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INSIGHTS PIECES

INSIGHTS

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This booklet showcases twelve INSIGHTS pieces. In each of them, researchers present the results of a research paper in an accessible manner, also providing links to current policy questions and societal demands.

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WHAT'S IN A NAME?

By Friederike Reichel **LMU Munich**

*"What's in a name? That which we call a rose
By any other name would smell as sweet."*

Spoken by Juliet, Act 2 Scene 2, Romeo and Juliet, William Shakespeare
Wild Roses, Vincent van Gogh (1853 - 1890), Saint-Rémy-de-Provence, May-June
1889

Our social world heavily relies on social labels. Often, it is hard to know what someone has actually been doing or saying, but we hear or read that they are labeled a fascist, a climate terrorist, or a bigot. Clearly, these labels matter because, based on them, we will decide whether to vote for a politician, support a social movement, or hire a person. Yet, the judgment about which set of actions should count as, say, bigoted is up for debate.

But would it make a difference to label more actions bigoted? Would people react if formerly accepted actions or statements were publicly denounced as bigoted? And if so, would people adjust their actions in systematic ways?

One might expect that raising the bar for avoiding a negative label, or earning a positive one, would cause people to engage in better behaviors. On the other hand, those who previously escaped judgment may start engaging in worse behaviors. They understand that using a stigmatizing label more broadly dilutes its reputational damage. In fact, the concern that disparaging terms lose their force when applied broadly is often voiced in public discourse.

A new working paper (Reichel, 2023) shows that these two opposing effects exist. A significant share of participants in the study reduced their contributions to a common cause when higher contributions were

required to escape a stigmatizing label; participants understood that others would judge people carrying that label less harshly. These findings may help explain why the last years have seen both a rise in right-wing populism (Guriev & Papaioannou, 2022) and heated debates around political correctness.

“Activism changes the language,” says Peter Sokolowski, an editor of the Merriam-Webster dictionary, when interviewed about the dictionary’s revision of the ‘Racism’ entry at the request of an activist in 2020 (Hauser, 2020). It is reasonable to assume that activists hope to see such linguistic changes lead to behavioral changes in society. Effectively influencing others’ behavior through language, however, requires an understanding of their reactions.

Reichel (2023) documents that participants misperceive the effects of using a stigmatizing term more broadly, incorrectly believing that this would lead to higher contributions. In fact, 70% of participants held these misperceptions. They believed that participants would increase their contributions when higher contributions were required to escape the stigmatizing label, even though contributions did not change on average. This misunderstanding gives people a motive to apply negative labels too broadly and positive ones too exclusively.

Juliet is right; labels are interchangeable. Swapping “up” and “down,” “magic” and “ordinary” would virtually make no difference as long as we all were aware of it. Words derive their meaning from how we use them (Wittgenstein, 1953). The stigma that a term carries is no exception to this principle of ordinary language philosophy. The inflationary use of terms will reduce their stigma and preventive power. The findings in Reichel (2023) demonstrate that the study participants, however, do not fully appreciate the extent to which the meaning of stigmatizing terms is diluted when they are applied more broadly: there’s less to a name than one may think.

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REAL ESTATE AGENT COMMISSIONS ON THE RISE DESPITE LEGAL REFORM IN GERMANY

By Julius Stoll **Hertie School**

Background

Homeownership represents a key gauge for prosperity. Yet surprisingly, Germany has one of the lowest homeownership rates in the world¹ even though most tenants would like to own the property they currently live in.² A potential reason for this is that buying real estate in Germany is costly: high transaction costs complicate the purchase of real estate. Besides real estate transfer taxes, the typical 7.14% (incl. VAT) commission fee that most real estate agents impose marks the largest portion of these transaction costs.

Not only the size of these commission rates is odd but also is their rigidity. Although freely negotiable, almost all agents charge the same rate, showing no signs of cost reduction through technology over the past two decades. This is surprising, as several international examples highlight that cost-lowering innovations can reduce commission rates. For example, Dutch real estate agents now charge less than 1.25% of the selling price despite highly comparable housing prices and service portfolios as in Germany.

Low commission rates may result from policy. In countries with low commission rates, sellers who hire a real estate agent must also cover the agent's commission. Germany is an outlier: until December 2020, sellers could make buyers pay the entire commission of the seller's real estate agent. A legal reform changed this, aiming for a unique compromise. Now, if sellers hire an agent, they must pay at least as much commission as buyers, effectively evenly splitting the commission between them. Lawmakers hoped that requiring sellers to pay at least half of the commission would raise their awareness of the commission and would motivate them to seek lower rates.

Results

My research shows the legal reform's failure. Analyzing over 500,000 listings, I reveal that instead of decreasing, the already high commission rates, by international standards, increased even further after the reform. Initially, buyer-only commission rates only varied regionally, from 4% or 5% in low-commission regions to 6% in regions with the highest commissions. After the reform, many agents charged both buyers and sellers 3% each, often increasing the total commission rate from 4% or 5% to 6%. Furthermore, my findings indicate that even before the reform, when buyers formally paid the entire commission, sellers bore most of the economic costs by receiving lower selling prices.

What allowed real estate agents to increase their commission rates? In a subsequent survey with 1,062 real estate agents, I offer evidence that home sellers are inattentive to the commission cost and I illustrate how real estate agents exploit this ignorance.

First, I verify that 85% of sellers do not even attempt to negotiate lower commission rates when hiring their real estate agents. Revealing that sellers pay most of the economic costs of the commission but do not attempt to negotiate corroborates that home sellers neglect the economic incidence of the commission – which they pay through a lower selling price.

Second, I offer evidence that real estate agents influence sellers by using the “regionally typical” (ortsübliche) commission as a misleading benchmark. My data shows that this “regionally typical” rate – which refers to the most common commission rate in a region – is most often larger than the average commission rate. Using randomly incentivized experimental questions highlights that real estate agents knowingly communicate these inflated reference rates.

Policy Implications

In total, my study illustrates that the policy reform caused consumers to lose approximately €390 million every year due to the commission increase. Although economists assume that individuals’ “propensity to truck, barter, and exchange”³ promotes price competition, my survey experiment highlights that sellers rarely uphold this when hiring real estate agents. Combining my results with international observations showcases a policy opportunity: high-commission countries either have confusing commission systems where both sellers and buyers may pay the selling agent or incentivize an extra buying agent, like in the US. By contrast, other

global examples point to more effective and less bureaucratic solutions: all countries with low commission rates share systems with just a selling agent who is only paid for by the seller (Bestellerprinzip).

1 See Deutsche Bundesbank Discussion Paper No 40/2019 by Huber, S. J., & Schmidt.

2 See Interhyp-Wohntraumstudie 2022 using a sample of 2,180 respondents from a representative online panel in Germany.

3 Adam Smith (1776) *The Wealth of Nations*, Book I., Chapter ii. 1, p. 25.



CORRECTING MISUNDERSTANDINGS ABOUT CO₂ EMISSIONS DOESN'T HELP TO FIGHT CLIMATE CHANGE

By *David Pace* **LMU Munich**

How much CO₂ does one generate to raise a cow, make a steak out of it, and deliver it to your favorite supermarket? Most likely, you don't know, and you are not alone. People have little clue about the size of the emissions associated with the goods they consume. When they are forced to make a guess, the guess tends to be lower than the actual number, and the misperceptions can be huge. At the same time, people care about the environment. Almost everyone says to be concerned about climate change, most people indicate they are willing to make sacrifices for the climate, and tens of thousands join protests to demand more stringent climate policies.

From these two observations, a simple idea emerges. People care about the environment, but they just don't know what to do to reduce their footprint. So, if we tell people how much each product pollutes, they will behave more sustainably. Policymakers embrace this idea. The European Commission's "Farm to Fork Strategy" proposes an extensive carbon labeling strategy, while its "New Consumer Agenda" argues for "more reliable information on sustainability". In the US, the Environmental Protection Agency implements several carbon labels.

Can politicians push people to act sustainably via information campaigns that correct consumers' misperceptions? In a recent working paper, we investigated this question (Imai et al., 2023), proceeding in two steps. The first step identifies the products for which correcting the misunderstanding should generate a significant behavioral change. These are the products for which a) many people think the emissions are lower than they are, and b)

the people who make this mistake care about climate change. It turns out that people are worst to guess the emissions generated by more polluting products. This is why we predict that one of the most promising targets of information is beef meat. Meanwhile, we predict no consumer reaction to information about a similar product like poultry meat. Cows are about ten times more polluting than chickens – mainly because cows produce large amounts of methane, a potent greenhouse gas.

In the second step, we test if these predictions are correct. To do so, we ran an experiment where we asked people how much they were willing to pay for a shipment of meat to their home address. The shipment is real, and people who want to receive it need to pay for it. We divide our participants into four groups: chicken-with information, chicken-without information, beef-with information, and beef-without information. The information tells the participants about the average emissions associated with the productions and distribution of one pound (0.45 kg) of each type of meat. Whenever we give the information, people become more accurate in their guesses about the emissions of the products. Yet, we don't find that the information reduces the amount the participants want to pay for the meat. This null effect of information was expected for chicken, but it is contrary to our predictions for beef.

We believe that our null result is informative about other consumer behavior, as our subjects come from a representative sample of the US population. We can exclude that the null result is due to the participants being inattentive to the information, the participants being already well informed, or the participants being vegetarian.

Our results thus indicate that correcting consumer beliefs does not necessarily lead to lower demand for carbon-intense consumer products, even in settings where misperceptions are large and consumers are interested in reducing or offsetting emissions. The results are consistent with recent evidence from university canteens experiments (for example, Lohman et al., 2022). These studies find that labels informing students of each meal's carbon footprint make them slightly more likely to choose greener options but the reduction in emissions is small and generally short-lived.

Overall, the picture from our and other studies suggests that policymakers should temper their enthusiasm for providing information to consumers, as information produce only modest behavioral changes in many cases. Consumers' good intentions cannot substitute climate policies based on carbon taxes, green subsidies, and regulations.

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EXPECTATIONS MATTER

By *Simone Maxand* **Viadrina U** and *Joschka Wanner* **Uni Potsdam**

3rd Berlin Climate Macro Workshop

Which role can central banks play in climate policy? What are the implications of climate change and climate policy for economic growth? How can government policy foster technological change that can lead the way towards the green transformation? These are some of the questions asked in the field of climate macroeconomics. On November 4, 2022, around 20 Berlin School of Economics researchers gathered at the University of Potsdam for the third Berlin Climate Macro Workshop to explore and discuss some of these questions. Four presentations and one keynote by Sjak Smulders from Tilburg University shed light on a wide range of topics in climate macroeconomics.

First off, Anna-Maria Göth from the Humboldt University of Berlin presented joint work with Michael Burda and Leopold Zessner-Spitzenberg on “Green Transition and Investment – The Optimal Path of Capital Accumulation”.

The second presentation stayed with the investment theme. Specifically, Ulrich Eydam from the University of Potsdam talked about his joint project with Francesca Diluiso on “Public Infrastructure and Green Investments”.

In his keynote speech, Sjak Smulders presented “Self-fulfilling Prophecies in the transition to Clean Technology”, which is a joint paper with Sophie Lian Zhou. The key point of his presentation was the role of expectations and how the same climate policy can lead to very different outcomes depending on the expectations of market participants, making a broader set of climate policies necessary that can succeed in steering expectations and hence the economy towards a green transition.

The fourth speaker was Achim Hagen from the Humboldt University of Berlin, who presented a paper with Angelika von Dulong and Niko Jaakkola on “Endogenous Climate Policy, stranded assets and systemic risk”.

The final presentation of the day was held by Alkis Blanz from the Mercator Research Institute on Global Commons and Climate Change and covered joint work with Beatriz Gaitan on “Differential Discounting, Climate Policy (and Housing) in General Equilibrium”.

The workshop made it abundantly clear that climate macroeconomics can offer highly relevant policy insights. Superficially, the economic answer to climate change tends to be simply putting a price on carbon equal to its social cost. A more thorough macroeconomic consideration of the challenges faced on climate policy suggests, however, that a more elaborate policy mix may be required. Stranded assets and financial market turbulences have to be avoided and green innovation fostered. The existence of a “brown” fossil equilibrium even in the presence of carbon pricing asks e.g. for green R&D subsidies, carbon prices above the social cost of carbon or the creation of a “brown bank” to isolate fossil investment risks. From the presentations and debates around these topics, the following three key take-aways can be condensed from the workshop:

1. Central banks can play a meaningful role in climate policy. The green transition brings substantial risks for financial stability making its management part of the central bank’s mandate.

2. Agents’ expectations matter strongly in the climate policy context. If market participants expect that fossil fuels continue to be used intensively and that brown investments

will continue to play an important role, the economy can end up in a sub-optimal, high emission equilibrium, even though climate policies are taken that would be compatible with a green transition under different expectations.

3. A better understanding of a broader set of climate policies is necessary. Carbon pricing is an important tool for climate change mitigation, but potentially insufficient. Expectation management, R&D subsidies, public infrastructure investments and green financial market regulation are some of the additional policies identified. The way they work and

interact with carbon pricing and with each other is a key area for future research.

A lot of work on environmental economics is done at several of the BSE institutions and the Berlin Climate Macro Workshop illustrated that opportunities for exchange between those researchers looking at environmental issues from a macroeconomic perspective creates large value-added.



IS AWARENESS ENOUGH TO SAFEGUARD US FROM BIASED NARRATIVES?

By Sili Zhang LMU Munich and Manwei Liu Nanjing Audit U

Ever since the birth of human society, much of the information communicated is not just fact, but narrative – qualitative interpretations of objective facts or events (Shiller 2017; 2020). As people become increasingly concerned about the detrimental effects of biased narratives on modern society, such as polarization and echo chambers, people are also becoming more aware of the biased narratives used by the media (Gallup, 2020). A recent study (Liu and Zhang, 2023) tackled a novel question in this context: whether we can effectively guard ourselves against biased narratives, especially when we are consciously aware of them.

The research centered around an innovative online experiment involving narratives about the use of genetically modified (GMO) mosquitoes in disease control – a topic carefully chosen for its relative obscurity to most people. This obscurity ensured that pre-existing strong opinions would play a minimal role, providing the best chance to counteract the narratives. Researchers crafted two different narratives based on the same set of facts – one narrative favoring the use of GMO mosquitoes, and the other opposing it. Study participants were then randomly assigned to read one of these narratives. Crucially, the participants were explicitly told that these narratives were biased and that participants were randomly assigned to one of the narratives.

So, is awareness enough? Unfortunately, the answer is, not really. Despite knowing that the narrative was biased and randomly assigned, participants reported attitudes that align significantly with the narrative that they read. Moreover, the opportunity to engage with balanced arguments, a scenario resembling real-world situations where individuals seek additional information, did surprisingly little to alter participants' views, once they

were influenced by the biased narratives. This persistence underscores the power of the first narrative that we encounter in shaping our beliefs, and suggests that simply being aware of a bias is not enough to guard against it.

A natural question is why this is the case. Liu and Zhang (2023) tease out possible channels and find that participants tend to find arguments that were consistent with their initially assigned narrative more convincing. This indicates a very surprising form of 'induced' confirmation bias, where initial exposure to a narrative already influences the evaluation of subsequent information, irrespective of an individual's awareness of the bias.

Delving deeper, it becomes clear that the battle against biased narratives is not only about awareness, but also about the order and manner in which information is presented. The study therefore carries implications for how we approach media consumption and information dissemination. It suggests that efforts to combat misinformation and biased narratives need to focus on ensuring balanced exposure from the outset. Preventing polarization and biased narratives may be more effective if done at the initial stages of information exposure, rather than trying to correct or counteract them later.

Overall, the study offers a critical perspective on our interaction with narratives in an information-rich society. It emphasizes the need for critical evaluation of the first stories that we encounter about a topic, and the importance of balanced exposure to multiple viewpoints. As we navigate a sea of information on a daily basis, understanding the persistent influence of narratives and our vulnerability to them is not just an academic exercise, but a necessary skill for informed decision-making in the modern world.

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COASE AND CAP-AND-TRADE: EVIDENCE ON THE INDEPENDENCE PROPERTY FROM THE EUROPEAN CARBON MARKET

By Aleksandar Zaklan DIW

Cap-and-trade has become a popular approach to mitigating environmental externalities. It promises cost-effectiveness: by combining a cap with the trading mechanism abatement takes place where it is most economical, minimizing aggregate costs for a given amount of abatement. Based on a seminal insight by Coase, under certain conditions agents' equilibrium solutions for the amount of the externality produced are independent from the allocation of allowances. Changes in allocations are limited to having distributional effects. Dependence between allocations and emissions would be a symptom of underlying friction in the allowance market.

The independence property is important in real-world settings, as policy makers often use free allocation in political bargaining surrounding cap-and-trade schemes. For example, in the EU Emissions Trading System (EU ETS) most of the cap was freely allocated during its initial phase, and close to half of the cap is still distributed for free today to mitigate carbon leakage risk. A cap-and-trade scheme in which emissions are independent from allocations is attractive for policy makers, as they can focus on whether free allocation is desirable from an equity perspective. Empirical evidence on whether the independence property holds in operational cap-and-trade schemes can therefore shed light on whether wide-spread use of free allocation should be avoided. Yet despite its importance the existing empirical evidence is extremely scarce.

The paper by Aleksandar Zaklan contributes to filling an important gap in the literature by testing whether emissions are independent from allowance allocations for firms regulated under the world's largest multilateral cap-

and-trade scheme, the EU ETS. The analysis focuses on power producers, responsible for the largest share of the EU ETS's greenhouse gas emissions and arguably the most sophisticated sector under the EU ETS with respect to the allowance trade. However, not all power producers may be able to participate in the allowance trade equally. Financially or organizationally constrained emitters, likely smaller firms, may be less able to internalize trading costs or overcome behavioral biases affecting their emission decisions. At least some producers may exhibit dependence between allocations and emissions, which may affect the independence property at the sector level.

The regression analysis pursues a difference-in-differences strategy using a panel of power producers from coal and gas during the period 2009 to 2017. The identification strategy exploits a change in allocation policy: in the majority of EU member states power producers lost a large share of their freely allocated allowances in 2013 and must purchase them through primary auctions or on the secondary market. However, while power generators generally faced full auctioning starting in 2013, a special provision - the so-called 10c rule - preserved a significant amount of free allocation for producers in eight EU member states, providing substantial exogenous variation in allocation levels. The analysis thus compares emission decisions of producers who lost most of their free allocation (treatment group) with those who continued receiving free allocation under the 10c rule (control group).

The main results show that emission decisions by power producers under the EU ETS are in line with the Coasean prediction. The independence property cannot be rejected for the power sector as a whole and for larger emitters representing by far the largest share of power sector emissions. For these firms a change in the level of free allocation does not cause a significant change in emissions. Emitters respond to the post-treatment allowance shortfall by increasing allowance purchases. However, there is suggestive evidence that the independence property fails for small emitters. An explanation could be trading costs affecting small emitters' emission decisions or, alternatively, resource constraints leading to poorer decisions by small emitters, in line with previous research. Behavioral bias may thus link abatement effort to the level of free allocation. However, as small emitters represent a very small share of the power sector's total emissions, distorted emission decisions among this group of firms do not significantly affect the independence property at the sector level.

The results suggest that policy makers may use free allocation as a tool in the political bargaining process without significantly distorting the cap-

and-trade program, as long as the setting is comparable to the one in this analysis. Of course, how the cap is allocated has important distributional implications. The finding for small emitters motivates further investigation of the mechanisms behind this result, to understand whether policy makers should focus on the cost side or on attempting to reduce behavioral bias.

The full paper “Coase and Cap-and-Trade: Evidence on the Independence Property from the European Carbon Market” is published in *American Economic Journal: Economic Policy*.

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TESTING MARX

By *Charlotte Bartels* DIW , *Felix Kersting* HU Berlin
& *Nikolaus Wolf* HU Berlin

What can we learn from Marx about inequality? The current debate about inequality frequently refers to ideas about capitalist dynamics that were first formulated by Karl Marx and his followers in 19th century Europe. Does capital accumulation increase capital concentration and income inequality? And does it spur political support for socialism? Orthodox Marxists like Karl Kautsky, the leading theoretical Marxist of the Second International (1889–1916) considered these mechanisms to be the defining feature of capitalism (Gronow 2016).

However, these mechanisms were disputed at the time, even within the socialist movement. The so-called Revisionists around Eduard Bernstein heavily attacked the orthodox Marxists arguing that, with the help of trade unions, capitalism could be changed for the benefit of workers. Both orthodox Marxists and Revisionists grounded their arguments in statistical evidence from the German statistical office and other contemporary official statistics. In our recent work (Bartels et al. 2023), we reevaluate the Revisionism debate using the same sources but relying on modern statistical techniques. We compile new panel data on capital accumulation, income inequality, capital share, capital concentration, and socialism across 28 districts and 544 counties in Prussia between 1874 and 1913.

Does capital accumulation increase capital concentration and income inequality?

For Imperial Germany before 1914, we have strong evidence that capital accumulation causally led to a growing share of capital in total income and contributed to income inequality, as first predicted by Karl Marx

and believed by his followers, but contested by their critics. To establish causality on the effects of capital accumulation, we exploit the spatial diffusion of industrialization over time across Prussia. The coefficients from our preferred IV estimation indicate that one standard deviation increase in capital accumulation can causally explain roughly 70% of a standard deviation increase of the change in the top 1% income share and more than 75% of a standard deviation increase of the change in the capital share.

According to our evidence, orthodox Marxists were right in their prediction that capital concentration was rising steeply. However, they were mistaken in their conviction that this “centralization” of capital was causally driven by capital accumulation.

Does capital accumulation lead to more political support for socialism?

The orthodox Marxist hypothesis regarding the relationship between capital accumulation and support for socialism was always related to the claim that capital accumulation would lead to an immiseration of the working class, which would fuel the political struggle. Our findings speak against this prediction. Real wages started to increase significantly in the 1890s. We also do not find evidence that capital accumulation strengthened political support for socialism through any other channel.

Can capitalism, with the help of trade unions, be changed for the benefit of workers?

The Revisionists rightfully stressed the role of labor conflict in limiting income inequality. We find support for the Revisionists claim that successful strikes helped to redistribute income between capital owners and workers, albeit only temporarily. A 10% increase in the number of successful strikes is associated with a reduction of the top 1% income share by ca. 1.4 pp. These are sizable magnitudes given that, on average, the top percentile received 12% of total income. What is more, the Revisionist strategy of strengthening the trade unions seems to have been a building block for the remarkable political success of the SPD before 1914.

Conclusion

To conclude, our evidence on Germany before 1914 shows again that any quest for general laws of capitalist development must be elusive. We find that Marx and his orthodox followers were (partly) correct in their diagnosis on the wide-ranging effects of capital accumulation on capital

concentration and income inequality. However, they underestimated the scope for institutional adjustment within a capitalist society. Nevertheless, while Marx is long dead, his question about the long-run dynamics of capitalism will continue to haunt us.

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FACT POLARIZATION

By Valeria Burdea [LMU Munich](#) , William Minozzi [Ohio State U](#) ,
and Jonathan Woon [Pittsburgh U](#)

Both casual observation and contemporary scholarship depict Democrats and Republicans in the United States as warring groups with clashing worldviews and mutual animosity (Iyengar and Westwood, 2015, Hetherington and Weiler, 2018). These differences extend to basic questions of fact. Partisans express sharply divided beliefs about economic conditions (Bartels, 2002; Jerit and Barabas, 2012), income inequality (Kuziemko et al., 2015), conflict (Gaines et al., 2007), and scientific issues including COVID-19 (Barrios and Hochberg, 2020; Druckman et al., 2021) and climate change (McCright and Dunlap, 2011).

The explanation for such “fact polarization” remains a matter of debate. Bayesian learning—the rational standard for updating beliefs—describes a rigorous way in which learning from observed evidence depends on the information structure. When exposed to similar evidence, beliefs of different people should converge (Becker et al., 2017). Fact polarization defies this expectation, and some argue that motivated reasoning—automatic rejection of information that challenges one’s beliefs—is responsible (e.g., Kahan, 2016; Taber and Lodge, 2006), resonating with the idea that partisan identity serves as a “perceptual screen” through which the world is viewed (Bartels, 2002; Berelson et al, 1954; Campbell, 1960; Zaller, 1992).

Others challenge this account of fact polarization (Gerber and Green, 1999; Bullock, 2009; Druckman and McGrath, 2019; Little, 2021; Coppock, 2022). These scholars argue that empirical patterns of belief divergence are consistent with rational, Bayesian learning when there are differences in perceived credibility of information sources, or second-order beliefs.

The two explanations are observationally equivalent based on existing evidence. Which explanation is correct matters not just for reasons of basic science, but also because any attempt to dispel factually inaccurate beliefs will depend on the underlying cause of the inaccuracy (Druckman and McGrath, 2019).

To investigate these accounts of fact polarization, a new study by Burdea et al. (2023) uses a novel research design that directly measures people's beliefs regarding the credibility of in-group and out-group information sources. To do so, the authors asked participants "How many Republicans [Democrats] (out of 100) CORRECTLY determined whether the following statement was true or false?". The statements involved various politically and economically relevant facts such as: "The difference in median household incomes between white and black Americans has increased between 1970 to 2018." [True], "Under half of all state prisoners in the United States were convicted of violent crimes." [False]. Importantly, participants are asked about the credibility of both in-group and out-group partisans which enables the authors to take the difference as a measure of bias in second-order beliefs. Moreover, before running this study, the authors elicited the true credibility of 100 Democrats and 100 Republicans and selected those statements on which there were no differences in accuracy between the two groups.

The results of this study show strong evidence of partisan bias in source credibility estimates: participants think that their in-group is approximately 9 percentage points more credible than the out-group.

At first glance, this finding suggests that the Bayesian account of fact polarization may be supported. However, the partisan credibility gap estimates could themselves stem from non-Bayesian channels. In assessing source credibility, people may be blinded by social identities and attachments (Tajfel and Turner, 1979; Tajfel, 1981; Huddy et al., 2015). They may use partisan identities as affectively charged heuristics to determine whether to trust sources, as in bounded rationality models (Simon, 1985; Kahneman, 1982; Bendor, 2010). In particular, citizens may use subjective feelings or emotions as a substitute for information or memory-based accuracy judgments. Consequently, strong positive feelings toward the in-party should lead to an upward bias in second-order beliefs (overestimating in-party accuracy), while strong negative feelings toward the out-party should lead to a downward bias (underestimating out-party accuracy). Alternatively, partisans may simply know less about out-party members' beliefs and their sources. A rational model may well predict that the more an individual knows about a party, the more accurate (less biased)

the second-order beliefs will be. All of these mechanisms may function simultaneously, varying by situations and for people with different traits.

The study of Burdea et al. (2023) also investigated how the partisan gap in source credibility may be affected by these different channels. The principal finding is that out-group affect—the main component of affective polarization (Iyengar et al., 2012)—is the most important predictor of source credibility bias. People with the coldest feelings toward the out-party are those with the largest biases in second-order beliefs. This finding is consistent with the hypothesized mechanism of using affect as a heuristic—which is also one of the postulated bases for motivated reasoning (Taber, 2006).

However, the authors find little consistent evidence in support of the mechanisms based on social identity or a rational model (i.e., knowledge-based). Finally, although Democrats evince more bias in the second-order beliefs than Republicans, there is no evidence of asymmetry across parties in the mechanisms.

These results seemingly cast doubt on the practical importance and relevance of the differences between the motivated reasoning and rational learning explanations for fact polarization. They highlight that social learning is a multi-dimensional problem, influenced not only by what is being said but also by who says it. Importantly, this influence is moderated by feelings and emotions that seem to raise the “perceptual screen” through which the information from different sources is processed.

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CHANGES IN RISK ATTITUDES VARY ACROSS DOMAINS THROUGHOUT THE LIFE COURSE

By Neil Murray **DIW** , Levent Neyse **DIW** ,
and Carsten Schröder **WZB**

Risk attitudes refer to an individual's inclination towards taking or avoiding risks. Some people may be more willing to take risks, while others may be more risk-averse. It is a fundamental concept in economics and decision-making research that helps explain how individuals make choices in situations where the outcomes are uncertain. As societies age, understanding how risk attitudes change over the life course becomes increasingly important for predicting economic outcomes such as job choice or saving strategies of demand for insurance. For instance, older people may become more risk-averse and therefore less likely to invest in high-risk stocks or start-ups and instead they may be more likely to choose low-risk assets, such as bonds or mutual funds.

Indeed, previous studies have found a consensus that risk aversion increases with age, but these studies often rely on measures of general risk attitudes that do not differentiate between specific situations or domains. For example, the willingness to risk one's health by living an unhealthy lifestyle or playing a risky sport may be different from the willingness to take risks in the financial domain. Therefore, this study extends previous research by examining the risk-age profiles within five specific domains (financial, occupational, leisure, health, and trust) and for general risk attitudes.

Based on survey data from the Socio-Economic Panel, the authors find that the relationship between risk attitudes and age strongly depends on the underlying domain. For risk attitudes in the domains of finance, occupation, and leisure, the findings suggest that risk-taking declines

significantly with age. However, in the areas of health, trust, and general risk, attitudes change little over the life course. In addition to the question of whether risk-taking changes with age, it is also important to examine how it changes. While the relationship follows a linear pattern in most domains, indicating a constant rate of change over time, there are two exceptions: In the leisure domain, there is a substantial decrease in risk-taking between the ages of 20 and 50 with almost no change thereafter, while general risk attitudes decrease slightly up to age 40 and then remain rather stable until they start to increase slightly again at age 60.

To better understand and quantify the impact of age on risk attitudes, the authors predict how shifting risk attitudes due to increasing age affects life outcomes such as investment in stocks or self-employment. It is found that due to changing risk attitudes in the financial domain, an increase in age by 10 years would reduce investments in stocks by 2.80% on average and that changing risk attitudes in the occupational domain would reduce self-employment by 5.73%. Repeating this analysis with general risk attitudes instead of domain-specific attitudes leads to a decrease of only 0.04% for investment in stocks and a decrease of 0.24% for self-employment. These contrasting outcomes highlight the importance of viewing risk attitudes as domain specific—otherwise, the results could be misleading.

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ONLINE TRADE PLATFORMS: HOSTING, SELLING, OR BOTH?

By *Özlem Bedre-Defolie* **ESMT** & *Simon Anderson* **Virginia U**

Many digital platforms, like Amazon, both host third-party products and sell their own products: they have a “hybrid” business model. While platforms provide innovative, efficient, and important products or services to the market, new research from Simon Anderson, Professor at University of Virginia, and Özlem Bedre-Defolie, Associate Professor of Economics at ESMT Berlin, outline conditions under which the hybrid model may harm consumers and sellers using platforms to access big marketplaces.

Extant economic theory is unclear under what conditions platforms want to engage in the hybrid mode because it cannibalizes the commissions that platforms earn from sales of third-party products. Major platforms charge significant commissions (often 15% on Amazon, depending on the product category). Anderson and Bedre-Defolie formalize this trade-off between commission revenue and profit from own-product sales, identifying markets where hybrid model benefits consumers.

The clearest situation where the hybrid model benefits consumers is when consumers do not differentiate between products and many sellers compete for business on the platform. An example is when many sellers offer the same brand of Bluetooth speaker. The platform would enter this market and sell the Bluetooth speaker if its (purchasing) cost of the speaker is below the cost of third-party sellers. The platform’s Bluetooth speaker would then replace third-party sellers’ offers entirely by selling it at a lower price. Here, the hybrid model benefits consumers.

The hybrid model can also benefit consumers when big market-dominating sellers exist (e.g., Walmart). If the big seller competes against the platform (and the many other third-party sellers), then the platform would once

again engage in hybrid model if it could purchase the Bluetooth speaker cheaper than its third-party sellers. The platform's product would replace the third-party sellers and compete with the big seller, driving down consumer prices. The same logic applies if the big firm is the only seller on the platform; again consumers benefit.

Hybrid business model might harm consumers in other markets. If the big seller chooses to sell on both the platform and through its own retail channel, then both the big seller and the platform mark up prices. The platform may choose to release its own product to capture more profit from the seller, but prices do not decrease as much because the big seller wants to protect demand on its direct channel.

Hybrid business practices can harm consumers in markets where consumers have different tastes for products. For example, instead of the same brand's Bluetooth, sellers offer different brands' speakers with different characteristics. Here the platform product steals some of the demand from third-party products. The platform now acts as both the referee as well as a player. Anderson and Bedre-Defolie (in an earlier work "Hybrid Platform Model" 2022) find that, when the platform is hybrid in these markets, it extracts higher commission fees from third-party sellers, so consumers are provided with fewer choices and pay higher prices.

Legislation has begun to target these hybrid business practices. In July 2022 the European Commission passed the Digital Markets Act and the Digital Services Act, which ban or regulate certain practices of these "gatekeeper" platforms. For instance, self-preferencing (steering consumers towards the platform-owned products) is banned and hybrid platforms must provide their third-party sellers access to data generated on the platform. Similarly, the Ending Platform Monopolies Act in the US proposes to prohibit self-preferencing and might ban the hybrid business model altogether. As legislators and regulators continue to review these platforms, they must consider the various markets where these practices can help or harm consumers, then tailor their responses accordingly.

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CLIMATE POLICY SHOULDN'T IGNORE ASSET STRANDING

By *Angelika von Dulong* [HU Berlin](#) , *Alexander Gard-Murray* [Brown U](#) ,
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and *Suphi Sen* [Wageningen U](#)

Ambitious climate policy measures threaten assets across the entire fossil fuel value chain. The majority of fossil fuel reserves must remain unextracted to meet our climate goals, and many fossil fuel-using assets like power plants will need to be retired before their natural end-of-life. Such assets will lose value and become “stranded”, prompting resistance from their owners and obstructing the implementation of stringent climate policies. The value of these threatened assets is also so large that stranding may threaten macro-financial stability. Therefore, asset stranding will have implications for the success of climate action. As political feasibility is a key element for realistic policy recommendations, climate policy advice should take the distributional consequences of asset stranding into consideration.

In a new paper Angelika von Dulong, Alexander Gard-Murray, Achim Hagen, Niko Jaakkola, and Suphi Sen surveyed recent literature in environmental economics, systematically assessing all papers in four leading journals from 2017 to 2020. They specifically looked for whether research covered climate policy and issues

around asset stranding, distributional impacts, or political economy.

They find that much research on climate economics ignores asset stranding, despite its potential impact on the implementation of effective climate policies. Among the work that does exist, the major focus has been on interactions between climate policies and stranded capital. Some researchers have looked at moratoriums on extraction, compensation for unextractable fossil fuel reserves, effects on assets that generate or use significant amounts of energy, and whether financial markets reflect carbon risk. Research on labor rather than capital is more sparse, and the evidence that does exist is mixed.

Major research gaps remain. One big issue is “policy endogeneity”: how future policies, such as carbon taxes in the 2030’s, are affected by economic decisions taken today. These in turn depend on people’s expectations. If firms and households expect policy to be weak, they have an incentive to invest in more fossil-based assets, making it harder to tighten policy later. Yet literature on the interaction between climate policies and people’s expectations remains limited. There is also too little work on the distributional impacts of asset stranding and proposed compensation schemes: who is likely to win and lose? How will income and wealth inequality be affected? Finally, we need more work that combines economics and political science, to see how current policies change the prospects for future climate politics.

Important policy implications from the review are that carbon prices are not optimal if policymakers do not commit to them. Without clear price signals, it is rational for actors to keep investing in carbon-intensive capital, thereby amplifying the problem of asset stranding. Policies should aim at stopping further investments into polluting durable capital stocks as the long lifetime of such assets creates an incentive to water down future climate action, and thus a commitment to future carbon emissions. Banning fossil investments and subsidizing investments into energy-efficient capital and renewable energy could reduce stranded assets in the future and pave the way for credible carbon pricing. Finally, policymakers could tip expectation-driven equilibria by triggering socioeconomic tipping points, for instance by decisively encouraging low carbon assets. This could facilitate rapid changes required for a net-zero carbon economy.

The full paper “Stranded Assets: Research Gaps and Implications for Climate Policy” is published in the Review of Environmental Economics and Policy and can be read for free.

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A GLIMPSE OF FREEDOM: ALLIED OCCUPATION AND POLITICAL RESISTANCE IN EAST GERMANY

By Jonas Jessen IZA , Luis R. Martinez Chicago U
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“So long as [the masses] are not permitted to have standards of comparison, they never even become aware that they are oppressed”

George Orwell - 1984

Countries experiencing declines in civil liberties and political rights have outnumbered those with improvements for more than a decade. In many of these countries, overt political opposition carries a risk for people's freedom, integrity, and lives. Theoretical models predict that if the expected gain from a regime change is larger, people's willingness to rebel against the current regime will increase. However, in non-democracies the alternative may not be clear if the regime was to fall. Thus, the lack of alternative to the status quo can play a key role in explaining political opposition in authoritarian regimes.

In Martinez et al. (2023), we show that a short exposure to better governance and disciplined occupying forces can increase resistance to autocratic rule in the early stages of nation-building. We focus on the early years of the German Democratic Republic (GDR), which emerged from the Soviet-administered occupation zone in Germany after World War II. At the time of Nazi surrender, around 40 percent of the prearranged Soviet occupation zone was occupied by the Allied Expeditionary Force led by the US and the UK. We conduct careful historical and archival research to reconstruct the exact line of contact at the granular municipality level and demonstrate

the idiosyncratic nature of the line. The line separated Western Allies and Soviet forces at the end of the war within East Germany and, as a result, part of the area assigned for Soviet occupation remained under Western Allied rule for around two months before the Soviet takeover, while the rest experienced Soviet rule throughout. (For simplicity, we henceforth use the term “Allies” to refer to the Western Allies, formally the Allied Expeditionary Force, comprised mostly of military units from the United States and the United Kingdom.)

We use a spatial regression discontinuity design to study the effects of a fleeting exposure to Allied occupation on protest incidence during the 1953 uprising, meaning that we compare protest incidence within municipalities just on either side of the Allied and Soviet line of contact. Municipalities that were initially occupied by Allied forces were approximately 15 percentage points more likely to experience protests during the 1953 uprising in the GDR. This is a large effect, corresponding to 68 percent of the sample mean. The findings are remarkable due to the short-lived nature of the treatment, with the Allied occupation lasting at most three months, averaging 75 days. We validate our findings with a large set of robustness checks, including placebo lines based on randomly drawn divisions based on salient geographical features to corroborate that our results are unlikely to have arisen due to chance.

To study persistent effects of Allied exposure, we collected data on more than 1,300 mayors to show that Allied-appointed mayors were quickly replaced after Soviet takeover. We additionally fielded a survey among residents of the former GDR to gain insights into the policies associated with the short-lived Allied occupation. In line with the historical narrative, we find that Allied occupation is more positively perceived and that it is associated with better governance. Other mechanisms find less empirical support: we identify no differences in exposure to radio signals from the sector that could have fostered opposition to the Soviet-supported GDR regime, we see no differential impact on public good provision in the GDR, and, using data from 1946 Berlin elections, we also show that the local population did not simply become more attached to the initial occupying force (“victor effect”).

Our study provides evidence for the importance of initial conditions for nation-building. Limited exposure to alternatives to the status quo may play an important role in explaining the lack of costly political opposition in non-democracies. Even a short exposure to better governance and a more disciplined occupying force can increase subsequent resistance to autocracy.

Reference: Martinez, Luis R., Jonas Jessen, Guo Xu. 2023. "A Glimpse of Freedom: Allied Occupation and Political Resistance in East Germany." *American Economic Journal: Applied Economics*, 15 (1): 68-106.



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