

WORKING PAPER 2606

Understanding the Effectiveness of Incomes Policy in a Two-Household SFC Model of the UK

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March 2026



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Abstract

This paper explores counterfactual scenarios using a two-household stock-flow consistent (SFC) model of the UK economy. Following the COVID-19 pandemic, the UK experienced a sharp surge in inflation, to which the Bank of England responded with monetary tightening measures starting 2023. Scholars have argued that this response was relatively late, limiting its effectiveness. Our analysis shows that post-COVID inflation was primarily driven by import price shocks, further constraining the impact of monetary policy. Counterfactual scenarios indicate that even earlier implementation of monetary tightening would have yielded limited reductions in inflation and could have worsened income distribution. In contrast, scenarios incorporating effective income policies reveal that if such measures had been introduced earlier by 2022, inflation could have been reduced by over 2 percentage points, while significantly improving income distribution. These findings highlight the critical role that targeted income policies could play, alongside conventional monetary interventions, in addressing post-pandemic inflation.

Keywords: post-COVID inflation, stock-flow consistent model, incomes policy, monetary policy, UK economy

JEL Codes: E12, E17

1. Introduction

Since the stagflation of the 1970s, the global economy has experienced a general secular decline in inflationary pressures. Scholars from the heterodox tradition generally explain the long-term moderation of inflation by reference to falling commodity prices (Perry and Cline 2016) and the weakening of labour's bargaining power due to de-unionisation (Setterfield 2007; Pivetti 2013). However, the resurgence of inflation in the aftermath of the COVID-19 pandemic has re-ignited the fundamental debates in macroeconomics of stabilization.

A central component of these debates initially concerned the *persistence* of post-COVID inflation. Notably, Krugman (2022) adopted a relatively optimistic view, characterizing the surge as largely transitory, whereas Summers (2021, 2021b) cautioned that the Federal Reserve's initial assessment of inflation as temporary delayed appropriate policy responses. Vernengo (2022) criticized both sides of this discussion, arguing that despite their apparent differences, both Krugman and Summers treated inflation primarily as necessarily evil, advocating cuts to fiscal spending as a remedy. This early debate set the stage for broader discussions regarding the underlying drivers of the post-pandemic inflation, particularly the role of corporate profits.

Following this debate, attention shifted to the role of corporate profits in driving the inflationary surge via a process that has been termed as *profit-led inflation*. Bivens (2022) was among the first to argue that rising profit margins contributed significantly to inflation. Building on this idea, Weber and Wasner (2023) outlined a three-stage framework synthesizing institutionalist and post-Keynesian perspectives. In their account, the first stage is characterized by supply chain bottlenecks and cost shocks, during which large corporations exploited market uncertainty to raise prices and secure excess profits, thereby transmitting inflationary pressures across sectors. The second stage emerges as other firms increase their own prices to defend profit margins, leading to a decline in workers' real incomes. The third stage involves distributive conflict: workers demand higher wages to restore purchasing power, and successful wage gains risk igniting a renewed inflationary spiral.

This perspective has sparked a vigorous debate among heterodox economists themselves. Lavoie (2023a) contends that rising profit shares can be explained by higher material costs relative to

labour costs, without recourse to strategic mark-up increases. Storm (2023), however, presents evidence that two-thirds of the rise in profit shares among US firms between 2020 and 2022 stemmed from mark-up hikes rather than input cost pressures, directly challenging Lavoie’s interpretation. Subsequent empirical studies (Cucignatto et al. 2023; Matamoros 2024) on countries such as Spain, France, and Germany support the “profit mark-up” view, finding evidence of substantial mark-up growth and advocating policy interventions including profit regulation, price controls, and sector-specific measures. Similarly, Nikiforos et al. (2024) document both aggregate increases in mark-ups and sectoral divergences.

Not all scholars share this perspective. Vernengo and Perez (2023) attribute post-pandemic inflation mainly to supply bottlenecks and the Russia–Ukraine war, questioning the claim that corporate mark-ups are the dominant driver. Lavoie (2023b, 2023c, 2024) refines his earlier arguments, acknowledging examples of higher mark-ups in sectors such as energy and luxury goods, but emphasizing the need to distinguish “profit inflation” from cost-push or profit-led inflation. He stresses that measuring profit shares alone is insufficient, since aggregate mark-up increases may reflect compositional changes in output or firm heterogeneity rather than widespread price gouging.

Overall, the post-COVID inflation debate highlights deep disagreements over the relative importance of cost shocks, profit margins, and distributive conflict in shaping recent price dynamics. While the discussion is global in scope, the UK experience provides a particularly revealing case study, as external shocks such as energy price volatility and Brexit-related trade frictions and labor mobility problems interacted with domestic institutional settings. The next section turns to this country-specific context to explore how these debates translate into the dynamics of post-COVID inflation in the UK economy. Section 3 then presents a two-household stock-flow consistent model, followed by counterfactual policy analysis in Section 4. Finally, Section 5 concludes.

2. Post-COVID Inflation in the UK Economy

Following decades of relatively subdued price dynamics since the mid-1990s, inflation re-emerged as a significant macroeconomic challenge in the UK during early 2020s (Figure 1). The COVID-19 pandemic acted as the initial trigger, as restrictions on mobility and economic activity led to a sharp contraction in consumption and output across advanced economies (Blot et al. 2022). In the Euro area, GDP fell by 6.7% in 2020, while energy demand plummeted, contributing to a collapse in oil prices. As the global economy re-opened, however, inflationary pressures intensified. Empirical evidence highlights the central role of bottlenecks in the global energy supply in this process, with crude oil identified as the channel that reflects inflation shocks most rapidly and visibly in the short run (Ahmed et al. 2023).

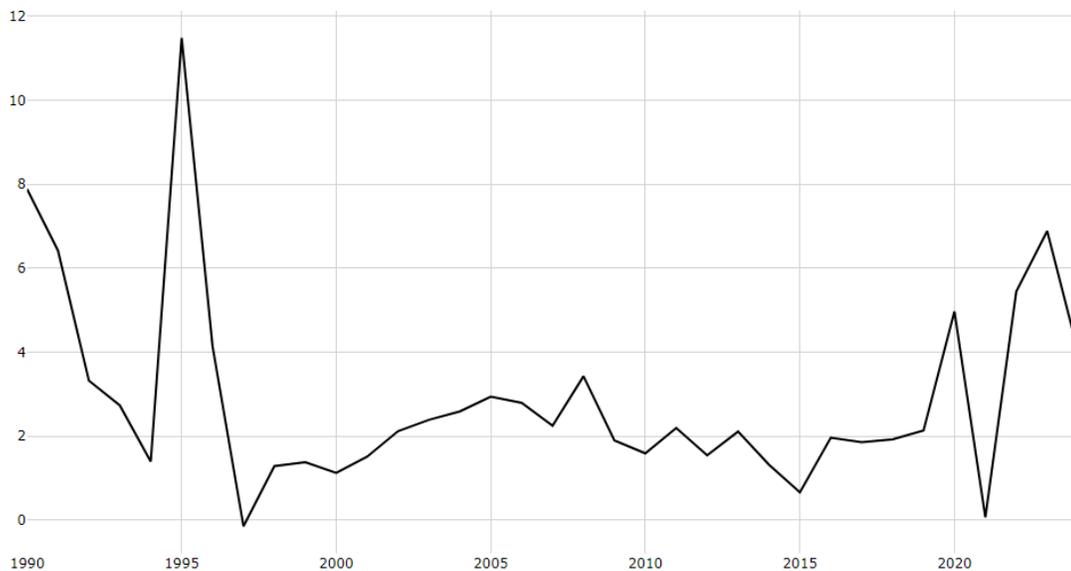


Figure 1 Inflation in the UK, GDP deflator (annual %)

Source: Worldbank Dataset

The rebound in oil and gas prices over 2021–2022 further played a pivotal role in fuelling UK inflation. This surge translated into a major import price shock, as illustrated in Figure 2. Castle, Hendry, and Martinez (2023) estimate that energy prices accounted for nearly half of the overall increase in consumer price inflation by mid-2022, underscoring the macroeconomic importance of energy inputs in both production and household consumption. They also document the presence

of significant non-linearities, with wage-price spirals emerging once annual inflation exceeded the 6–8% threshold. Similarly, Blot et al. (2022) and Bernoth and Ider (2021) stress that the post-pandemic surge in inflation was closely tied to energy price recoveries, compounded by fiscal policy changes such as the reversal of temporary VAT reductions.



Figure 2 Import Price Index by Origin (NAICS): All Industries for United Kingdom

Source: U.S. Bureau of Labour Statistics via FRED

Comparisons with past inflationary episodes further illuminate the distinctiveness of the post-COVID crisis. Lu, Coutts, and Gudgin (2024) argue that although the most recent shock in import costs resembles the 1970s oil crises, its macroeconomic effects have been mitigated by weakened labour bargaining power and various institutional transformations in the UK labour market. In particular, the labour market was undergoing structural shifts, most notably following Brexit, which terminated free mobility of labour from the EU and was accompanied by a major change in immigration policy implemented in January 2021 (Portes and Springford, 2023). Nonetheless, the sharp rise in energy import prices following the Russia–Ukraine war placed considerable strain on real national income, exacerbating the erosion of living standards. As the UK was once again a net importer of fuels in 2022, higher import costs fed directly into domestic inflation, while attempts by households and firms to defend real incomes risked generating wage–price spirals. Furthermore, Breinlich et al. (2022) note the association between the “Brexit depreciation” and

rising inflation in product groups with higher import shares in household expenditures. This study points out import costs pass-through to consumer prices originating from Brexit depreciation.

It can be argued that beyond the immediate energy shock broader global environment also amplified inflationary dynamics. Disruptions to global supply chains, rising food and commodity prices, and the release of pent-up demand from household savings all reinforced the upward momentum of prices (Lu et al. 2024). These developments interacted with monetary policy in complex ways. Garcia and Cross (2024) show that in advanced economies, including the UK, the pursuit of inflation targeting amid tightening monetary policy has distributional consequences, often worsening income inequality. Their findings suggest that the design of country-specific monetary strategies may play a key role in mitigating the inequality-inducing effects of inflation stabilization efforts.

Taken together, existing literature on the UK macroeconomy highlights that the post-COVID inflation was primarily driven by external supply shocks, particularly energy, compounded by domestic transmission mechanisms through wages, prices, and policy responses. While these shocks share similarities with earlier inflationary episodes, their economic and social implications have been shaped by contemporary institutional settings, making them a distinct challenge for both policymakers and households. Thus, there remains an important scope for counterfactual modelling to disentangle this interplay, to reveal the contribution of different channels, such as wages, profits, and import prices, to both the inflationary process and the distribution of income. Our SFC framework provides a systematic analytical instrument to address this endeavour.

3. Model Description

We employ a two-household stock-flow consistent (SFC) model of the UK economy to analyse the distributional and inflationary dynamics in the aftermath of the COVID-19 pandemic. The model is designed to investigate the interplay between post-COVID inflation dynamics and income distribution. The framework builds on the accounting tradition of Godley and Lavoie (2007), ensuring consistency between balance sheets, transactions, and flows of funds. In this section, we provide a concise overview of the model structure and its key behavioural equations¹.

3.1 Structure of the Model

The model distinguishes two household groups: workers and rentiers, in order to capture the heterogeneous effects of counterfactual policy experiments. The bottom 80 income percentages of the households are assumed worker households, where the top 20 percentile are rentiers. The remaining sectors comprise non-financial corporations (NFCs), monetary financial institutions (MFIs), insurance and pension funds, the government, and the rest of the world, all articulated through a balance sheet matrix and a transactions-flow matrix that ensure full stock–flow consistency.

3.2 Households

We assume Pasinettian households where both workers and rentiers save money with the proviso that rentiers' propensity to save is higher than that of workers (Pasinetti, 1974, Ch.4). After worker households save a portion of their income in terms of pension and house stocks, they consume all remaining earnings along with tax and interest payments. However, rentiers diversify their income flows by receiving wages, dividends, interest earnings, whereas workers' main income flows are wages and operating income. Both receive state pensions and annuities but the key difference between two households is that rentiers is presumed to have a massive stock of wealth, which is a stylized fact that we derive from UK wealth data series. We further assume that rentiers do not

¹ The full set of accounting matrices, behavioral equations, and calibration details are presented in article*
*this reference is omitted to ensure unanimity

engage in real investment, which precludes them from receiving operating income. Therefore, the following two equations represent the net disposable incomes of both households.

$$YD_t^W = (1 - \tau^W) * (WP_t^W) + INT.EARN_t^W - INT.PAYM_t^W + NOS_t^W + S.PEN_t^W + ANN_t^W - PEN.CON_t^W + NET.EQE_t^W \quad (4.1)$$

$$YD_t^R = (1 - \tau_t^R) * (WP_t^R) + (1 - \tau_t^F) * (INT.EARN_t^R + NET.EQE_t^R) - INT.PAYM_t^R + S.PEN_t^R + ANN_t^R - PEN.CON_t^R \quad (4.2)$$

We further assume that the rentier consumption function depends on both net disposable income and their wealth, while workers consume all their net disposable income. Consumption behaviour of households is formulated as follows:

$$CON_t^W = YD_t^W \quad (4.3)$$

$$CON_t^R = c0_t + c1 * YD_t^R + c2 * N.WORTH_{t-1}^W \quad (4.4)$$

To ensure consistency between balance sheets, net lending positions and financial net wealth transactions are set as follows:

$$NLP_t^W = YD_t^W - CON_t^W + PEN.CON_t^W \quad (4.5)$$

$$NLP_t^R = YD_t^R - CON_t^R + PEN.CON_t^R \quad (4.6)$$

$$FNW_t^W = PENSION_t^W + DEP.HH_t^W + EQUITY_t^W - LOAN.HH_t^W \quad (4.7)$$

$$FNW_t^R = PENSION_t^R + DEP.HH_t^R + EQUITY_t^R - LOAN.HH_t^R \quad (4.8)$$

3.3 Firms and Investment

Output is demand-driven. Using standard investment accelerator principle as suggested by Godley and Lavoie (2006), private investment expenditures are sensitive to divergences between GDP and capital stock, which in turn depreciates over time (δ_K). Investment function is driven by the animal spirits of private companies (i_0), steered by a respective speed of adjustment factor (γ). Therefore, existing stocks of capital expand through increases in private investment as well as households' housing investments and government investments.

Private investment demand and the evolution of capital stock are formulated as follows:

$$I^{NFC} = i_0 + \gamma * [GDP^{EXP} - \beta * K_{t-1}] + \delta_{NFC} * \delta_K * K_{t-1} \quad (4.9)$$

$$K_t = K_{t-1} * (1 - \delta_K) + I^{NFC}_t + I^{GOV}_t + I^{House}_t \quad (4.10)$$

While assuming a constant share of government investment in GDP for simplicity, we suggest a modified version of housing investment function as suggested in Burgess et al (2016). It depends on mortgages and house prices, and all housing investment is realized by worker households.

$$I^{House} = \sigma_9 + \sigma_{10} * NEW.MORT_{t-1}^{HH} + \sigma_{11} * P_{t-1}^H \quad (4.11)$$

We calculate the profit income of the NFC sector from income side of the GDP. The gross operating surplus of NFCs (GOS^{NFC}) is calculated by deducting total wage payments, production and import taxes net of subsidies, and the gross operating surplus of other sectors. We assume that gross operating surplus of government is proportional to GOS of the total economy.

$$GDP^{INC} = WP_t^{Total} + GOS + TAX.PRO.IMP_t^{NFC} \quad (4.12)$$

$$GOS^{NFC} = GDP^{INC} - WP_t^{Total} - TAX.PRO.IMP_t^G - GOS^{Other} \quad (4.13)$$

$$GOS^{Other} = GOS^H + GOS^{GOV} + GOS^{FC} \quad (4.14)$$

Firms allocate some portion of their aggregate profits as depreciation allowances. They distribute dividends over their net operating surplus. They use internal and external sources to finance their investment.

$$Div^{NFS} = \alpha_{div} * [NOS^{NFC}] \quad (4.15)$$

$$I^{NFC} - \delta_0 * \delta_K * K_{t-1} = IF^{NFS} + EF^{NFS} \quad (4.16)$$

Furthermore, we assume that firms do not make repayment of their debt, and they only make interest payment, which makes producer credit as a perpetual stock. The following two equations are net lending position and financial net wealth, which secure consistency of matrices.

$$NLP_t^{NFC} = GOS^{NFC} + N.Int^{NFC} - I^{NFC} - Div^{NFS} - TP_t^{EP} \quad (4.17)$$

$$FNW_t^{NFC} = DEP_t^{NFC} - EQ_t^{NFC} - LOAN_t^{NFC} \quad (4.18)$$

3.4 Prices, Wages, and Inflation

In our framework, following the post-Keynesian tradition, inflation stems from the distributional conflict between household groups and the NFCs sector. Prices are set according to a Kaleckian cost-plus rule, where NFCs apply a markup over unit costs:

$$P_t = (1 + \varphi 1_t) * UC_t \quad (4.19)$$

The markup ($\varphi 1_t$) is treated as historically given but subject to exogenous shocks (e.g., changes in monopoly power or technology) represented by the parameter θ :

$$\varphi 1_t = \theta * \varphi 1_{t-1} \quad (4.20)$$

$$\theta = \bar{\theta} \quad (4.21)$$

Unit costs include both wage payments and costs of imported commodities, divided by real sales:

$$UC_t = \frac{(WP_t + P_t^{IMP} * IMP.COM_t)}{Y_{real}} \quad (4.22)$$

where imports of commodities are a fixed share of total imports and import prices (P_t^{IMP}) directly affect the price level.

Total wage payments consist of workers' and rentiers' wage bills:

$$WP_t^{Total} = WP_t^W + WP_t^R, \quad WP_t^W = N_t^W * W_t^W, \quad WP_t^R = N_t^R * W_t^R \quad (4.23)$$

Wage dynamics follow a wage-targeting mechanism (Godley & Lavoie, 2007). Wage income, based on productivity and labour market conditions, is set by the bargaining power of workers and rentiers.

$$W_t^{Tar} = \omega 0_t + \omega 1_t * pr_t^W + \omega 2_t * \left(\frac{N_t^{Act}}{N_t^{Ful}} \right) \quad (4.24)$$

Actual wages gradually adjust towards this target according to the bargaining strength of workers' unions. Furthermore, any change in the NFC's pricing decision (e.g., against changes in import prices) directly erodes real wages, thereby widening the adjustment gap across periods. This is defined in the following expression:

$$W_t^W = W_{t-1}^W + \omega 3_t * \left[W_{W_t}^{Tar} - \left(\frac{W_t^W}{P_t} \right) \right] \quad (4.25)^2$$

We investigate the dynamics of inflation as a phenomenon arising from shifts in the composition of income, which in turn reshape its distribution across social groups. To decompose the rate of inflation, we adopt the approach of Bivens (2022) and Weber and Wasner (2023), attributing changes in the GDP deflator to four components: profits, wages, other income, and taxes. The contribution of each component, to be referred to as *capture ratio*, reflects its relative share in overall price dynamics, with the sum of all components amounting to the total sum of the GDP deflator.

For clarification, we present a scenario where NFCs pass import price shocks to final prices that in turn erode real wages. In the short-term households may not fully compensate for their income loss due to lags in periodic wage adjustment. Consequently, profits of the NFCs significantly increase and raise the rate of profit capture. The economy thereby experiences *profit inflation* where profit contribution to the GDP deflator serves as the major driver.

$$Profit.Receive_t = GDP^{INC} - WP - TAX.PRO.IMP_t^{NFC} - GOSH \quad (4.26)$$

$$Profit.Capture_t = 100 * \frac{(Profit.DEF_t - Profit.DEF_{t-1})}{(GDP.DEF_t - GDP.DEF_{t-1})} \quad (4.27)$$

$$Profit.Con_t = G.GDP.DEF_t * Profit.Capture_t \quad (4.28)$$

² An analogous process applies to rentier wages with distinct parameters.

Overall, then, inflation in the model reflects the interplay of oligopolistic markups, wage bargaining, and external shocks through import prices, embarking it as an inherently distributional and structural phenomenon.

3.5 Government, Monetary Policy, and the External Sector

The government administers state expenditures and provides transfers to household as state pensions. It also collects taxes on production, wages, and rentier incomes. Any deficit in fiscal balances is financed by bond issuance.

$$G_t^{Exp} = \pi_5 * GDP^{EXP} \quad (2.29)$$

$$S.PEN_t^{HH} = \pi_6 * G_t^{EXP} \quad (2.30)$$

$$G_t^{Inc} = TP_t^W + TP_t^{R.INC} + TAX.PRO.IMP_t^{NFC} \quad (4.31)$$

$$G_t^{DEF} = G_t^{Exp} + S.PEN_t^{HH} + I_t^{GOV} + (INT_t^{GOV} * B_{t-1}^{GOV}) - G_t^{Inc} - GOS_t^{GOV} \quad (4.32)$$

Monetary policy is represented by an exogenously determined policy (interest) rate. The interest rate thereby governs the returns on financial assets held by rentiers, and the cost of loans faced by firms, transmitting monetary policy through both distributional and investment channels.

$$i_t = \bar{i}_t \rightarrow iD_t = \theta^D * i_t, \quad iB_t = \theta^B * i_t, \quad iL_t = \theta^L * i_t \quad (4.33)$$

Exports and imports are assumed as constant shares of GDP and these together resolve the current account balances for the domestic (UK) economy.

3.6 Policy Channels and Counterfactual Analysis

In this framework, monetary policy is envisaged to operate primarily through distributional channels: higher interest rates redistribute income from workers to rentiers, sustaining rentier consumption while depressing workers' consumption. While rentier income from financial assets rises with higher interest rates, profits of non-financial corporations (NFCs) decline, and the composition of their financing shifts across internal and external sources. Moreover, if the authorities reinforce the interest rate hike by further cutting government expenditures, two

additional channels come into play: First, NFC profits fall further, since government spending constitutes an important source of NFC income. Second, state pensions, which are linked to government expenditures, are automatically reduced. This diminishes household disposable income, particularly for workers. To capture this distributional shift more clearly, we introduce the rentier income share, denoted as the ρ ratio, and define it as the share of rentier disposable income in the total disposable income of the household sector.

$$\rho_t = \frac{YD_t^R}{YD_t^{HH}} \quad (4.34)$$

By contrast, fiscal and incomes policies, such as rentier income taxation or net production taxation, directly influence income distribution and the rate of inflation, thereby addressing incomes policy tools that mitigate inflation by improving income distribution. Although the channels emerging from monetary policy and fiscal cut clemently operate rentier incomes, which are easily compensated by higher financial returns, they damage mainly workers. However, incomes policy tools are effective to distribute the policy burden more equally across households. In detail, rentier income taxation through additional taxes on wage income and financial income may prevent the compensation due to higher financial returns and may reduce rentier consumption. Moreover, without interest rate hike, it may also prevent a significant fall in worker consumption.

Using these policies, we now turn to the exploration of counterfactual scenarios. In particular, we examine whether earlier interest rate hikes by the Bank of England, or alternative incomes policies, could have altered the inflation pathways and distributional dynamics of the post-COVID UK economy.

4. Policy Analysis

We begin by describing the baseline scenario, which is constructed given the main macroeconomic averages over 2020 to 2023. We then explore the dynamics of two main counterfactual policy strategies: a *mainstream strategy* that combines monetary policy interventions with cuts in government’s fiscal expenditures, including both public spending and social transfers. Then we introduce and discuss an *alternative strategy centred on progressive income distribution*. Our contention is that, if an effective strategy of income policies could have been enacted in UK as early as 2022, inflationary pressures emanating from profit-driven pressures could have been elevated by as much as 2 percentage points, while significantly improving income distribution. Our alternative scenario, thus, relies not on the narrow instrumentalization of the interest rate as a tool of monetary tightness, but goes beyond that to target income inequality in order to address the institutional and historical roots of inflation dynamics in the UK.

In what follows, we first introduce a *baseline scenario* to serve as a benchmark for comparison against the counterfactual policy alternatives, and then introduce rudiments of our counterfactual scenario analyses.

4.1 Baseline Scenario

The “baseline” reference path closely replicates the historical observations reported officially by the ONS. It is developed using data from 2020 to 2023, supplemented by observations from the first three quarters of 2024. By design, the baseline scenario excludes any form of monetary policy intervention.

Historically speaking, fiscal expansion constitutes the main policy component of the *baseline*. Between 2020 and 2023, government spending increased by an average of approximately 6 percent per annum. It is therefore assumed that this growth rate will continue for the following three years. The *baseline scenario* further accommodates the following: *first*, all tax rates are held constant throughout the simulation period. *Second*, household and non-financial corporate (NFC) investment levels are assumed to remain stable at their 2020-2023 average (at £10 billion *per annum*), an expectation reinforced by data from the first three quarters of 2024. *Third*, the rentier households’ consumption-to-disposable income ratio is set constant at 69 percent. *Finally*, the propensity of rentier households to consume out of net wealth (denoted as c_2) is fixed at 1.5 percent

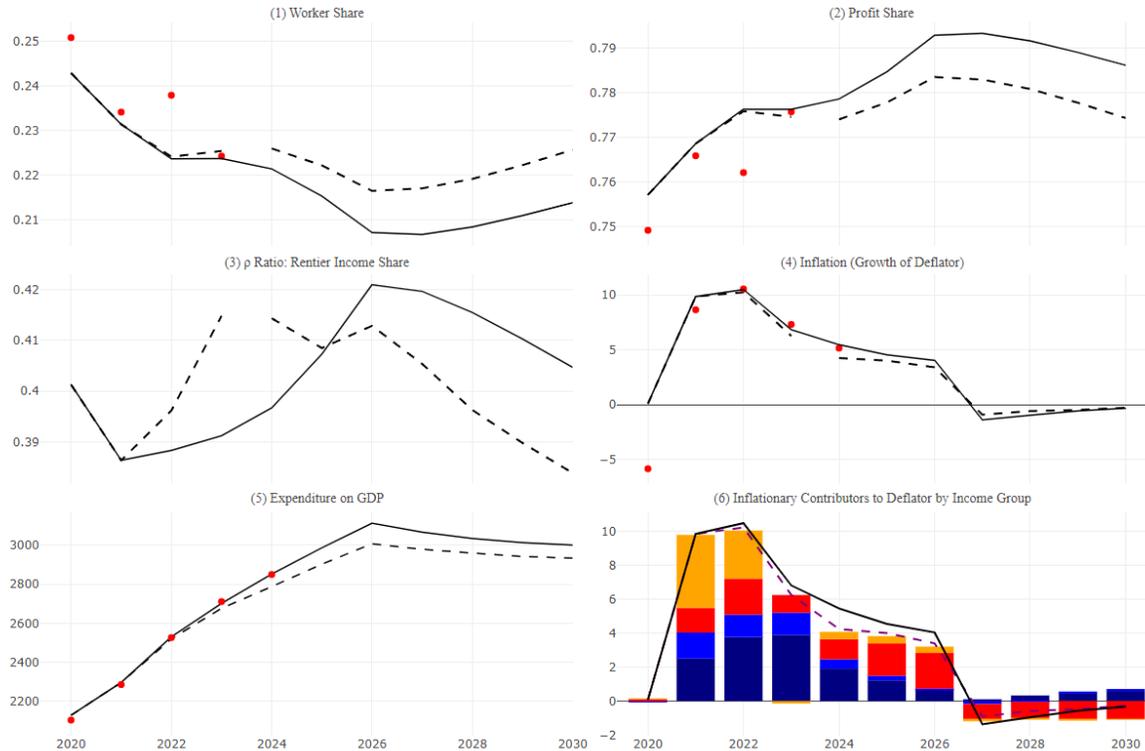
for the 2024-2026 period. While this parameter is generally closer to 1 percent for the broader household sector, we presume that rentier households consume mainly out of their accumulated wealth. Accordingly, our calibration suggests assigning slightly higher value to c_2 for this group.

In the following panels, the baseline scenario paths are represented by solid lines, the selected scenario paths by dashed lines, and red dots indicate observations officially announced by the ONS.

4.2 Mainstream Policy Scenario

The mainstream policy scenario incorporates monetary and fiscal interventions as its primary instruments to mitigate inflationary pressures. On the fiscal side, the intervention involves reductions in government spending and social transfers. On the monetary side, it entails active administration of the rate of interest to reduce inflation. Under this scenario, the growth rate of government spending and social transfers is limited to 4 percent annually over the 2024-2026 period. This indicates a 2-percentage point reduction relative to the baseline scenario.

Monetary policy is modelled based on the historically observed, actual policy actions as well as projected trajectories. In the United Kingdom, monetary tightening began in 2023, with the Bank of England raising the policy rate from 1.6 percent in 2022 to 4.7 percent in 2023. This tightening continued in 2024, further increasing to 5.1 percent. In our scenario, we follow these interest rate levels and assume a gradual easing thereafter with a reduction to 3 percent in 2025, followed by a further cut to 2 percent in 2026. Panel 1 illustrates the effects of these interventions over main macroeconomic variables of interest.



Panel 1: Mainstream policy

This panel documents the outcomes of the baseline and mainstream policy scenarios over the 2020-2030 period, with a specific focus on the three-year shock imposed between 2024 and 2026. Contrary to expectations, the mainstream policy, represented by dashed lines, which combines interest rate hikes with cuts in government spending and social transfers, does not deliver a significant improvement in inflation dynamics relative to the baseline scenario. Despite its disinflationary intent, rate of inflation is observed to remain broadly inertial throughout the adjustment period (2023-2024), indicating the limited effectiveness of this policy mix in containing price pressures.

In contrast, the mainstream policy leads to significant adverse distributional outcomes. Conventional indicators such as the wage share and profit share fail to capture the financial gains of rentiers during monetary tightening. In other words, rentiers can easily offset losses in their wage income by raising their financial earnings during these periods. Consequently, even if the wage share appears to improve, the rentier income share, denoted as the ρ ratio, increases more rapidly and surpasses the baseline path throughout the monetary tightening period. This indicates that rentier households disproportionately benefit by boosting their financial income. This trend

reflects the mechanisms through which higher interest rates enhance financial earnings, thereby exacerbating income inequality.

While the worker share continues to decline under the baseline, the mainstream policy interventions mainly continue to follow this trend failing to meaningfully reverse it. The profit share, which also includes rentier wage incomes, initially rises under both scenarios but stabilizes earlier under the mainstream path, likely due to weakened demand from fiscal retrenchment. Moreover, GDP grows more slowly under the mainstream policy, as to be expected with the implementation of spending cuts, which dampens overall aggregate demand. This also serves as a reason leading to a rise of the wage share. Government expenditure is one source of earnings for NFC; when these expenditures are cut, the profit share is directly reduced. However, this does not necessarily imply an improvement in the functional distribution of income. Monetary policy intervention, as a standard tool of mainstream policy design, boosts the financial earnings of rentiers, as represented by the ρ ratio.

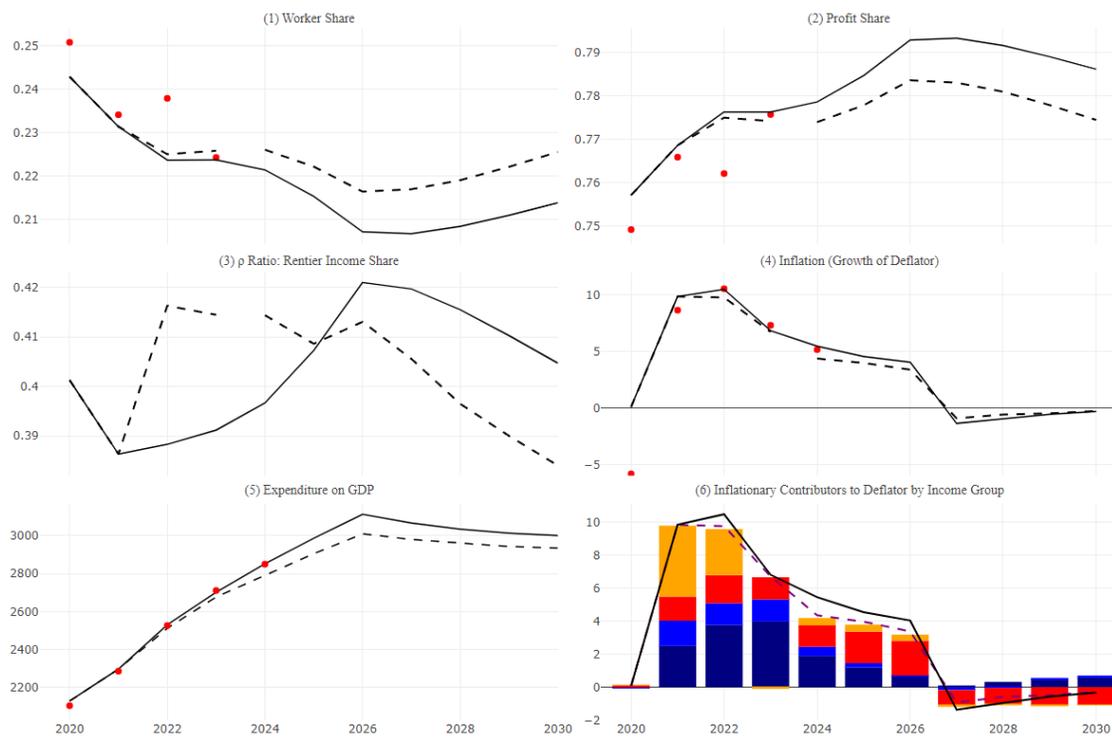
Finally, the last figure portrays the contributions to the rate of inflation by the income groups – distinguished as wages, profits, taxes and other income. It highlights the prolonged tendency for wages and other incomes to fall after 2023.

4.3 Early Monetary Policy Intervention

Now we turn to the contestations on the *timing* of monetary policy interventions. This subject was initially raised by economists such as Summers (2021, 2021b) and Krugman (2022) amid the emergence of post-COVID inflation and revolved around the query whether inflation is *transitory or persistent*. While Krugman displayed an optimistic stance stressing the temporary nature of the ongoing inflation back then, Summers cautioned that the Federal Reserve initially regarded inflation as transitory and delayed policy action (Summers 2021b).

Historically speaking, central banks initially adopted a transitory view of the post-COVID inflation episode before shifting their stance. As narrated by Perli and LeSueur (2024) and Clarida (2025), the Federal Reserve at first characterized the inflation surge as temporary and refrained from immediate intervention. However, as inflationary pressures persisted, the Fed changed course and began implementing direct monetary policy measures. Similarly, Bank of England viewed the mid-2021 inflation increase as largely transitory, driven by temporary factors such as the hikes in energy

prices, and therefore maintained an accommodative policy stance. Compared to the Fed’s later aggressive tightening, the Bank of England was more cautious, opting for a gradual approach and prolonging accommodative measures. The Bank of England significantly raised interest rates only in 2023.



Panel 2 Mainstream Policy with earlier (2022) monetary policy intervention

Accordingly, we implement a counterfactual scenario and explore the effects of imposing the monetary policy shock one year earlier than the Bank of England’s actual intervention. Panel 2 presents graphical illustrations of the *early policy scenario*. Our simulation results indicate that earlier action would not significantly reduce inflation compared to the mainstream policy scenario that imposes the shock in 2023. Moreover, early intervention leads to a greater increase in rentier income distribution relative to the previous scenario.

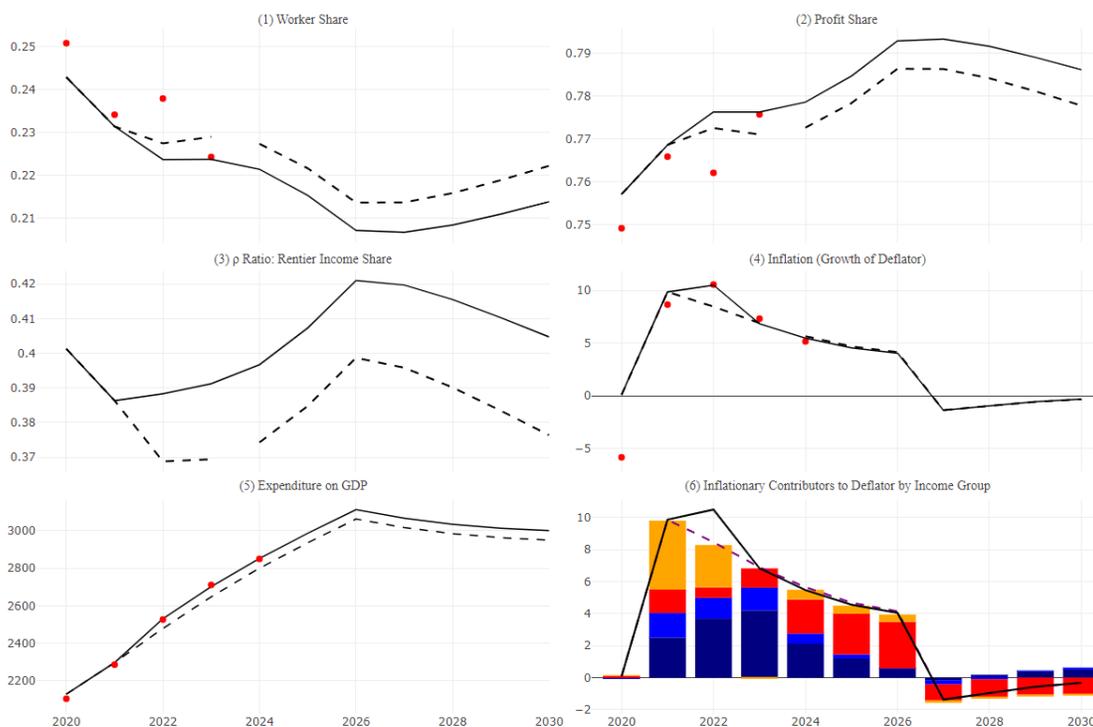
These findings lay further support to the arguments of the heterodox literature, questioning the effectiveness of monetary policy in the first place. For instance, Rochon (2022) highlights the importance of cost-push inflation, which is largely absent in mainstream monetary theory wherein inflation is primarily treated as demand driven. However, the empirical literature on UK economy does not support this assumption. Bunn et al. (2022) show that energy prices, as well as labour and

material shortages, are the main drivers of the recent inflation hike. Similarly, Haskel et al. (2023) find that inflation in the UK during 2021 was primarily driven by supply shortages and energy price shocks, while in 2022 and 2023, additional pressures arose from labour market tightness and Ukraine War, which led to food price increases. Along the same lines, Nersisyan and Wray (2024) argue that interest rate hikes are unlikely to resolve supply chain-related issues and may even exacerbate them. They further note that by the time inflation emerged, the stimulative effects of fiscal policy on aggregate demand had largely dissipated, making it an unlikely driver of the observed inflation. Therefore, using interest rate hikes, which is a standard tool for curbing inflation via aggregate demand suppression, has been considered as inappropriate for the current inflationary environment.

Furthermore, even if we assume that post-COVID inflation in the UK economy has a demand-side origin, ONS dataset shows that the sharp interest rate hike in 2023 fails to reduce household aggregate consumption. Taken together, both our simulation results and the literature suggest that standard monetary policy tools, such as interest rate hikes, are largely ineffective in addressing the current inflationary pressures and may disproportionately impact income distribution.

4.4 Pursuing Alternatives in Progressive Incomes Policies

Our incomes policy scenarios are designed through effective and progressive taxation. Administered under three alternative formulations, our aim is to examine how inflation might have evolved if an incomes policy had been implemented in 2022 instead of the historically observed monetary intervention that solely relied on interest rate management and demand contraction. To analyse this pursuit, we *first* introduce a 5% increase in wage income taxation for the top 20% rentier households and implement it over 2022 and 2024. This approach aligns with Storm (2023), who emphasizes policies targeting income inequality, Gallo & Rochon (2024), who advocate incomes policies to protect workers, and Nikiforos et al. (2024), who highlight the importance of protecting wage levels and strengthening workers' bargaining power, which can be indirectly supported by progressive taxation on high-income households.



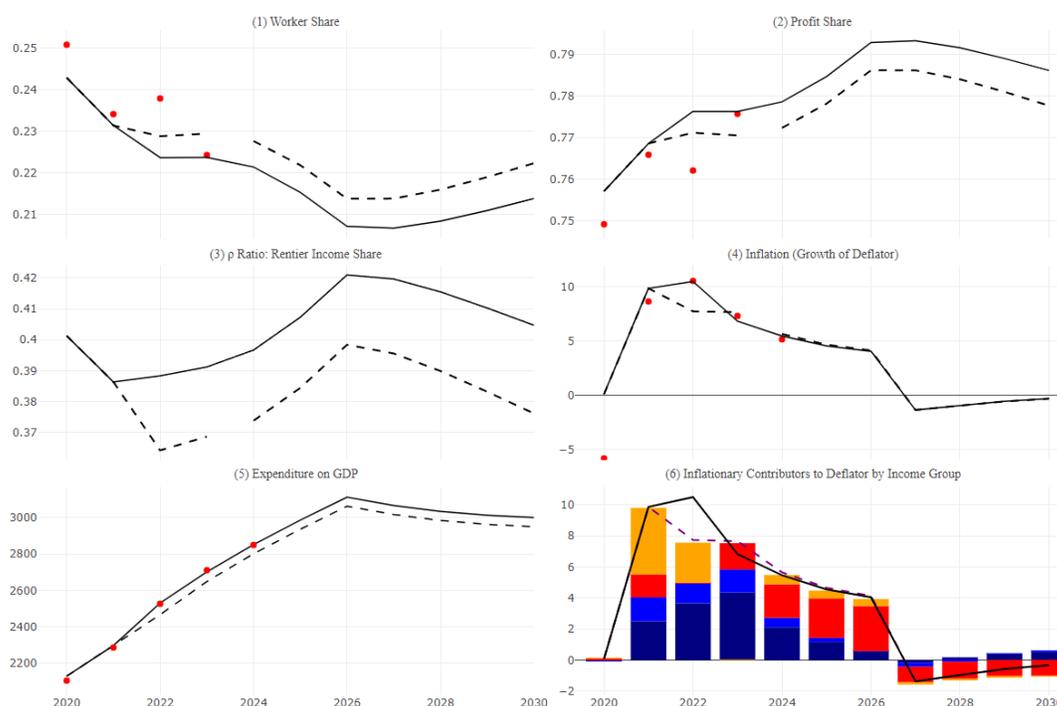
Panel 3 Incomes Policy with 5% Increase in Rentier Wage Tax

The simulation results of our first incomes policy scenario are illustrated in Panel 3. In Panel 3, Figure 4 demonstrates that inflation could have been reduced by more than 2 percent if this policy had been implemented in 2022. Moreover, the third figure indicates a substantial improvement in income distribution. Therefore, this policy may effectively reduce inflation by improving income distribution.

Therefore, our first incomes policy that involves a 5 percent increase in rentier wage tax has two main implications for inflation and income distribution: it causes a substantial decline in NFC earnings, which is reflected in the profit share shown in the second figure of Panel 3. This policy restores the functional income distribution and reduces the rentier income share. Moreover, by decreasing aggregate profits, the decline in NFC earnings leads to a reduced contribution of profits to inflation.

Next, we complement the rentier wage income tax increase with a single-year *financial income tax*. This measure is consistent with Weber & Wasner (2023), who recommend profit taxation to counter excessive price-setting power, and with Romaniello & Antonella (2024), who underscore the role of compensatory fiscal measures to shield low-income households. Additionally, this

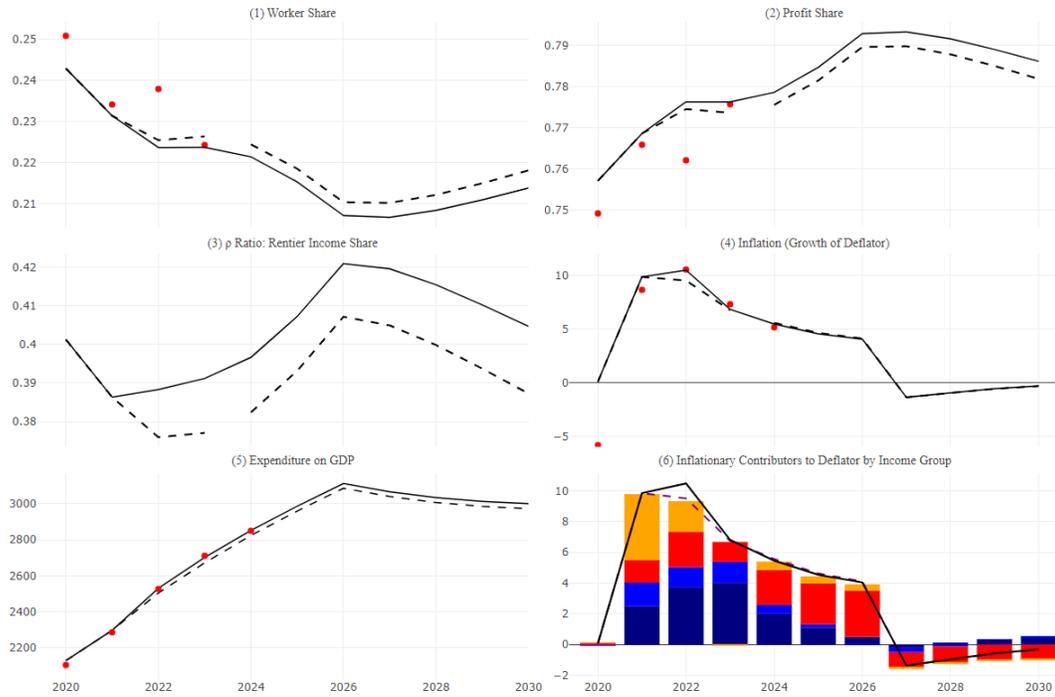
intervention aligns with Storm’s (2023) call for addressing speculative activities in financial markets through regulatory and fiscal tools.



Panel 4 Incomes Policy with 5% Rentier Wage Tax increase and Single-Year Financial Income Tax by 10%

The simulation results of the second incomes policy scenario are illustrated in Panel 4. Compared to the first incomes policy scenario, this extension achieves further gains, resulting in a deceleration of the inflation rate approximately 2.8 percent in comparison to the baseline scenario, as shown in the fourth figure of Panel 4. Additionally, the third figure demonstrates additional improvement in income distribution in 2022.

Our *last incomes policy scenario* combines the 5% rentier tax with a 2% reduction in net production tax, thereby targeting both income redistribution and a supply-side cost relief. This dual approach was recommended in Vernengo & Perez (2023), who argue for moving away from purely contractionary monetary policy towards addressing supply-side constraints, and in Matamoros (2024) who stresses lowering entry barriers and enhancing market competition. Moreover, the reduction in production taxes could also help preserve real wage remunerations, consistent with the recommendations of Cucignatto et al. (2023) and also Raza et al. (2023).



Panel 5 Incomes Policy with 5% Rentier Wage Tax Increase and 2% Reduction in Net Production Tax

The simulation results of the final incomes policy scenario are illustrated in Panel 5. This scenario provides greater protection for NFC profits, as shown in the second figure of Panel 5 when also compared with the previous two incomes policy scenarios. Furthermore, GDP expenditure aligns more closely with both official observations and the baseline scenario, indicating a smaller reduction in economic activity. Similar to the preceding scenarios, this incomes policy alternative achieves significant outcomes towards both inflation reduction and progressive income distribution, with a 1 percent reduction in inflation in 2022 and an improvement in income distribution, as illustrated in the third figure of Panel 5.

5 Conclusion

This paper has examined the drivers of post-COVID inflation in the UK and evaluated alternative policy responses using a two-household stock-flow consistent (SFC) model. Our findings suggest that the inflation surge was largely shaped by import price shocks, which limited the effectiveness of conventional monetary tightening. Even if the Bank of England had acted earlier, the results indicate that monetary policy alone would have achieved only modest reductions in inflation, while exacerbating income inequality. By contrast, the introduction of targeted income policies in 2022 could have significantly mitigated inflationary pressures by over 2 percentage points, while simultaneously improving income distribution.

These results underscore the need to move beyond the narrow reliance on interest rate adjustments along with the esoterics of central banking communications and highlight the potential of incomes policies as a complementary tool in addressing inflation under conditions of external cost shocks. By situating the UK case within the broader post-COVID inflation debate, this paper contributes to ongoing discussions about the interaction between distributive conflict, external shocks, and macroeconomic policy design.

Future research could extend this analysis in many ways, by incorporating sectoral heterogeneity more explicitly or by exploring the role of fiscal-monetary coordination under persistent supply-side disturbances. Such directions would further clarify how alternative policy mixes can attain a better calculated social balance among objectives of inflation control and distributional outcomes.

The global economy appears to have entered a new era in which protectionism is gaining prominence, with the tariffs imposed by the Trump administration on a wide range of countries serving as an early indicator of this shift. In the UK context, this development is particularly relevant given the country's persistent current account deficit. Import prices in the UK have displayed a sustained upward trend in the aftermath of the COVID-19 pandemic, adding to macroeconomic uncertainty and keeping income conflict alive. Building on the present analysis, future research will therefore focus on modelling shocks to import prices and evaluating their macroeconomic and distributional effects. Such work would provide a clearer understanding of how policy frameworks can be designed to mitigate the adverse consequences of external price shocks in an increasingly protectionist global environment.

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