### Post-Pandemic Inflation: Can Current

# Theories Explain the Central Banks'

## Behaviour?

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#### **Abstract**

The article explores the changing perceptions of central banks' (CBs) role in political and economic policies in the wake of the Covid-19 pandemic. The unprecedented lending by CBs to governments has put pressure on the traditional role of custodian of low inflation and price stability. The article examines the effects of inflation as predicted and forecasted by the macroeconomic model Aggregate Demand-Aggregate Supply (AD-AS) and presents figures and statistics to demonstrate the recent surge in price levels in the European Union, the Euro Area, the UK, and the US. The article raises questions about the behaviour of CBs in developed countries and their stretching of powers in the face of the current crisis. Moreover, it critically analyses three recent papers that discuss the relationship between fiscal and monetary authorities, the continuous struggle between inflation hawks and doves in monetary committees, and the role of democracy in central bank independence. It concludes that CBs strategically act based on external pressures and internal considerations to maintain their credibility, effectiveness, and legitimacy as institutions.

**Keywords:** Central Bank, Monetary Policy, International Political Economy, Inflation, Central Bank Independence

#### Introduction

The Covid-19 pandemic drastically changed the perceptions of central banks' (CBs) role in political and economic policies (see: Carstens, 2020; Restoy, 2020). Indeed, the lending extensions by CBs toward governments are without precedents in history, with their traditional role of custodians of low inflation and price stability being under pressure. Recently, Christine Lagarde, president of the European Central Bank (ECB), declared that, although ECB's task is price stability, it will not address the issue immediately but only reduce the asset purchase programme (Lagarde, 2022; ECB, 2022). Furthermore, the Federal Reserve (Fed) declared that the "fiscal and monetary policy response in the United States to the COVID crisis was unprecedented in its scale, scope, and speed" (Clarida et al., 2021, p. 2). The Bank of England (BoE) opted to double its Asset Purchase Facility acquisitions to almost £900 billion and cut the interest rates to 0.1% (Bank of England, 2022a; Bank of England, 2022b). Following the macroeconomic model AD-AS (Aggregate Demand-Aggregate Supply), the effects of inflation are perfectly predicted and forecasted (Scarth, 2010; Raisová and Ďurčová, 2014).\(^1\)

Indeed, in the Euro area, inflation reached 10.1% in November 2022, after a peak of 10.6% in October, in what is its highest level in more than 30 years in the continent (Eurostat, 2022), 9.3% also in November 2022 in the UK (Office for National Statistics, 2022), and reached 9.1%, the highest since World War I, in the US in June, while now stabilizing at 7.1% (US Bureau of Labor Statistics, 2022). The HICP (Harmonised Index of Consumer Prices based on the final costs of a basket of commodities weighted for the different European regions) between January 2008 and November 2022 in the European Union and the Euro Area reached record levels after the pandemic. Also, prices in the UK (with all three types of measurement based on different coverages and methodologies) and in the US (based on the Consumer Price Index, CPI) increased to record-level.

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<sup>&</sup>lt;sup>1</sup> This paper selected, as AD-AS model representation, the article by Scarth (2010, p. 325) because it developed a thorough review of the critiques that this model is accused of, arguing that, with due attention and consideration, the model "is a useful framework that seems to make sense of both the warnings of Keynes and our current macroeconomic difficulties". On the other hand, Raisová and Ďurčová (2014) empirically tested the relationship between economic growth and supply and demand mechanisms in some European countries, further proving the validity of the AD-AS model, despite its generality and simplicity.

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Further, this increase could likely continue due to the Ukrainian crisis disrupting global supply

chains and the provision of various commodities, especially regarding food and energy (Hauk, 2022;

Schifferes, 2022).

Like after the global financial crisis in 2007-08, CBs in developed countries seemed to have

stretched their powers, ignoring their role to ensure price stability and leading the role as protector

of their economies (Fernández-Albertos, 2015). Can we explain this behaviour by current theories

in the CBs? This article critically analyses three recent papers, and their respective literature,

arguing about the relationship between fiscal and monetary authorities (Mabbett and Schelkle,

2019), the continuous struggle between inflation hawks and inflation doves in monetary

committees (Baerg and Lowe, 2020), and the role of democracy in the central bank independence

(CBI) (Bodea and Hicks, 2015).

Argument and Research Question of the Papers

Indeed, Mabbett and Schelkle (2019) were concerned about the institutional process that creates

CBs in the first place and how, in various political systems (classified according to the number of

veto players), the causal relationship between CBs and governments mutates. They argue that CBs

in systems with numerous veto players operate under more restrictions than where there are fewer

or singular veto players.2 However, they add that CBs are not power-maximiser actors, but, on the

contrary, they accept willingly and, sometimes, voluntarily restraints on particular occasions.

Indeed, CBs advocate for their limitations to strategically keep or protect their monetary power,

especially in times of crisis (Mabbett and Schelkle, 2019). In this way, they can limit the extent to

which financial market panic could force their hands, expanding their independence from financial

markets and governments. Nevertheless, this could still result in the central bank acting alone to

secure financial stability, creating exceptional amounts of liquidity with the risks this brings.

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<sup>2</sup> "Veto players are individual or collective actors whose agreement (by majority rule for collective actors) is required for a change of the status quo" (Tsebelis, 1995, p. 289).

Differently, Baerg and Lowe (2020) focused on the individual interests and activities that explain the different behaviour in monetary policies. On the other hand, Mabbett and Schelkle (2019) questioned the explanatory abilities of the previous strategy by arguing that this methodology is limited to past events and lacks any forecasting power. Nevertheless, the article maintains that its insights are valuable since they oppose previous theorisations with different and new conclusions regarding monetary policies, contributing to the expansion of the scholarship. The authors discovered that the inflation level and interest rates are related to the share of inflation talks and that representatives inside monetary committees are also sensitive to their region's economic performance when implementing their policies (Baerg and Lowe, 2020).

Finally, Bodea and Hicks (2015) research created the theoretical basis for the aforementioned studies. The authors wanted to investigate whether CBI empirically affects price stability and whether different types of political institutions, as intermediary variables, affect the outcome of CBI on inflation and money growth rates. This research question is also pivotal in understanding the role of CBs since the first exploring causal mechanisms of political institutions rather than only the general effect (Broz, 2002) and unifying different previous academic contributions inside a unique political economy framework. Therefore, the authors discovered that the negative impact of CBI on the money growth rate is substantial and significant only in democratic settings dominated by executive and political constraints and freedom of speech, following a mechanism of public opinion trust toward CBI implemented in Tsebelis (1995).

#### Data and Scholarly Position of the Research

Bodea and Hicks (2015) understood the importance of CBI on price stability and built their theorisations over previously disconnected findings. Pragmatically, they tried to connect studies that argued for a strong correlation between CBI and inflation control (see: Keefer and Stasavage, 2003) and others that observed weaker relations (see: Daunfeldt and de Luna, 2008; Jácome and Vázquez, 2008). Therefore, Bodea and Hicks (2015) developed a more persuasive empirical argument for their conclusions. First, they implemented a qualitative analysis of the role of veto players and freedom of the press when, in 1957, German politicians attempted to modify the Federal Republic Germany Bundesbank law. Second, they adopted a quantitative analysis applying an OLS

regression with country-fixed effects and lagged dependent variable and controlling for other variables like time-specific factors, media freedom, and other political estimators to solve autocorrelation problems. Their paper contributes to the idea that CBs resist increasing money supply inside economies due to inflation concerns (Brunnermeier *et al.*, 2009) and, principally, for fear of losing credibility, integrity, and trust from both domestic and international public opinion and investors (Reis, 2015). Therefore, this research approach permits replicating results and generalising the findings in other periods and countries, creating a fair comparison between political regimes. However, it should be highlighted that the research could not completely rule out the "economic development argument". Furthermore, the data on the CBI was based on *de jure* provisions and not *de facto* activities of CBs, creating a possible bias in the result.

Baerg and Lowe (2020) directly replicated a new methodology from the political science literature to assess and classify the ideological position of a committee member. Differently from political research estimating a candidate's standing based on the right-left classification, the authors grounded their distinction on Taylor's (1993) rule that divides officials in CBs based on their emphasis on inflation versus employment and output. For this reason, the researchers collected the data from the contributions made by each monetary bureaucrat during official meetings, exceeding the internal validity of all the other theorisations based on spatial voting models (Eijffinger *et al.*, 2018). Nevertheless, spatial voting methods are not to be completely disregarded, as defended by Eijffinger *et al.* (2016), but they should be considered a valuable addition to the toolkit of researchers interested in monetary policy committees.

The concept of *veto players* is not new in the literature, especially in political science.<sup>4</sup> Therefore, Mabbett and Schelkle (2019) used the method established in this literature and translated the research approach regarding the constitution and relationship between CBs and governments. By

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<sup>&</sup>lt;sup>3</sup> Bodea and Hicks (2015) measured a high correlation between the democracy variable and economic development, thus questioning which variable is driving the effect. However, this finding is not strictly relevant since this article studies the CBs of economically developed and democratic countries.

<sup>&</sup>lt;sup>4</sup> Indeed, some articles in the political economy reasoned that CBs are political entities (see: Reis, 2015), and thus have replicated methods or theories from the political science literature in the study of economic institutions (see: Keefer and Stasavage, 2003; Chwieroth and Walter, 2015).

adopting a qualitative research design based on comparisons and assessing the lending policies adopted by the US Federal Reserve, the European Central Bank, and the Bank of England during the global financial crisis. With this approach, they demonstrated that CBs triumphed against the pressures from governments and economic subjects. Indeed, CBs successfully pushed fiscal and financial authorities to implement austerity policies, as in Europe and the UK (Mabbett and Schelkle, 2019). However, their analyses from the empirical data may lack confounding variables inside their investigation: the type of crisis. Although the current pandemic-related recession had similar effects on disrupting the global supply chain, the monetary reactions were dissimilar. Nevertheless, the article still provides valuable insight and framework for understanding CBs' decisions: they are not immune from the political environment and behave strategically to gain collaboration from governments and preserve their effectiveness.

### Implications for IPE Research

Overall, CBs' decisions to inject billions into their economies during the pandemic were influenced by their desire to maintain or enhance their independence and credibility in the eyes of the public and other stakeholders. As a consequence, their injections contributed to the record level of inflation currently experiencing (UN DESA, 2022). Mabbett and Schelkle (2019) developed significant ideas that can support the explanation of the current phenomena during the pandemic crisis, although their study does not differentiate between the CB's behaviour in different emergencies. Based on their findings, the decision of CBs to inject billions into their economies reflects that they are not alone in the political economy game. The outcome is a theorisation that identifies the interactions of governments, CBs, and private economic institutions. The current situation could be described as the "financial dominance" of the financial system that desperately requested aid. In that situation, CBs could not refuse such assistance due to the risk of a damaging reputation with governments – that can change the statute and legislation regarding CB's operations and management – and public opinion – which is a pivotal actor in establishing and reinforcing the credibility effect of CBs. Therefore, the intense pressures of financial actors and consumers forced the hand of CBs into defending their respective economies from the crisis and, thus, maintaining the credibility necessary to implement future monetary policies effectively. Thus, CBs became 'the only game in town', leading to unprecedented monetary interventions (Baer et al., 2021) and compelling them to recapitalise banks via the CBs' balance sheets rather than governmental budgets (Heldt and Mueller, 2021).<sup>5</sup>

Furthermore, Baerg and Lowe (2020) contributed a new research methodology for interpreting voting behaviours inside monetary committees, but its implications can go far beyond that. Indeed, the previous two papers can be reasonably connected, understanding the different choices of various monetary officials regarding interest rates and money growth rates. While Mabbett and Schelkle (2019) explained that monetary committees decide based on political restraints and financial pressures, Baerg and Lowe (2020) deconstructed the causal mechanisms at the individual level. Bureaucrats ground their decisions on the economic forecasts made by economists and academics at the international, national, and regional levels. For this reason, the majority of projections during the pandemic strongly maintained that the economic disruption would be only temporary and the post-pandemic recovery would be steady and significant compared to prepandemic levels. Therefore, implementing the theorem of the relationship between money growth and inflation, excesses in forecast optimism can lead to a disproportionate mismatch with the level of money growth, resulting in higher levels of inflation (Mayhew, 2013). By contrast, also overly pessimist estimates can trigger a more vigorous response in monetary policies to favour economic recovery and to achieve the structural level of unemployment and output, like Baerg and Lowe

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<sup>&</sup>lt;sup>5</sup> Besides, research on the political influence on monetary committees also outlines political pressures through the appointment of monetary authorities based on determined ideological profiles, but its effect on the decision-making process is still debated (Eijffinger *et al.*, 2016).

<sup>&</sup>lt;sup>6</sup> Indeed, Estrin *et al.* (2020) argued the "monumental need for timely and reliable economic forecasts", especially regarding the shift in consumer behaviours and practices. Therefore, addressing the changes in supply and demand and economic growth due to profound changes in the labour and supply market structures is complex (Barnes *et al.*, 2021).

<sup>&</sup>lt;sup>7</sup> Indeed, this is a direct implication of the Quantity Theory of Money where MV = PY (Mayhew, 2013), which can be arranged as: M = PY/V. This formula represents the correlation between money growth (M), inflation (P), economic growth (Y), and velocity of money circulation (V). Economists forecast the expected level of economic growth, and then CBs react by increasing the money supply by the same amount to keep inflation constant. However, if the forecasts are too optimistic, the mismatch between money and economic growth is reflected by changes in price levels.

(2020) noticed in their paper.<sup>8</sup> Finally, in the analysis by Baerg and Lowe (2020), it could be added that, together with economic forecasts, also credibility and trust play a crucial role (Bodea and Hicks, 2015). Therefore, the circle ultimately closes because confidence is directly affected by the political environment where CBs are, especially based on the presence of *veto players*, freedom of the press, and other political constraints. In conclusion, CBs acted in response to the public opinion and political restraints constantly encountered during their lifetime and, more importantly, by their internal strategic considerations on maintaining their legitimacy and effectiveness as institutions.

#### **Conclusions**

Based on the previous theories, politics and CBs are more interconnected than thought. CBs are composed of individuals influenced by the political environment – represented by the constraints to their powers and decision-making processes – and by individual considerations – personal beliefs about the state of the economy, unemployment, and trust from public opinion. Further, these individuals have to play a constant political-strategic game with governments and financial institutions. In the end, the outcomes that researchers investigate are far more complicated than expected. In the case of Covid-19, a mixture of confident forecasts about economic growth (Ranasinghe and Carvalho, 2020; OECD, 2021),9 negative perceptions by public opinion (Dougherty and Barnett, 2022), and pressures from financial institutions (Giese and Haldane, 2020; ECB, 2021) forced CBs to implement amounts of quantitative easing without historical precedents. Although many interest groups argue that CBI must be preserved at all costs and that CBs are stretching their power in fiscal matters, paradoxically, the same parties demand more economic support from CBs (Mabbett and Schelkle, 2019). The outcome is based on the strategic decisions of different actors inside distinct political environments, and CBs continue to strategically act to preserve their independence and credibility as insurance for future crises, as the case of Covid-19 demonstrated. Further research should investigate the differences in response and inflation between countries

<sup>&</sup>lt;sup>8</sup> This is explained by the Phillips curve by the expected inflation and supply shocks terms in the formula (Smyth, 1971; Swamy and Tavlas, 2007) and can be analysed based on the inflation expectations held by consumers and businesses for the future of their wages and product prices (Muscatelli, 2021).

<sup>&</sup>lt;sup>9</sup> For instance, OECD (2021) made four predictions on the inflation rates, and all forecasted lower inflation levels than happened in the real economy.

based on political, rather than only economic, characteristics to generate a more nuanced understanding of the complex relationship between CBs and governments during crises. Besides, exploring the impact of different economic forecasts on monetary policy decisions, together with individual beliefs and biases, could be extremely useful in understanding and forecasting CBs' behaviour and how to deliver more specific guidance to CB officials on how to use economic forecasts to make more effective monetary policy decisions. Finally, new research has to unveil the numerous political economy impasses that can lead to disastrous economic collapses, making policymakers and monetary officials more efficient in times of emergencies.

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