

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Schmidt, Tobias

# Working Paper Narrating inflation: How German economic journalists explain post-covid price rises

DoCMA Working Paper, No. 14

**Provided in Cooperation with:** Dortmund Center for Data-based Media Analysis (DoCMA), TU Dortmund University

*Suggested Citation:* Schmidt, Tobias (2025) : Narrating inflation: How German economic journalists explain post-covid price rises, DoCMA Working Paper, No. 14, TU Dortmund University, Dortmund Center for Data-based Media Analysis (DoCMA), Dortmund, https://doi.org/10.17877/DE290R-25380

This Version is available at: https://hdl.handle.net/10419/313658

# Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# WWW.ECONSTOR.EU

DORTMUND CENTER FOR DATA-BASED MEDIA ANALYSIS

# Narrating Inflation: How German Economic Journalists explain Post-Covid Price Rises

**Tobias Schmidt** 

TU Dortmund University, Dortmund, Germany tobias3.schmidt@tu-dortmund.de

# Working Paper

Abstract. This paper examines the pivotal role of journalists in shaping economic narratives, focusing on inflation coverage in Germany in 2022. While the media's influence on disseminating economic narratives is widely acknowledged, little research has focused on journalists, the agents responsible for content production. Using a mixed-method approach combining survey data with media content analysis, this study investigates how economic journalists explain inflation causes and persistence compared to professional economists. The results from surveys conducted during peak inflation (10.4%) show that journalists hold less optimistic views on inflation persistence than experts and that they are more likely to attribute inflation to specific protagonists, particularly the European Central Bank (ECB) and corporate profit-seeking. The ECB's role emerges as an especially contentious issue among journalists, revealing significant disagreement within the profession. Analysis of media coverage reveals notable alignment between journalists' perceptions and actual content, especially regarding the emphasis placed on the ECB's role-despite experts considering monetary policy a relatively minor factor. While this might suggest that journalists' personal narratives influence media coverage, the study's design precludes causal claims. The findings underscore the need for further research into how journalists' personal narratives impact public discourse on economic matters.

Keywords:  $media \cdot narratives \cdot journalism \cdot inflation$ 

**Cite as:** Schmidt, T. (2025). "Narrating Inflation: How German Economic Journalists explain Post-Covid Price Rises", *DoCMA Working Paper #14*. DOI: 10.17877/DE290R-25380

# 1 Introduction

Since Robert Shiller's (2017) influential work the topic of economic narratives has received increasing attention in economic research (Roos & Reccius, 2024). Economic narratives, the stories people tell about economic events, trends, and policies, have emerged as vital elements in deciphering the complex relationships between economic forces. As several studies indicate, narratives have a significant impact on how individuals, organizations, and governments understand and respond to economic developments, especially during times of "radical uncertainty" (Kay & King, 2020) or profound shifts in the economic landscape (Shiller, 2019; Tuckett & Nikolic, 2017; Tuckett et al., 2020).

Although the transmission mechanism of narratives remains a subject of ongoing research, it is widely acknowledged that the media play a decisive role in how and which economic narratives are disseminated (Andre et al., 2023; Fiore et al., 2022; Shiller, 2019). However, research that places journalists, after all the news producers behind media coverage, at the center of analysis, is still rare in the literature (Reid et al., 2021). Most research treats "the media" as a single entity that produces news reports, inside stories or interviews autonomously, thereby ignoring the decisions of content creators who determine what to report and how to frame it. Rather than passively reporting facts and figures about GDP growth, unemployment and inflation rates, journalists actively shape, or at least have the power to shape, public debates on these topics (McCombs & Shaw, 1972). Journalists help setting the public agenda (ibid.), act as issue gatekeepers (Shoemaker & Reese, 1996), present different frames of a topic (Entman, 1993), and propose a range of (economic) narratives with each article they write (Müller, 2023).

To contribute to this field of literature, this research paper takes a closer look at the explanatory patterns employed by German economic journalists to explain the causes of the high inflation figures measured in 2022. In November 2022, Germany experienced a record inflation rate of 10.4%, the highest in 70 years, while in the United States inflation rates rose to levels not seen in four decades. Experts, firms, and households tried and still try to make sense of these figures, sometimes strongly disagreeing in their explanations of the underlying causes (Andre et al., 2023). With Kay and King (2020) in mind, this time of rising inflation in Germany can surely be seen as a period of high, if not radical uncertainty, making the period under investigation an obvious context for the analysis of economic narratives. Figure 1 gives an impression of the perception of uncertainty in Germany in 2022, as measured by the Uncertainty Perception Indicator (UPI), developed by Müller et al. (2021).

The research presented in this paper is based on both survey data and a large corpus of articles related to inflation in the media. The online survey was conducted in November and December 2022 among German business journalists. Respondents were asked to formulate their own inflation narratives in both open and closed-ended questions. Furthermore, survey questions implored them for their personal inflation expectations and their thoughts on several widely dis-

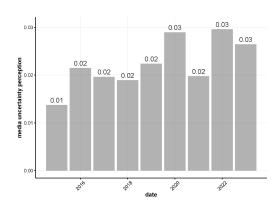


Fig. 1: Uncertainty perception in Germany as indicated by the UPI Müller et al., 2021. The UPI quantifies the percentage articles newspaper of that contain the German word stems "unsicher\* (translating to "uncertain\*") and "wirtschaft\*" (translating "econom\*") to in the respective period. As depicted in this figure, the study is conducted in a year with heightened levels of uncertainty perception. Values are retrieved from GitHub.

cussed causes of inflation. A similar survey was sent out to economists, thereby enabling comparisons of the convictions of media professionals and experts. Considering the findings gained through the surveys, the second part of the analysis focuses on the actual inflation coverage from 2022 and quantifies to what extent different inflation causes were covered in the media. This analysis is performed using Large Language Models (LLMs), that are capable of retrieving information from given texts when equipped with detailed coding instructions. The analysis draws on self-refined zero-shot document classifications provided by *Claude 3.5 Sonnet* from Antropic AI. The model was prompted to search for the same set of possible inflation causes that the survey participants were presented with. Moreover, it was assigned to indicate whether these items were (implicitly or explicitly) mentioned as causes of inflation in the inflation-related articles published in 2022. <sup>1</sup>

The results indicate that journalists and economists share similar narratives about the causes of inflation. Both groups mainly blamed the energy crisis (as a result of the Russian war on Ukraine) and supply chain issues (due to the COVID pandemic) for post-COVID price rises. Nevertheless, journalists were more pessimistic than experts about the persistence of inflation. In addition, they were significantly more likely to attribute responsibility to the European Central Bank (ECB). The ECB constitutes an important part of the inflation narratives put forward by journalists and—as the second part of this paper shows—of the inflation-related media coverage. Although experts saw the monetary policy of the ECB only as the seventh most important inflation driver on average, for journalists it was the third most frequently mentioned factor. As the analysis shows, it is also the third most frequently mentioned inflation driver in the coverage, suggesting that journalists' inflation narratives and the actual coverage

<sup>&</sup>lt;sup>1</sup> The described model performed best in several experiments based on different LLMs, including Mixtral 8x22B, GPT-4o, and LLaMA 3.1 70B. See the Methods section for further details.

might be aligned to some degree. What's more, the survey results reveal that journalists are a more heterogeneous group than experts, particularly in their assessment of the role of the European Central Bank in the recent rise of inflation.

The paper is structured as follows. Section 2 presents a comprehensive review of the literature, examining the extensive body of literature on economic narratives, media narratives, and the potential role of journalists in shaping them. Section 3 describes the research design. This includes a detailed presentation of the online survey conducted, a discussion of the rationale behind the questionnaire and the integration of the LLM *Claude 3.5 Sonnet* into this research. The main findings are presented in Section 4, and some cautious conclusions are drawn in Section 5.

# 2 Related work

The field of economics has traditionally been dominated by quantitative models and econometric analyses. However, as Kay and King (2020) demonstrate, these traditional approaches often reach their limits in times of "radical uncertainty". Under conditions of complexity and increased uncertainty, forming rational expectations and maximizing utility in conventional ways becomes difficult, if not impossible. Instead, economic agents turn to narratives—sense-making stories they share with each other—to navigate uncertainty and interpret their experiences. These narratives reduce the complexity of economic situations to manageable frameworks, enabling decision making and potentially shaping collective action to the effect that they influence various economic variables, from consumption and investment behavior to wage and price setting, and emerging phenomena like cryptocurrency adoption (Bénabou et al., 2018; Gennaioli & Shleifer, 2018; Shiller, 2017, 2019; Tuckett & Nikolic, 2017).

Although the concept of economic narratives has become increasingly prominent in the economic literature, it still lacks a universally accepted definition. Shiller (2017) describes economic narratives as "stories that offer interpretations of economic events, or morals, or hints of theories about the economy" (Shiller, 2017), thereby providing a rather vague analytical framework.

Taking a much more formal approach, Eliaz and Spiegler (2020, 2024) draw on the Bayesian Networks literature to propose a comprehensive mathematical model to formalize economic narratives. They depict narratives using directed acyclic graphs (DAGs) to illustrate relationships between variables and their influence on perceptions of political and economic realities, arguing that people reason about empirical regularities in terms of "causal stories". From a political science point of view, narratives can be conceptualized with the *Narrative Policy Framework* (NPF) (Crow & Jones, 2018; Jones & McBeth, 2010; Shanahan et al., 2018). This framework divides narratives into the two components *content* and *form* where the latter is described as the structure of the narrative, which is independent of the actual content. It proposes four major elements defining the structure of a narrative:

- 1. Setting. e.g., a period of high inflation rates and elevated uncertainty levels
- Characters. e.g., government, central bank, Russia, Ukraine, Covid, big Companies, China
- 3. *Plot.* links and relationships between the characters, situating the story and protagonists in space and time
- 4. *Moral of the story.* the point of the story, usually accompanied by an (implicit) call to action or a treatment recommendation.

Crucially, the authors emphasize that "who is to blame for the problem" is an essential part of a narrative, again highlighting the importance of causal attribution in the narrative structure.

Building on this focus on causality, Andre et al. (2023) provide a framework that is particularly suited to analyze media narratives about inflation. The authors explicitly define economic narratives as "causal accounts for past economic events", deliberately choosing a narrower definition that allows the authors to conceptualize narratives (just like Eliaz and Spiegler (2020)) as DAGs. Their backward-looking approach focuses specifically on narratives that explain past events, rather than forward-looking narratives about potential future developments.

While this selection of definitions and conceptualizations provides key insights into the nature of economic narratives, it represents only a subset of the broader literature on this topic. For a comprehensive review of narrative definitions in various scientific fields, see Roos and Reccius (2024). For the purpose of this study, I particularly draw on Andre et al.'s (2023) backward-looking approach to analyze inflation narratives, while incorporating the structural elements proposed by the NPF (Jones & McBeth, 2010). This combination provides a practical framework for identifying and comparing narratives in media content, particularly regarding the causal explanations of inflation and the attribution of responsibility to various actors.

While various studies demonstrate the significance of economic narratives (Eliaz & Spiegler, 2020; Flynn & Sastry, 2022; Gueta et al., 2024; Larsen & Thorsrud, 2019; Sharpe et al., 2020; Tuckett et al., 2020), the mechanisms driving their emergence, spread, and decline still remain opaque. What is evident, however, is the crucial role of media in this process, which, according to Habermas (1991), tends to shape public discourse more profoundly than any other societal actor.

# 2.1 Narratives and the Media

The media serve as the main source of economic information for both the public and firms (Blinder & Krueger, 2004; Chahrour et al., 2021; Hong et al., 2022; Kumar et al., 2015; Nimark & Pitschner, 2019). Indeed, most consumers and decision-makers rely predominantly or exclusively on the mass media for their understanding of economic developments (Berger et al., 2011; Reid et al., 2020). Using a survey of German households, Conrad et al. (2022) show that media coverage has a significant impact on the inflation expectations of German media recipients. The authors argue that "traditional media channels are important for gaining an accurate picture of the current state of the economy, i.e., for obtaining the correct numbers". This is especially true for inflation: households primarily obtain information about changes in the price level in their own country from the media (ibid.). The authors thus confirm earlier results by Larsen et al. (2021), who use a topic modeling analysis to show that newspaper reports help households to form more accurate inflation expectations. Lamla and Lein (2014) come to a similar conclusion, emphasizing that people's personal forecasts are strongly influenced by the information provided by the media. Their analysis demonstrates that intensive reporting improves the accuracy of consumers' inflation expectations. Boumans et al. (2023) use a survey of 1200 economists to show that media coverage also plays a crucial role in the formation of experts' expectations.

However, by reading newspapers or consuming TV media, recipients do not simply take in facts and professional forecasts and adjust their expectations accordingly. They also pick up, and partly adopt, narratives about the causes and consequences of economic developments (Andre et al., 2023; Müller et al., 2022; Song & Macaulay, 2024). By associating information with potential outcomes, news articles typically address the question of who is in charge and what is likely to occur next. Thus, media exposure not only provides important economic numbers, it "shapes people's narratives about the macroeconomy" (Andre et al., 2023).

These narratives can take various forms. For example, media coverage might not only report on recent inflation rates, but also link them to the European Central Bank's (ECB) latest interest rate decisions. Such reporting could frame these decisions as either too cautious or too late, potentially influencing public discourse on the ECB's role in managing inflation. This exemplifies the key elements of economic narratives discussed above: a clear setting (inflation), specific characters (the ECB), a (backward-looking) plot (interest rate decisions reinforcing price hikes), and a moral (central bank culpability and the need for policy change). Similarly, news outlets might report on companies raising prices, sometimes framing these increases as profit-driven rather than cost-related—a typical "greedflation" narrative, which holds the potential of shaping public sentiment.

This transmission might happen both in direct and indirect ways (Müller, (forthcoming) 2025). A narrative provides a basic model of how the economy functions and what will happen next (direct), thereby shaping a recipients expectation. At the same time, it also informs individuals about the outcomes expected by others (including institutions) and their probable reactions (indirect). The latter effect is typically referred to as the "third-person effect" in communication science (Davison, 1983).

Such interpretations, while legitimate and common in journalism (Van Hout & Macgilchrist, 2010), do not come without risks. Especially in times of increasing market uncertainty, media can inadvertently act as crisis amplifiers (Wilke,

2011). As Isabel Schnabel, Member of the Executive Board of the European Central Bank states, this could even lead to heightened public concerns about inflation that may not fully align with economic reality (Schnabel, 2021), which, in turn, has the potential to impact monetary policy, markets and prices (Müller, 2023).

Given these observations, it becomes crucial to look beyond the broad "media analysis" and examine how such narratives emerge in the first place. Although extensive research has documented the influence of the media on economic perceptions, less attention has been paid to the journalists who craft these narratives. Understanding their role is essential, as they are not mere conduits of information but active participants in shaping economic discourse.

## 2.2 Why care about the narratives of journalists?

Media coverage is the result of complex journalistic decision-making processes. As highlighted in Shoemaker and Reese's (1996) gatekeeping theory, these processes are shaped by several factors, from the individual to the wider social and cultural ones. At the organizational level, for example, the objectives, available resources, and editorial policy of the media play a crucial role in determining what news is covered. At an extra-institutional level, societal trends and cultural forces affect the journalistic agenda. Yet, from a narrative point of view, the individual level of this process is of particular interest.

In theory, the personal beliefs of journalists should not have a significant impact on their editorial decisions. Journalists are professionally committed to neutrality and objectivity. As shown by a survey by Hanitzsch et al. (2011) the majority of journalists indicate that they "do not allow [their] own beliefs and convictions to influence [their] reporting." In the context of financial news, journalists surveyed by Call et al. (2022) say they have strong incentives to write timely, informative, and accurate articles, placing a particularly high value on accuracy.

However, Mothes (2017) demonstrates that journalists sometimes tend to prioritize their own attitudes and opinions over objective news values in their reporting practices. Drawing on her findings from a quasi-experiment with 430 journalists and 432 citizens in Germany, she concludes that journalists exhibit similar levels of biased objectivity as citizens. These findings support earlier research showing that the perceived newsworthiness of a topic is somewhat dependent on the personal views of journalists and their political attitudes (Patterson & Donsbagh, 1996; Schönbach & Noelle-Neumann, 1977). However, it remains unclear to what extent these findings can be generalized to business and financial journalists. One could argue that business journalists, who typically possess formal training in economics, might be subject to specific professional biases stemming from their economic education rather than being influenced by political considerations.

Such effects of journalistic subjectivity on (economic) reporting have been extensively investigated under the terms *news bias* or *media bias* (Engelmann,

2010; Gentzkow & Shapiro, 2010; Jost & Koehler, 2021; Kepplinger & Lemke, 2016). Hackett (1984) describes news bias as opposite to objectivity, leading to journalists' subjective opinions infiltrating news organizations' output, for instance by not balancing competing points of view. Although most journalists commit themselves to neutrality and objectivity, studies repeatedly conclude "that journalists are not drones who can completely separate their professional coverage from their personal beliefs" (Watson, 2014) (p.805). Even with the highest degree of journalistic diligence, some level of subjectivity almost always finds its way into an article (Gitlin, 2003). This is especially true when media content goes beyond merely presenting facts, such as when events or conditions need to be explained (as in the case of inflation coverage). It is only plausible to assume that this mechanism also drives inflation coverage (e.g. "Who is to blame for inflation?"). As stated by Reid et al. (2021) "the journalists' understanding of the concept [of inflation] will also influence their views about appropriate monetary policy"—and ultimately their reporting.

#### 2.3 Factors influencing economic narratives

Identifying narratives in media coverage is a challenging task; understanding their origins and formation processes, however, is even more complex. A journalist's personal background is one factor likely to influence their economic narrative. As described by Shoemaker and Vos (2008), the perceived newsworthiness and interpretation of a certain topic is—among other factors—influenced by journalists' socialization and experience. Social interactions, in particular, play a crucial role in this context. From a sociological perspective, belief systems emerge through complex social interactions and are intrinsically linked to shared conceptual frameworks, or narratives, within groups (Roos & Reccius, 2024). These belief systems encompass not only mental models, but also normative, evaluative, and motivational elements that shape the way information is interpreted and communicated. Collective sense-making processes can help explain why certain economic interpretations become dominant within specific media organizations or journalist networks.

A study by Schultze (2023) hints in a similar direction and also highlights that belief systems develop and intensify throughout the career. He analyzes the German TV show Wirtschaft vor Acht" (translates to Economics before Eight") through an extensive framing analysis. He finds that the journalists investigated presented their interpretations without referencing statistics and scientific theories and relied solely on their belief systems (Schultze, 2023). He states that journalists' personal experiences have condensed into subjective theories over time, which were then used to explain economic developments.<sup>2</sup> This is in line with a conclusion drawn by Gitlin (2003), who states that journalists

 $<sup>^2</sup>$  A subsequent study conducted by Müller and von Nordheim (2024), which also examines the same TV program among others, arrives at a different conclusion by underscoring the show's superior quality, specifically in terms of its elaboration methodologies.

develop implicit theories and cognitive patterns that they later resort to—often unconsciously—to explain the world. As a result, for example, journalists can develop characteristics such as persistent bullishness or bearishness, ultimately influencing investors' believes and hence move financial markets (Dougal et al., 2012).

Beyond social or professional factors, a journalist's economic literacy might also play a pivotal role in shaping their narratives. Becker et al. (1994) argue that most journalists major in fields unrelated to economics, gaining their economic knowledge largely through on-the-job training and by reading other journalists' work.<sup>3</sup> Also Reid et al. (2021) stress the importance of the journalists' economic literacy. The authors conducted semi-structured interviews with South African journalists to explore their understanding of inflation and the effects of monetary policy. The study found that only a small number of journalists mentioned key aspects such as core inflation, second-round effects, or inflation expectations when explaining the concept of inflation in interviews—factors that are all critical factors in inflation dynamics. The authors note that this limited understanding not only affects how inflation is presented, but also diminishes the ability of journalists to adequately communicate its long-term implications.

Uncertainty further amplifies the fallback on narratives in economic journalism. Müller ((forthcoming) 2025) illustrates this mechanism by using the example of unemployment reporting. The journalistic process involves not only selecting and prioritizing specific economic issues, but also developing narratives that help contextualize the data. As he notes, "A reporter sitting down to write a news story first needs to convince herself, then her editor, and lastly the audience". This process is complicated by the fact that journalists and editors themselves operate under considerable uncertainty when covering current economic developments. They too "do not know exactly what is going on at the current juncture, a complication they deal with by contextualizing the news through gathering further information and referring the results to prevailing interpretative patterns" (Müller, (forthcoming) 2025).

For a comprehensive review of how narratives form and evolve in economic contexts, including research in cognitive science and social psychology, see Roos and Reccius (2024). For a description of how new information transforms into news stories—and especially into narratives—see Müller ((forthcoming) 2025) and Van Hout and Macgilchrist (2010).

## 2.4 Is it always (the own) narratives?

The inherently interpretative nature of journalism regularly leads to coverage that diverges from what institutional sources might expect or intend. As former Fed governor Laurence Meyer notes: "You try to be disciplined and communicate as effectively as you can, and then you give a speech and get 10 varying interpretations of what you said, often with a lot of liberties taken in the interpretation" (Fettig, 1998).

 $<sup>^{3}</sup>$  The latter is partly confirmed by the present study, see 13

However, such divergences not only stem from different implicit economic narratives. In many cases, it is also specific news values that drive the focus of media coverage. As an example, research finds that financial journalists are more likely to write about a company or CEO when the company is involved in controversy or when the CEO has a distinctive personality (Call et al., 2022). Likewise, they tend to favor analysts' sell recommendations over buy recommendations, which might reflect the well-documented negativity bias in news (Galtung & Ruge, 1965; Lengauer et al., 2012; Soroka, 2006).

In addition, to qualify as a marketable product, journalistic material must be truthful, persuasive, and engaging. It should also be easy to understand, that is, not overly complex. Simplifying complexity, in turn, is achieved by connecting new information with familiar narratives, aligning with the well-known news value of consonance (Galtung & Ruge, 1965; Müller, (forthcoming) 2025).

Moreover, journalists actively validate, interpret, and contextualize information from central banks and other sources (Maat, 2007; Reid et al., 2020; Rocci & Luciani, 2016). In developing their stories, journalists engage with various experts and business leaders (Call et al., 2022; Damstra & De Swert, 2021; Tambini, 2010), weighing multiple perspectives and interests (Van Hout & Macgilchrist, 2010). Depending on the resources spoken with, this almost certainly adds a certain spin to a story.

Lastly, it is important to note that journalists do not construct their narratives in isolation. When researching economic topics, they encounter multiple pre-existing narratives already present in public discourse. Taking unemployment reporting as an example, journalists might face competing explanations ranging from corporate outsourcing and insufficient demand to regulatory burden, immigration, or technological displacement (Müller, (forthcoming) 2025). While journalists are expected to validate these narratives against evidence to maintain credibility, multiple plausible explanations often coexist. The selection among these competing narratives may then be influenced by editorial decisions and audience considerations. As Attfield and Dowell (2003) demonstrate, journalists often gather expert opinions and supporting information to reinforce their chosen narrative framework, a process shaped by both professional judgment and market considerations.

Therefore, Van Hout and Macgilchrist (2010) emphasize that different versions of the same event should not be viewed as misrepresentations, but rather as alternative ways of reporting that foreground different elements. This perspective aligns with modern journalistic practice, which acknowledges that complete objectivity may be an unrealistic goal while maintaining professional standards of accuracy and fairness. Velthuis (2015), on the other hand, suggests that "both journalists and central bankers want to manipulate markets with their communicative utterances, albeit in different and frequently opposing ways" (p.316). Although this interpretation may be extreme, it highlights that the media acts as more than a passive information channel. As Reid et al. (2021) argue, viewing media as a simple "transmission channel" overlooks journalists' significant agenda-setting and framing capabilities.

# 2.5 How Journalists think about the economy

Given the reasons outlined above, it is crucial to understand what economic journalists actually know about economics, how they perceive monetary policy, and how they evaluate economic decisions.

An early influential study on journalists' economic thinking was conducted by Becker et al. (1994) in 1994. The authors surveyed US economists, economic educators, high school teachers, and journalists, using questions from the widely recognized AKV-Survey (Alston et al., 1992). The study included responses from 655 journalists, mainly members of the Society of American Business Editors and Writers and the Society of Professional Journalists. The authors found a significant divergence between journalists and economists in their assessment of several topics, e.g., of the causes of inflation. The analysis also revealed that journalists showed a notable aversion to public debt compared to economists. Overall, journalists' views aligned more closely with those of teachers than economists, which the authors attributed to journalists' potentially limited formal education in economics.

Following a similar approach, Jacob et al. (2011) surveyed economic experts, laypersons, economic journalists, and teachers. The authors examined how these groups evaluate a set of economic policies and whether journalists' and teachers' viewpoints align more closely with those of experts or laypeople. The study found that the opinions of journalists and teachers generally fell between those of economists and the general public. Teachers tended to align more with laypeople, while journalists tended to align more with economists. However, both teachers and journalists prioritized perceived fairness over economic efficiency, much like laypeople, in their assessments of economic policies, contrasting the economists' focus on efficiency.

Mast (2012) investigated the interpretations of German journalists, business leaders, and laypeople of the European financial crisis through comprehensive telephone surveys. The results again revealed notable differences among the surveyed groups. Journalists were more inclined than business leaders or laypeople to believe that political actions contributed to the crisis (64.1% vs 54.4% and 56.7%, respectively). Furthermore, a majority of journalists did not believe that banks had learned from the crisis (71.7% vs 52.4% and 71.6%) or that politicians were competent enough to understand the strategies of financial institutions (75.9% vs 59.5% and 63.9%). Despite these differences, however, journalists' responses generally aligned more closely with those of business leaders than with those of laypeople. A comparison with economic experts was not part of the study.

The studies collectively highlight that while journalists' perspectives often bridge the gap between laypeople and economic experts, their views seem to be shaped by unique professional priorities, such as fairness and skepticism towards political and financial institutions, which distinguish them from both groups.

# 2.6 Research Questions

Building on the literature review presented above, this research aims to better understand the economic narratives that journalists relied on during the latest period of high uncertainty (Fig. 1). More specifically, it delves into journalists' views on the causes of the inflation spike in November and December 2022, when inflation hovered around 10.4 percent in Germany, the highest level in 70 years. As described above, this period provides a well-suited context for this research, considering the profound, if not radical, uncertainty that characterized it. Overall, this paper seeks to answer the following overarching question:

# What are journalists' views on the rise in inflation in Germany in 2022, and how do these views align with actual media coverage during the same period?

This broader research question can be divided into four more specific questions. For each of these questions, except the last one, I examine whether there are significant differences from the answers given by economists:

- 1. How persistent do journalists expect the German inflation rate to be? (RQ1)
- 2. Which causes of inflation do journalists mention when confronted with a series of commonly discussed items? (**RQ2**)
- 3. How do journalists explain the latest rise in inflation when asked in an opentext question? (**RQ3**)
- 4. Which inflation drivers were mentioned most frequently in the media during 2022? (**RQ4**)

The methodology employed to address these questions is described in the following section.

# 3 Data and Method

This study is based on two surveys that were conducted online from November 28, 2022, to December 13, 2022. The first questionnaire was sent to German business journalists who either work for the business section of a media company or have indicated in their online profiles that they regularly cover economic topics. The N=67 journalists who completed the survey came from different news outlets, radio and television stations, online magazines, and news agencies, including conservative-leaning as well as rather progressive media outlets. The second questionnaire was distributed among German economists at the same time. N=32 economists completed the survey. Given the limited numbers of participants, conclusions need to be handled with caution.

The questionnaire for economists was deliberately kept brief to maximize response rates within this already limited target group. The questionnaire for journalists was based on the same core questions, but was supplemented with

12

additional, more specific ones tailored to this group. Apart from these targetspecific variations, the two surveys were designed to be comparable. The surveys were inspired by previous research conducted by Andre et al. (2023). In their research, the authors conduct a survey of American households, managers, and experts on the topic of inflation, asking them to explain in free text form the rising inflation rates experienced during the second half of 2021. My research draws inspiration from this approach, though diverges from it in the following ways:

- The original work underscores the significance of the media system in shaping inflation narratives. However, the authors exclusively consider the demand side of inflation coverage, that is, the recipients. In contrast, the present study concentrates on the supply side, specifically the media and, more precisely, journalists. While the primary focus is on the narratives formulated by journalists, a survey among professional economists has also been conducted for comparison purposes.
- The original paper focuses on the United States. It thus provides important insights into prevailing inflation narratives in the world's largest economy. The present work, in contrast, focuses on the German market and thus Europe's largest economy.

The questions in my survey have, in many cases, been adopted directly from the aforementioned study.

## 3.1 Closed-text questions

The majority of the questionnaire consists of closed-text questions designed to maximize comparability with expert responses. For example, participants were asked to share their views on future developments of the inflation rate. Specifically, they were asked on a binary scale whether they expect inflation to be short-term (fall below 3% within the next 5 years) or long-term (remain above 3% over the next 5 years). Following this, both groups were presented with nine potential causes of inflation frequently discussed in the media and asked to rate these explanations according to the extent they believe these factors influence inflation. The selection of items is based on the questionnaire by Andre et al. (2023). Additionally, the factors *profiteering* (companies raise prices to increase their profits) and money supply (the ECB unduly expands liquidity) are added to the list. Both are arguments that were regularly mentioned in German media when discussing the causes of inflation. Afterwards, both groups were asked how important they consider these factors to be for future inflation. In addition, participants were asked to assign probabilities to specific inflation scenarios. The advantage of such probabilistic belief elicitation is that it provides a well-defined. absolute numerical scale that allows for both inter- and intrapersonal comparisons (Haaland et al., 2023; Manski, 2004). Researchers can use these measures to directly compute a measure of uncertainty, as well as the mode and mean of the given answers.

Although most of the questions presented so far are rather restrictive, they facilitate a straightforward comparison of the narratives of the participants. They provide well-defined response options and prompt participants to consider explanations that may not have been part of their personal inflation narratives. For the same reason, these questions were posed only at a later point in the questionnaire. To avoid priming the respondents early in the survey, the questionnaire begins with an open-text question.

# 3.2 Open-text question

At the beginning of the survey, all respondents were asked why they think the inflation rate in Germany is 10.4% at the time of the survey. This question is designed to encourage respondents to formulate an inflation narrative in their own words. Positioning the question at the beginning of the questionnaire ensures that participants can answer the question in an unbiased manner.

To transform the qualitative responses into a comparable format, established methods of qualitative content analysis were employed (Mayring, 2004). This approach enabled a comparison of inflation drivers mentioned by journalists with those mentioned by experts. In the first step, the nine causes of inflation discussed earlier were identified within the narratives, and the frequency of their mention was counted for each group. In addition, all narratives were carefully reviewed to inductively identify other potential inflation drivers. Through this process, 16 additional items were identified and included in the subsequent analysis, regardless of their economic plausibility or significance. The only criteria for inclusion were that each item was explicitly and clearly mentioned as a cause of inflation and cited by at least two respondents within the same group. As a result, even broader or less specific responses, such as *Corona* or *the war*, were included in the categorization. Both questionnaires (English translation) are attached to this paper (See Appendix).

# 3.3 Analysis of media coverage

To complement the analysis of expert and journalist narratives, I examined the actual German news coverage of inflation, focusing on the extent to which the nine identified causes of inflation were explicitly mentioned as drivers in the media. For this purpose, I evaluated the performance of several state-of-the-art (SOTA) Large Language Models (LLMs) in identifying these specific items across relevant news articles. The models tested were *Mixtral 8x22B* (Mistral AI), *GPT-4o* (OpenAI), *LLaMA 3.1 70B* (Meta), and *Claude 3.5 Sonnet* (Anthropic AI).

LLMs, particularly modern SOTA models such as the ones mentioned above, have consistently demonstrated strong performance across various natural language processing tasks, including natural language understanding and information retrieval (Brown et al., 2020; Bubeck et al., 2023; Chang et al., 2023; Chiang et al., 2024; Fan et al., 2023; Zhao et al., 2023). These models enable efficient classification of thousands of documents in hours rather than the weeks or months required for manual annotation.

This approach was selected because traditional natural language processing tools are not designed to reliably identify predefined backward-looking narratives in unstructured text. Previous research projects have employed topic models (Hong et al., 2022; Macaulay & Song, 2023; Müller et al., 2023), sentiment analysis (Sharpe et al., 2020; Tilly & Livan, 2021), or machine learning pipelines like *RELATIO* (Ash et al., 2021) to investigate media coverage on inflation. While these models have their strengths, none are specifically designed to identify and categorize predefined items as explicit causes of inflation in the text—or if they are, they struggle with the task at hand. (Lange et al., 2022) The research that comes closest to my approach is put forward by Gueta et al. (2024), who investigate whether LLMs can learn macroeconomic narratives from social media and evaluate their predictive power for financial forecasting. Using two curated Twitter datasets and GPT-3.5, they demonstrate that LLMs are to some degree capable of extracting and summarizing economic narratives from unstructured text-although their operationalization of narratives differs substantially from the one presented here. Their empirical approach relies heavily on sentiment analysis and topic modeling as proxies for narratives, treating any topic-related tweet cluster or sentiment pattern as a potential narrative.

Nonetheless, recent research in computational social science has demonstrated the effectiveness of LLMs for content analysis tasks. Studies show that such models can match or even exceed human performance in coding tasks typically performed by political scientists and sociologists (Ziems et al., 2024). For instance, Mellon et al. (2024) found that LLMs achieved approximately 95% agreement with trained coders when analyzing British election statements, while Gilardi et al. (2023) demonstrated that GPT-3.5 could accurately classify tweet content, author stances, and frames with higher accuracy than trained crowd workers.

For my analysis, articles from three major German newspapers were selected: Handelsblatt (a business daily), Die Welt (a conservative-leaning daily), and Süddeutsche Zeitung (a left-of-centre daily). These outlets represent a broad spectrum of political and economic perspectives and reflect the majority of media sources where the surveyed journalists indicated to work at. Additionally, as these are among the largest newspapers in Germany, their content can be expected to reflect the broader discourse to a significant extent. All articles published between January 1, 2022, and December 31, 2022, that contain at least two of the terms inflation, teuerung, preiserhöhung, or preisniveau<sup>4</sup> were collected and processed, resulting in 2,939 relevant documents.

<sup>&</sup>lt;sup>4</sup> Translates to inflation, inflation, price increase, price level

# Initial prompt given to the LLMs (English translation)

You are an experienced economic and media analyst. Your task is to examine texts for explicit mentions of the items listed below as causes of inflation in Germany. Treat each text as an excerpt from a German newspaper article published in 2022. Your task is as follows: Indicate whether the text identifies the following items as causes of inflation in Germany:

- 1. the energy crisis (high energy prices, oil, gas, electricity, etc.)
- 2. inflation expectations (expectations of households, workers, or other market participants)
- 3. fiscal policy measures (minimum wage, short-time work benefits, fiscal programs, tax cuts, etc.)
- 4. interest rates (particularly claims that ECB nominal rates are too low)
- 5. labor and skilled worker shortages
- 6. ECB's (expansive) monetary policy, especially money supply
- 7. pent-up/generally high consumer demand
- 8. corporate profiteering (companies raising prices excessively to increase profits)
- 9. supply chain issues
- $10. \ {\rm other}$

Assign a label from 0-2 for each item, indicating whether - and if so, how explicitly - the item is mentioned as a cause:

0: Item is not mentioned as a cause, or the described relationship refers to another country (other than Germany)

- 1: uncertain/at most implicitly mentioned as a cause
- 2: explicitly mentioned as a cause

Content about consequences or other neutral information about inflation is not of interest. Also ignore inflation causes that only apply to specific countries (USA, Turkey, Argentina, etc.). Please first write a brief assessment discussing which items are described how explicitly as causes of inflation. Think about this step by step. Also address whether the text obviously refers to a country other than Germany.

Finally, return your final answer in a simple JSON format with the following keys: [energy crisis, expectations, fiscal policy, interest rates, labour shortages, money supply, pent-up demand, profiteering, supply chains, other]. The values are your labels from [0,1,2].

 $\{\text{text}\}$ 

# Follow up prompt (English translation)

Please double-check your response. Consider only items that are explicitly mentioned as drivers of inflation and clearly relate to the German context.

The analysis focused on relevant text segments within these articles, defined as paragraphs containing any of the target terms. Each segment included the sentence containing the keyword plus two sentences before and after it. If the keyword appeared again within this window, the paragraph was extended accordingly. After restricting all articles to the relevant paragraphs, short documents (fewer than two remaining sentences) were excluded.

A validation set of 110 documents (approximately 4% of the corpus) was independently annotated by two researchers who subsequently reconciled their labels to create a gold standard. All models analyzed each document in the validation set using standardized prompts (presented above). An inflation driver was considered *identified* if a model indicated it was "at least implicitly mentioned as a cause"—a threshold that best matched human judgment. To improve accuracy, each model's initial response was refined through a follow-up prompt, implementing a *self-refine* approach that has been shown to enhance LLM performance (Madaan et al., 2023).

Evaluation against the human-annotated validation set showed that *Claude* 3.5 Sonnet (claude-3-5-sonnet-20241022) achieved the highest alignment with human judgments, substantially outperforming all other tested models (Figure 8, Appendix). Consequently, the final analysis was conducted using this version of Anthropic's flagship model (as of November 2024).

The final model outputs are transformed into json dictionaries using the *json* library in Python. LLM inference was performed in Python, all other evaluations were conducted in R.

# 4 Findings

In this section, the results of the survey are presented, starting with the closedended questions and followed by the open-ended questions. The findings from the media analysis are then discussed.

#### 4.1 Evaluation of closed-ended questions

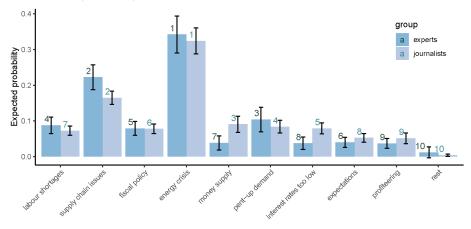
The following results are based on the closed-ended questions in the questionnaires.

**Expected Persistence of Inflation.** Both groups were asked to classify their views on inflation as either temporary or permanent using a binary scale. Based

on the results, **RQ1** can be addressed directly (see Figure 9, Appendix). Although both groups generally expect inflation to be temporary, the surveyed journalists are more pessimistic about inflation persistence. They are significantly more likely to consider inflation a long-term problem compared to economists.

Inflation Trend over the next twelve Months. When asked to assign probabilities to several potential future inflation rates, journalists again tend to give more pessimistic answers. Although uncertainty is high among both experts and journalists, the tendency for journalists to be more pessimistic about future inflation rates is also evident here, particularly in the 60-month forecast (Figure 10, Appendix).

**Current Factors influencing Inflation.** When asked about the factors driving the recent rise in inflation, both similarities and differences between journalists and experts become obvious. Both groups were presented with nine different items that are frequently discussed in the German public discourse and then asked to rate their perceived influence on inflation. The analysis reveals that the main expected influence factors for both groups are the energy crisis and supply chain issues (Figure 2).



**Fig. 2:** Expected impact of inflation drivers at the period under investigation. Respondents were asked to assign probabilities to each driver. The error bars indicate the standard error. The in-group rank of each item is provided as absolute number above each bar.

Although both groups on average rate most of the items quite similarly, the monetary policy of the ECB regarding money supply and nominal interest rates seems to be an exception. Journalists rate the influence of the ECB significantly higher than economists (Table 1). For journalists, the *money supply* is on average the third most important driver of inflation (albeit by a small margin), while for experts it is only the seventh. Low interest rates are the fifth most

Item	p-value Significance
1 Labour shortages	0.26
2 Supply chain issues	0.01 ***
3 Fiscal policy	0.91
4 Energy crisis	0.58
5 Money supply	0.00 ***
6 Pent-up demand	0.31
7 Interest rates too low	0.00 ***
8 Expectations	0.19
9 Profiteering	0.17
10 Rest	0.34

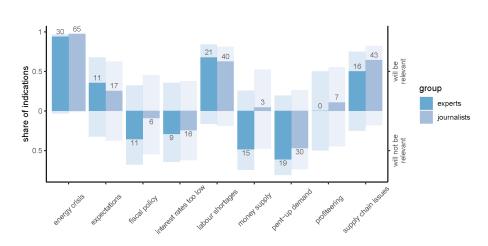
**Table 1:** Results of a two-sided t-test comparing the ratings of inflation drivers between journalists and economists. The table displays the p-values for each item, with significance levels indicated as \*\*\*p + 0.01. Items such as money supply and low interest rates, attributed to the ECB, show significant differences in perception between the two groups..

frequently mentioned driver among journalists, while for experts they are the second to last. This difference in perception persists regardless of journalists' formal economic education levels (controlling for this factor does not change results). However, as a later part of the questionnaire reveals, journalists are far from unanimous in their assessment of the ECB's responsibility. No other factor is as controversial among German business journalists as the role of the ECB (see the next subsection).

In addressing **RQ2**, it can be concluded that the surveyed journalists primarily attribute the increase in inflation to the energy crisis and supply chain problems when faced with widely discussed inflation causes. The journalists' responses align largely with those of the experts, suggesting a similar level of economic reasoning. However, it is also evident that journalists tend to blame the ECB's monetary policy significantly more often than experts do.

Factors influencing Inflation in the Future. Respondents were also asked to assess which factors mentioned would remain influential in the future. Once again, a considerable amount of uncertainty is observed in the responses. However, journalists and experts generally agree on the role of the energy crisis, inflation expectations, labor shortages, and supply chain problems (Figure 3). According to their responses, all four factors are expected to have a decisive impact on inflation in a year's time. Conversely, both groups expect fiscal policy, excessively low interest rates, and pent-up demand to become less significant over the next twelve months. The most notable difference again concerns the ECB, with most experts expecting money supply to become less of a problem, while the majority of journalists believe the opposite.

How journalists inform themselves about politics and economy. When asked what resources journalists use to inform themselves about politics and the economy, the four most frequently mentioned categories are media-related, such as online news, general interest media, news agencies, and special interest media (Figure 13, Appendix). Primary sources rank fifth, supporting Becker et al. (1994) in his conclusion that "What journalists learn about economics



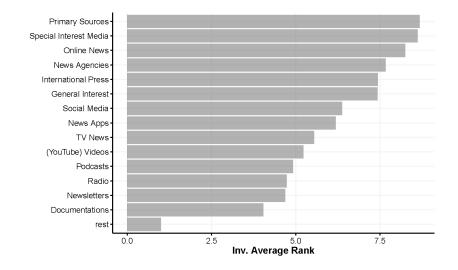
**Fig. 3:** Expected impact of inflation drivers in the next 12 months. The values indicate the share of respondents expecting the respective item to be relevant (above 0) or not relevant (below 0) for inflation developments in the next 12 months. The transparent bars show the actual shares for experts and journalists respectively, while the colored bars show the difference between positive and negative values per case and group. To help interpreting the bars, the respective in-group differences are indicated in absolute numbers.

often comes from [...] reading what other journalists write about these issues" (p.85). This is, however, no indication of how important journalists evaluate these sources for their research, as the question only asks for frequencies. It is somewhat expectable that those sources are mentioned mostly that are the easiest accessible.

To control for this effect, journalists were asked to rank these items according to their perceived importance to their own professional knowledge. To facilitate a clearer comparison of overall importance, a weighted average rank was calculated for each element. The weighted average rank  $\operatorname{AvgRank}_i$  for each item *i* was determined by summing the products of the rank *j* and the frequency  $\operatorname{Count}_{ij}$  with which that rank is assigned and dividing by the total number of mentions for that item:

$$AvgRank_i = \frac{\sum_{j=1}^{n} (Rank_j \times Count_{ij})}{Total mentions of Item i}$$

The results are illustrated in Figure 4. Somewhat moderating the above observation, the results show that *Primary sources* were frequently rated the most important source of information. Databases, direct contacts within the economy, and exchanges with research institutes appear to play a significant role in journalists' formation of opinions, often surpassing simple media consumption, at least as reported by the respondents. *special interest media, general interest media*, and *news agencies* are ranked right thereafter. In contrast, *social media*, and



 $TV\ news$  appear mainly in lower ranks, indicating a lesser role in the collection of professional information.

**Fig. 4:** Inverse weighted average ranks of media categories for informing about politics and economy. The weighted average ranks are subtracted from 12 (being the highest value + 1), so a higher rank is associated with a higher number / longer bar. This is done for illustration purposes only.

Inflation Coverage through the Eyes of Economic Journalists. At the end of the survey, journalists were asked for their assessment of current inflation coverage. They indicated which topics they believe are under-emphasized and which aspects of inflation they feel should receive less attention in the media. The results indicate that the group of economic journalists is divided into two "camps", at least with respect to the role of the ECB: Some think that the media as a whole does not adequately highlight the role of the ECB, while others hold the opposite view, believing that the role of the central bank is overemphasized in media coverage (see Figure 11, Appendix). The analysis reveals that the degree of disagreement about the adequacy of the ECB coverage is more pronounced than on any other aspect. Fifteen out of 37 respondents indicated that the ECB is overemphasized in German inflation coverage, whereas 10 out of 29 stated the exact opposite: that the ECB's role is underemphasized. This finding once again reflects the general uncertainty surrounding the topic of inflation.

Furthermore, some journalists appear quite critical of their own guild. When asked to give a general opinion on recent inflation coverage, journalists give either no or mostly negative answers (25 answers, 19 negative). Some criticize that many reports offer too simplistic explanations (6). Others state that the wrong aspects were highlighted, while, for example, social consequences, the role of the central bank, or implications for private consumption were neglected (4). Some journalists perceive the reporting as "panicky" or "sensational" (5). Three journalists state that the inflation coverage was just faulty, one respondent claims it was interest driven. Only six of the impressions given are positive. However, despite the fact that these are rather small numbers in absolute terms, it is well known that people tend to express negative rather than positive emotions when asked for their opinion (Kanouse & Hanson Jr, 1987), which should be considered when interpreting these results.

# 4.2 Evaluation of Narratives

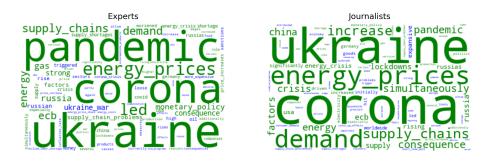
The analysis of responses to the initial open-ended question provides insight into how journalists and experts explain inflation figures in their own words. In a freetext question, all respondents were asked to write down their personal inflation narrative. No instructions were provided, except that the response should be written as continuous text. The following example illustrates what these answers typically look like, showing the responses of two participants focusing on the energy crisis (English translation):

- 1. The Ukraine crisis and its consequences for the energy prices are responsible for higher inflation.
- 2. Rising consumer prices are driving the inflation rate. Consumer prices are increasing due to increased purchasing and production costs. Purchasing and production costs are rising because the energy supply has increased sharply from a very favorable level due to the short-term loss of gas supplies and the resulting mass purchase of gas by the state on the spot market. Purchasing on the spot market became necessary because suppliers no longer provided contracts at the booked conditions on a long-term basis. In addition, in many cases, there were no long-term contracts in the economic sectors, since purchases on the spot market were cheap in the past. The loss of gas supplies, which also contribute to electricity generation in Germany, has also highlighted the gaps in the expansion of renewable energy. [...]

Despite varying in complexity, both narratives can be recapped similarly using the NPF outlined earlier. They both pertain to the same context (high inflation), identify similar protagonists (Ukraine crisis, gas suppliers), construct a comparable plot (regardless of complexity), and imply that resolving the energy crisis (and associated supply issues) equates to addressing inflation.

In total, the two groups formulate quite similar inflation narratives, both in terms of language and content. The average text length ranges from two to five sentences for experts and from one to five sentences for journalists (middle 50% quartile in each case). In both groups very detailed explanations occur just as much as brief and simple ones. Some participants provide very clear narratives, while others attempt to identify and categorize as many potential influencing factors as possible (see above). A simple word count analysis reveals that both

groups, just as proven by the closed-text follow-up questions discussed above, focus mainly on Covid-related effects and the energy crisis as a result of the Russian war on Ukraine (Fig. 5).

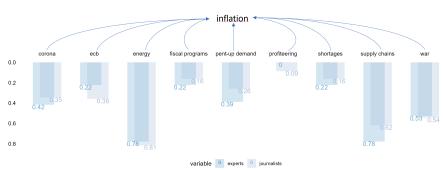


**Fig. 5:** Word clouds displaying the most frequently used terms (in English translation) in the narratives of both groups. Terms that appear in both word clouds are highlighted in dark green. For this analysis, all texts were spell-checked and converted to lowercase. Punctuation, numbers, symbols, and a small list of stop words were removed.

Incidence of inflation drivers. A subsequent quantitative content analysis confirms that, also in the free-text responses, journalists and economists agree on the significance of most inflation drivers. As described in section 3, the narratives were carefully reviewed to find both the nine predefined inflation drivers discussed earlier as well as other potential inflation drivers that were not considered yet. As shown in Figure 6, the most frequently mentioned factors in absolute terms are again the energy crisis and supply chain problems. As a kind of proxy for both factors, Covid (mainly responsible for supply chain problems) and the war in Ukraine (mainly responsible for the energy crisis) are the third and fourth most mentioned factors.

In line with the above findings, journalists were more likely than economists to cite the ECB's monetary policy as a cause of inflation. In addition, the items *profiteering* (companies raising prices to increase their profits), *raw material prices*, and *climate change* were mentioned more often in the narratives of journalists than in those of economists.

While the specific items chosen to explain inflation slightly varied between the two groups, both journalists and experts displayed similar levels of complexity in their narratives, typically citing between three and six different causes (Fig. 16, Appendix). These results complement the research by Andre et al. (2023), who found that laypersons tend to construct simpler inflation narratives than experts, using fewer causal factors in their explanations. The comparable complexity in journalists' and experts' narratives suggests that journalists, unlike laypeople, recognize the multifaceted nature of current inflation developments,



**Fig. 6:** Comparison of the most frequently mentioned inflation drivers between experts and journalists. The plot shows the share of respondents in each group who mentioned each item, with journalists' (violet) and experts' (blue) shares displayed in side-by-side bars for easy comparison. See Figure 13, Appendix, for a visualization of all mentioned drivers.

though direct comparisons with Andre et al.'s (2023) findings should be made cautiously given differences in study design and context.

Turning to **RQ3**, it can be concluded that both surveyed groups tell similar inflation stories on average. Most of these stories are complex, others are rather monocausal. The most frequently mentioned causes of inflation are the energy prices in Europe and supply chain issues following the Corona pandemic. These factors are often supplemented by elements such as monetary policy, fiscal programs, or labor shortages. Interestingly, journalists are more likely than experts to cite the monetary policy of the ECB and profiteering effects as a contributing cause.

# 4.3 Comparison with actual coverage

In a final step of this study, the inflation narratives discussed above are compared with the actual media coverage. The following excerpts illustrate how these inflation drivers were typically discussed as a cause in the media.

Examples of articles mentioning *profiteering* as a main driver

- "Prices are currently inflating unusually quickly and strongly. And some companies are even taking advantage of the situation to make more profit. Some people are therefore also talking about 'greedflation'." (Süddeutsche Zeitung, August 6th, 2022)
- "Conclusion: The companies that use this justification to significantly increase prices are using the minimum wage as an excuse to make more profit at the expense of their customers (and the employees they want to deprive of a fair wage)." (Süddeutsche Zeitung, October 8th, 2022)

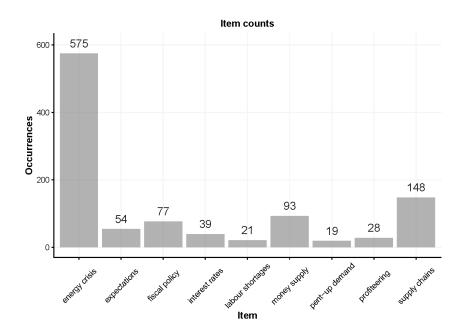
# Examples of articles mentioning *money supply* as a main driver

- "Consumer demand is high. At the same time, central banks are still flooding economies with cheap money. This combination must lead to inflation." (Süddeutsche Zeitung, January 3rd, 2022)
- "However, this time it is unfortunately not a boom that is driving up prices, but a mix of acute economic problems and reckless monetary policy. Shortages of raw materials and energy, supply bottlenecks, and a shortage of skilled workers are making production more difficult and more expensive. But while central banks around the world are already taking action to stabilize prices again, the top euro guardian Christine Lagarde has announced that she intends to continue her ultra-loose monetary policy for a long time to come." (*Welt*, January 7th, 2022)
- "Since the outbreak of coronavirus, the ECB has financed almost the entire budget deficits of the member states with its bond purchases. It may also buy government bonds in the future as part of a new program that was recently adopted if highly indebted countries such as Italy allegedly have to pay too high interest rates. The ECB will not be able to prevent such purchases from increasing the money supply and ultimately inflation." (*Handelsblatt*, August 23rd, 2022)

As illustrated in Figure 7, the analyzed newspapers by and large prioritized the same items that both journalists and experts found to be the most influential. Most inflation-related articles point to the energy crisis and supply chain issues.

Notably, mentions of the energy crisis as a driver of inflation substantially outnumber all other factors. While both survey groups identified the energy crisis as the most significant driver, its dominance in media coverage exceeded what would have been expected. Supply chain issues emerged as the second most frequently cited cause, though with considerably fewer mentions. Additionally, while experts consider the ECB's monetary policy to be a relatively weak inflation driver, it featured prominently in German media coverage in 2022. This pattern closely mirrors journalists' perceptions, as indicated by their personal narratives of inflation drivers (Figure 2), suggesting a potential relationship between journalists' individual perceptions and actual coverage. When grouping the items *interest rates* and *money supply* to one item ('ECB related causes'), this pattern presents itself with even more clarity. However, as this study does not examine causality, these findings should be interpreted as correlational rather than causal relationships. The observed pattern might, for example, also occur from journalists following specific news values (e.g., consonance with public discourse) or the endeavor of holding powerful institutions accountable.

**RQ4** can be answered as follows: The analysis of media coverage in the course of 2022 reveals that the inflation drivers most frequently mentioned in German



**Fig. 7:** Frequency of inflation drivers mentioned in German media coverage during 2022. Values indicate the number of articles citing each factor as a cause of inflation. The analysis is based on articles from *Handelsblatt, Die Welt,* and *Süddeutsche Zeitung.* 

media were the energy crisis and supply chain issues. These findings align with the narratives put forward by both journalists and experts, who identified these factors as the main contributors to the recent bout of inflation. However, there are notable differences in how other drivers were covered, especially the ECB.

#### 4.4 Discussion

Building on the empirical findings discussed above, several key insights emerge. Most strikingly, journalists and economists show substantial agreement in their assessment of primary inflation drivers, particularly regarding the energy crisis and supply chain disruptions. This alignment is noteworthy when viewed through the lens of the Narrative Policy Framework (Jones & McBeth, 2010): both groups construct similar stories with comparable settings (post-pandemic economic environment), characters (energy suppliers, manufacturing firms, government, central bank), plots, and morals. Both groups predominantly blame the same causes for inflation in their backward-looking narratives, promoting a narrative that emphasizes external shocks as the main contributors to inflation, suggesting that there is no reason to lose confidence in economic institutions. Moreover, journalists match experts in narrative complexity, typically citing between three and six different causes for inflation. This general alignment somewhat contrasts with previous research (Becker et al., 1994; Jacob et al., 2011), that found significant divergences between journalists' and economists' interpretations of the economy. The observed convergence might reflect the intensified interaction between journalists and economic experts (Call et al., 2022; Damstra & De Swert, 2021).

However, regarding the narratives' plots and morals, also some differences emerge. While experts consider money supply and current interest rate levels two relatively minor factors, journalists place greater emphasis on the ECB's role. Furthermore, the survey findings show that journalists were more pessimistic about the persistence of inflation rates compared to experts. This divergence can possibly be explained by previous studies holding that journalists tend to develop implicit theories about economic circumstances through experience, which shapes their interpretation of economic events (Gitlin, 2003; Schultze, 2023). The constant interaction with various sources and interest groups (Maat, 2007; Reid et al., 2020; Rocci & Luciani, 2016), as well as different levels of formal economic education compared to economists (Becker et al., 1994), may further explain why journalists, on average, formulate slightly different narratives than experts.<sup>5</sup>. At the same time, there was considerable disagreement among the journalists themselves. No other factor is mentioned more frequently as "covered too much" or "not covered enough" than the ECB. Furthermore, the results suggest that journalists are quite critical of German inflation reporting, pointing out issues such as oversimplified explanations and sensationalism. Overall, it becomes clear that it is too simplistic to treat "the media" as a single entity or to view journalists as mere intermediaries of a central bank's forward guidance.

Particularly noteworthy is how journalistic interpretations appear to be reflected in media coverage. The analysis of 2022 media content reveals some level of alignment between journalists' personal narratives and the prominence of different inflation drivers in news coverage. This alignment is especially evident in the emphasis placed on the ECB's role (money supply, interest rate decisions), despite economists considering monetary policy a relatively minor factor. This observed pattern can be linked to Shoemaker and Reese's (1996) gatekeeping theory, which suggests that journalists' personal beliefs and experiences influence their selection and framing of news. However, journalism training strives to tame these instincts. Constantly questioning one's own work and the coverage of others is part of their everyday-routine. As a professional norm, journalists are supposed to aim at a state of intellectual and ideological independence. What's more, journalistic standards require that powerful institutions and individuals be held to account. If the journalistic media turn out to be a "watchdog that didn't bark" (as Starkman (2014) formulates in reference to the lack of critical coverage in the run-up to the 2008 financial crisis), they risk damaging their

<sup>&</sup>lt;sup>5</sup> The journalists who participated in this survey showed varying levels of formal economic education, ranging from no specific economic training (40%) to graduatelevel economics degrees (10%), with most having completed either business-focused A-levels or a bachelor's degree with economic components. See Figure 12, Appendix

reputation. Consequently, there may be several factors at work that influence the observed pattern, apart from a narrative-based news bias effect.

The findings highlight the importance of further investigating how journalists' personal narratives come into play and how they might impact public discourse. While this study provides valuable insights into these relationships, it is important to acknowledge its limitations. The relatively small sample sizes, particularly for economists, necessitates caution in generalizing the findings. Future research could benefit from larger, more diverse samples and longitudinal studies to track how narratives evolve over time. As demonstrated by Andre et al. Andre et al. (2023), the views of US citizens on the causes of inflation are closely linked to the media outlets they follow. It would be intriguing to observe how these differences in media profiles influence (or are influenced by) journalists' convictions. Additionally, while the focus on German media provides a valuable case study, comparative analyses across different countries and economic contexts could offer broader insights into the formation and dissemination of inflation narratives. Most importantly, the observed relationships between journalists' narratives and media coverage should be interpreted with caution. While this study identifies notable correlations, it does not establish causality. Future research examining the causal relationships between journalists' narratives, media coverage, and public perception of inflation would significantly advance our understanding of how economic narratives form and spread.

# 5 Conclusion

Narratives play an important role in the formation of market participants' expectations, especially during times of uncertainty. Consumers rely not only on figures and forecasts, but also on stories, convictions, and commonly shared beliefs to make sense of the world and predict future developments. Media coverage is crucial in this context, as it is the primary source of information on the current state of the economy for most economic agents (Blinder & Krueger, 2004; Hong et al., 2022; Kumar et al., 2015; Nimark & Pitschner, 2019). Thus, it is not surprising that the topic of media narratives gets more and more popular in economic research (Eliaz & Spiegler, 2020; Flynn & Sastry, 2022; Gueta et al., 2024; Larsen & Thorsrud, 2019; Sharpe et al., 2020; Tuckett et al., 2020). However, to this day, little research has been done on the narratives that journalists—the architects behind media coverage—utilize when crafting news in times of uncertainty. The present study aimed to fill this gap by examining the inflation narratives of German economic journalists.

This research employed a mixed-method approach, combining survey data from journalists and economists with a comprehensive analysis of media coverage. Online surveys were conducted in November and December 2022, when German inflation rates peaked at 10.4%. Furthermore, a large corpus of articles in 2022 related to inflation was analyzed using state-of-the-art natural language processing techniques. The findings reveal that both journalists and economists generally view inflation as a short-term phenomenon, although journalists are significantly more likely to consider it a long-term problem. Both groups primarily attribute the rise in inflation to the energy crisis and supply chain disruptions. However, journalists are more inclined to cite specific protagonists, particularly the European Central Bank (ECB) and companies raising prices to increase profits. Notably, the role of the ECB is highly contentious among journalists, with divergent views on its coverage in the media. Some journalists are critical of their profession, citing oversimplified explanations and sensationalism in inflation reporting. The analysis of media coverage in 2022 largely aligns with the narratives expressed by journalists and experts, with the energy crisis and supply chain issues being the most frequently mentioned drivers. Interestingly, the ECB's monetary policy features prominently in media coverage, despite being considered a relatively minor factor by economists.

While this study identifies some notable differences in the inflation narratives of experts and journalists—particularly regarding the impact of "greedflation" and monetary policy—the small sample size limits the generalizability of the findings. Therefore, these results should be interpreted cautiously and viewed as a starting point for further research.

In conclusion, this study highlights the complex interplay between journalistic perceptions, expert opinions, and media coverage in shaping public understanding of economic phenomena like inflation. It underscores the importance of considering the role of media professionals in the formation and dissemination of economic narratives, particularly during periods of uncertainty.

# References

- Alston, R. M., Kearl, J. R., & Vaughan, M. B. (1992). Is there a consensus among economists in the 1990's? *The American Economic Review*, 82(2), 203– 209.
- Andre, P., Haaland, I., Roth, C., & Wohlfart, J. (2023). Narratives about the macroeconomy.
- Ash, E., Gauthier, G., & Widmer, P. (2021). Relatio: Text semantics capture political and economic narratives. arXiv preprint arXiv:2108.01720.
- Attfield, S., & Dowell, J. (2003). Information seeking and use by newspaper journalists. Journal of documentation, 59(2), 187–204.
- Becker, W., Walstad, W. B., & Watts, M. (1994). A Comparison of The Views of Economists, Economic Educators, Teachers, and Journalists on Economic Issues. In W. B. Walstad (Ed.), An International Perspective on Economic Education (pp. 65–87). Springer Netherlands. https://doi. org/10.1007/978-94-011-1382-3\_5
- Bénabou, R., Falk, A., & Tirole, J. (2018). Narratives, imperatives, and moral reasoning (tech. rep.). National Bureau of Economic Research.
- Berger, H., Ehrmann, M., & Fratzscher, M. (2011). Monetary policy in the media. Journal of Money, Credit and Banking, 43.4, 689–709.

- Blinder, A. S., & Krueger, A. B. (2004). What does the public know about economic policy, and how does it know it?
- Boumans, D., Müller, H., & Sauer, S. (2023). How media content influences economic expectations: Evidence from a global expert survey. *Journal* of Forecasting, 1–14. https://doi.org/10.1002/for.2961
- Brown, T., Mann, B., Ryder, N., Subbiah, M., Kaplan, J. D., Dhariwal, P., Neelakantan, A., Shyam, P., Sastry, G., Askell, A., et al. (2020). Language models are few-shot learners. Advances in neural information processing systems, 33, 1877–1901.
- Bubeck, S., Chandrasekaran, V., Eldan, R., Gehrke, J., Horvitz, E., Kamar, E., Lee, P., Lee, Y. T., Li, Y., Lundberg, S., Nori, H., Palangi, H., Ribeiro, M. T., & Zhang, Y. (2023). Sparks of artificial general intelligence: Early experiments with GPT-4. arXiv preprint 2303.12712.
- Call, A. C., Emett, S. A., Maksymov, E., & Sharp, N. Y. (2022). Meet the press: Survey evidence on financial journalists as information intermediaries. Journal of Accounting and Economics, 73(2), 101455. https://doi.org/ 10.1016/j.jacceco.2021.101455
- Chahrour, R., Nimark, K., & Pitschner, S. (2021). Sectoral Media Focus and Aggregate Fluctuations. American Economic Review, 111(12), 3872– 3922. https://doi.org/10.1257/aer.20191895
- Chang, Y., Wang, X., Wang, J., Wu, Y., Yang, L., Zhu, K., Chen, H., Yi, X., Wang, C., Wang, Y., et al. (2023). A survey on evaluation of large language models. ACM Transactions on Intelligent Systems and Technology.
- Chiang, W.-L., Zheng, L., Sheng, Y., Angelopoulos, A. N., Li, T., Li, D., Zhang, H., Zhu, B., Jordan, M., Gonzalez, J. E., et al. (2024). Chatbot arena: An open platform for evaluating llms by human preference. arXiv preprint arXiv:2403.04132.
- Conrad, C., Enders, Z., & Glas, A. (2022). The role of information and experience for households' inflation expectations. *European Economic Review*, 143, 104015. https://doi.org/10.1016/j.euroecorev.2021.104015
- Crow, D., & Jones, M. (2018). Narratives as tools for influencing policy change. Policy & Politics, 46(2), 217–234.
- Damstra, A., & De Swert, K. (2021). The making of economic news: Dutch economic journalists contextualizing their work [Publisher: SAGE Publications]. Journalism, 22(12), 3083–3100. https://doi.org/10.1177/ 1464884919897161
- Davison, W. P. (1983). The third-person effect in communication. Public opinion quarterly, 47(1), 1–15.
- Dougal, C., Engelberg, J., García, D., & Parsons, C. A. (2012). Journalists and the Stock Market. The Review of Financial Studies, 25(3), 639–679. https://doi.org/10.1093/rfs/hhr133
- Eliaz, K., & Spiegler, R. (2020). A model of competing narratives. American Economic Review, 110(12), 3786–3816.

- Eliaz, K., & Spiegler, R. (2024). News media as suppliers of narratives (and information). arXiv preprint arXiv:2403.09155.
- Engelmann, I. (2010). Journalistische Instrumentalisierung von Nachrichtenfaktoren. Einflüsse journalistischer Einstellungen auf simulierte Issue-, Quellen- und Statement-Entscheidungen. Medien & Kommunikationswissenschaft, 58(4), 525–543. https://doi.org/10.5771/1615-634x-2010-4-525
- Entman, R. M. (1993). Framing: Toward Clarification of a Fractured Paradigm. Journal of Communication, 43(4), 51–58. https://doi.org/10.1111/j. 1460-2466.1993.tb01304.x
- Fan, L., Li, L., Ma, Z., Lee, S., Yu, H., & Hemphill, L. (2023). A bibliometric review of large language models research from 2017 to 2023. arXiv preprint 2304.02020.
- Fettig, D. (1998). Interview with laurence meyer. The Region, (Sep).
- Fiore, F. D., Goel, T., Igan, D., & Moessner, R. (2022, May). Rising household inflation expectations: what are the communication challenges for central banks? (BIS Bulletins No. 55). Bank for International Settlements. https://ideas.repec.org/p/bis/bisblt/55.html
- Flynn, J. P., & Sastry, K. (2022). The macroeconomics of narratives. Available at SSRN 4140751.
- Galtung, J., & Ruge, M. H. (1965). The structure of foreign news: The presentation of the congo, cuba and cyprus crises in four norwegian newspapers. *Journal of peace research*, 2(1), 64–90.
- Gennaioli, N., & Shleifer, A. (2018). A crisis of beliefs: Investor psychology and financial fragility.
- Gentzkow, M., & Shapiro, J. M. (2010). What Drives Media Slant? Evidence From U.S. Daily Newspapers. *Econometrica*, 78(1), 35–71. https://doi. org/10.3982/ECTA7195
- Gilardi, F., Alizadeh, M., & Kubli, M. (2023). Chatgpt outperforms crowd workers for text-annotation tasks. Proceedings of the National Academy of Sciences, 120(30), e2305016120.
- Gitlin, T. (2003). The whole world is watching: Mass media in the making and unmaking of the new left. Univ of California Press.
- Gueta, A., Feder, A., Gekhman, Z., Goldstein, A., & Reichart, R. (2024). Can llms learn macroeconomic narratives from social media? arXiv preprint arXiv:2406.12109.
- Haaland, I., Roth, C., & Wohlfart, J. (2023). Designing information provision experiments. Journal of economic literature, 61(1), 3–40.
- Habermas, J. (1991). The structural transformation of the public sphere: An inquiry into a category of bourgeois society. MIT press.
- Hackett, R. A. (1984). Decline of a paradigm? bias and objectivity in news media studies. Critical Studies in Media Communication, 1(3), 229–259.

Hanitzsch, T., Hanusch, F., Mellado, C., Anikina, M., Berganza, R., Cangoz, I., Coman, M., Hamada, B., Elena Hernández, M., Karadjov, C. D., et al. (2011). Mapping journalism cultures across nations: A comparative study of 18 countries. *Journalism studies*, 12(3), 273–293.

- Hong, Y., Jiang, F., Meng, L., & Xue, B. (2022). Forecasting inflation with economic narratives and machine learning. *Available at SSRN 4175749*.
- Jacob, R., Christandl, F., & Fetchenhauer, D. (2011). Economic experts or laypeople? How teachers and journalists judge trade and immigration policies. *Journal of Economic Psychology*, 32(5), 662–671. https://doi. org/10.1016/j.joep.2011.06.006
- Jones, M. D., & McBeth, M. K. (2010). A narrative policy framework: Clear enough to be wrong? *Policy studies journal*, 38(2), 329–353.
- Jost, P., & Koehler, C. (2021). Who shapes the news? Analyzing journalists' and organizational interests as competing influences on biased coverage [Publisher: SAGE Publications]. Journalism, 22(2), 484–500. https:// doi.org/10.1177/1464884918788270
- Kanouse, D. E., & Hanson Jr, L. R. (1987). Negativity in evaluations. Preparation of this paper grew out of a workshop on attribution theory held at University of California, Los Angeles, Aug 1969.
- Kay, J., & King, M. (2020). Radical uncertainty: Decision-making beyond the numbers. WW Norton & Company.
- Kepplinger, H. M., & Lemke, R. (2016). Instrumentalizing Fukushima: Comparing Media Coverage of Fukushima in Germany, France, the United Kingdom, and Switzerland [Publisher: Routledge]. *Political Communication*, 33(3), 351–373. https://doi.org/10.1080/10584609.2015.1022240
- Kumar, S., Afrouzi, H., Coibion, O., & Gorodnichenko, Y. (2015). Inflation targeting does not anchor inflation expectations: Evidence from firms in new zealand. *Brookings Papers on Economic Activity*, 2015(2), 151– 225.
- Lamla, M. J., & Lein, S. M. (2014). The role of media for consumers' inflation expectation formation. Journal of Economic Behavior & Organization, 106, 62–77.
- Lange, K.-R., Reccius, M., Schmidt, T., Müller, H., Roos, M. W., & Jentsch, C. (2022). Towards extracting collective economic narratives from texts. Ruhr Economic Papers.
- Larsen, V. H., & Thorsrud, L. A. (2019). Business cycle narratives.
- Larsen, V. H., Thorsrud, L. A., & Zhulanova, J. (2021). News-driven inflation expectations and information rigidities. *Journal of Monetary Economics*, 117, 507–520. https://doi.org/10.1016/j.jmoneco.2020.03.004
- Lengauer, G., Esser, F., & Berganza, R. (2012). Negativity in political news: A review of concepts, operationalizations and key findings. *Journalism*, 13(2), 179–202.
- Maat, H. P. (2007). How promotional language in press releases is dealt with by journalists: Genre mixing or genre conflict? The Journal of Business Communication (1973), 44(1), 59–95.
- Macaulay, A., & Song, W. (2023). News media, inflation, and sentiment. AEA Papers and Proceedings, 113, 172–176.

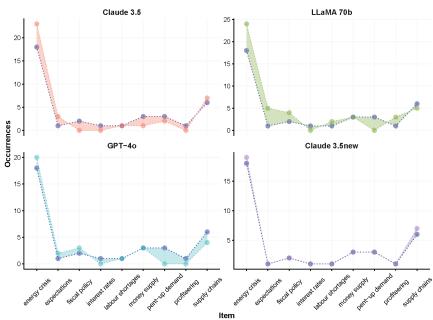
- Madaan, A., Tandon, N., Gupta, P., Hallinan, S., Gao, L., Wiegreffe, S., Alon, U., Dziri, N., Prabhumoye, S., Yang, Y., Gupta, S., Majumder, B. P., Hermann, K., Welleck, S., Yazdanbakhsh, A., & Clark, P. (2023). Self-Refine: Iterative Refinement with Self-Feedback. Advances in Neural Information Processing Systems, 36, 46534–46594. Retrieved July 6, 2024, from https://proceedings.neurips.cc/paper\_files/paper/2023/hash/ 91edff07232fb1b55a505a9e9f6c0ff3-Abstract-Conference.html
- Manski, C. F. (2004). Measuring expectations. *Econometrica*, 72(5), 1329–1376.
- Mast, C. (2012). Neuorientierung im wirtschaftjournalismus: Redaktionelle strategien und publikumserwartungen. Springer-Verlag.
- Mayring, P. (2004). Qualitative content analysis. a companion to qualitative research, 1 (2), 159-176.
- McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. Public opinion quarterly, 36(2), 176–187.
- Mellon, J., Bailey, J., Scott, R., Breckwoldt, J., Miori, M., & Schmedeman, P. (2024). Do ais know what the most important issue is? using language models to code open-text social survey responses at scale. *Research & Politics*, 11(1), 20531680241231468.
- Mothes, C. (2017). Biased objectivity: An experiment on information preferences of journalists and citizens. Journalism & Mass Communication Quarterly, 94(4), 1073–1095.
- Müller, H. (2023, July). Challenging Economic Journalism: Covering Business and Politics in an Age of Uncertainty (1st ed. 2023 Edition). Palgrave Macmillan.
- Müller, H. ((forthcoming) 2025). Narratives and the media. In I. Köhler, L. Lenel, A. Nützenadel, J. Streb, & eds. (forthcoming) (Eds.), The routledge handbook of economic expectations in historical perspective. Routledge.
- Müller, H., Rieger, J., & Hornig, N. (2021, March). "We're rolling" Our Uncertainty Perception Indicator (UPI) in Q4 2020: Introducing RollingLDA, a New Method for the Measurement of Evolving Economic Narratives. https://doi.org/10.17877/DE290R-21974
- Müller, H., Schmidt, T., Rieger, J., Hornig, N., & Hufnagel, L. M. (2023). The Inflation Attention Cycle [Publisher: TU Dortmund]. DoCMA Working Paper;13. https://doi.org/10.17877/DE290R-23141
- Müller, H., Schmidt, T., Rieger, J., Hufnagel, L. M., & Hornig, N. (2022). A German Inflation Narrative [Publisher: TU Dortmund]. DoCMA Working Paper; 9. https://doi.org/10.17877/DE290R-22632
- Müller, H., & von Nordheim, G. (2024). Viel kraft-wenig biss: Wirtschaftsberichterstattung in ard und zdf.
- Nimark, K. P., & Pitschner, S. (2019). News media and delegated information choice. Journal of Economic Theory, 181, 160–196. https://doi.org/10. 1016/j.jet.2019.02.001
- Patterson, T. E., & Donsbagh, W. (1996). News decisions: Journalists as partisan actors [ISBN: 1058-4609 Publisher: Taylor & Francis]. *Political* communication, 13(4), 455–468.

- Reid, M., Bergman, Z., Plessis, S. D., Bergman, M. M., & Siklos, P. (2020). Inflation and Monetary Policy: What South African Newspapers Report in an Era of Policy Transparency [Publisher: Routledge \_eprint: https://doi.org/10.1080/00213624.2020.1787045]. Journal of Economic Issues, 54(3), 732-754. https://doi.org/10.1080/00213624.2020.1787045
- Reid, M., Siklos, P., Guetterman, T., & Du Plessis, S. (2021). The role of financial journalists in the expectations channel of the monetary transmission mechanism. *Research in International Business and Finance*, 55, 101320. https://doi.org/10.1016/j.ribaf.2020.101320
- Rocci, A., & Luciani, M. (2016). Economic-financial journalists as argumentative intermediaries. *Journal of Argumentation in Context*, 5(1), 88–111.
- Roos, M., & Reccius, M. (2024). Narratives in economics. Journal of Economic Surveys, 38(2), 303–341. https://doi.org/10.1111/joes.12576
- Schnabel, I. (2021). Das gespenst der inflation. Der EZB-Blog. https://www.ecb.europa.eu/press/blog/date/2021/html/ecb.blog210914~a514f7c553.de.html
- Schönbach, K., & Noelle-Neumann, E. (1977). Trennung von nachricht und meinung: Empirische untersuchung eines journalistischen qualitätskriteriums. Verlag Karl Alber.
- Schultze, D. (2023). Noise: Wirtschaftsberichterstattung in der ard-sendung börse vor acht. Herbert von Halem Verlag.
- Shanahan, E. A., Jones, M. D., McBeth, M. K., & Radaelli, C. M. (2018). The narrative policy framework. In *Theories of the policy process* (pp. 173– 213). Routledge.
- Sharpe, S. A., Sinha, N. R., & Hollrah, C. A. (2020). The Power of Narratives in Economic Forecasts. *Finance and Economics Discussion Series*, 2020(001r1), 1–58. https://doi.org/10.17016/FEDS.2020.001r1
- Shiller, R. J. (2017). Narrative Economics. American Economic Review, 107(4), 967–1004. https://doi.org/10.1257/aer.107.4.967
- Shiller, R. J. (2019). Narrative economics: How stories go viral & drive major economic events. Princeton University Press.
- Shoemaker, P. J., & Reese, S. D. (1996). *Mediating the message*. White Plains, NY: Longman.
- Shoemaker, P. J., & Vos, T. P. (2008). Media Gatekeeping [Num Pages: 15]. Routledge.
- Song, W., & Macaulay, A. (2024, June). Narrative-Driven Fluctuations in Sentiment: Evidence Linking Traditional and Social Media. https://doi.org/ 10.2139/ssrn.4876678
- Soroka, S. N. (2006). Good news and bad news: Asymmetric responses to economic information. *The journal of Politics*, 68(2), 372–385.
- Starkman, D. (2014). The watchdog that didn't bark: The financial crisis and the disappearance of investigative journalism. Columbia University Press.
- Tambini, D. (2010). What Are Financial Journalists For? [Publisher: Routledge \_eprint: https://doi.org/10.1080/14616700903378661]. Journalism Studies, 11(2), 158–174. https://doi.org/10.1080/14616700903378661

- Tilly, S., & Livan, G. (2021, July). Predicting market inflation expectations with news topics and sentiment [arXiv:2107.07155 [cs]]. Retrieved August 23, 2022, from http://arxiv.org/abs/2107.07155
- Tuckett, D., Holmes, D., Pearson, A., & Chaplin, G. (2020). Monetary Policy and the Management of Uncertainty: A Narrative Approach. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3627721
- Tuckett, D., & Nikolic, M. (2017). The role of conviction and narrative in decision-making under radical uncertainty. *Theory & Psychology*, 27(4), 501–523. https://doi.org/10.1177/0959354317713158
- Van Hout, T., & Macgilchrist, F. (2010). Framing the news: An ethnographic view of business newswriting.
- Velthuis, O. (2015). Making monetary markets transparent: The European Central Bank's communication policy and its interactions with the media [Publisher: Routledge]. *Economy and Society*, 44(2), 316–340. https: //doi.org/10.1080/03085147.2015.1013355
- Watson, B. R. (2014). Assessing ideological, professional, and structural biases in journalists' coverage of the 2010 BP oil spill [ISBN: 1077-6990 Publisher: SAGE Publications Sage CA: Los Angeles, CA]. Journalism & Mass Communication Quarterly, 91(4), 792–810.
- Wilke, J. (2011). Finanz-und wirtschaftskrisen in der deutschen tagespresse. ein historischer rückblick. *Communicatio Socialis*, 44(4), 462–484.
- Zhao, W. X., Zhou, K., Li, J., Tang, T., Wang, X., Hou, Y., Min, Y., Zhang, B., Zhang, J., Dong, Z., Du, Y., Yang, C., Chen, Y., Chen, Z., Jiang, J., Ren, R., Li, Y., Tang, X., Liu, Z., ... Wen, J.-R. (2023). A survey of large language models. arXiv preprint 2303.18223.
- Ziems, C., Held, W., Shaikh, O., Chen, J., Zhang, Z., & Yang, D. (2024). Can large language models transform computational social science? *Computational Linguistics*, 50(1), 237–291.

#### APPENDIX

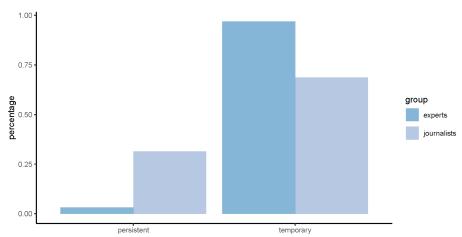
#### 1.1 Model comparison



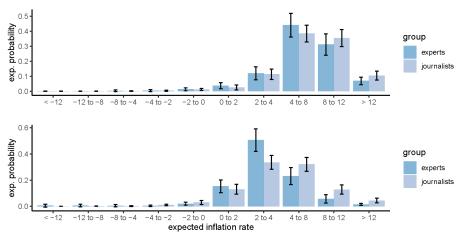
Comparisons of different models with human annotaion

**Fig. 8:** Comparisons of different language models in identifying inflation drivers compared to human annotation. The chart shows the performance of four language models—*Claude 3.5 Sonnet* (claude-3-5-sonnet-20240620), *GPT-4o*, *LLaMA 70b*, and *Claude 3.5 Sonnet latest* (claude-3-5-sonnet-20241022)—in detecting the presence of predefined inflation drivers in a validation set of German news articles. The models' outputs are evaluated against a human-annotated gold standard, with the y-axis indicating the model's occurrences for each inflation driver item. The results demonstrate that the claude-3-5-sonnet-20241022 model substantially outperformed the other tested models in aligning with human judgments on this task.

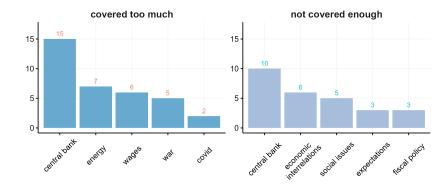
1.2 Survey Results



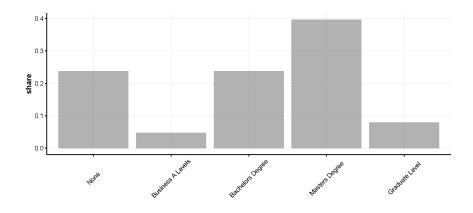
**Fig. 9:** Expected persistency of inflation. Note: Values on the y-axis indicate the percentage of respondents choosing each answer. "Temporary" corresponds to the answer "In 5 years at the latest, the inflation rate will be below 3%", "Permanent"" means "In 5 years, the inflation rate will still be above 3%". A Pearson's Chi-squared test, which tests the null hypothesis that there is no relationship between inflation expectation and survey group, yields a p-value of 0.004, rejecting the null hypothesis at a 5% significance level and indicating that the difference in inflation expectations between the two groups is statistically significant.



**Fig. 10:** Expected average inflation rate for the next 12 months (above) and the next 60 months (below) as perceived by experts and journalists. The graph displays the mean expected inflation rates for each group, with the black lines indicating the standard error.



**Fig. 11:** Which topics do journalists rate "covered too much" or "not covered enough"?. Values indicate how often each category was mentioned by respondents. Only the six most mentioned categories are shown.



**Fig. 12:** Distribution of formal economic education levels among surveyed journalists. Values indicate the share of respondents with each qualification level.

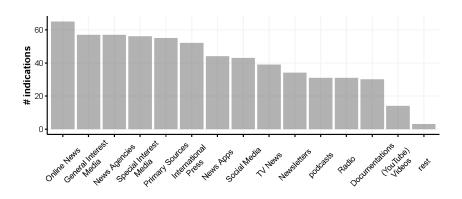
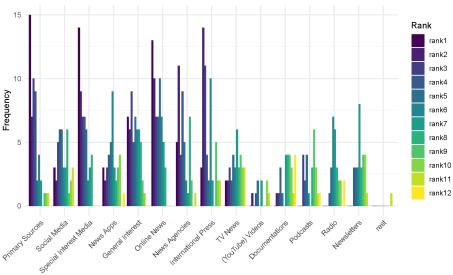
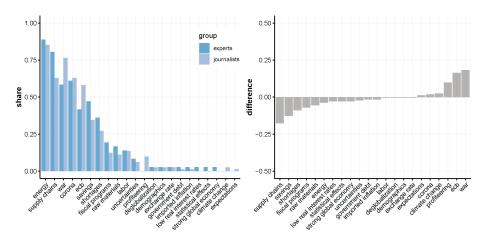


Fig. 13: Which resources do journalists most frequently resort to when informing about politics?

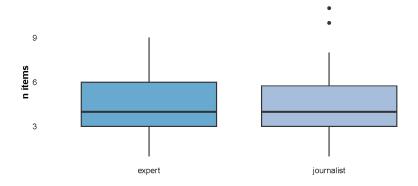


Media Category

**Fig. 14:** Which resources do journalists most frequently resort to when informing about politics and the economy—and how do they rank them? Multiple indications are allowed. Figure shows how often (y) each item (x) is ranked at rank (Rank) position, with each bar representing a media category and each color corresponding to a specific rank.

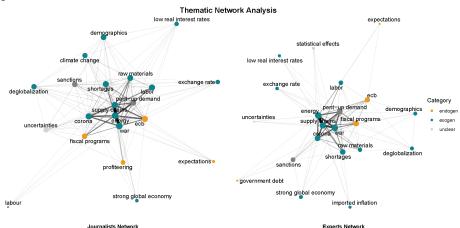


**Fig. 15:** Comparison of all mentioned inflation drivers between experts and journalists. The left plot shows the share of respondents in each group who mentioned each item, with journalists' and experts' shares displayed in side-by-side bars for easy comparison. The right plot highlights the difference in mentions between groups, sorted by the magnitude of the difference. Positive values indicate higher mentions by journalists, while negative values indicate higher mentions by experts. The y-axes have been adjusted to ensure consistent scaling between the left and right plots.



**Fig. 16:** Number of inflation drivers mentioned in narratives by experts and journalists. The boxes show the middle 50% of responses, with the horizontal line indicating the median. Whiskers extend to the most extreme values within 1.5 times the interquartile range, and points represent outliers.

Thematic Network Analysis. As a supplementary analysis, a thematic network analysis was performed. This approach was chosen to gain deeper insights into the complex relationships between inflation drivers as perceived by journalists and economists, as it goes beyond simple frequency counts and allows for a visual and structural examination of how different factors are interconnected in the narratives of each group. By mapping the co-occurrence of inflation drivers within responses, the network analysis reveals not only the prominence of individual factors but also their relationships and relative positioning within the broader conceptual framework of inflation causes. The analysis reveals that the items energy crisis, supply chains, war, and Covid are not only the most frequently mentioned causes, they are also mostly mentioned together. These four factors end up being located very close and centered, indicating that both journalists (left) and experts (right) mostly mention all four factors together in their inflation narratives (Figure 17). This illustrates well how both groups formulate rather complex, multi-causal inflation narratives when asked in an open-text question.



**Fig. 17:** Thematic Network Analysis of Inflation Drivers as Perceived by Journalists and Experts. Node size indicates frequency of mention, with central positioning reflecting higher prevalence. Edge thickness represents co-occurrence strength between drivers. Colors denote the nature of drivers: exogenous (blue), endogenous (orange), or unclear (teal). 'Government debt' was excluded due to infrequent mentions (1 journalist, 2 experts).

The graphs also indicate differences between the groups, with *climate change* and *profiteering* only appearing in journalists' narratives, and *imported inflation* and *statistical effects* only in experts' accounts. Moreover, the journalists' network exhibits a more interconnected pattern, with numerous edges between peripheral factors. This suggests a rather complex, multifaceted understanding of inflation, which might reflect the journalists' tendency to synthesize information from various sources and draw broader connections. In contrast, the experts' network displays a more centralized, star-like structure, with fewer connections between outer nodes and stronger links to central factors such as *corona*, *en*- *ergy*, and *supply chains*. This pattern could indicate a more focused, potentially hierarchical view of inflation drivers among experts, emphasizing direct causal relationships with core factors.

42

Questionnaire (experts)

# What is this survey about?

This survey is about your views on the inflation rate in Germany. We want to find out how German economists think about inflation: where does it come from, how long will it stay, what factors will they influence in the future.

We are very interested in your thoughts and assessments. There are no wrong answers. The survey is anonymous. All information is voluntary. However, we would ask you to always answer honestly. Even if you feel that another answer is "desired" - please listen to your feeling.

#### Thank you for participating!

This survey contains 13 questions.

### Important

On the next page you will find an open question. We would like to ask you to record your thoughts and views - in your own words - there.

In our experience, it takes about two minutes to answer the question. This answer is particularly valuable for our research. So please take a little time and answer conscientiously and honestly.

## Why has the inflation rate in Germany increased?

In the years 2000-2020, the inflation rate in Germany was never higher than 3%. With a few exceptions, it was consistently very close to the ECB's target (2%).

However, the inflation rate has been rising for over a year. One year ago it was 3.1%, well above the average of the last 20 years. <u>Currently, it is</u> 10.4% ( as of November 2022).

#### What do you think: What has led to this rise in inflation?

(Please answer in full sentences)

Remember that the inflation rate has never been higher than 3% in the last 20 years. However, it is currently 10.4%. **What do you think: is this level permanent or temporary?** 

Please select only one of the following answers:

O Temporary: In 5 years at the latest, inflation will be below 3%

OPermanent: In 5 years the inflation rate will still be above 3%

In some of the following questions, we will ask you how likely you think certain developments are. Specifically, we will ask you for percentages.**Your partial answers can take any value from 0 to 100.** 

The only important thing is that the probabilities you give to scenarios must add up to 100% per question.

For example, as follows:

- With a 70% chance, I think the sun will shine permanently tomorrow
- With 20% probability the sun will be covered by clouds from time to time
- With 10% probability it will be permanently covered

We are interested in how likely you think the inflation trend is.

# In your opinion, what is the percentage probability that the following scenarios will become reality in the next 12 months?

The inflation rate will be 12% or higher amount	
The inflation rate will be between 8% and 12%	
The inflation rate will be between 4% and 8%	
The inflation rate will be between 2% and 4% are	[
The inflation rate will be between 0% and 2%	
The deflationary rate (the opposite of	
inflation) will be between 0% and 2% amount	
The deflationary rate (the opposite of	
inflation) will be between 2% and 4% amount	
The deflationary rate (the opposite of	
inflation) will be between 4% and 8% amount	L
The deflationary rate (the opposite of	
inflation) will be between 8% and 12%	
amount	
The deflationary rate (the opposite of	
inflation) will be 12% or higher	ļ

Now refer to the next 4-5 years (48-60 months in the future
---

In your opinion, what is the percentage probability for the following scenarios?

Please enter your answer(s) here:

The inflation rate will be 12% or higher amount

The inflation rate will be between 8% and 12%

The inflation rate will be between 4% and 8%

The inflation rate will be between 2% and 4% are

The inflation rate will be between 0% and 2%

The deflationary rate (the opposite of inflation) will be between 0% and 2% amount

The deflationary rate (the opposite of inflation) will be between 2% and 4% amount

The deflationary rate (the opposite of inflation) will be between 4% and 8% amount

The deflationary rate (the opposite of inflation) will be between 8% and 12% amount

The deflationary rate (the opposite of inflation) will be 12% or higher

er	
and	
and	
and	Î
and	
-	
:	· · · · · · · · · · · · · · · · · · ·
6	

# Why has the inflation rate in Germany increased?

There are many possible explanations for why inflation is currently at 10.4%. Below we show you 10 reasons that are often mentioned in the public discussion as influencing factors.

#### We are interested in the importance given to possible influencing factors .

We would therefore ask you to weigh the factors below so that the individual values add up to 100. If you think all factors have the same influence, give each factor a value of 10.

#### How do you estimate the impact of the following factors on the current inflation rate?

Please enter your answer(s) here:	
High production costs of the companies	
due to many vacant positions	
(for example, because many in Corona	
Lost or active in their job	
have changed)	
High production costs of the companies	
due to disturbances in the	ļ
Supply chains	
High demand for goods and	
Services based on	
Government expenditure and	
Rescue programmes (short-time allowance,	
Discount on fuel, VAT reduction, etc.)	
Increased electricity and heating costs due to	
the global energy crisis	L F
The European Central Bank has too much	
Money put into circulation	
High demand for goods and	
Services based on the	ļJ
Reopening the economy after Corona	
(money that households have previously save	d,
is now output)	<u>ا</u>
Central bank interest rates too low	
High inflation expectations for the	
Future that will lead to	
Consumers prefer purchases,	
Employees Higher wage claims	
and companies their prices	
increase	
Strong price increases of	
Companies to increase profits	
Other reasons	

#### What other factors do you think contributed to the current inflation rate?

Now we are interested in your assessment of how much the above factors will play a role in the future.

#### Which of the following factors do you expect will influence inflation over the next 12 months?

Please select the correct answer for each item:

	Will play a role	Won't matter
High production costs of the companies due to many unfilled jobs (for example, because many have lost their job in times of corona or have actively changed)		
High production costs of companies due to supply chain disruptions	C}	S
High demand for goods and services due to government spending and rescue programs (short-time allowance, discount on fuel, VAT reduction, etc.)	C	0
Increased electricity and heating costs due to the global energy crisis	C	C
The European Central Bank has put too much money into circulation	Ç	C.
High demand for goods and services due to the re-opening of the economy after Corona (money that households have previously saved is now being spent)	Č	C
Central bank interest rates too low	C	0
High inflation expectations for the future, which lead to consumers preferring purchases, employees demanding higher wages and companies raising their prices as a precaution	C	
Strong price increases by companies to increase profits	<u>C</u>	C
Other reasons	C	С
	0	0

#### What other aspects do you think will influence the inflation rate in future?

Please enter your answer here:

There is a lot of news about inflation in the media these days. The number of articles dealing with inflation is at its highest in 20 years. We are interested in whether and how the reporting changes the citizens' view on inflation.

## How do you estimate the impact of inflation reporting on the following variables?

Please select the correct answer for each item:

	0 - There is no influence	1	2	3	4	5 - There is a strong influence
Acute inflation perception of households	0	0	0	0	0	0
Inflation expectations of households for the near future	0	0	0	0	0	0

#### Stay up to date

If you would like to be kept informed of the results of the investigation, please click on Yes. In order to be able to reach you in this case, please write an empty e-mail with the subject "Research results" to tobias3.schmidt@tu-dortmund.de. Thank you for your support!

Please select only one of the following answers:

 $\bigcirc$  Yes, I would like to be kept up to date with the results of research

#### **Optional feedback**

If you like, please give us feedback on our survey. Thank you!

Please enter your answer here:

#### Thank you for participating!

For questions or comments on the survey, please write to the person who created the survey:

13.12.2022 - 16:16

Send your completed questionnaire: Thank you for answering the questionnaire. Questionnaire (journalists)

44

# What is this survey about?

This survey is about your views on the inflation rate in Germany. We want to find out how journalists in Germany think about inflation.

We are interested in your thoughts and assessments. There are no wrong answers. The survey is anonymous. All information is voluntary. However, we would ask you to always answer honestly. Even if you feel that another answer is "desired" - please listen to your feeling.

Thank you for participating!

This survey contains 30 questions.

## Welcome questions

The survey begins with a few brief introductory questions. We then turn to the actual topic.

The first question addresses the following problem: In surveys like this, it is not unusual for some participants to read the questions not really carefully and instead click through the survey at a high speed.

This significantly affects the results of surveys. To show that you are following this survey carefully, please select the fields "very interested" and "not at all interested" as your answers to the below Question.

#### Based on this: How interested are you in general in political issues?

Please select the correct answers:

Please select all the answers that apply:

Very interested

Not interested at all

#### How can you best describe your current employment relationship?

☐ I Please select one of the following answers: Please select only one of the following answers:

O Full-time employee

OPart-time employed

O Self-employed

Other

#### What medium do you work for?

Please enter your answer here:

#### What are the topics you report most often on?

#### What do you think: What is the current inflation rate in Germany?

I Only numbers may be entered in this field. Please enter your answer here:

The inflation rate over the last 12 months. Here is your estimate or. Your memory asked. Please don't look. We are interested in your personal opinion. Please answer in percent (%)

#### How often have you been preoccupied with inflation in the last three months?

I Please select one of the following answers: Please select only one of the following answers:

ONot at all

Once About once a month

Once every few weeks

O About every week

O Several times a week

#### Would you say that inflation has been less, as much or more frequent than in the previous year?

□ I Please select one of the following answers: Please select only one of the following answers:

O More often

OAs often

#### How often have you seen, heard or read about inflation in the news in the last three months?

☐ I Please select one of the following answers: Please select only one of the following answers:

Once

O About once a month

Once every few weeks

O About every week

O Several times a week

Would you say that you have seen, heard or read about inflation less often, as often or more frequently than in the previous year? I Please select one of the following answers: Please select only one of the following answers:
More often         As often         Less common
Would you say that you have reported less, as often or more frequently on inflation in the last 3 months than in the previous year? I Please select one of the following answers: Please select only one of the following answers:
<ul> <li>More often</li> <li>As often</li> <li>Less common</li> <li>This also means posts in which you take up inflation without it being the core topic of your post.</li> </ul>

On the next page you will find an open question. We would like to ask you to record your thoughts and views - in your own words - there.

In our experience, it takes about two minutes to answer the question. This answer is particularly valuable for our research. So please take a little time and answer conscientiously and honestly.

We are interested in what you think. Please let us share.

# Why has the inflation rate in Germany increased?

In the years 2000-2020, the inflation rate in Germany was never higher than 3%. With a few exceptions, it was consistently very close to the ECB's target (2%).

However, the inflation rate has been rising for over a year. One year ago it was 3.1%, well above the average of the last 20 years. <u>Currently, it is</u> 10.4% ( as of November 2022).

## What do you think: What has led to this rise in inflation?

(Please answer in full sentences)

Remember that the inflation rate has never been higher than 3% in the last 20 years. However, it is currently 10.4%. **What do you think: is this level permanent or temporary?** 

Please select only one of the following answers:

O Temporary: In 5 years at the latest, inflation will be below 3%

OPermanent: In 5 years the inflation rate will still be above 3%

In some of the following questions, we will ask you how likely you think certain developments are. Specifically, we will ask you for percentages.**Your partial answers can take any value from 0 to 100.** 

The only important thing is that the probabilities you give to scenarios must add up to 100% per question.

For example, as follows:

- With a 70% chance, I think the sun will shine permanently tomorrow
- With 20% probability the sun will be covered by clouds from time to time
- With 10% probability it will be permanently covered

We are interested in how likely you think the inflation trend is.

# In your opinion, what is the percentage probability that the following scenarios will become reality in the next 12 months?

Please enter your answer(s) here:

The inflation rate will be 12% or higher
amount
The inflation rate will be between 8% and

12%

The inflation rate will be between 4% and 8%

The inflation rate will be between 2% and 4% are

The inflation rate will be between 0% and 2%

The deflationary rate (the opposite of inflation) will be between 0% and 2% amount

The deflationary rate (the opposite of inflation) will be between 2% and 4% amount

The deflationary rate (the opposite of inflation) will be between 4% and 8% amount

The deflationary rate (the opposite of inflation) will be between 8% and 12% amount

The deflationary rate (the opposite of inflation) will be 12% or higher

ſ		
<u> </u>		
1		
ļ		
Ĩ.		

## Now refer to the next 4-5 years (48-60 months in the future).

In your opinion, what is the percentage probability for the following scenarios?

The inflation rate will be 12% or higher	[
amount	
The inflation rate will be between 8% and	,
12%	
The inflation rate will be between 4% and	
8%	
The inflation rate will be between 2% and	
4% are	
The inflation rate will be between 0% and	
2%	
The deflationary rate (the opposite of	
inflation) will be between 0% and 2%	
amount	
The deflationary rate (the opposite of	
inflation) will be between 2% and 4%	
amount	~ <u>,</u>
The deflationary rate (the opposite of	
inflation) will be between 4% and 8%	
amount	<u></u>
The deflationary rate (the opposite of	
inflation) will be between 8% and 12%	L]
amount	
The deflationary rate (the opposite of	1
inflation) will be 12% or higher	

## Why has the inflation rate in Germany increased?

There are many possible explanations for why inflation is currently at 10.4%. Below we show you 10 reasons that are often mentioned in the public discussion as influencing factors.

### We are interested in the importance given to possible influencing factors.

We would therefore ask you to weigh the factors below so that the individual values add up to 100. If you think all factors have the same influence, give each factor a value of 10.

#### How do you estimate the impact of the following factors on the current inflation rate?

Please enter your answer(s) here:	
High production costs of the companies	
due to many vacant positions	
(for example, because many in Corona	
Lost or active in their job	
have changed)	
High production costs of the companies	( )
due to disturbances in the	n
Supply chains	
High demand for goods and	
Services based on	
Government expenditure and	
Rescue programmes (short-time allowance,	
Discount on fuel, VAT reduction, etc.)	
Increased electricity and heating costs due to	[°]
the global energy crisis	L I
The European Central Bank has too much	[ ]
Money put into circulation	
High demand for goods and	
Services based on the	<u></u>
Reopening the economy after Corona	d
(money that households have previously save is now output)	d,
Central bank interest rates too low	÷
Central bank interest rates too low	
High inflation expectations for the	·
Future that will lead to	
Consumers prefer purchases,	
Employees Higher wage claims	
and companies their prices	
increase	
Strong price increases of	
Companies to increase profits	
Other reasons	

#### What other factors do you think contributed to the current inflation rate?

Now we are interested in your assessment of how much the above factors will play a role in the future.

## Which of the following factors do you expect will influence inflation over the next 12 months?

Please select the correct answer for each item:

	Will play a role	Won't matter
gh production costs of the companies due to many unfilled jobs (for example, because many we lost their job in times of corona or have actively changed)		
gh production costs of companies due to supply chain disruptions	C.	Q
gh demand for goods and services due to government spending and rescue programs (short-time owance, discount on fuel, VAT reduction, etc.)	Ģ	0
reased electricity and heating costs due to the global energy crisis	C	C
e European Central Bank has put too much money into circulation	Ç	C.
gh demand for goods and services due to the re-opening of the economy after Corona (money that useholds have previously saved is now being spent)	Ċ	Q
entral bank interest rates too low	C	0
h inflation expectations for the future, which lead to consumers preferring purchases, ployees demanding higher wages and companies raising their prices as a precaution	Č	
rong price increases by companies to increase profits	C	С
her reasons	C	С
	0	0

#### Which of the following channels do you use to get information about business and politics?

☑ I Please select the correct answers: Please select all the answers that apply:

News apps
Social media (Twitter, Instagram, Facebook,)
Articles on news websites (online articles)
General-interest media (daily newspaper, weekly newspaper, magazine,)
Specialized German-language business media (e.g., Handelsblatt, Wirtschaftswoche, Manager Managzin,)
Podcast formats
Videos on YouTube or other video formats
Documentaries and films
Newsletter
Internationale Wirtschaftsmedien (Economist, Financial Times, Wall Street Journal,)
Primary sources (direct contacts to the economy, databases, institutes,)
TV news or other informative formats on television (consumer shows, talk shows,)
Radio
News agencies (Reuters, Bloomberg,)
Other

# Please let us know which of these channels is most important to you in order to keep informed about economic and political developments.

It is less important how often you use the respective channels. We are interested in how important the respective channels are to you for your knowledge and opinion formation.

Please sort the mentioned points from top (especially important) to bottom (less important)

I All your answers must be different, and must be assigned.

I Please select a maximum of 12 answers.

Please number each box in order of your preference, starting with 1 to 15

News apps	
Social media (Twitter, Instagram, Facebook,)	
Articles on news websites (online articles)	
General-interest media (daily newspaper, weekly newspaper, magazine,)	
Specialized German-language business media (e.g., Handelsblatt, Wirtschaftswoche, Manager Managzin,)	
Podcast formats	
Videos on YouTube or other video formats	
Documentaries and films	
Newsletter	
Internationale Wirtschaftsmedien (Economist, Financial Times, Wall Street Journal,)	
Primary sources (direct contacts to the economy, databases, institutes,)	
TV news or other informative formats on television (consumer shows, talk shows,)	
Radio	
News agencies (Reuters, Bloomberg,)	
Other	

#### What other channels do you use to get information about business and politics?

Answer this question only if the following conditions are met:

Answer was for question '21 [F114punkt1]' ( which of the following channels do you use to get information about business and politics? )

Please enter your answer here:

#### Which aspects are overemphasized in the current debate about inflation?

Please enter your answer here:

### Which aspects are not sufficiently addressed in the current debate on inflation?

Please enter your answer here:

#### If you like, you can share your perception of the current inflation reporting with us.

Please enter your answer here:

"Current" refers to the current year.

#### What is your highest level of education?

□ IPlease select one of the following answers: Please select only one of the following answers:

\*

O No school leaving certificate

O Secondary school leaving certificate

O Secondary school leaving certificate (intermediate)

OBaccalaureate (general university entrance qualification, technical university entrance qualification)

Ocompleted training (according to BBIG)

O University degree (Bachelor/Diplom(FH)), certified business administrator/specialist merchant/master

Ouniversity degree (Master/Diploma(Univ.)/Magister), state examination

### What formal economic background do you have?

IPlease select one of the following answers: Please select only one of the following answers:

OI have never completed a course in economics, finance or business

- Owirtschafts-Abitur
- O Bachelor-Niveau

O Master-Niveau

Graduierten-Niveau

#### **Optional feedback**

If you like, please give us feedback on our survey. Thank you!

Please enter your answer here:

#### Thank you for participating!

For questions or comments on the survey, please write to the person who created the survey:

13.12.2022 - 16:16

Send your completed questionnaire: Thank you for answering the questionnaire.