firms eventually reach a point where they effectively adjust production to actual demand through a process of trial and error. This effective demand equilibrium is defined as

$$D\Big(N\left(P_t, W_t\right), t\Big) - \Phi\Big(N\left(P_t, W_t\right), t\Big) \;=\; 0. \tag{3}$$

This term should not be interpreted as general equilibrium in Walras's sense,[9] since at this stage not all resources are necessarily fully exhausted. Instead, it should simply be understood as the point at which entrepreneurs' expectations align.

To track the changes in equilibrium position over time, I fully differentiate the expression (3) with respect to time and assume that $Z_t = D_t$ is true for a period t. After further algebraic manipulations, the result is

$$\big(\varrho \Delta P_t / P_t - \omega \Delta W_t / W_t\big)\big(\sigma - \varepsilon\big) \;=\; \big(\delta - \varsigma\big)\Delta t. \tag{4}$$

[9] That is, a point at which all markets are *cleared*.

Equation (1) implies that equilibrium prices and money wages move at the same rate.[10] From this follows directly the formulation in Proposition 1, which yields

$$\hat{W}_t \;=\; \hat{P}_t = \frac{\delta - \varsigma}{\left(\varrho - \omega\right)\left(\sigma - \varepsilon\right)} \;=\; \left(\delta - \varsigma\right)\Lambda, \tag{5}$$

where $\Lambda \equiv \frac{1}{\left(\varrho-\omega\right)\left(\sigma-\varepsilon\right)} = 1$ is treated as a constant. Proposition 1 is thus proven.

This result is essential because it shows that an (unexpected) autonomous expansion of demand relative to supply[11] can lead to a positive shift in price and money wage levels over time ($n = 1, 2, \ldots$), represented by

$$P_{t+n} \;=\; \left(1 + \delta - \varsigma\right)^n P_0, \tag{6}$$

and also

$$W_{t+n} \;=\; \left(1 + \delta - \varsigma\right)^n W_0. \tag{7}$$

Trial and error adjustment process. Consider the tomato market in equilibrium at $t < 0$. Upon opening at $t = 0$, it faces an autonomous demand shock such that $\delta > \varsigma$. This excess demand exceeds the sales expectations of the entrepreneurs and exhausts the market earlier than expected. The early market exhaustion prompts firms to hire additional labor to match expected revenue and sales in period $t = 1$. In response to this additional demand for labor, producers must agree with workers on wages worth $W_{t+1} = \left(1 + \delta - \varsigma\right) W_0$ and therefore expect to sell tomato production in the next period at $P_{t+1} = \left(1 + \delta - \varsigma\right) P_0 = \left(1 + m\right) W_{t+1}$. For tractability, I assume that the absolute value of employment's price elasticity exceeds that of wages, $\varrho > \omega$. Consequently, the volume of hired labor will increase from N_t to N_{t+1} (at the rate indicated in (8)) in anticipation of the upcoming market round.

If the market gap persists and firms continue to underestimate sales at $t = 1$, they must adjust production, prices, and wages at $t = 2$—and continue doing so until expectations align with actual demand. This iterative process continues until the system reaches equilibrium. Figure 1 shows the time sequence of these changes.

The response of prices and wages then depends on the discrepancy between demand and supply shocks, unless a subsequent opposite shock neutralizes the original impulse. This process demonstrates how autonomous demand shocks generate imbalances that reshape expectations and influence production and employment. However, this shock has *no effect on the income distribution* between workers and entrepreneurs. Both groups adjust at the same rate, $\hat{W}_t = \hat{P}_t$, maintaining the existing distribution and keeping the real wage in constant equilibrium. This

[10] The hat ˆ above each variable indicates the proportional rate of change relative to its level.

[11] I assume that δ represents the unexpected component of the autonomous shock (which is defined as the uninduced part of aggregate demand), while the expected component is contained in firms' *ex-ante* production decisions. Positive changes in prices and wages can also result from a negative supply shock compared to demand. From now on, I will refer to δ as an autonomous demand shock, which already contains the unexpected component in its status.

synchronized movement in prices and wages ensures a balanced labor response given by

$$\hat{N}_t(\hat{P}_t, \hat{W}_t) = (\varrho - \omega)\hat{W}_t = \frac{\delta - \varsigma}{\sigma - \varepsilon}. \tag{8}$$

If the gap between autonomous demand and supply remains positive over a long period of time, full employment can theoretically be achieved, as Keynes predicted. Here, however, I focus exclusively on the inflation dynamics driving this change, leaving aside further analysis of the labor market.

As soon as the market gap closes, prices, wages and employment stabilize at their last balance level, so that the economy can quickly return to effective demand equilibrium (expressed in levels).[12] This path to equilibrium appears smooth and straightforward, as it relies solely on market forces and excludes distributional conflict. How would the adjustment in this naïve-farm economy change if a distributional conflict were introduced? In the next section, I examine how the bargaining power of both groups affects economic outcomes, focusing on the distributional effects of an autonomous demand shock.

3 A Conflicting-Claims Model

Here, I assume that the earlier trial-and-error process—where nominal wages and prices move toward equilibrium—is driven by conflict. I introduce the concept of "aspiration gaps" (Rowthorn, 1977; Dutt, 1987) to explain this dynamic. Firms and workers adjust prices in an antagonistic manner, aiming to reduce the other group's share of income. I first examine the aspirational motivations and balancing strategies of each group independently, before turning to a general analysis in Section 4. The results show how the inertial inflationary pressure of one or both groups interrupts the path to the equilibrium point of effective demand and leads to an undesirable destabilization of the system.

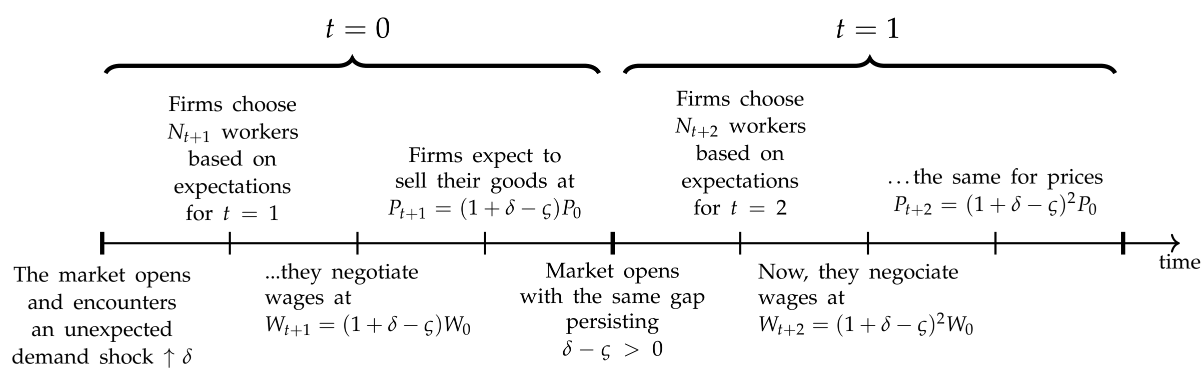
Workers

The aspiration gap of employees is based on the assumption that they have an aspirational real wage, denoted as $s_{W,t}$, which they want to achieve.[13] In contrast, the actual real wage, denoted by w_t, is the result effectively determined in each period. I assume the actual real wage enters the system only as a ratio, reflecting its *ex-post* nature. The workers' aspiration gap, defined as $s_{W,t} - w_t$, serves as a benchmark for wage setting aimed at moving compensation toward

[12] In this model, I assume a rapid transition to equality of levels when the autonomous shock dissipates, so that the market gap expressed in autonomous shocks can be treated interchangeably with the gap in levels.

[13] This ideal wage is supported by a cultural framework that varies across societies; however, it will not be examined in detail here, as this is not the purpose of the model.

Figure 1: Trial-and-error timeline



their aspirational target. Following Olivera (1991), I argue that the aspiration gap belongs to the dimension of social equilibrium that is achieved when this gap is closed. From the workers' perspective, this social equilibrium is partial, with firms influencing it through the actual real wage. I will later define the remaining component of this partial equilibrium from the firms' point of view.

In social equilibrium, price and wage modifications reflect each group's relative power to increase its share of income. In contrast, adjustments in prices and wages at market equilibrium reflect the relative scarcity of goods—or, in Keynesian terms, a mismatch between expectations. In other words, market equilibrium corresponds to the point of effective demand where aggregate demand intersects supply. While market and social equilibria are linked, they remain distinct. The price structure that sustains one equilibrium may differ markedly from that which supports the other. Distributional conflict exacerbates this distinction.

I assume persistent dissatisfaction among workers leads to increasing aspirations over time. This assumption rests on the idea that, as capitalist societies mature, material progress continually elevates workers' aspirations. The inherent dynamics of capitalism—such as constant innovation and growing consumption opportunities—create a social environment in which standards are constantly being raised. This process encourages a steady upward revision of aspirations, leading to a kind of downward rigidity (i.e., $\hat{s}_{W,t} \geq 0$). In this single-good model, material progress can manifest itself as a desire for greater quantities or higher quality tomatoes and/or even intangible improvements. Whether these desires translate into an actual increase in real wages depends on the bargaining power of workers: the greater the bargaining power, the wider the gap between the two equilibria. This distinction begins with the following definition:

Definition 1 (Partial equilibrium of workers). In the *absence* of bargaining power, aspirations and the market gap move in tandem so that

$$\hat{s}_{W,t} - \hat{w}_t \;=\; \delta - \varsigma. \tag{9}$$

Without external pressures—such as workers' bargaining power—that would otherwise widen the gap between aspirations and market outcomes, this alignment implies that when the market equilibrium is reached (i.e. $\delta - \varsigma = 0$), by definition the workers' social equilibrium is reached simultaneously, $\hat{s}_{W,t} - \hat{w}_t = 0$. This formulation emphasizes the close interdependence between these partial equilibria in a context where neither aspirations nor the real wage are actively influenced by workers.

The assumption of an initial match between social and market equilibrium reflects a steady-state scenario in which distributional tensions (captured by the aspiration gap) and macroeconomic conditions (captured by demand and supply shocks) are in equilibrium without external disturbances. Although such perfect alignment is rare in real economies, the assumption offers a useful starting point for analyzing disequilibrium dynamics. On the other hand, while the literature on distributional conflict inflation has extensively analyzed wage bargaining, inflation expectations, and conflict-driven price dynamics, it usually treats social aspirations and macroeconomic imbalances as separate forces. This approach contributes by unifying these elements and explicitly linking the aspiration gap mechanism to macroeconomic fluctuations. That is, this perspective helps to explain how inflationary pressures result from both distributional conflict and the aggregate supply and demand situation.

To address dynamic shocks in autonomous supply and demand, the aspiration gap is expressed in terms of rates of change. This adaptation allows a coherent and continuous analysis of its evolution over time by reconciling changes in aggregate demand and aggregate supply with the aspiration gap. To integrate these concepts into the real economy, in particular this "farm economy," and to include bargaining power in this framework, I assume that tomato consumption c_t is a positive function of workers' aspiration level, $c_t = f(s_{W,t-1})$, where $f'(s_{W,t-1}) > 0$. The target level $s_{W,t}$ is an exogenous variable[14] that is influenced by factors such as cultural norms, institutional practices and historical contexts. For simplicity, given the lengthy nature of this process, I assume that changes in aspirations do not affect consumption immediately, but only take effect after a period. At the same time, and all other things being equal, higher consumption implies a higher actual real wage, $w_t = g(c_t)$, where $g'(c_t) > 0$. This is due to excess demand and the additional labor input required to meet it. For tractability, I assume that the adjustment takes place within the same period, without a delay between changes in consumption and the actual real wage.[15]

[14] Although it can be fully endogenized, for the sake of tractability in this model, I will assume it as given.

[15] Assuming that real wage changes follow a one-period lag consumption adjustment would not substantially change

From this information, it can be deduced that an increase in social aspirations would lead to a positive shift in tomato consumption. This would have a positive effect on the actual real wage of workers, which is thus represented as

$$\hat{c}_t \;=\; \mathrm{A} \cdot \hat{s}_{W,t-1} \qquad \text{and} \qquad \hat{w}_t \;=\; \Gamma \cdot \hat{c}_t,$$

where $\mathrm{A} \equiv \frac{\Delta c_t / c_t}{\Delta s_{W,t-1}/s_{W,t-1}}$ and $\Gamma \equiv \frac{\Delta w_t / w_t}{\Delta c_t / c_t}$ denote the aspirations elasticity of consumption and the consumption elasticity of the actual real wage, respectively. On the basis of (9) I can now derive two equations:

$$\hat{s}_{W,t+1} \;=\; \delta - \varsigma + \mathcal{W}\hat{s}_{W,t} \tag{10}$$

$$\hat{w}_{t+1} \;=\; \big(\delta - \varsigma + \hat{w}_t\big)\mathcal{W}. \tag{11}$$

These expressions are the *fundamental equations* for workers' aspirations and the actual real wage corrections. I interpret $\mathcal{W} \equiv \Gamma\mathrm{A}$ as the bargaining power that workers exercise to adjust their aspirations and real wage changes over time. $\mathcal{W}$ captures the compound elasticity by which a change in aspirations leads to higher consumption, which ultimately leads to an increase in the actual real wage.

Assumption 1. The bargaining power $\mathcal{W}$ is treated as a single unit, regardless of the individual values of Γ and A. In a similar manner, the bargaining power of firms will be viewed as a single measure abstracted from its individual components.

The introduction of bargaining power in partial equilibrium (9) can alter this proportional relationship. A higher $\mathcal{W}$ may prolong the changes in aspirations and the actual real wage and thus widen the gap between the social equilibrium of workers and the market equilibrium.

How does money wage adjust in this context? Building on the wage-setting framework of Taylor (2009) and Martin (2023)—which intuitively is very similar to the canonical linear adjustment—I assume that wages at time t are determined as a geometrically weighted average of aspirations and the actual real wage, given by

$$W_t\big(s_{W,t}, w_t\big) \;=\; \big(s_{W,t}\big)^{\alpha}\big(w_t\big)^{1-\alpha}. \tag{12}$$

Expressed in terms of rates of change, this equation shows wage movements, i.e. wage inflation $\hat{\pi}_t^W$, which is the phenomenon I want to study, with

$$\hat{\pi}_t^W\big(\hat{s}_{W,t}, \hat{w}_t\big) \;=\; \alpha\hat{s}_{W,t} + \big(1-\alpha\big)\hat{w}_t. \tag{13}$$

the results discussed in Section 4. Therefore, this simplification is used without loss of generality.

α controls the sensitivity of wage setting to the aspiration gap. It increases with the size of the gap—i.e. the greater the difference between aspirations and the actual real wage, the higher the value of α. In the extreme case, when the gap is maximum $\alpha = 1$, individuals move the nominal wage according to $\hat{s}_{W,t}$ in order to "catch up" with their aspirations. At the other extreme, when the gap is completely closed $\alpha = 0$, the money wage responds to the actual real wage, as it already reflects the (real) aspirational wage. However, I exclude these extremes and assume a parameter that fluctuates within the limits $\alpha \in (0, 1)$. In this case, the wage setting process reflects a positive aspiration gap that gradually adjusts toward the target over time. The main interest is to examine how bargaining power at a given gap (and thus a given α) alters the process of partial attainment of the target in each period, in parallel with the trial-and-error dynamics of the tomato market. Next, I analyze how wage adaptations respond to the four possible values that workers' bargaining power can take.

Case 1, $\mathcal{W} = 0$. In this scenario, workers lack bargaining power, which prevents them from adjusting the actual real wage. Only aspirations can move, but they are constrained by market equilibrium. The solutions to equations (10) and (11) can be summarized as follows:

$$\hat{s}_{W,t} = \delta - \varsigma \qquad \text{and} \qquad \hat{w}_t = 0. \tag{14}$$

In this context, wage inflation sets a constant minimum floor, which is determined solely by the supply and demand pressure of the market, expressed as $\hat{\pi}_t^W(\cdot) = \alpha(\delta - \varsigma)$. This wage variation will remain in place until the aggregate imbalance between supply and demand is closed $\delta - \varsigma = 0$, which also eliminates the rate of change of the aspiration gap as defined in Definition 1. However, this is a disadvantage because the market equilibrium dictates the necessary corrections to the workers' social equilibrium and hinders the ability of them to keep pace with aspirational changes.

Case 2, $\mathcal{W} \in (0, 1)$. In this intermediate case, changes in aspirations and actual real wages converge to their intertemporal equilibrium in the long run, which is represented by

$$\hat{s}_{W,t} = (\delta - \varsigma)\frac{1}{1 - \mathcal{W}} = \hat{s}_W^* \qquad \text{and} \qquad \hat{w}_t = (\delta - \varsigma)\frac{1}{1 - \mathcal{W}}\mathcal{W} = \hat{w}^*. \tag{15}$$

Although wage inflation is higher than in the previous case, where $\hat{\pi}_t^W(\cdot) = \frac{1}{1-\mathcal{W}}(\delta - \varsigma)\Big(\mathcal{W} + \alpha(1 - \mathcal{W})\Big)$ (since bargaining power acts as a wage-adjusting multiplier, $1 + \mathcal{W} + \mathcal{W}^2 + \ldots$), the aspirational gap movement will also cease as soon as the gap between supply and demand closes. That is, variations are still subject to market forces. The influence of bargaining power on wage inflation becomes clear, with the effectiveness of aspirations and real wage adjustments depending on whether $\mathcal{W} \gtrless 0.5$, even for small values of α. This effect leads to rigidities in the response to the aspiration gap, which feed directly into the trial-and-error process and thus influence the expectations and production decisions of entrepreneurs.

Case 3, $\mathcal{W} = 1$. This context is characterized by strong bargaining power,[16] where workers' aspirations and the evolution of actual real wages depend on market equilibrium, which is reinforced by temporal factors and initial conditions that constitute the inertial (i.e. autonomous) component of the system.[17] The general solutions for both variables show a dynamic equilibrium over time, which ultimately simplifies to

$$\hat{s}_{W,t} \;=\; \left(\delta - \varsigma\right)t + \hat{s}_{W,0} \qquad \text{and} \qquad \hat{w}_t \;=\; \left(\delta - \varsigma\right)t + \hat{w}_0. \tag{16}$$

The multiplicative component $\mathcal{W} = 1$ prevents the gap from converging to $\hat{s}_W^*$ and $\hat{w}^*$, leading to a persistent inflationary deviation from dynamic equilibrium over time, $\hat{\pi}_t^W(\cdot) = \left(\delta - \varsigma\right)t + \alpha\hat{s}_{W,0} + \left(1-\alpha\right)\hat{w}_0$.[18] Even after the imbalance between supply and demand is corrected, the inflationary process remains constant driven by the weighted (inertial) initial conditions $\alpha\hat{s}_{W,0} + \left(1-\alpha\right)\hat{w}_0$. In other words, inertial factors lead to an adaptation of the aspirational gap, which moves further away from market equilibrium from period to period. This shows that a balanced market is unable to resolve wage inflation against a background of unfulfilled aspirations and strong bargaining power.[19]

Case 4, $\mathcal{W} > 1$. The response is very sensitive in this context, which indicates a strong bargaining power of the employees. This leads to an unstable trajectory in which both the actual real wage and the real target experience a rapid, unbounded growth as $t \to \infty$. As a result, wage inflation is represented by

$$\hat{\pi}_t^W\left(\hat{s}_{W,t}, \hat{w}_t\right) \;=\; \underbrace{\left(\alpha\left(\hat{s}_{W,0} - \hat{s}_W^*\right) + \left(1-\alpha\right)\left(\hat{w}_0 - \hat{w}^*\right)\right)\mathcal{W}^t}_{\text{Inertia}} + \underbrace{\alpha\hat{s}_W^* + \left(1-\alpha\right)\hat{w}^*}_{\text{Convergence}}. \tag{17}$$

This expression shows that wage inflation is a weighted average of inertial and stable components. After the gap between supply and demand has closed, the inertial component of the wage inflation rate grows *explosively* at $\left(\alpha\hat{s}_{W,0} + \left(1-\alpha\right)\hat{w}_0\right)\mathcal{W}^t$, which illustrates the increasing deviation of the workers' social equilibrium from the market equilibrium over time. This highly unstable scenario can lead to macroeconomic problems such as a distorted income distribution

[16] Which means nothing other than that an aspirational change today will lead to a proportional adjustment of actual real wages tomorrow, $\hat{w}_{t+1} = \mathcal{W} \cdot \hat{s}_{W,t} = 1 \cdot \hat{s}_{W,t}$.

[17] The inertial component works autonomously, i.e. it becomes a force that is independent of external factors such as the business cycle or shifts in expectations.

[18] Note that although inflation increases over time, its acceleration remains constant and reaches a maximum upper limit at $\frac{\Delta\hat{s}_{W,t}}{\Delta t} = \frac{\Delta\hat{w}_t}{\Delta t} = \delta - \varsigma$.

[19] Even if the aspiration gap were completely closed, so that $\alpha = 0$, the inertial component would remain due to $\hat{w}_0$.

and systemic risks due to excessive nominal wage increases adding volatility. It is not desirable for this economy to remain in this situation. The negative consequences will be illustrated later with examples (see Section 5).

Firms

The firm's aspiration gap is defined by a "targeted" real wage $s_{F,t}$, which is conceived as the reciprocal of an ideal profit rate, and the actual real wage w_t. Since the firm's target wage is always less than or equal to the actual real wage, the aspiration gap is defined as $w_t - s_{F,t}$. This reflects social equilibrium from the firm's point of view. Similar to workers, I assume that $s_{F,t}$ has a downward tendency (without going towards zero), reflecting upward rigidity. This dynamic underlies the antagonistic adjustment process, as firms seek to reduce w_t until it aligns with $s_{F,t}$.

Thus, the partial equilibrium of firms, which includes their social equilibrium and market equilibrium without taking bargaining power into account, is similar to Definition 1. Expressed in terms of rates of change, it follows that:

Definition 2 (Partial equilibrium of firms). When there is no bargaining power, the market and firms' aspiration gaps move in unison so that

$$\hat{w}_t - \hat{s}_{F,t} = \delta - \varsigma. \tag{18}$$

This mirrors Definition 1 and highlights the synchronized movement of aspiration and market gaps under equilibrium.

To relate these concepts to the farm economy, I consider that firms' target wage is a negative function of the installed capacity of the economy u_t, expressed as $s_{F,t} = f(u_t)$, where $f'(u_t) < 0$.[20] This inverse relationship stems from the assumption that firms adjust targets and prices in response to the business cycle (see Lima, 2009 and Brochier, 2020). In particular, they use economic booms to raise their prices and lower their targets, while the opposite is true during downturns. This reconfiguration takes place within the same time period and is determined by firms' ability to make price decisions. Furthermore, I assume that capacity utilization u_t is a positive function of the actual real wage, $u_t = g(w_{t-1})$, where $g'(w_{t-1}) > 0$ (see Blecker, 2016). An increase in the real wage, spurred by higher tomato consumption and the associated increase in employment, requires greater installed capacity to meet excess demand. Since the response of installed capacity is a gradual, time-consuming process, I assume that the change will take place with a delay of one period.

[20] Wildauer et al. (2023) uses the same causal link, but in a positive direction, focusing on mark-up targets instead of real wage targets.

To clearly outline the sequence of events, suppose that the economy suffers an exogenous workers' aspirational shock that leads to an increase in tomato consumption. This, in turn, raises the actual real wage, as production expands to meet excess demand, leading to an enlargement in capacity to produce more tomatoes. Firms will use this boom phase to realign their targets, formally expressed as

$$\hat{u}_t = \Pi \cdot \hat{w}_{t-1} \qquad \text{and} \qquad \hat{s}_{F,t} = -\mathrm{H} \cdot \hat{u}_t.$$

Here $\Pi \equiv \frac{\Delta u_t / u_t}{\Delta w_{t-1} / w_{t-1}}$ and $\mathrm{H} \equiv \frac{\Delta s_{F,t} / s_{F,t}}{\Delta u_t / u_t}$ denote the actual real wages elasticity of capacity utilization and capacity utilization elasticity of firms' wage aspirations, respectively. Using the same procedure as before, I derive via (18) the firms' *fundamental equations* as

$$\hat{w}_{t+1} = \delta - \varsigma - \mathcal{F}\hat{w}_t \tag{19}$$

$$\hat{s}_{F,t+1} = -\big(\delta - \varsigma + \hat{s}_{F,t}\big)\mathcal{F}, \tag{20}$$

where $\mathcal{F} \equiv \Pi\mathrm{H}$ represents firms' bargaining power to accommodate target and actual real wages. In this context, greater firm bargaining power *reduces* both actual real wages and wage aspirations, since both are measured in real terms. This will become clearer in the cases discussed below. Similar to workers, the pricing strategy is a weighted average of firms' aspirations and the actual real wage, where the constant parameter $\beta \in \big(0, 1\big)$ fulfills the same function as in (13), excluding marginal cases. However, expressing the firms' gap in real terms will slightly affect the structure of the price-setting function. The price response must be inversely related to both target and actual real wages so that

$$P_t\big(w_t, s_{F,t}\big) = \big(w_t\big)^{-\beta}\big(s_{F,t}\big)^{-(1-\beta)}. \tag{21}$$

Thus, when the gap is large (β near one), prices will tend to follow the real wage, aiming to "catch up" with firms' aspirations. Consequently, price inflation $\hat{\pi}_t^F$ is determined by

$$\hat{\pi}_t^F\big(\hat{w}_t, \hat{s}_{F,t}\big) = -\beta\hat{w}_t - \big(1 - \beta\big)\hat{s}_{F,t}. \tag{22}$$

This framework introduces four additional scenarios based on the different bargaining power of firms. Since the objectives of firms are directly opposed to those of workers, price revisions will move in the opposite direction. Later we will examine how this antagonistic adjustment leads to fundamental economic imbalances.

Case 5, $\mathcal{F} = 0$. As firms have no bargaining power, they cannot adjust their targets, so actual real wage movements are solely determined by market forces. Equations (19) and (20) have the following solutions

$$\hat{w}_t = \delta - \varsigma \qquad \text{and} \qquad \hat{s}_{F,t} = 0. \tag{23}$$

The actual real wage reacts positively to a demand-supply gap. However, companies are not in a position to counteract this shift. In the absence of bargaining power, the market works "against" firms, with price inflation remaining negative and minimal, $\hat{\pi}_t^F = -\beta(\delta - \varsigma)$, until the market gap closes.

Case 6, $\mathcal{F} \in (0,1)$. In this intermediate case, aspirations and real wages exhibit limited adaptability and gradually converge to the long-run equilibrium rate of change defined by

$$\hat{w}_t = (\delta - \varsigma)\frac{1}{1+\mathcal{F}} = \hat{w}^* \qquad \text{and} \qquad \hat{s}_{F,t} = -(\delta - \varsigma)\frac{1}{1+\mathcal{F}}\mathcal{F} = \hat{s}_F^*. \tag{24}$$

Note that firms' defense mechanism is twofold: the response of the actual real wage proves ineffective and leads to a price decline, while the aspirational channel is more efficient as shifts in aspirations cause positive price adjustments. Whether price inflation is positive depends on $\mathcal{F} > \frac{\beta}{1-\beta}$, as given by $\hat{\pi}_t^F(\cdot) = \frac{1}{1+\mathcal{F}}(\delta - \varsigma)\Big((1-\beta)\mathcal{F} - \beta\Big)$. That is, for firms to raise prices—assuming the market gap remains open—the aspiration gap must be relatively small, such that $\beta < 0.5$, and firms must have sufficient bargaining power to satisfy such inequality. Otherwise, if $\mathcal{F} \leq \frac{\beta}{1-\beta}$, firms are unable to counteract the positive shift in the actual real wage, leading to negative inflation.

Case 7, $\mathcal{F} = 1$. In this context, characterized by the strong bargaining power of firms, prices do not converge to a moving equilibrium due to *inertia*.[21] The solutions to the fundamental equations are represented by

$$\hat{w}_t = -\hat{w}_0 + (\delta - \varsigma) \qquad \text{and} \qquad \hat{s}_{F,t} = -\hat{s}_{F,0} - (\delta - \varsigma). \tag{25}$$

The inertial component reflects the autonomous change in actual real wages and aspirations, shaped by their initial conditions. In solution (25), the positive market gap[22] prevents upward price adjustments via the real wage channel. Nevertheless, overall price inflation remains positive, as indicated by $\hat{\pi}_t^F(\cdot) = \beta\hat{w}_0 + (1-\beta)\hat{s}_{F,0} + (1-2\beta)(\delta - \varsigma)$. The positive effect is amplified as long as the market gap remains open and $\beta < 0.5$, which indicates a relatively small aspiration gap. As soon as the market gap closes, inflation will continue to grow inertially at a constant

[21] In this case, as in the following ($\mathcal{F} > 1$), I assume that the homogeneous solution for the actual real wage and the firms' objective has the approximate form $-\theta\,|\mathcal{F}|^t$, where θ is an arbitrary constant. This formulation aims to ensure a monotonic time path that maintains both the direction and the magnitude of the adjustment and thus avoids artificial sign reversals that would be inconsistent with the underlying economic dynamics.

[22] Note that the market gap here is not reinforced by the temporal variable, as observed in Case 3 for the workers.

rate. This situation can only be reversed by a market shock in the opposite direction, i.e. by an autonomous negative demand or positive supply shock.

Case 8, $\mathcal{F} > 1$. This scenario is similar to Case 4 of the workers. The (explosive) price inflation rate is thus represented by

$$\hat{\pi}_t^F\left(\hat{w}_t, \hat{s}_{F,t}\right) = \underbrace{\Big(\beta\big(\hat{w}_0 - \hat{w}^*\big) + \big(1-\beta\big)\big(\hat{s}_{F,0} + \hat{s}_F^*\big)\Big)\left|\mathcal{F}\right|^t}_{\text{Inertia}} - \underbrace{\beta\hat{w}^* + \big(1-\beta\big)\hat{s}_F^*}_{\text{Convergence}}. \tag{26}$$

This results in a highly unstable macroeconomic environment, with inertia playing a central role in the system's instability. The model shows that when bargaining power is low an autonomous demand shock only temporarily disrupts the trial-and-error correction process. In this sense, inflationary inertia poses a major challenge: it transforms a temporary shock into a lasting deviation from the system's path toward effective demand equilibrium.[23]

The novelty of this result lies in the model's break from the traditional link between aspiration gaps and bargaining power found in canonical treatments (e.g. Blecker and Setterfield, 2019; Lavoie, 2022). Instead, bargaining power determines how changes in aspirations and real wages today affect outcomes in the next period and propagate over time. This suggests that the inertia component, once established, is difficult to eliminate due to the independence of adjustments. This result is formally stated in Proposition 2 and Corollary 1. However, another issue must be addressed first. Until now, the actual real wage has only been partially formulated, with each group rebalancing its respective equation. Yet since both groups view the same variable from different angles, a single, general equation suffices to capture its evolution over time.

The next section derives a general expression for the actual real wage and integrates it into the framework of distributional conflict—clarifying and simplifying the overall analysis.

4 A General Actual Real Wage Into the Conflict

Building on the two partial equilibrium real wages (11) and (19), I derive a general equation that characterizes the behavior of the actual real wage, given by

$$\hat{w}_{t+2} = \big(1 - \mathscr{C}\big)\big(\delta - \varsigma\big) - \mathscr{C}\hat{w}_t. \tag{27}$$

The structure of this equation offers key insights into the dynamics of distributional conflict. For simplicity, I define $\mathscr{C} \equiv \mathcal{F}\mathcal{W} = \Pi\mathrm{H}\Gamma\mathrm{A}$, representing the composite elasticity of both groups' bargaining power.

[23] I refer to this phenomenon of persistent inflationary dynamics as inertia because it reflects long-lasting adjustments over time, even if certain forms of it produce hysteresis-like effects.

Assumption 2. From this point forward, both groups observe the fundamental equation (27) and use it to form their aspiration gaps.

Solution and Equilibrium. The roots of equation (27), $\pm i\sqrt{\mathscr{C}}$, are purely imaginary and represent the underlying drivers (the *source*) of the conflict. Therefore, the general solution of equation (27) is given by

$$\hat{w}_{G,t} \;=\; C_1 \mathscr{C}^{\frac{t}{2}} \cos\left(\frac{\pi}{2}t + C_2\right) + \hat{w}_G^*, \tag{28}$$

where $\frac{\pi}{2}$ indicates the amplitude of actual real wage fluctuations and C_1 and C_2 are arbitrary constants. In terms of intertemporal equilibrium, the expression

$$\hat{w}_G^* \;=\; (\delta - \varsigma)\frac{1-\mathscr{C}}{1+\mathscr{C}}, \tag{29}$$

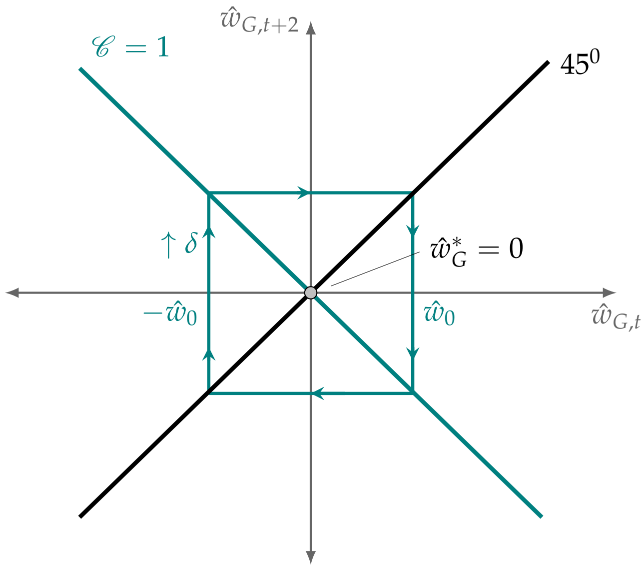
represents the rate of change at which the general real wage fluctuates and converges over time. The oscillatory behavior, captured by the sequence $\left\{\cos\left(\frac{\pi}{2}t + C_2\right)\right\}$, resembles the "Simonsen (1964) curve"[24] described in the structuralist literature (Bresser-Pereira and Nakano, 1987; Carvalho, 1993), which was originally based on contractual delays between firms and workers. In this model, however, the oscillations stem not from contractual features (as indexation is excluded), but from the business cycle, which is determined by the interaction between consumption c_t and capacity utilization u_t in the economy.

A key insight from equation (28) and the dual structure of $\mathscr{C}$ is that achieving an equilibrium real wage $\hat{w}_G^*$ does not imply a corresponding equilibrium in distribution, as happens in the canonical model with continuous time (see e.g. Blecker and Setterfield, 2019, chapter 5). In continuous time, the instantaneous adjustment of the real wage serves as an attractor, *stabilizing income distribution* under inflationary conditions. Interestingly, this convergence occurs at values of $\mathcal{W}, \mathcal{F} \in (0, \infty)$. In contrast, the actual real wage in this discrete-time model exhibits oscillations and *does not* act as an attractor. The distinction between market and social equilibrium in conjunction with the structure of $\mathscr{C}$ implies that bargaining power here can destabilize distribution over time. The actual real wage can reach equilibrium but still leave the distribution problem unsolved due to inflationary inertia. As I will show, this inertia can persist in any established equilibrium, be it in the market or in a social equilibrium.

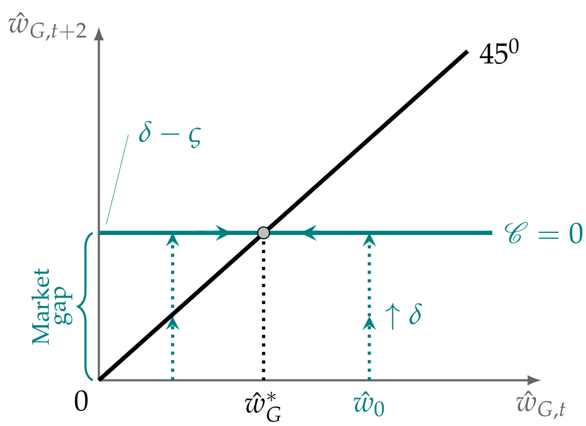
Stability. The actual real wage may converge intertemporally through two distinct pathways. First, one can assume that $\mathscr{C} = 0$. When significant constraints limit price or wage movements—whether for entrepreneurs, workers, or both—the actual real wage adjusts solely in response to market imbalances between supply and demand. This trajectory is monotonic and ceases once the market gap is closed. This is illustrated in Figure 2b.

[24] This in turn goes back to the sawtooth pattern of real wages by Kaldor (1955).

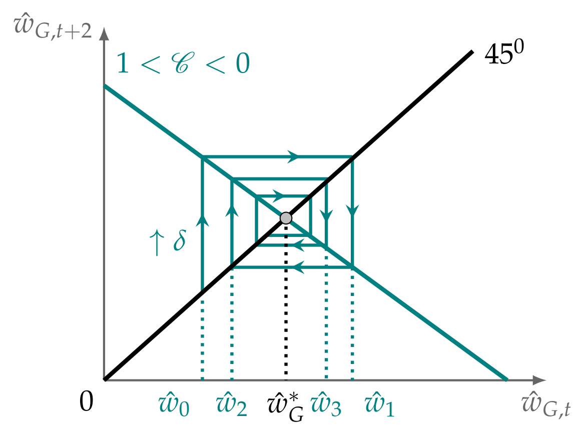
Figure 2: Actual real wage convergence paths under different values of $\mathscr{C}$



(a) Two-period cyclical instability (resembling the Simonsen curve)



(b) Monotonic convergence



(c) Cobweb-like stability

Second, if $\mathscr{C} \in (0, 1)$, the actual real wage will oscillate towards the steady state $\hat{w}^*_G$. As illustrated in Figure 2c, these oscillations are damped following an autonomous demand shock, gradually diminishing over time from the initial condition $\hat{w}_{G,0}$ (in $t = 0$, without specifying the initial conditions in $t = 1$). As long as there is a positive structural gap between demand and supply curves, the general real wage converges to $\hat{w}^*_G$. Once the market gap closes, the oscillation centers around the origin $\hat{w}^*_G = 0$. This is formulated in the following proposition from which a key result emerges.

Proposition 2 (Real wage stability and bargaining power decoupling). *For the general actual* *real wage to remain stable, it is necessary and sufficient that $\mathscr{C} \in [0, 1)$, implying*

$$\mathcal{W} < \frac{1}{\mathcal{F}} \quad \text{or} \quad \mathcal{F} < \frac{1}{\mathcal{W}}.$$

This means the stability condition applies regardless of the specific partial equilibrium outcomes resulting from the different cases of each group, decoupling the dynamics of general real wage stability from the individual bargaining scenarios.

This result is central, as it decouples the dynamics of the actual real wage from each group's bargaining power. The implications, explored through examples in Section 5, suggest that achieving overall system stability requires far-reaching social agreements beyond market mechanisms—whether in terms of the market gap or the actual real wage—that focus on the aspirations sought by each group.

If $\mathscr{C} > 1$, on the other hand, the trajectory of the actual real wage becomes explosive.[25] This result is the inverse of Proposition 2, with the inequalities reversed.

What happens when $\mathscr{C} = 1$? This is a singular and unstable case in which the actual real wage constantly fluctuates by $\hat{w}_G^*$ over time. This inertial case closely resembles the Simonsen curve presented by structuralist economists in the 1980s,[26] although it has an oscillating cycle (and not specifically a sawtooth shape). Even after the market gap is eliminated in the long run, the real wage continues to fluctuate constantly, but is now around zero, since $\hat{w}_G^* = 0$. Figure 2a illustrates this two-period cycle case in the long run, oscillating alternately between positive and negative values, as indicated by the equation

$$\hat{w}_{G,t} = C_1 \cos\left(\frac{\pi}{2} t + C_2\right).$$

On the basis of the information presented so far, in particular the result derived from Proposition 2, the following corollary can be formulated, which shows that inflationary inertia is a more complex phenomenon than it first appears.

Corollary 1 (The enduring impact of inflationary inertia). *Inflationary inertia may exert a persistent influence not only after the closure of the market imbalances, but also after the closure of the two aspiration gaps. That is, even when the economy reaches full market and social balance, inflationary (inertial) pressure remains.*

This surprising result can be illustrated with a simple example. Consider an economy in which workers have intermediate bargaining power (Case 2) and firms have unitary bargaining

[25]This scenario is not shown in Figure 2, but it is similar to 2c, except that the oscillation deviates from equilibrium and moves away from $\hat{w}_G^*$, which is in the *third quadrant* of the plane.

[26]In many theoretical formulations developed by these economists, a unitary $\mathscr{C}$ was implicitly assumed to represent a proportional adjustment of the real wage; this ultimately led to the emergence of inertia.

power (Case 7) such that $\mathscr{C} \in (0, 1)$ is true satisfying the inequality $\mathcal{W} < \frac{1}{\mathcal{F}}$ set up in Proposition 2. Assume that the market gap has rebalanced (after a previous demand shock), and for the sake of this hypothetical exercise both aspiration gaps have also closed. Wage inflation will be $\hat{\pi}_t^W(\cdot) = 0$, since $\hat{w}_G^* = 0$; but price inflation will be $\hat{\pi}_t^F(\cdot) = \hat{s}_{F,0} > 0$ (note that β disappears as the aspiration gap closes). No mechanism halts this process; the change persists and—assuming all else remains equal—continues indefinitely. Of course, this is a theoretical exercise as such a scenario is unrealistic in the real economy as there are natural limits to inflation.[27]

The closure of aspiration gaps is only temporary, typically lasting briefly after they are first bridged. Firms' inertial adjustments in aspirations lead to shifts in real wages to keep the gap closed, but these shifts reopen the gap for workers, perpetuating the cycle. The key point of this theoretical example is that inertia operates as a force that transcends established equilibria. I will explore this in more detail using two more examples in Section 5, but first it is necessary to establish a taxonomy of the cases analyzed.

Taxonomy of inflation regimes and distribution types. The decoupling of bargaining power outlined in Proposition 2, combined with earlier elasticity scenarios, yields several possible inflation regimes and distributional outcomes. To clarify these combinations and illustrate the resulting income distributions, I propose a taxonomy. Table 1 summarizes the taxonomy and outlines the potential inflation and distributional outcomes resulting from these interactions. The equations for prices, wages and employment associated with each of these regimes can be found in Appendix A.

The prevailing inflation regimes and the corresponding distribution types are determined by the values of $\mathcal{W}$ and $\mathcal{F}$. Notably, inflationary inertia is absent in only two specific cases: first, when both bargaining powers are zero. In this case, inflation is driven by the market gap alone, leading to a distribution in favor of workers with positive wage inflation and negative price inflation. Second, in what I call the *consensus regime*, bargaining powers are balanced at intermediate levels. This is the sole scenario in which firms may hold relatively greater bargaining power while maintaining a worker-favorable distribution. Consequently, real wages rise[28] within a stable framework, which is contrary to the usual policy recommendations that advocate lowering real wages to eliminate inertia (see e.g. Reinhart, 2019). I refer to this as a consensus regime because the distribution is influenced by non-market factors such as institutional norms, political agreements, and implicit egalitarian arrangements that prevail in conflict-prone societies (see Sawyer, 2024).[29]

[27] In reality, price inflation cannot continue indefinitely without a corresponding wage adjustment. Otherwise, real wages and consumption would eventually fall to zero, which is unsustainable.

[28] The origin of this effect lies in the fact that the actual real wage moves positively in this context (even from the firms' point of view), which exerts downward pressure on price inflation. See Case 6 and the sign of $\hat{w}_G^*$.

[29] Brazil illustrates a remarkable transition from an inertial regime driven by firms' profit targets, to a consensus

Table 1: Taxonomy of conflict types and distributive regimes

Power	Inflationary Regime	Distributional Type
$\mathcal{F} = \mathcal{W} = 0$	Led by the market	In favor of workers
$\mathcal{F} \in (0,1)$ $\mathcal{W} \in (0,1)$	Led by consensus	In favor of workers
$\mathcal{F} \geq 1$ $\mathcal{W} \geq 1$	Led by chaos (both aspirations)	Alternated (oscillatory)
$\mathcal{F} > 1$ $\mathcal{W} \in [0,1)$	Led by firms aspirations	In favor of firms
$\mathcal{W} > 1$ $\mathcal{F} \in [0,1)$	Led by workers aspirations	In favor of workers

Note: It is worth noting that most regimes produce inertia, and I largely dismiss the first market-driven case, as such a scenario is highly unlikely (except perhaps under extreme authoritarian conditions). This underscores the importance of a consensus-led regime—plausible, but requiring agreements beyond market mechanisms to establish a sustainable long-term framework.

These external factors ultimately keep both bargaining positions within moderate limits. The model suggests that distributional conflict, together with inflationary inertia, goes beyond market dynamics and requires a comprehensive stabilization approach that also addresses all forms and sources of inflation outside the market sphere. I draw on Heymann (1986), who argues that to stabilize inflation, existing redistributive mechanisms must be replaced by alternatives that mitigate these pressures. Although the model does not directly address political economy, it suggests that a consensus-based regime may be essential for long-term macroeconomic stability. However, implementing this political dimension is often difficult and time-consuming, as it challenges those with greater social and political power.

Next, I will give two additional examples to illustrate the points discussed.

regime. In the latter half of the 20th century, Brazil's real wages were highly volatile, marked by a pronounced saw-tooth pattern and a persistent downward trend after the 1960s. However, after the implementation of the Real Plan in 1994, real wages stabilized considerably, with less volatility and a steady upward trend that continued into the early 21st century. Although the model does not include adjustment variables like interest rates, Brazil's stabilization experience broadly reflects the consensus regime. For the real wage series, see http://www.ipeadata.gov.br.

5 Examples

This section presents two examples illustrating the adverse effects of inflationary inertia on the economy. First, I examine how inertia qualitatively affects employment, reviewing the timeline of the trial-and-error process under distributional conflict. Then, I examine a numerical example to quantify some cases discussed earlier.

A qualitative example

Employment. To examine how distributional conflict affects employment response, I include price and wage inflation in equation (8)

$$\hat{N}_t\left(\hat{w}_{G,t}, \hat{s}_{F,t}, \hat{s}_{W,t}\right) = \varrho\hat{\pi}_t^F - \omega\hat{\pi}_t^W = -x\hat{w}_{G,t} - y\hat{s}_{F,t} - z\hat{s}_{W,t}. \tag{30}$$

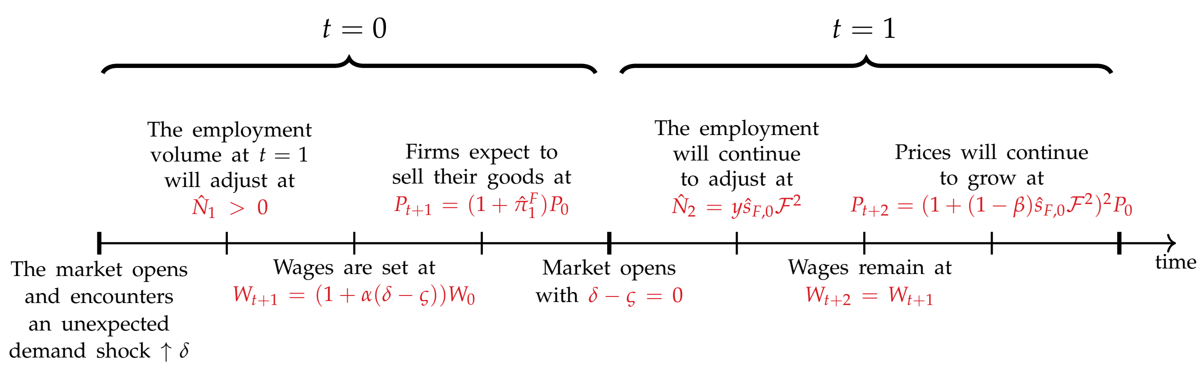
This expression implies that changes in employment depend on three elements: the actual real wage, and firms' and workers' aspirations. The coefficients x, y, and z capture the influence of the size of each aspiration gap weighted by price- and wage-employment elasticity.[30]

The workers' aspiration channel exerts downward pressure on employment. When workers push for higher nominal wages to match their aspirational targets, firms respond by cutting back on labor demand to protect profit margins. At the same time, a higher real wage increases production costs, further discouraging hiring. However, employment may rise through the firm-side channel. An increase in prices in line with firm aspirations may be interpreted by producers as a favorable demand condition, expanding output, and thus labor demand. This effect depends on whether workers' influence remains relatively muted. When workers' pressure is strong, their impact on nominal wages outweighs the firm-side effect, leading to a net contraction in employment.

The overall result depends on the relative strength of these opposing forces. In a regime where workers have full bargaining power ($\mathcal{W} = 1$) and firms exert strong influence ($\mathcal{F} > 1$), aspiration gaps do not close, and the employment path becomes unstable. As formalized in equation (30) (whose derivation can be seen in Appendix A), employment evolves in a cyclical and oscillatory fashion, driven by repeated adjustments in response to persistent firms' and workers' aspiration changes. The economy does not return to its original point of effective demand, as each group's effort to improve its distributional position introduces new imbalances. By contrast, in a consensus regime—where bargaining power is moderate—employment converges more smoothly. Once the market gap closes, imbalances stabilize, and employment settles at a new level consistent with the equilibrium real wage.

[30] To simplify the notation, I use $x = \beta\varrho + \omega(1-\alpha)$, $y = (1-\beta)\varrho$, and $z = \omega\alpha$.

Figure 3: A stylized timeline augmented by a firm's aspiration-led regime



Trial-and-error with conflict. In order to replicate the trial-and-error process in the farm economy while accounting for distributional conflict, I extend the previous dynamic structure to include both price and wage inflation as well as employment response. Specifically, I use the inflation rates of prices and wages at their respective levels, as given by equations (6) and (7), and add the rate of change of employment from equation (30). The intertemporal dynamics are captured by

$$P_{t+n} = \left(1 + \hat{\pi}^F_t\right)^n P_0, \quad W_{t+n} = \left(1 + \hat{\pi}^W_t\right)^n W_0 \quad \text{and} \quad N_{t+n} = \left(1 + \hat{N}_t\right)^n N_0. \tag{31}$$

These expressions show that the paths of prices, wages, and employment are no longer solely determined by the market gap—as in the conflict-free version of the farm economy—but now also reflect the aspiration gaps and bargaining power of firms and workers. As both groups attempt to accommodate their income shares over time, their actions influence production decisions and price-setting behavior.

To highlight how inertia operates under this process, consider a stylized extreme case. Suppose we observe a society in which workers have no bargaining power (i.e., $\mathcal{W} = 0$), while firms enjoy strong bargaining power, $\mathcal{F} > 1$. In this scenario, the entire adjustment mechanism is dominated by firms' aspirations, and the economy becomes governed by a regime aligned with their distributive preferences. Assume that at $t = 0$, a positive and unexpected autonomous demand shock occurs (i.e., $\delta - \varsigma > 0$). Firms, anticipating continued strong demand, increase production and hire more labor. Because workers lack bargaining power, the wage they receive for the next period is a fraction of the market-driven shock $\alpha\left(\delta - \varsigma\right)$, where $\alpha \in \left(0, 1\right)$ reflects the size of the aspiration gap. Simultaneously, firms adjust their prices upward according to their aspiration-based inflation rule, incorporating both the market gap and the firm's own gap relative to its desired real wage. As a result, employment rises, since more labor is needed to meet the anticipated increase in tomato production.

Now suppose that at $t = 1$, the market gap closes—i.e., $\delta - \varsigma = 0$. In theory, this should lead to the stabilization of expectations and effective demand. However, because the firm's aspirations adjustment remains positive, the inflationary process continues. In period $t = 2$, firms raise prices again to move closer to their aspirational target, while nominal wages remain fixed at the previous level due to the absence of worker influence. Prices change and evolve at a rate $\left(1-\beta\right)\hat{s}_{F,0}\mathcal{F}^2$, which illustrates the persistence of aspiration-led inflation. Employment also continues to increase, now driven solely by firm expectations. This trajectory is unstable: even though output rises, the economy drifts further from its effective demand equilibrium. Firms' desire to continually expand income shares leads to rising prices and excess output, while workers' incomes stagnate. Over time, this dynamic erodes real wages and creates an unsustainable pattern of inflationary inertia.[31]

Although employment increases in this example, the underlying process is recessive and contradictory. Firms overestimate the demand and induce excess supply in the market guided by this increase in income. The attempt to pursue aspirational gains through prices and output ends up destabilizing the economy. That is, what initially appears to be advantageous for firms ultimately becomes detrimental both to the firms themselves and to the system in general. The timeline of this sequence is shown in Figure 3.

In the following numerical example, I illustrate how the consensus regime benefits employees in the context of a moderate response.

A quantitative example

Before quantifying some cases discussed above, I will first introduce a general price index that captures the interaction between prices and money wages in overall inflation. Using the same approach as before, the index will be represented as a weighted average $G_t\left(W_t, P_t\right) = \left(W_t\right)^{\gamma}\left(P_t\right)^{1-\gamma}$ so that the model can capture how aspiration gaps affect total (general) inflation through their impact on prices and wages. General inflation is therefore given by[32]

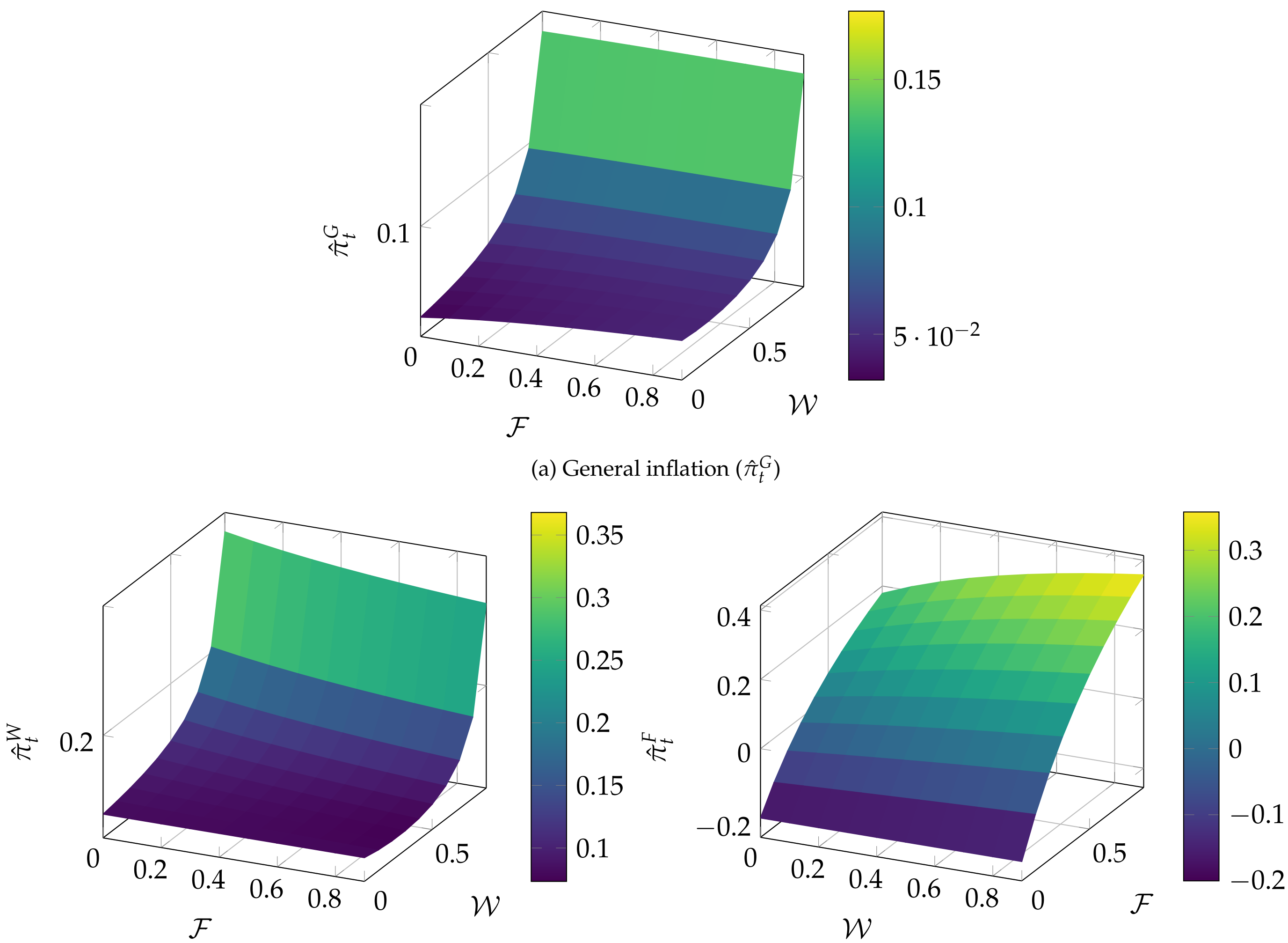
$$\hat{\pi}_t^G\left(\hat{w}_{G,t}, \hat{s}_{F,t}, \hat{s}_{W,t}\right) \;=\; a\hat{w}_{G,t} - b\hat{s}_{F,t} + c\hat{s}_{W,t}. \tag{32}$$

In this simple farm economy developed in this paper, the "tomato" can be seen as the totality of all physical goods produced in an economy. However, money wages provide a purchasing power that goes beyond the mere consumption of physical goods. They are essential for the livelihood of workers and enable their continuous participation in the production process. I will refer to these goods as *health and mental care* and assume that they are intangible. Money wages incorporate the pricing of these intangibles in the general index and serve as a channel through

[31] As mentioned in footnote 27, a complete reduction of the actual real wage is obviously not feasible in a real economy, as it would severely restrict both consumption and production capacity. Such a result illustrates the theoretical limits of the model rather than a realistic forecast.

[32] To reduce notational complexity, I use the constants $a = \gamma\left(1-\alpha\right) - \left(1-\gamma\right)\beta$, $b = \left(1-\beta\right)\left(1-\gamma\right)$ and $c = \gamma\alpha$.

Figure 4: Inflationary outcomes under a consensus-led regime



(a) General inflation ($\hat{\pi}_t^G$)

(b) Wage inflation ($\hat{\pi}_t^W$)

(c) Price inflation ($\hat{\pi}_t^F$)

which workers' aspirations enter this index.[33] Note that general inflation (32) gathers three driving forces widely recognized in the economic literature: (a) an excess of aggregate demand over the supply of goods and services, (b) wage costs associated with changes in the actual real wage, and (c) distributional conflict arising from antagonistic adjustments in prices and money wages that crystallize into shifts in aspirational targets.

Consensus-led regime. I will now examine the consensus-led regime through a numerical example to provide a quantitative understanding of how workers benefit in this context. This

[33] In addition to the consumption of the physical good "tomato," money wages enable workers to access intangible goods and services that are important for their health and well-being (with the exception of housing services). These include: (a) mental health services (e.g., therapy, counseling, stress management); (b) access to culture (e.g., art, music, social activities); (c) education (learning and knowledge enhancement); and (d) entertainment (recreational activities such as sports and games), to name a few.

example is illustrative only and does not represent a calibrated scenario. Wage and price inflation are represented by

$$\hat{\pi}_t^W = (\delta - \varsigma)\left(\alpha \frac{1}{1-\mathcal{W}} + (1-\alpha)\frac{1-\mathscr{C}}{1+\mathscr{C}}\right) \quad (33)$$

$$\hat{\pi}_t^F = (\delta - \varsigma)\left((1-\beta)\frac{\mathcal{F}}{1+\mathcal{F}} - \beta\frac{1-\mathscr{C}}{1+\mathscr{C}}\right). \quad (34)$$

Therefore, the "consensus-led" general inflation rate is given by

$$\hat{\pi}_t^G = (\delta - \varsigma)\left(c\frac{1}{1-\mathcal{W}} + b\frac{\mathcal{F}}{1+\mathcal{F}} + a\frac{1-\mathscr{C}}{1+\mathscr{C}}\right). \quad (35)$$

Suppose the economy experiences an unexpected autonomous demand shock that raises the market gap $\delta - \varsigma$ by 8 % annualy—the unit of time used in this example. In this economy, firms have greater adjustment power than workers, with values of $\mathcal{F} = 0.60$ and $\mathcal{W} = 0.30$, leading to $\mathscr{C} = 0.18$. I assume that both aspiration gaps are relatively small (i.e. with parameters < 0.5). However, due to the downward rigidity of workers' aspirations, reflecting their "insatiability," the gap is larger for workers than for firms, with $\alpha = 0.40$ and $\beta = 0.20$. This implies that wage-setting places greater weight on workers' aspirations than price setting does to firms' aspirations.

Considering that the market gap remains constant over time, the inflation rate for prices will be around 1.3 % over the annual period, while wage inflation will reach 7.9 %. This results in a general inflation rate of 4.6 %, which will remain stable throughout the period as long as the market gap persists. Any variation in the market gap leads to a proportional correction in inflation, as shown in equations (33)-(35). Once the market gap closes, inflation will fall to zero, allowing the system to settle into the effective demand equilibrium point without inertial disturbances. How does this scenario affect employment levels? Whether employment rises or falls depends on price (ϱ) and wage (ω) elasticity in relation to employment. Because the price inflation is low in this case, a positive change in employment requires at least a ratio of $\frac{\varrho}{\omega} \geq 3.8$.

The heat maps in Figure 4 illustrate each inflationary behavior under the consensus-led regime.[34] Note that the numerical values on the vertical axis are in decimals, not percentages.[35] Wage inflation (Figure 4b, corresponding to equation (33)) consistently exceeds price inflation (Figure 4c, corresponding to equation (34)) for each $\mathcal{W}$-$\mathcal{F}$ combination. Wage adjustments remain consistently positive—especially with explosive growth above 0.8—even at low $\mathcal{W}$ values, suggesting that workers are managing to achieve wage increases, albeit at a slower pace. Price adjustments are disadvantageous, as low values of $\mathcal{F}$ can even lead to deflation. This is due to the term $\frac{1-\mathscr{C}}{1+\mathscr{C}}$, which dampens price inflation (as shown in Case 6). Firms cannot take full advantage of their

[34]Illustrating inflation patterns through heat maps is more effective for understanding than presenting tables of values for each combination of bargaining powers.

[35]For example, a value of 0.1 stands for 10 %.

Table 2: Consensus-led regime: externally set model parameters

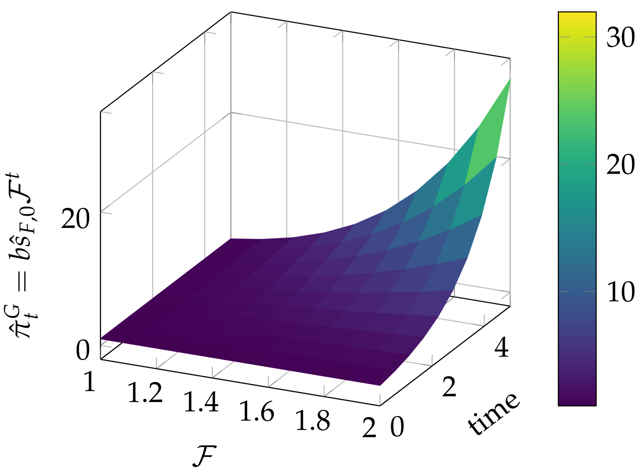
Parameters	Description	Value
$\delta - \varsigma$	Market gap	8%
$\mathcal{F}$	Firms' power	0.60
$\mathcal{W}$	Workers' power	0.30
$\mathscr{C}$	Composite elasticity	0.18
α	Workers' aspiration gap	0.40
β	Firms' aspiration gap	0.20
$\hat{\pi}_t^W$	Wage inflation	7.9%
$\hat{\pi}_t^F$	Price inflation	1.3%
$\hat{\pi}_t^G$	General inflation	4.6%

greater bargaining power as the interaction with workers' bargaining power (via $\mathscr{C}$) reduces the inflationary pressure they can exert on prices. The compound elasticity $\mathscr{C}$ provides a balancing effect by limiting firms' ability to raise prices and helping to maintain workers' relative advantage in income distribution. This disadvantage is apparent at first glance, as the concave price variation plane in Figure 4c contrasts sharply with the convex wage variation plane in Figure 4b. Additional scenarios exploring a broader range of aspiration gap configurations, while keeping the demand gap and bargaining powers fixed, are presented in Appendix B.

Firms' aspiration-led regime. For the purpose of illustrating graphically the inertial factor in the farm economy (in conjunction with the timeline shown in Figure 3 for the qualitative example), Figure 5 shows the regime that is driven by firms' aspirations. Recall that here $\mathcal{F} > 1$, $\mathcal{W} = 0$ and therefore $\mathscr{C} = 0$. Taking the market gap as already closed for the sake of simplicity, general inflation is primarily determined by the inertial component of firms' aspirations $\hat{\pi}_t^G = b\hat{s}_{F,0}\mathcal{F}^t$. Note that inflationary growth becomes exponential over time. If the value of $\mathcal{F}$ is close to 1, inflation remains moderate for the first four periods. However, as $\mathcal{F}$ approaches 2, it becomes clear that general inflation rises to over 200 % after the fourth period ($t = 4$), which is very likely to lead to a hyperinflationary scenario.

I want to emphasize that this is a theoretical analysis of wage and price inflation dynamics under different combinations of bargaining power, and I am aware of the limitations of the model in relation to real economies. Nevertheless, my aim is to shed light on important analytical aspects of the current inflation debates, in particular the distributional consequences of inflationary inertia in a conflictual context.

Figure 5: Inflation trajectory under a firm's aspiration-led regime



6 Conclusion

This paper investigates how inflationary inertia, driven by distributional conflict, disrupts the economy's path to an effective demand equilibrium. I address this by incorporating aspiration gaps and the bargaining power of firms and workers into a simple Keynesian D/Z model. A key innovation is the dynamic, discrete-time analysis of the model's underlying trial-and-error process. This feature offers a clear, intuitive, and analytical account of how unfulfilled aspirations give rise to inflationary inertia. Moreover, the model formalizes conflict in a novel way: wage and price-setting strategies are expressed not as linear functions of aspiration gaps, but as weighted averages of the actual real wage and these aspirations. This formulation improves the interpretation of price and wage inflation and facilitates a thorough examination of how different combinations of bargaining power shape macroeconomic outcomes, as the decoupling feature in Proposition 2 shows. The inflationary inertia resulting from these interactions becomes a formidable and autonomous force, difficult to eliminate. I conclude that an economic system embedded in a conflict-driven society requires a "consensus"—an institutional mechanism that mitigates price and wage modifications through channels beyond conventional market logic.

References

Afrouzi, Hassan et al. (2024). "Changing Central Bank Pressures and Inflation". *Brookings Papers on Economic Activity*.

Bacha, Edmar (1988). "Moeda, Inercia, e Conflito: Reflexoes Sobre Politicas de Estabilizacao no Brasil". *Pesquisa e Planejamento Economico*, (18)1, pp. 1–16.

Blanchard, Olivier J. (1986). "The Wage Price Spiral". *The Quarterly Journal of Economics*, (101)3, p. 543.

Blecker, **Robert A.** (2011). “Open economy models of distribution and growth”. Ed. by **Eckhard Hein and Engelbert Stockhammer**. Cheltenham, UK: Edward Elgar. Chap. A Modern Guide to Keynesian Macroeconomics and Economic Policies.

— (2016). “Wage-led Versus Profit-led Demand Regimes: The Long and the Short of It”. *Review of Keynesian Economics*, (4)4, pp. 373–390.

Blecker, **Robert A. and Mark Setterfield** (2019). *Heterodox Macroeconomics. Models of Demand, Distribution and Growth*. Cheltenham, UK: Edward Elgar Publishing.

Bresser-Pereira, **Luiz and Yoshiaki Nakano** (1987). *The Theory of Inertial Inflation. The Foundation of Economic Reform in Brazil and Argentina*. Boulder: Lynne Rienner Publishers.

Brochier, **Lidia** (2020). “Conflicting-Claims and Labour Market Concerns in a Supermultiplier SFC Model”. *Metroeconomica*, (71)3, pp. 566–603.

Carvalho, **Fernando C.** (1993). “Strato-Inflation and High Inflation: The Brazilian Experience”. *Cambridge Journal of Economics*, (17), pp. 63–78.

Cevik, **Serhan** (2022). “Breaking Bad: A Disaggregated Analysis of Inflation Inertia”. *IMF Working Paper 22/167*.

Davidson, **Paul** (2011). *Post Keynesian Macroeconomic Theory. A Foundation for Successful Economic Policies for the Twenty-First Century*. 2. ed. Cheltenham: Edward Elgar.

Dutt, **Amitava K.** (1987). “Alternative Closures Again: A Comment on "Growth, Distribution and Inflation"”. *Cambridge Journal of Economics*, (11)1, pp. 75–82.

Frenkel, **Roberto** (1986). “Salarios e Inflacion en America Latina. Resultados de Investigaciones Recientes en la Argentina, Brasil, Colombia, Costa Rica y Chile”. *Desarrollo Economico*, (25)100, p. 587.

Goodhart, **Charles A. E. and Manoj Pradhan** (2020). *The Great Demographic Reversal. Ageing Societies, Waning Inequality, and an Inflation Revival*. Palgrave Macmillan.

Hartwig, **Jochen** (2007). “Keynes vs. the Post Keynesians on the Principle of Effective Demand”. *The European Journal of the History of Economic Thought*, (14)4, pp. 725–739.

Hein, **Eckhard** (2023). *Macroeconomics After Kalecki and Keynes. Post-Keynesian Foundations*. Cheltenham, UK: Edward Elgar Publishing.

— (2024). “Inflation is Always and Everywhere... A Conflict Phenomenon: post-Keynesian Inflation Theory and Energy Price Driven Conflict Inflation, Distribution, Demand and Employment”. *European Journal of Economics and Economic Policies: Intervention*, (21)2, pp. 202–231.

Hein, **Eckhard and Engelbert Stockhammer** (2009). “A Post-Keynesian Macroeconomic Policymix as an Alternative to the New Consensus Approach”. Ed. by **Philip Arestis and John McCombie**. Palgrave Macmillan. Chap. Unemployment: Past and Present.

Heise, **Arne** (2024). “Keynes and the Drunkard Under the Lamp Post: Making Sense of Palley”. *The Japanese Political Economy*, (50)1, pp. 47–62.

— (2024a). “Dr. Palley and the Merits of Conflict”. *ZOSS Discussion Paper, No. 105*.

Heymann, **Daniel** (1986). “Tres Ensayos Sobre Inflacion y Politicas de Estabilizacion”. *Documento de Trabajo CEPAL*, 18.

Heymann, **Daniel and Axel Leijonhufvud** (1995). *High inflation*. The Arne Ryde memorial lectures. Oxford, UK: Clarendon Press.

Hilscher, **Jens and Alon Raviv and Ricardo Reis** (2024). “How Likely is an Inflation Disaster?” *CEPR discussion paper 17224*.

Kaldor, **Nicholas** (1955). “Alternative Theories of Distribution”. *The Review of Economic Studies*, (23)2, p. 83.

Kalecki, **Mickal** (1943). “Political Aspects Of Full Employment”. *The Political Quarterly*, (14)4, pp. 322–330.

Keynes, **John Maynard** (1936). *The General Theory of Employment, Interest and Money*. Macmillan, London.

Kolaja, **Jiri** (1968). “Antagonistic and Non-Antagonistic Conflicts: A Contribution to the Theory of the Temporal Dimension of Conflict”. *Canadian Slavonic Papers*, (10)3, pp. 376–384.

Kregel, **Jan A.** (1976). “Economic Methodology in the Face of Uncertainty: The Modelling Methods of Keynes and the Post-Keynesians”. *The Economic Journal*, (86)342, p. 209.

Lavoie, **Marc** (2022). *Post-Keynesian Economics. New foundations*. Second edition. Cheltenham, UK: Edward Elgar Publishing.

— (2024). “Conflictual Inflation and the Phillips Curve”. *Review of Political Economy*, pp. 1–23.

Lima, **Gilberto T.** (2009). “Functional Distribution, Capital Accumulation and Growth in a Non-linear Macrodynamic Model”. *Journal of Income Distribution*, (18)1, pp. 3–19.

Lorenzoni, **Guido and Ivan Werning** (2023). “Inflation is Conflict”. *National Bureau of Economic Research Working Paper 31099*.

Marglin, **Stephen A.** (1984). “Growth, Distribution, and Inflation: A Centennial Synthesis”. *Cambridge Journal of Economics*, (8)2, pp. 115–144.

Martin, **Bill** (2023). “Rudimentary Inflation Conflict Models: A Note”. *Centre for Business Research, University of Cambridge, Working Paper No. 535*.

Millar, **James R.** (1972). “The Social Accounting Basis of Keynes’ Aggregate Supply and Demand Functions”. *The Economic Journal*, (82)326, p. 600.

Mitchell, **William and L. Randall Wray and Martin J. Watts** (2019). *Macroeconomics*. London: Red Globe Press.

Olivera, **Julio H. G.** (1991). “Equilibrio Social, Equilibrio de Mercado e Inflacion Estructural”. *Desarrollo Economico*, (30)120, pp. 487–493.

Palley, **Thomas** (2023). “Keynes’ Denial of Conflict: Why The General Theory is a Misleading Guide to Capitalism and Stagnation”. *The Japanese Political Economy*, (49)1, pp. 7–34.

— (2024). “Keynes’ Denial of Conflict: A Reply to Professor Heise’s Critique”. *The Japanese Political Economy*, (50)1, pp. 63–65.

Pill, **Huw** (2023). “Inflation Persistence and Monetary Policy”. *ICMB Lecture, Graduate Institute, Geneva*. URL: https://www.bankofengland.co.uk/speech/2023/april/huw-pill-speech-at-the-international-centre-for-monetary-and-banking-studies-public-lecture.

Possas, **Mario** (1986). “Para uma Releitura Teorica da Teoria Geral”. *Pesquisa e Planejamento Economico*, (16)2, pp. 295–308.

Reinhart, **Carmen M.** (2019). “Explaining Inflation Inertia”. *Project Syndicate*. URL: https://www.project-syndicate.org/commentary/explaining-inflation-inertia-japan-argentina-by-carmen-reinhart-2019-05.

Robinson, **Joan** (1962). *Essays in the Theory of Economic Growth*. London: Palgrave Macmillan.

Ros, **Jaime** (1989). “On Inertia, Social Conflict, and the Structuralist Analysis of Inflation”. *Helen Kellogg Institute For International Studies Working Paper 128*.

— (1993). *La Edad de Plomo del Desarrollo Latinoamericano*. El trimestre economico. Mexico, D.F.: Instituto Latinoamericano de Estudios Transnacionales.

Rowthorn, **Robert E.** (1977). “Conflict, Inflation and Money”. *Cambridge Journal of Economics*, (1)3, pp. 215–239.

— (1980). *Capitalism, Conflict, and Inflation. Essays in Political Economy*. London: Lawrence and Wishart.

Rowthorn, **Robert E.** (2024). “The Conflict Theory of Inflation Revisited”. *Review of Political Economy*, pp. 1–12.

Sawyer, **Malcolm** (2024). “Conflictual Distributional Struggles and Inflation”. *Review of Political Economy*, (36)4, pp. 1–17.

Schwartzman, **Felipe F.** (2023). “Untangling Persistent Inflation: Understanding the Factors at Work”. *Federal Reserve Bank of Richmond Economic Brief 23/31*.

Scitovsky, **Tibor** (1978). “Market Power and Inflation”. *Economica*, (45)179, p. 221.

Sen, **Anindya and Amitava K. Dutt** (1995). “Wage Bargaining, Imperfect Competition and the Markup: Optimizing Microfoundations”. *Economics Letters*, (48)1, pp. 15–20.

Serrano, **Franklin** (2010). “O Conflito Distributivo e a Teoria da Inflacao Inercial”. *Revista de Economia Contemporanea*, (14)2, pp. 395–421.

Serrano, **Franklin and Ricardo Summa and Guilherme S. Morlin** (2024). “Conflict, Inertia, and Phillips Curve from a Sraffian Standpoint”. *Review of Political Economy*, (36)4, pp. 1510–1535.

Setterfield, **Mark** (2023). “Post-Keynesian Growth Theory and the Supply Side: a Feminist Approach”. *European Journal of Economics and Economic Policies Intervention*, (20)2, pp. 299–316.

Simonsen, **Mario Henrique** (1964). *A Experiencia Inflacionaria no Brasil*. Instituto de Pesquisas e Estudos Sociais, IPES.

— (1983). “Indexation, Current Theory and the Brazilian Experience”. Ed. by **Rudiger Dornbusch and Mario Henrique Simonsen**. Boston, Cambridge: The MIT Press. Chap. Inflation, Debt and Indexation.

Skidelsky, **Robert** (2013). “Keynes, Hobson, Marx”. *PSL Quarterly Review*, (66)264, pp. 7–19.

Skott, **Peter** (1989). *Conflict and Effective Demand in Economic Growth*. Cambridge University Press.

— (2024). “Conflict Inflation: Keynesian Path Dependency or Marxian Cumulation?” *Metroeconomica*, online version, pp. 1–18.

Sylos-Labini, **Paolo** (1974). *Trade Unions, Inflation and Productivity*. Lexington Books.

Taylor, **Lance** (2009). *Reconstructing Macroeconomics. Structuralist Proposals and Critiques of the Mainstream*. Cambridge: Harvard University Press.

Vera, **Leonardo** (2013). “Inflacion estructural redux”. *Ensayos Economicos, BCRA*, (69), pp. 37–99.

Wildauer, **Rafael** et al. (2023). “Energy Price Shocks, Conflict Inflation, and Income Distribution in a Three-Sector Model”. *Energy Economics*, (127)Part B, pp. 1–19.

Appendix

A Equations for Wages, Prices, and Employment

This appendix describes the intertemporal paths of wages, prices and employment for each inflationary regime shown in Table 1.

- Market-led regime, where $\mathcal{F} = \mathcal{W} = 0$ and $\mathscr{C} = 0$:

$$
\begin{aligned}
W_{t+n} &= \Big(1 + \alpha\big(\delta - \varsigma\big)\Big)^{n} W_0, \\
P_{t+n} &= \Big(1 - \beta\big(\delta - \varsigma\big)\Big)^{n} P_0, \\
N_{t+n} &= \Big(1 - \big(x + z\big)\big(\delta - \varsigma\big)\Big)^{n} N_0.
\end{aligned}
$$

- Consensus-led regime, where $\mathcal{F} \in (0,1)$, $\mathcal{W} \in (0,1)$, and $\mathscr{C} \in (0,1)$:

$$
\begin{aligned}
W_{t+n} &= \left(1 + (\delta - \varsigma)\left(\alpha\frac{1}{1-\mathcal{W}} + (1-\alpha)\frac{1-\mathscr{C}}{1+\mathscr{C}}\right)\right)^{n} W_0, \\
P_{t+n} &= \left(1 + (\delta - \varsigma)\left((1-\beta)\frac{\mathcal{F}}{1+\mathcal{F}} - \beta\frac{1-\mathscr{C}}{1+\mathscr{C}}\right)\right)^{n} P_0, \\
N_{t+n} &= \left(1 + (\delta - \varsigma)\left(x\frac{1-\mathscr{C}}{1+\mathscr{C}} - y\frac{\mathcal{F}}{1+\mathcal{F}} + z\frac{1}{1-\mathcal{W}}\right)\right)^{n} N_0.
\end{aligned}
$$

In the following regimes, which are characterized by bargaining powers greater than or equal to one, workers' aspirations are represented by $\hat{s}_{W,t} = \big(\hat{s}_{W,0} - \hat{s}^*_W\big)\mathcal{W}^t + \hat{s}^*_W$, firms' aspirations by $\hat{s}_{F,t} = -\big(\hat{s}_{F,0} + \hat{s}^*_F\big)\,|\mathcal{F}|^t - \hat{s}^*_F$, and the current real wage (with $\mathscr{C}$ greater than one) by $\hat{w}_{G,t} = C_1\mathscr{C}^{\frac{t}{2}}\cos\Big(\frac{\pi}{2}t + C_2\Big) + \hat{w}^*_G$.

- Chaos regime in which I assume that both bargaining powers are greater than one: $\mathcal{F} > 1$, $\mathcal{W} > 1$, and $\mathscr{C} > 1$:

$$
\begin{aligned}
W_{t+n} &= \Big(1 + \alpha\hat{s}_{W,t} + (1-\alpha)\hat{w}_{G,t}\Big)^{n} W_0, \\
P_{t+n} &= \Big(1 - \beta\hat{w}_{G,t} + (1-\beta)\hat{s}_{F,t}\Big)^{n} P_0, \\
N_{t+n} &= \Big(1 - x\hat{w}_{G,t} + y\hat{s}_{F,t} - z\hat{s}_{W,t}\Big)^{n} N_0.
\end{aligned}
$$

- Firms' aspirations-led regime where $\mathcal{F} > 1$, $\mathcal{W} \in (0,1)$, and $\mathscr{C} \in (0,1)$:

$$\begin{aligned}
W_{t+n} &= \left(1 + (\delta - \varsigma)\left(\alpha \frac{1}{1-\mathcal{W}} + (1-\alpha)\frac{1-\mathscr{C}}{1+\mathscr{C}}\right)\right)^n W_0, \\
P_{t+n} &= \left(1 - \beta(\delta - \varsigma)\frac{1-\mathscr{C}}{1+\mathscr{C}} + (1-\beta)\hat{s}_{F,t}\right)^n P_0, \\
N_{t+n} &= \left(1 - (\delta - \varsigma)\left(x\frac{1-\mathscr{C}}{1+\mathscr{C}} + z\frac{1}{1-\mathcal{W}}\right) + y\hat{s}_{F,t}\right)^n N_0.
\end{aligned}$$

- Workers' aspirations-led regime where $\mathcal{W} > 1$, $\mathcal{F} \in (0,1)$, and $\mathscr{C} \in (0,1)$:

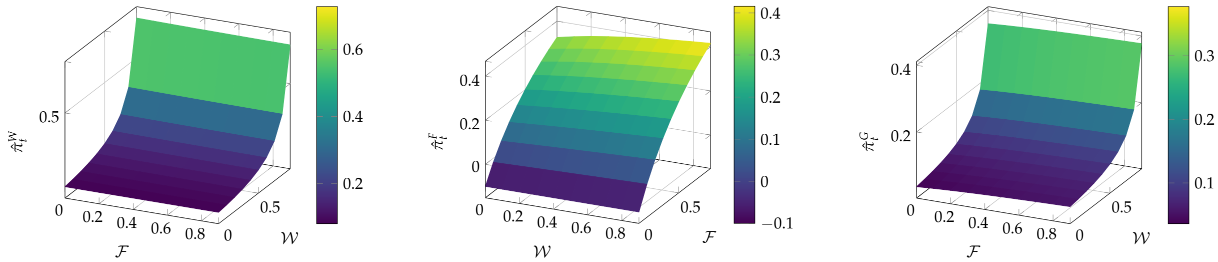
$$\begin{aligned}
W_{t+n} &= \left(1 + \alpha\hat{s}_{W,t} + (1-\alpha)\frac{1-\mathscr{C}}{1+\mathscr{C}}\right)^n W_0, \\
P_{t+n} &= \left(1 + (\delta - \varsigma)\left((1-\beta)\frac{\mathcal{F}}{1+\mathcal{F}} - \beta\frac{1-\mathscr{C}}{1+\mathscr{C}}\right)\right)^n P_0, \\
N_{t+n} &= \left(1 + (\delta - \varsigma)\left(y\frac{\mathcal{F}}{1+\mathcal{F}} - x\frac{1-\mathscr{C}}{1+\mathscr{C}}\right) - z\hat{s}_{W,t}\right)^n N_0.
\end{aligned}$$

To compute wage, price, and employment dynamics under a specific scenario—such as $\mathcal{F} > 1$, $\mathcal{W} = 0$, and $\mathscr{C} = 0$—the reader should substitute these values directly into the relevant expressions derived for each regime. The equations provided for each case (conflict-free, consensus, chaos, firm-led, and worker-led) are general in form and they are intended to accommodate a range of values for bargaining power, composite elasticity, and aspiration gaps values. By specifying the appropriate parameters, one can simulate or analytically trace the corresponding inflationary and distributive outcomes.

B Alternative Scenarios for the Consensus-Led Regime

I extend in this appendix the analysis of the consensus-led regime by exploring a broad range of aspiration gap configurations. While Section 5 presents outcomes under a base case ($\alpha = 0.4$ as the size of workers' aspiration gap, and $\beta = 0.2$ regarding firms' aspiration gap), here I hold the demand gap ($\delta - \varsigma = 0.08$), the bargaining power values ($\mathcal{F} = 0.6$, $\mathcal{W} = 0.3$), and vary the aspiration openness parameters systematically. The aim is to assess whether the core dynamic—wages adjusting more strongly than prices—remains robust and to identify how different aspiration profiles affect distributive outcomes.

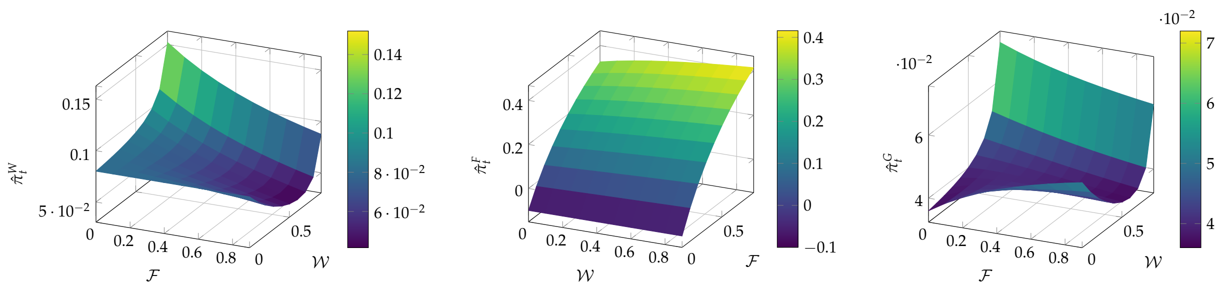
Figure B.1: Consensus-led regime: $\alpha = 0.9, \beta = 0.1$



(a) Wage inflation ($\hat{\pi}_t^W$) (b) Price inflation ($\hat{\pi}_t^F$) (c) General inflation ($\hat{\pi}_t^G$)

Note: Despite the extreme difference in aspiration gap openness, the pattern from the base case persists: wages adjust more than prices, leading to positive general inflation (6.5 %). This confirms the robustness of the model's core dynamic under large aspiration asymmetries.

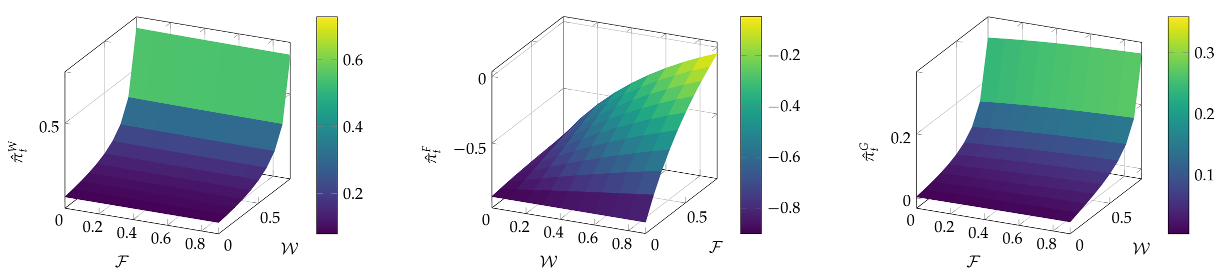
Figure B.2: Consensus-led regime: $\alpha = 0.1, \beta = 0.1$



(a) Wage inflation ($\hat{\pi}_t^W$) (b) Price inflation ($\hat{\pi}_t^F$) (c) General inflation ($\hat{\pi}_t^G$)

Note: When both groups are rapidly close their aspiration gaps, inflationary pressures are subdued. Wage inflation remains slightly higher than price inflation (6 % vs. 2 %, respectively), but firms' prices increasingly catch up to wages—narrowing the distributional gap. General inflation is low (4.1 %) and relatively stable.

Figure B.3: Consensus-led regime: $\alpha = 0.9, \beta = 0.9$



(a) Wage inflation ($\hat{\pi}_t^W$) (b) Price inflation ($\hat{\pi}_t^F$) (c) General inflation ($\hat{\pi}_t^G$)

Note: A reversal emerges: wage inflation is strongly positive (10 %), while price inflation turns negative (−4.7 %). This reflects how, when both groups prioritize their aspirations over actual outcomes, worker pressure dominates the adjustment. The result is upward pressure on wages and downward pressure on prices which keep general inflation at low levels (3 %), but probably will not last for long: the consensus will be permanent if firms change their prices positively, i.e., they must have some positive profit.

The results confirm that the model's core mechanisms are robust to extreme and symmetric aspiration profiles under a consensus regime. Even under large asymmetries ($\alpha = 0.9$, $\beta = 0.1$), the inflationary structure of the consensus regime remains intact. However, when both groups hold very open aspirations ($\alpha = \beta = 0.9$), the model generates a reverse effect: wage inflation becomes strongly positive, while price inflation turns negative. This reveals that aspiration intensity (openness)—not just bargaining power—can decisively shape distributive outcomes and that even consensus regimes can become unsustainable over time (in this case for firms, since they cannot permanently adjust prices negatively) if aspiration gaps remain persistently highly open.