

ECONOMIC POLICY AND ITS IMPACT

A World Unprepared: Missing Skills for Development

Sarah Gust, Eric A. Hanushek and Ludger Woessmann

INSTITUTIONS ACROSS THE WORLD

Inequality Trends in the Context of Changes in Labor Market Outcomes, Composition and Redistribution in Germany

Maximilian Blömer, Elena Herold, Max Lay, Andreas Peichl, Ann-Christin Rathje, Paul Schüle and Anne Steuernagel

BIG-DATA-BASED ECONOMIC INSIGHTS

Semantic Shifts in EU Competition Law: A Data-driven Study of Policy Goals

Anselm Küsters

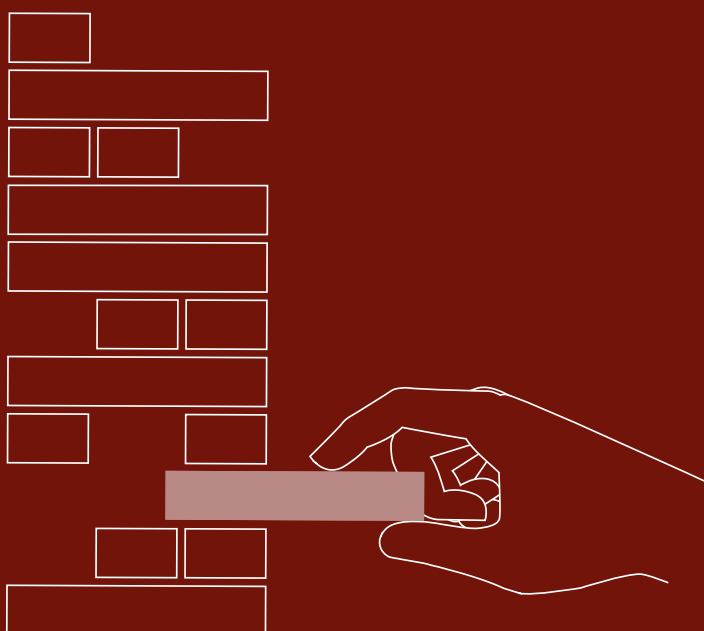
Pandemics, Payments and Fiscal Policy: Lessons from Four Years after the Outbreak of Covid-19

Gerome Wolf

POLICY DEBATE OF THE HOUR

Rise of Populism: Causes, Consequences and Policy Implications?

Sergei Guriev, Florian Dorn, David Gstrein and Florian Neumeier, K. Peren Arin, Efsthios Polyzos and Marcel Thum, Eugenio Levi and Steven Stillman, Manuel Funke, Moritz Schularick and Christoph Trebesch, Luisa Dörr, Niklas Potrafke, Felix Rösel and Tuuli Tähtinen, Vincenzo Galasso, Gylfi Zoega, Massimo Morelli



Editorial Board

Florian Dorn, Oliver Falck, Lisandra Flach, Sarah Necker, Florian Neumeier, Karen Pittel, Niklas Potrafke, Panu Poutvaara, Andreas Peichl, Helmut Rainer, Marcel Thum, Sebastian Wichert and Ludger Woessmann



EconPol is CESifo's economic policy platform. With key support from the ifo Institute, it seeks to leverage CESifo's globe-spanning network of 2 000 high-ranked economists – at least a dozen of whom have won the Nobel Prize – and ifo's decades-deep research expertise to provide well-founded advice to European policymakers. Drawing on the wide range of specializations of its members, EconPol's mission is to contribute to the crafting of effective economic policy in the face of the rapidly evolving challenges faced by the European economies and their global partners.

EconPol Forum
ISSN 2752-1176 (print version)
ISSN 2752-1184 (electronic version)

A bi-monthly journal on European economic issues
Publisher and distributor: CESifo GmbH, Poschingerstr. 5, 81679 Munich, Germany
Telephone +49 89 9224-0, telefax +49 89 9224-1409, email office@cesifo.de
Annual subscription rate: €50.00
Single subscription rate: €15.00
Shipping not included
Director EconPol Europe: Florian Dorn
Editor of this issue: Chang Woon Nam
Reproduction permitted only if source is stated and copy is sent to CESifo.

EconPol Europe: www.econpol.eu

2/2024

econPOL FORUM

Populism is on the rise. It goes hand in hand with far-left or far-right party slogans and/or strong, personalized political leadership and polarized rhetoric: The presidency of Donald Trump in the US and the campaigns for the Brexit referendum are two prominent examples in recent years. Several EU member states, namely France, Italy, Spain, Portugal, Hungary, Greece, Austria, the Netherlands, Sweden, and Germany, have experienced how quickly populists win voters in national elections. With the presidential election in the US and European elections in 2024, many people fear a further rise in political polarization and populism in the Western world.

In this issue of the EconPol Forum, our authors examine the problems posed by populism. They take a critical look at the main economic and political causes and consequences. And they shed light on the challenges ahead and how economic policy should respond to this global development.



How can universal, high-quality education standards be achieved? In “Economic Policy and Its Impact,” the authors show that the world is far from getting there, even though it plays an important role in economic development. In “Institutions Across the World,” the authors analyze long-term trends in inequality. The focus is on changes in labor market outcomes, composition, and redistribution in Germany. “Big-Data-Based Economic Insights” looks at the semantic shifts in EU competition law and the lessons learned from the Covid-19 crisis for payment systems and fiscal policy.

POLICY DEBATE OF THE HOUR

Rise of Populism: Causes, Consequences and Policy Implications?

Introduction to the Issue on Rise of Populism: Causes, Consequences and Policy Implications?	3
<i>Chang Woon Nam</i>	
Causes and Consequences of Spreading Populism: How to Deal with This Challenge	5
<i>Sergei Guriev</i>	
Economic Causes for the Rise of Populist and Nationalist Movements	9
<i>Florian Dorn, David Gstrein and Florian Neumeier</i>	
Understanding the Populist Voter	14
<i>K. Peren Arin, Efsthios Polyzos and Marcel Thum</i>	
External Shocks and Populism	19
<i>Eugenio Levi and Steven Stillman</i>	
Populists in Power: Economic and Political Consequences	24
<i>Manuel Funke, Moritz Schularick and Christoph Trebesch</i>	
What Policies Do Populists Pursue When in Power? Results of Selected Studies	29
<i>Luisa Dörr, Niklas Potrafke, Felix Rösel and Tuuli Tähtinen</i>	
The Effects of Fighting Populism on the Populist Dynamic	32
<i>Vincenzo Galasso</i>	
The Great Slowdown and Political Populism	36
<i>Gylfi Zoega</i>	
Sad Populism and the Policies of Hope	40
<i>Massimo Morelli</i>	

ECONOMIC POLICY AND ITS IMPACT

A World Unprepared: Missing Skills for Development	43
<i>Sarah Gust, Eric A. Hanushek and Ludger Woessmann</i>	

INSTITUTIONS ACROSS THE WORLD

Inequality Trends in the Context of Changes in Labor Market Outcomes, Composition and Redistribution in Germany	47
<i>Maximilian Blömer, Elena Herold, Max Lay, Andreas Peichl, Ann-Christin Rathje, Paul Schüle and Anne Steuernagel</i>	

BIG-DATA-BASED ECONOMIC INSIGHTS

Semantic Shifts in EU Competition Law: A Data-driven Study of Policy Goals	53
<i>Anselm Küsters</i>	
Pandemics, Payments and Fiscal Policy: Lessons from Four Years after the Outbreak of Covid-19	61
<i>Gerome Wolf</i>	

Introduction to the Issue on

Rise of Populism: Causes, Consequences and Policy Implications?

Chang Woon Nam

Populism, which goes hand in hand with far-left or far-right party slogans and/or strong, personalized political leadership and polarized rhetoric, is on the rise worldwide. The presidency of Donald Trump in the US and the campaigns in favor of the Brexit referendum are seen as two prominent examples in recent years. A number of EU member countries have also recently witnessed rapid popularity of such populist parties. For example, the radical parties in France, Italy, Spain, Portugal, Hungary, Greece, Austria, the Netherlands, Sweden, and Germany have recently gained votes in national elections. 2024 will be an important election year with the presidential elections in the US and the European elections, raising concerns of a further rise in political polarization and populism in the Western world.

Economic interests are often seen as one of the most important determinants of political preferences, and economic conditions appear to have a significant influence on voting behavior. In this context, rising unemployment, inequality of income and opportunity, economic uncertainty, and trade shocks are frequently suggested as the main reasons for supporting populist parties. Economic downturns and crises, which lead to job losses and substantial cuts in pensions, subsidies, and transfer payments, usually favor populist votes. Voters who are adversely affected by such developments usually demand more social protection and a significant increase in income redistribution. In parallel to their claim that jobs should be provided first for domestic workers, populist parties can therefore be characterized as “nationalist,” pursuing an “anti-immigration” policy, as such determining that social benefits should not be granted to foreigners who do not pay taxes, but mainly guaranteed for nationals. And these parties are also endowed with an “anti-elite” ideology, as they believe that the ruling elites, who are responsible for the crises, do not suffer the consequences. Populist politicians also argue that financial sector managers and shareholders benefit in good times, while taxpayers finance the bailouts for crisis-related losses.

This issue of EconPol Forum brings together nine articles that address the issues arising from populism worldwide. They not only take a critical look at the main economic and political causes and consequences, but also shed light on the wider challenges ahead and how future economic policy should respond to this serious global development.

Sergei Guriev argues that the rise of populism has been caused by secular trends (globalization, automa-

tion, and the rise of social media) and one-off events (e.g., the 2008–2009 global financial crisis and subsequent austerity, and the 2015–2016 refugee crisis), as well as cultural conflicts. He points to the evidence that populists in power stifle economic growth and undermine democratic political institutions, and recommends better redistribution, social media regulation, deliberative democracy, and ranked choice voting to combat the rise of populism.

In their critical assessment of the findings of recent economic and political science research, *Florian Dorn*, *David Gstrein* and *Florian Neumeier* postulate that the main factors behind the rise of populism and the loss of trust in political institutions are a growing gap between rich and poor, increasing regional inequalities, economic insecurity, and exposure to economic shocks, as well as fears about future economic development and social decline. To effectively combat the spread of populism, democracies must increase their resilience. This requires well-designed welfare and education systems that protect citizens from the consequences of economic crises while ensuring equal opportunities, sound and sustainable fiscal policies to respond to economic crises, and targeted economic policies and instruments to limit economic uncertainty in times of crisis and to support regions and people who feel left behind.

Drawing on a large-scale survey in France, Germany, Spain, and the UK aimed at better understanding the rise of populism and identifying the socio-demographic characteristics, attitudes, sources of information, and psychological patterns of those who vote or intend to vote for a populist party, *K. Peren Arin*, *Efstathios Polyzos* and *Marcel Thum* highlight that immigration emerges as a key area of divergence, with left-wing populist voters emphasizing the positive effects of immigration, while right-wing populists see it as a greater threat to native workers and the welfare state. Both populist groups share concerns about economic insecurity, perceived political inequality, limited opportunities, and a cautious attitude towards multinational corporations.

According to *Eugenio Levi* and *Steven Stillman*, the initial development in the 1990s and the long-term success of New Zealand First (NZF), one of the oldest populist parties in the OECD, are attributed to structural reforms that resulted in significant income losses, accompanied by immigration reforms that led to increased migration from culturally distant countries. In addition, the effects of these shocks were

found to be concentrated in rural areas. The shocks led to an increased mistrust in established parties. Both authors believe that a timely redistribution policy and a more convincing migration policy could be a first step in preventing the spread of populism.

Manuel Funke, Moritz Schularick and Christoph Trebesch show that countries with populist regimes experience a significant decline in real GDP per capita on average. In particular, the erosion of democratic norms could be an important reason for the negative economic consequences of populism, as democracy and strong institutions have a positive impact on economic prosperity in the long term. Institutional uncertainty and strong polarization in populist-led countries discourage investors and innovation, leading to capital flight and brain drain. Moreover, populism is an extremely persistent phenomenon, and the damage to democratic institutions can also explain why one populist government is often followed by another and why they often slide into authoritarianism. Such a serial nature of populism is a serious risk for the future.

Apart from the fact that populist-led countries tend to have lower economic growth and less integration into the global economy, *Luisa Dörr, Niklas Potrafke, Felix Rösel and Tuuli Tähtinen* provide some additional empirical evidence on what policies populists in office have pursued at the local level. These include: (1) during their time in office, populist mayors have restricted immigration and social polarization has increased; (2) the election of populist mayors with anti-immigrant agendas also influences attitudes toward foreign migrants, leading to a higher likelihood of hate crimes against immigrants; and (3) the representation of populists in local councils can lead to shifts in the ideological positions of other parties.

As populism often poses an existential threat to established political parties, traditional parties could try to debunk populist rhetoric or fight back with populist tactics. Based on a field experiment during the 2020 referendum in Italy, *Vincenzo Galasso*

shows that fighting back can be effective: political ads denouncing populist politicians demobilized their electoral base at little economic cost. However, he warns against the lasting effectiveness of such negative campaigns by traditional parties and emphasizes the need for future-oriented strategies in the fight against populism – such as positive narratives that do not boomerang over time.

Populism thrives on mistrust of established institutions, ideas, and ideologies. Stagnating productivity, large trade imbalances, and waves of immigration have contributed to growing discontent of the population in the West and undermined confidence. In this context, *Gylfi Zoega* suggests that long-term inclusive growth would help to restore confidence: while “growth” improves living standards over time, “inclusiveness” ensures that all or most workers benefit from growth and also feel that they are valued and given opportunities.

Finally, according to *Massimo Morelli*, the age of populism is characterized by two paradoxes: a political paradox – the demand for fewer checks and balances in times of growing distrust; and an economic paradox – the increased demand for national sovereignty in times of global challenges that cannot be solved by action at the national level. Since the collapse of hope and trust is both a cause and a consequence of populism, the political debate should therefore focus on these concerns. He sees that it is difficult to reverse the trend at the national level, but carefully chosen European policies can achieve this. For example, corporate and capital taxation at the EU level is feasible and could provide funds for greater economic security for the masses, e.g., with EU unemployment insurance, while helping to reduce taxes on labor income at the national level. This type of policy can create trust and hope in supranational institutions.

We hope you enjoy this Policy Debate of the Hour!

Sergei Guriev

Causes and Consequences of Spreading Populism: How to Deal with This Challenge*

THE RISE OF POPULISM IN THE 21ST CENTURY

We live in the era of an unprecedented rise of populism, especially (but not only) in advanced economies. In the 21st century, populist politicians' vote shares in Europe have been growing: at first slowly in the 2000s, then rapidly in the 2010s (Guriev and Papaioannou 2022). The number of countries with populists in power reached a historical peak in 2018 and remained close to this peak thereafter (Funke et al. 2023). What are the causes and the consequences of this rise of populism? If the consequences are a problem, what are the solutions to this problem?

As we show in Guriev and Papaioannou (2022), the public woke up to the threat of populism in 2016. The number of media articles mentioning “populism” or “populist” doubled in 2016 relative to 2015 and continued to grow in subsequent years. This was not surprising given the unexpected outcome of the Brexit referendum in the UK and Donald Trump's victory in the US presidential election. Research on populism followed suit – with the share of JSTOR research papers devoted to populism tripling in 2017 (and also continuing to grow afterwards).

The new focus on populism was especially striking in academic economics. Before 2016, economists thought that populism was a thing of a past, a macroeconomic folly of left-wing Latin American governments that neglected Economics 101 to their peril. Asked for a definition of populism before 2016, an economist would have to refer to the famous Dornbusch and Edwards (1991) book on Latin American macroeconomic disasters.

Since 2016, economists have understood that modern populists are different. Most 21st-century populists have learned basic macroeconomics. Moreover, a majority of successful modern populists are actually right wing rather than left wing (Funke et al. 2023). Economists had to find a new definition of populism – and they adopted that of political science. Instead of focusing on the neglect of macroeconomic laws, the definition of political scientists in Mudde (2004 and 2007) and Mudde and Rovira Kaltwasser (2017) considers populism as a view of society divided into two homogenous, antagonistic groups: “the pure people” and “the corrupt elite.” Populists may be left wing, right wing, or neither. Their main policy proposal is to give power to the “pure people.”

* Based on Guriev and Papaioannou (2022).

KEY MESSAGES

- **We live in the era of the unprecedented rise of populism – measured either by voting share for populist (i.e., anti-elite and anti-pluralist) politicians or by the presence of populists in governments**
- **There is convincing evidence that the rise of populism has been caused by secular trends (globalization, automation, and the rise of social media) as well as one-off events (such as the 2008–2009 global financial crisis and subsequent austerity and the 2015–2016 refugee crisis). It is also plausible that the rise of populism is a response to cultural wars**
- **There is also evidence that shows that populists in power slow down economic growth and undermine democratic political institutions**
- **There is limited research on solutions to the problem of the rise of populism. The suggested solutions include redistribution, regulating social media, deliberative democracy, and ranked-choice voting**

This definition thus implies two key features of populism: anti-elitism and anti-pluralism. Both are important. There are many liberal politicians who fight against elites in corrupt countries; they are not populists. There are many anti-pluralist politicians in democratic or non-democratic countries who belong to the elites; these are not populists either.

Mudde and Rovira Kaltwasser's definition of populists is “minimal” in the sense of imposing only two conditions. There are other definitions adding “identitarianism,” or “nativism,” or “authoritarian angle” (Mueller 2016; Eichengreen 2018; Norris and Inglehart 2019). Addition of criteria narrows the circle; this is why Guriev and Papaioannou (2022) prefer to stay with the broadest definition to analyze the phenomenon of populism in its entirety.

The minimal (anti-elite and anti-pluralism) definition is also useful in helping to identify who is and who is not populist – and therefore measuring the rise of populism in quantitative terms. While there are



Sergei Guriev

is Professor of Economics and Provost at Sciences Po in Paris. He was Rector of the New Economic School in Moscow from 2004 to 2013 and Chief Economist and Member of the Executive Committee of the European Bank for Reconstruction and Development (EBRD) from 2016 to 2019.

some disagreements on classification of populist parties, Rodrik (2018) shows that the 21st century has witnessed an unprecedented increase in the vote share of populist parties, especially the right-wing ones and especially in Europe. Guriev and Papaioannou (2022) show that this rise was indeed substantial in Europe, where the populist parties have gained 10–15 percentage points of vote share in the second decade of the century. Studying populists in power in 60 countries (accounting for 95 percent of global GDP), Funke et al. (2023) show that in 2018 more than one-quarter of these countries were run by populists – a much higher share than at any other point in history; and the rise of populism in the 21st century was mostly driven by the right-wing rather than the left-wing populists.

WHY RISE OF POPULISM AND WHY NOW

Populism is not new. Some political scientists date it back to Russian “narodniki” movement of the 1860s and 1870s. Narodniki literally means “populists,” but the movement’s ideology was certainly very different from the modern definition of populism. The first populists in the modern sense of this term were the members of the United States’ 1890s “People’s Party,” which did indeed put forward an anti-elite program and backed the 1896 presidential candidate William Jennings Bryan. While Bryan lost the election, the People’s Party policy proposals were eventually carried over onto the Progressive platform implemented by President Theodore Roosevelt and his successors.

The People’s Party’s anti-elite followers in the US and other countries were not always progressive. The 20th-century populists included post-WWI fascist regimes such as Hitler’s Nazi government. Yet, as mentioned above, it is the 21st century that has witnessed the unprecedented rise of populism. Why now? There are several explanations.

First, there are economic explanations. There are the secular trends of globalization and technological progress. These are interrelated. Technological progress reduces costs of trade in goods and services and promotes exchange of ideas, thus contributing to globalization. Globalization strengthens incentives to innovate and thus accelerates technological progress. Indeed, if R&D is likely to produce a new technology for a local market, the payoff is limited; if the product of the R&D is sold to the whole world, the return is much higher. Hence, globalization speeds up innovation.

Both globalization and technological progress promote global welfare and reduce global poverty. But both also increase within-country inequality and create losers. In advanced economies, blue-collar workers and routine white-collar workers are seeing their jobs being automated away and outsourced to low-wage countries. These left-behind voters support the populists who decry “cosmopolitan elites in favor of unconstrained globalization.” Economists

have traditionally been in favor of globalization and technological progress, as they assume that the losers from trade and automation can be compensated by national governments. It turns out, however, that compensating “losers” is actually much harder than it was supposed to be – because of political and institutional constraints.

The other explanation of the recent rise of populism is the global financial crisis of 2008–2009. This crisis was caused by the “incompetence of the elites” who were supposed to be able to regulate the mortgage market and the investment banks in charge of complex mortgage-based derivatives. It turned out that financial deregulation went too far. And the systemic failures were paid for not only by the investment bankers losing their multi-billion stock options but also by the lower-middle-income class homeowners going underwater on their mortgages. To add insult to injury, many European countries responded to the crisis with austerity policies, which further aggravated the well-being of the left-behind (Algan et al. 2017; Fetzer 2019). The impact of crisis and austerity on unemployment has greatly contributed to the rise of populism in both US and Europe (Guriev and Papaioannou 2022).

If the rise of populism were explained by economic factors only, it would not be as problematic. The economic problems of the left-behind can and should be addressed by economic instruments such as redistribution. Those are feasible, and they do deliver (Albanese et al. 2022). The problem arises if a substantial part of the rise of populism is explained by non-economic factors such as the spread of social media and an increase in immigration.

Social media platforms use the advertising model, which privileges the dissemination of messages that are more likely to be reshared – i.e., the more exciting and less boring messages. Not surprisingly, the rise of social media contributes to the rise of populists (Guriev et al. 2021). Indeed, populists are more likely to use shorter and simpler messages that are more “exciting” (Haidt and Rose-Stockwell 2019) and are more likely to “connect” to “ordinary people” and get their feedback (Zhuravskaya et al. 2020).

The “cultural” explanations of populism are more problematic – not because there is a question of “why,” but because there is a question of “why now.” By definition, culture changes slowly. If Europeans have always disliked non-Judeo-Christian immigrants, why did the populist vote share increase in recent years? There are several answers to these questions. First, there has been a rapid growth in immigration into OECD countries since the 1990s (Guriev and Papaioannou 2022). Second, there was an important one-off refugee crisis in 2015–2016. Third, recent events and social media have made immigration more salient (Bonomi et al. 2021; Henry et al. 2022; Guriev et al. 2023). Fourth, the long-standing cultural divides may have been activated by economic factors – such as the

global financial crisis of 2008–2009. Finally, it may well be the case that the secular trends of cultural change reached a tipping point (Norris and Inglehart 2019).

If the cultural explanations are correct, addressing the challenge of populism is much harder. It is hard to change culture; even if we can change it, that change is likely to take long time.

THE IMPLICATIONS OF THE RISE OF POPULISM

While the populists seem to address real problems of liberal democracies, their suggested solutions are counterproductive. Societies are diverse and the populists' binary simplifications of modern societies into elites vs. the people cannot help solve the problems of climate change, loss of biodiversity, misinformation, and the rise of inequality and discrimination, and they certainly cannot help stand up to non-democratic regimes and their wars.

Are populists at least better prepared to address the issues of economic underperformance and the neglect of the left-behind? The recent study by Funke et al. (2023) provides a convincing response to this question: no. The authors compare the performance of populist governments to their counterfactuals (constructed via the synthetic control method) and show that populists underdeliver in terms of economic growth (10 percentage points in 15 years relative to counterfactual) and quality of institutions (rule of law and press freedom). Populists also fail to reduce inequality. While there are exceptions, typical populists in government do not deliver on their electoral promises. This is not surprising, given that the populists do not like experts or checks and balances (which are important for economic growth). Given economic underperformance, populists try to stay in power by undermining democratic political institutions. As Funke et al. show, populists are more likely to leave in an irregular way rather than simply as a result of losing elections.

SOLUTIONS AND POLICY CONCLUSIONS

Given that populists are dangerous for the common good, what should we do to fight the recent rise of populism? Research on solutions to the populism problem is much more limited than that on its causes and consequences. Yet, there are several promising ideas.

First, to address the economic grievances of the left behind, national governments should use redistribution and retraining. This was not done in the aftermath of the global financial crisis. However, ten years later, during the Covid pandemic, governments learned the lessons and rolled out a generous spending campaign to support the most vulnerable parts of society. While populism did not disappear, it certainly did not increase during Covid (Funke et al.'s data show that there were fewer populists in power in 2020 than in 2018 and 2019).

Second, we need to regulate social media to prevent the dissemination of false news. There has already been progress in the European Union, which has adopted the Digital Services Act; this will drastically increase transparency of algorithms and provide the platform companies with incentives to limit the dissemination of "alternative facts."

Third, we need to bridge the gap between politicians and voters by resolving the "paradox of the democratic leader" (Kane and Patapan 2012). In today's political environment, democratic leaders face very high expectations of being much more competent than their voters. At the same time, they are expected to keep a connection to the voters and represent the "ordinary people." This is an impossible task. Democratic politicians are supposed to attend elite universities and have extensive experience of working in leading companies and ministries. At the same time, they are supposed to share the experience of the median voter, who in most OECD countries has not received tertiary education.

A potential solution to this problem is the deliberative democracy (Van Reybrouck 2016; Landemore 2020). The idea is very simple: instead of replacing elected entities such as parliament, we can randomly select a "mini-public," a sample of a hundred or a thousand of ordinary citizens, and ask them to discuss a difficult political problem (e.g., an egalitarian approach to green transition). The members of this citizens' assembly usually meet several weekends in a row, talk to each other as well as to experts and politicians, and finally formulate a proposal to be submitted to elected politicians. By definition, this proposal reflects the views of "ordinary people" and thus addresses the challenge of representation in political decision-making.

Finally, there are institutional fixes for electoral systems. Social media and the rise of inequality contribute to political polarization and support for extreme-left and extreme-right populist parties who reject the "centrist elites." There are, however, voting systems that can help the centrist politicians and raise social welfare. Ranked-choice voting resolves the problem of "vote splitting" in a first-past-the-post setting whereby centrist and left-wing voters divide their support, leaving the minority-supported extreme-right candidate to win (Maskin 2022). In the ranked-choice voting system, instead of naming just one preferred candidate, the voters rank all the candidates. The system selects the "least hated" candidate, which in many cases helps avoid the election of extreme-left or extreme-right politicians.

REFERENCES

- Albanese, G., G. Barone and G. de Blasio (2022), "Populist Voting and Losers' Discontent: Does Redistribution Matter?", *European Economic Review* 141, 104000.
- Algan, Y., S. Guriev, E. Papaioannou and E. Passari (2017), "The European Trust Crisis and the Rise of Populism", *Brookings Papers on Economic Activity* 48, 309–382.

- Bonomi, G., N. Gennaioli and G. Tabellini (2021), "Identity, Beliefs, and Political Conflict", *Quarterly Journal of Economics* 136, 2371–2411.
- Dornbusch, R. and S. Edwards (Eds., 1991), *The Macroeconomics of Populism in Latin America*, University of Chicago Press, Chicago.
- Eichengreen, B. (2018), *The Populist Temptation: Economic Grievance and Political Reaction in the Modern Era*, Oxford University Press, New York.
- Fetzer, T. (2019), "Did Austerity Cause Brexit?", *American Economic Review* 109, 3849–3886.
- Funke, M., M. Schularick and C. Trebesch (2023), "Populist Leaders and the Economy", *American Economic Review* 113, 3249–3288.
- Guriev, S., N. Melnikov and E. Zhuravskaya (2021), "3G Internet and Confidence in Government", *Quarterly Journal of Economics* 136, 2533–2613.
- Guriev, S. and E. Papaioannou (2022), "The Political Economy of Populism", *Journal of Economic Literature* 60, 753–832.
- Guriev, S., E. Henry, T. Marquis and E. Zhuravskaya (2023), "Curtailed False News, Amplifying Truth", <https://ssrn.com/abstract=4616553>.
- Haidt, J. and T. Rose-Stockwell (2019), "The Dark Psychology of Social Networks: Why It Feels Like Everything Is Going Haywire", *The Atlantic*, <https://www.theatlantic.com/magazine/archive/2019/12/social-media-democracy/600763/>.
- Henry, E., E. Zhuravskaya and S. Guriev (2022), "Checking and Sharing Alt-Facts", *American Economic Journal: Economic Policy* 14, 55–86.
- Kane, J. and H. Patapan (2012), *The Democratic Leader: How Democracy Defines, Empowers and Limits Its Leaders*, Oxford University Press, Oxford.
- Landemore, H. (2020), *Open Democracy: Reinventing Popular Rule for the Twenty-First Century*, Princeton University Press, Princeton.
- Maskin, E. S. (2022), "How to Improve Ranked-Choice Voting and Democracy", *Capitalism & Society*, Volume 16, Issue 1.
- Mudde, C. (2004), "The Populist Zeitgeist", *Government and Opposition* 39, 541–563.
- Mudde, C. (2007), *Populist Radical Right Parties in Europe*, Cambridge University Press, Cambridge.
- Mudde, C. and C. Rovira Kaltwasser (2017), *Populism: A Very Short Introduction*, Oxford University Press, New York.
- Mueller, J. W. (2016), *What Is Populism?*, University of Pennsylvania Press, Philadelphia.
- Norris, P. and R. Inglehart (2019), *Cultural Backlash: Trump, Brexit, and Authoritarian Populism*, Cambridge University Press, Cambridge.
- Rodrik, D. (2018), "Populism and the Economics of Globalization", *Journal of International Business Policy* 1, 12–33.
- Van Reybrouck, D. (2016), *Against Elections: The Case for Democracy*, Random House, New York.
- Zhuravskaya, E., M. Petrova and R. Enikolopov (2020), "Political Effects of the Internet and Social Media", *Annual Review of Economics* 12, 415–438.

Florian Dorn, David Gstrein and Florian Neumeier

Economic Causes for the Rise of Populist and Nationalist Movements*

In recent years, radical right-wing political groups and populist movements have strongly gained popularity in many Western democracies. The presidency of Donald Trump and the increasing political polarization in the US, the Brexit vote in the UK, as well as the electoral successes of nationalist parties in many Western countries – such as the Alternative für Deutschland (AfD) in Germany, Rassemblement National in France, the Sweden Democrats, or the Movimento 5 Stelle, Lega, or Fratelli d'Italia in Italy – serve as evidence of this trend. One of the key features of many of these movements is an anti-establishment, anti-immigration, and anti-globalization rhetoric. They stoke fear against foreigners and foreign cultures, reject pluralism, promote political and economic nationalism, and advocate for protectionist policies.

The rise of radical right-wing and populist movements has spurred research into its causes. Researchers discuss many possible factors including cultural backlash, a loss of democratic space, or the role of social media and fake news. In both economics and political science, there are also numerous studies linking the rise of populist and far-right movements to changing economic conditions. Indeed, there have been significant economic transformations in recent years and decades, such as advancing globalization and increasing automation, but also crises and conflicts, such as the economic and financial crisis, the Covid-19 pandemic, and wars that have caused worldwide economic strain. It thus seems obvious to assume that these trends are connected.

In this article, we summarize the existing literature studying the extent to which economic causes contribute to the rise in populism. This literature has focused especially on the relevance of the following economic factors:

- General and personal economic situation
- Economic uncertainty
- Economic and financial crises
- Economic globalization and structural change
- Migration and economic insecurity

In the remainder of this article, we discuss the insights provided by the economics and political science literature regarding the aforementioned factors.

GENERAL VS. PERSONAL ECONOMIC SITUATION

The literature on the influence of economic conditions on political preferences can be broadly divided into two groups. The first group focuses on the influence

KEY MESSAGES

- **Radical parties and populists benefit from deteriorating macroeconomic conditions. For voters, the overall economic development appears to be more important than their actual personal economic situation**
- **The most important economic factors explaining the rise of populism as well as the loss of trust in political institutions are a widening income gap between people and between regions, exposure to economic shocks, high economic uncertainty, and worries about the future**
- **Financial and economic crises, high exposure to global trade competition, an accelerating structural transformation, and immigration are discussed as key factors for increasing economic uncertainty**
- **Populists benefit from misperceptions about immigration and from perceptions of increasing economic risks, even if they differ from objective developments**
- **To combat the rise in populism, democracies need to increase resilience. That requires well-designed welfare and education systems that shield citizens from the consequences of economic crises and ensure equal opportunities; sound and sustainable fiscal policy to be able to react to economic crises; and targeted economic policies and instruments to limit economic uncertainty during crises and to support regions and people that feel left behind**

of macroeconomic developments, such as economic growth, the unemployment rate, and various measures of income inequality. The second group deals with the influence of an individual's economic situation. Here, for example, the development of one's own income or employment history are considered, as well as a person's relative position in the income distribution.

The first strand of the literature has a long tradition in both economics and political science and has been thoroughly reviewed in several articles (Healy and Malhotra 2013; Lewis-Beck and Stegmaier 2000; Stegmaier and Lewis-Beck 2013). Early studies falling into this category document robust correlations between leading macroeconomic indicators and the approval of the incumbent government. Lower economic growth, higher unemployment, and inflation, for instance, are associated with poorer election re-

* The article is largely based on an excerpt from a review conducted for a study on behalf of the nonprofit Hertie Foundation (Dorn et al. 2023b).

sults for political parties and/or politicians in power. Some of these studies also show that it is not only the actual economic development that matters, but also citizens' own (sometimes differing) perception of the macroeconomic situation. More recent studies also show that radical parties in particular benefit from deteriorating economic conditions (Algan et al. 2017; Funke et al. 2016; Mian et al. 2014). Algan et al. (2017), for instance, report that rising unemployment is associated with higher support for populist parties in Europe. Trust in national and European political institutions is also declining. Lechler (2019) and Dijkstra et al. (2020) document a strong correlation between rising unemployment and greater rejection of the EU.

Related studies have focused on the influence of (income) inequality for the success of populist movements. For instance, several studies report a strong association between greater inequality and increasing political polarization in the US (Duca and Saving 2016; Garand 2010; Poole et al. 2016; Voorheis et al. 2015). Inequality also plays a role in Europe, but the exact effects vary. Winkler (2019) documents a positive correlation between inequality and rising support for left-wing parties. Dorn et al. (2020), on the other hand, find a positive effect of growing inequality between regions on the support for radical right-wing parties in Germany, albeit with the caveat that the effects differ depending on the definition of the radical parties considered. In addition to the radical right, left-wing extremist parties are also benefiting from growing regional economic inequality. However, while the German left-wing party Die Linke benefits only from increasing inequality in West German regions, radical right-wing parties – especially the AfD – are particularly successful in East Germany. The exact effect of inequality could therefore depend on the political environment and other contextual factors. These factors may depend, for example, on regional economic development, but also on the individual experiences of the affected voter groups. Roth and Wohlfart (2018), for example, find that people who have experienced greater inequality in their formative years are more likely to reject redistribution and less likely to support left-wing parties.

The second strand of studies linking economic conditions to political outcomes focuses on the importance of people's individual economic situations. However, in their literature review, Stegmaier and Lewis-Beck (2013) find that the overall economic situation appears to be more important than the individual situation for electoral outcomes. This also appears to apply to the success of radical parties. In their study, Dorn et al. (2023a) show that the popularity of radical parties, dissatisfaction with democracy, and the loss of trust in the political system and established parties increases across all income groups in economically disadvantaged regions in Germany.

ECONOMIC INSECURITY

Aspects other than objective economic characteristics such as income or unemployment can also play a role in political attitudes. For example, the fear of losing a job can influence political decisions, even if the job loss has not (yet) occurred. In addition, individual perceptions of economic risks can differ from objective developments. In the existing literature, these economic risks and their perception are often summarized under the term “economic insecurity.” The design of the social security system also plays an important role in the literature, as it mitigates the consequences of economic risks and can therefore reduce economic uncertainty.

In their study, Guiso et al. (2019) utilize survey data from 31 European countries and measure economic insecurity along three dimensions (ability to live on current income, experience of unemployment, impact of globalization on job). The findings of their study suggest that increasing economic insecurity correlates with higher support for populist parties. Rising uncertainty also increases the likelihood of not voting, especially among former voters of non-populist parties. Economic insecurity also correlates with lower trust in (established) political parties in general and higher rejection of migration.

Dal Bó et al. (2018) analyze the consequences of cuts to the social security system in Sweden. These reforms increased economic insecurity as they re-



Florian Dorn

is Director of EconPol Europe, and Senior Secretary to the President of the ifo Institute. He is a Lecturer in Economics at the University of Munich and a CESifo Research Network affiliate.



David Gstrein

is a Junior Economist and Doctoral Student at the ifo Taxation and Fiscal Policy Research Group and LMU Munich.



Florian Neumeier

heads ifo's Taxation and Fiscal Policy Research Group.

duced protection in the event of job losses. After the 2008 financial crisis, unemployment rose sharply, and the right-wing populist Sweden Democrats gained support, especially in regions that were particularly hard hit by the reforms and the financial crisis. These same authors also document that people with lower incomes and higher job insecurity are overrepresented among the ranks of Sweden Democrats politicians. This shows that economic shocks not only increase the demand for populist parties, but potentially also the supply of candidates for radical parties.

ECONOMIC GLOBALIZATION AND STRUCTURAL TRANSFORMATION

For a long time, economists assumed that the economically disadvantaged would primarily turn to left-wing parties, as these advocate redistributive policies and social equalization (Romer 1975; Meltzer and Richard 1981). However, it is currently mainly nationalist and right-wing populist parties that are particularly popular in economically strained times. There are various explanations for this. Aggeborn and Persson (2017) argue that this is primarily because nationalist parties place a particular focus on policy areas that benefit the domestic population. Left-wing parties, on the other hand, are generally willing to contribute to the financing of “global” goods and services that do not directly benefit the domestic population, such as development aid or climate protection. Antràs et al. (2017) and Sinn (2003) point out that the possibilities for redistribution in a globalized (economic) world are limited, as tax increases entail the risk of capital flight. In an open economy, the welfare state’s hands may therefore be tied when it comes to compensating the losers of globalization. For this reason, protectionist messages, such as those sent out by nationalist parties, are particularly popular.

Against this backdrop, economics and political science scholars have become interested in the effects of increasing globalization on political outcomes. In particular, the literature has dealt with the effects of international trade. Different regions within a country tend to be affected very differently by increasing international competition due to differences in their industrial structure. This is why the effects of globalization on regional labor markets also vary greatly within a country, which offers the opportunity to identify causal effects through the application of treatment-control group designs and instrumental variable estimation.

One of the most influential studies in this field is the one by Autor et al. (2013), which investigates the consequences of China’s increasing importance in the global economy on regional labor markets in the US. The authors find that US regions that are more affected by import competition and trade with China experience greater declines in manufacturing employment and wages. In a later study, Autor et al. (2020)

show that regions that are particularly affected by this “China syndrome” also exhibited greater political polarization. In addition, the study suggests that the exposure to import competition from China had a substantial effect on Donald Trump’s electoral success.

There are similar results for other countries. Colantone and Stanig (2018a) show that greater exposure of regions to globalization increased support in the UK for the Brexit referendum. They also show that the effect is not limited to employees in the affected sectors, but that regional economic shocks generally lead to more skepticism toward the EU. In another study, Colantone and Stanig (2018b) conduct a similar analysis for 15 Western European countries and find similar results. The authors also show that economic shocks adversely affect attitudes towards migration and democracy.

For Germany, Dippel et al. (2022) examine the relationship between trade with low-wage countries and voting behavior in affected regions. They find that greater exposure of a region to import competition leads to higher support for nationalist parties, especially the AfD. However, they also show that higher exports from a region can have the opposite effect. The effects of globalization therefore do not necessarily go in only one direction, but voters seem to be able to distinguish whether their jobs and income depend on globalization with a strong export economy. Based on individual data, Dippel et al. (2022) also show that in the manufacturing sector in particular, people with a low level of education turn to nationalist parties.

Overall, the literature shows that negative economic shocks triggered by structural change and globalization can increase support for populist parties. To what extent it is the poor economic situation of the region or of the individual caused by the globalization shock is usually not clear from the studies. There is also the question of the extent to which other economic shocks besides the globalization shock can lead to similar reactions. Di Tella and Rodrik (2020), for example, show in information experiments that job losses triggered by poor management increase support for better social security. In contrast, job losses due to offshoring lead to more support for protectionist trade policies, but not in favor of better protection. In this respect, negative economic effects attributable to globalization are most likely to play into the hands of right-wing and protectionist parties.

Other studies also show the political impact of structural transformation, which can be attributed to technological and digital change or the green transformation. Anelli et al. (2021), for example, document a correlation between individual concerns about automation and support for radical right-wing (and to a lesser extent radical left-wing) parties for 13 Western European countries. Colantone et al. (2022) examine the effects of a ban on high-pollution cars in Milan. Voters affected by this were more likely to support the right-wing populist party Lega. Voters who were com-

pensated for the ban did not change their preferences. These results show that the impact and distributional effects of the current structural transformations in democratic countries can have substantial effects on voting behavior and political stability.

ECONOMIC AND FINANCIAL CRISES

History shows that economic and financial crises occur regularly and lead to economic uncertainty. The political effects of these crises have therefore also been studied intensively in the existing literature. Funke et al. (2016) analyze financial crises in 20 industrial nations over the last 140 years. After financial crises, the share of votes for far-right parties increases by an average of 30 percent. Far-left parties, on the other hand, appear to benefit significantly less from crises. The authors also show that these strong political reactions are a special feature of financial crises. Economic crises that do not lead to turmoil in the financial sector have a much smaller effect on vote gains for radical parties. Other studies have focused on the 2007–2008 global financial crisis. Algan et al. (2017) document a strong association between the rise in unemployment in European regions and support for populist parties. They also show that trust in national and European institutions declined in the aftermath of the global financial crisis.

One consequence of the 2007–2008 global financial crisis and the subsequent sovereign debt crisis was the need to implement fiscal austerity measures in many countries. Fetzner (2019) finds that the spending cuts in the aftermath of the financial crisis in the UK led to higher support for UKIP and a more negative attitude towards the EU. Furthermore, Fetzner (2019) estimates that without austerity measures, support for leaving the EU would have been 6 percentage points lower, meaning that the “Remain” option would have won the Brexit referendum. For Sweden, Dal Bó et al. (2018) report that the welfare spending cuts contributed to the rise of the Sweden Democrats.

MIGRATION AND ECONOMIC INSECURITY

Migration policy is one of the core topics of right-wing populist and nationalist parties. In their anti-immigration rhetoric, they typically highlight the fiscal costs associated with the intake of refugees or stoke fears that an inflow of immigrants reduces native residents’ employment opportunities and wages. In this regard, economic insecurity and the fear of losing one’s job, as well as the feeling of not getting what they believe they are entitled to, indeed often go hand in hand with anti-immigration attitudes and can even lead to an increase in far-right motivated violence (Becker et al. 2017; Guiso et al. 2019; Davis and Deole 2016; Falk et al. 2011; Facchini and Mayda 2009; Mayda 2006).

Against this backdrop, economic literature examines whether immigration can explain an increase

in the electoral success of populist and extremist parties. Alesina and Tabellini (2022) summarize this literature. In principle, a large part of the literature discussed there finds that immigration has positive effects on the election results of populist and nationalist parties (e.g., Ajzenman et al. 2022; Dustmann et al. 2019; Edo et al. 2019; Halla et al. 2017). However, the effects also appear to be strongly context-dependent. A number of factors influence the effects, including the size of the migration flow, socio-economic composition, educational and cultural background of the group of migrants, and interactions between the groups, i.e., between host society and immigrants.

One particularly interesting insight reported by Steinmayer (2021) is that support for nationalist parties becomes smaller the closer the citizens of a country get in touch with immigrants. The author examines the effect of immigration to Austria during the refugee crisis of 2015 and exploits regional variation in the number of vacant buildings that are suitable for refugee accommodation to identify causal effects. The results reveal that municipalities which refugees had only passed through had higher right-wing vote shares, while municipalities in which refugees settled for longer periods experienced lower vote shares for right-wing parties. Steinmayer (2021) interprets this result as support for the “contact hypothesis,” which states that attitudes towards immigrants develop positively the more people interact with them.

Another important aspect is the difference between the perception and reality of immigration. Surveys conducted by Alesina and Tabellini (2022) in six countries (France, Germany, Italy, Sweden, the UK, and the US) found that the number of immigrants is greatly overestimated in all countries. In addition, immigrants are perceived to be more often Muslim, unemployed, and less educated than they actually are. This distorted perception of migration, and in particular the socio-economic characteristics of migrants, thus plays into the hands of nationalist parties’ anti-migration rhetoric.

POLICY IMPLICATIONS

Populist and nationalist parties and movements have enjoyed increasing public support in recent years, posing a threat to the stability of Western democracies. Strategies to counter these developments should be based on a sound understanding of the factors behind the success of populist movements. This article summarizes the findings of recent economics and political science research into the economic causes of the rise in populism. The most important factors explaining the rise of populism as well as the loss of trust in political institutions are a widening gap between rich and poor, growing regional disparities, economic uncertainty, and exposure to economic shocks, as well as fears about future economic development and social decline.

What can be done to counter populist and nationalist movements? Above all, it's important that countries become resilient to economic shocks and remain able to shield their citizens from the consequences of economic crises. To achieve this, provisions must be put in place to compensate a country's citizens for the income loss they may experience in case of an economic downturn and, at the same time, enable them to adapt to changing economic conditions. This requires functioning welfare and education systems that provide a safety net for people affected by economic shocks, ensure equal opportunities, and enable all citizens to participate in society. It also requires a sound and sustainable fiscal policy to be able to react to economic crises. Well-designed economic policy instruments may limit the adverse effects of economic downturns and the perceived economic uncertainty. In addition, improving economic conditions is essential to improving people's perception of their prospects – which is particularly important in more economically disadvantaged regions.

REFERENCES

- Aggeborn, L. and L. Persson (2017), "Public Finance and Right-Wing Populism", *IFN Working Paper* 1182.
- Ajzenman, N., C. G. Aksoy and S. Guriev (2022), "Exposure to Transit Migration: Public Attitudes and Entrepreneurship", *Journal of Development Economics* 158, 102899.
- Alesina, A. and M. Tabellini (2022), "The Political Effects of Immigration: Culture or Economics?", *SSRN Electronic Journal*, May, <https://doi.org/10.2139/ssrn.4122808>.
- Algan, Y., S. Guriev, E. Papaioannou and E. Passari (2017), "The European Trust Crisis and the Rise of Populism", *Brookings Papers on Economic Activity*, Fall, 309–382.
- Anelli, M., I. Colantone and P. Stanig (2021), "Individual Vulnerability to Industrial Robot Adoption Increases Support for the Radical Right", *Proceedings of the National Academy of Sciences of the United States of America* 118, 1–8.
- Antràs, P., A. De Gortari and O. Itzhoki (2017), "Globalization, Inequality and Welfare", *Journal of International Economics* 108, 387–412.
- Autor, D., D. Dorn and G. H. Hanson (2013), "The China Syndrome: Local Labor Market Effects of Import Competition in the United States", *American Economic Review* 103, 2121–2168.
- Autor, D., D. Dorn, G. H. Hanson and K. Majlesi (2020), "Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure", *American Economic Review* 110, 3139–3183.
- Becker, S. O., T. Fetzer and D. Novy (2017), "Who Voted for Brexit? A Comprehensive District-level Analysis", *Economic Policy* 32, 601–651.
- Colantone, I., L. Di Lonardo, Y. Margalit and M. Percoco (2022), *The Political Consequences of Green Policies: Evidence from Italy*, Cambridge University Press, Cambridge.
- Colantone, I. and P. Stanig (2018a), "Global Competition and Brexit", *American Political Science Review* 112, 201–218.
- Colantone, I. and P. Stanig (2018b), "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe", *American Journal of Political Science* 62, 936–953.
- Dal Bó, E., F. Finan, O. Folke, T. Persson and J. Rickne (2018), *Economic Losers and Political Winners: Sweden's Radical Right*, <http://perseus.iies.su.se/~tapers/papers/Draft180902.pdf>.
- Davis, L. and S. Deole (2016), "Immigration, Attitudes and the Rise of the Political Right: The Role of Cultural and Economic Concerns over Immigration", *CEifo Working Paper* 5680.
- Dijkstra, L., H. Poelman and A. Rodríguez-Pose (2020), "The Geography of EU Discontent", *Regional Studies* 54, 737–753.
- Dippel, C., R. Gold, S. Heblich and R. Pinto (2022), "The Effect of Trade on Workers and Voters", *The Economic Journal* 132, 199–217.
- Di Tella, R. and D. Rodrik (2020), "Labour Market Shocks and the Demand for Trade Protection: Evidence from Online Surveys", *The Economic Journal* 130, 1008–1030.
- Dorn, F., C. Fuest, L. Immel and F. Neumeier (2020), "Economic Deprivation and Radical Voting: Evidence from Germany", *ifo Working Paper* 336.
- Dorn, F., C. Fuest, D. Gstrein, L. Immel and F. Neumeier (2023a), "Economic Deprivation and Radical Voting: Evidence from Germany", *Working Paper*, Mimeo.
- Dorn, F., D. Gstrein and F. Neumeier (2023b), *Stabile Demokratien in wirtschaftlich schweren Zeiten?*, ifo-Studie im Auftrag der Hertie-Kommision "Demokratie und Bildung", Gemeinnützige Hertie-Stiftung, Berlin.
- Duca, J. V. and J. L. Saving (2016), "Income Inequality and Political Polarization: Time Series Evidence over Nine Decades", *Review of Income and Wealth* 62, 445–466.
- Dustmann, C., K. Vasiljeva and A. Piil Damm (2019), "Refugee Migration and Electoral Outcomes", *Review of Economic Studies* 86, 2035–2091.
- Edo, A., Y. Giesing, J. Öztunc and P. Poutvaara (2019), "Immigration and Electoral Support for the Far-left and the Far-right", *European Economic Review* 115, 99–143.
- Facchini, G. and A. Mayda (2009), "Individual Attitudes towards Immigration: Welfare-State Determinants across Countries", *Review of Economics and Statistics* 91, 295–314.
- Falk, A., A. Kuhn and J. Zweimüller (2011), "Unemployment and Right-Wing Extremist Crime", *Scandinavian Journal of Economics* 113, 260–285.
- Fetzer, T. (2019), "Did Austerity Cause Brexit?", *American Economic Review* 109, 3849–3886.
- Funke, M., M. Schularick and C. Trebesch (2016), "Going to Extremes: Politics after Financial Crises, 1870–2014", *European Economic Review* 88, 227–260.
- Garand, J. C. (2010), "Income Inequality, Party Polarization, and Roll-Call Voting in the U.S. Senate", *Journal of Politics* 72, 1109–1128.
- Guiso, L., H. Herrera, M. Morelli and T. Sonno (2019), *Economic Insecurity and the Demand of Populism in Europe*, <https://heliosherrera.com/populism.pdf>.
- Halla, M., A. F. Wagner and J. Zweimüller (2017), "Immigration and Voting for the Far Right", *Journal of the European Economic Association* 15, 1341–1385.
- Healy, A. and N. Malhotra (2013), "Retrospective Voting Reconsidered", *Annual Review of Political Science* 16, 285–306.
- Lechler, M. (2019), "Employment Shocks and Anti-EU Sentiment", *European Journal of Political Economy* 59, 266–295.
- Lewis-Beck, M. S. and M. Stegmaier (2000), "Economic Determinants of Electoral Outcomes", *Annual Review of Political Science* 3, 183–219.
- Mayda, A. (2006), "Who Is against Immigration? A Cross-Country Investigation of Individual Attitudes toward Immigrants", *Review of Economics and Statistics* 88, 510–530.
- Meltzer, A. H. and S. F. Richard (1981), "A Rational Theory of the Size of Government", *Journal of Political Economy* 89, 914–927.
- Mian, A., A. Sufi and F. Trebbi (2014), "Resolving Debt Overhang: Political Constraints in the Aftermath of Financial Crises", *American Economic Journal: Macroeconomics* 6, 1–28.
- Poole, K. T., N. McCarty and H. Rosenthal (2016), *Polarized America: The Dance of Ideology and Unequal Riches*, MIT Press, Cambridge, MA.
- Romer, T. (1975), "Individual Welfare, Majority Voting, and the Properties of a Linear Income Tax", *Journal of Public Economics* 4, 163–185.
- Roth, C. and J. Wohlfart (2018), "Experienced Inequality and Preferences for Redistribution", *Journal of Public Economics* 167, 251–262.
- Sinn, H. W. (2003), *The New Systems Competition*, Blackwell, Oxford.
- Stegmaier, M. and M. S. Lewis-Beck (2013), "The VP-Function Revisited: A Survey of the Literature on Vote and Popularity Functions after over 40 Years", *Public Choice* 157, 367–385.
- Steinmayr, A. (2021), "Contact versus Exposure: Refugee Presence and Voting for the Far Right", *The Review of Economics and Statistics* 103, 310–327.
- Voorheis, J., N. McCarty and B. Shor (2015), *Unequal Incomes, Ideology and Gridlock: How Rising Inequality Increases Political Polarization*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2649215.
- Winkler, H. (2019), "The Effect of Income Inequality on Political Polarization: Evidence from European Regions, 2002–2014", *Economics and Politics* 31, 137–162.

K. Peren Arin, Efstathios Polyzos and Marcel Thum

Understanding the Populist Voter

KEY MESSAGES

- **Left-wing and right-wing populist voters differ the most on the issues of immigration, the importance of traditions, religiosity, and the need to dismantle the welfare state**
- **Populist voters from left and right share concerns about economic insecurity, a lack of empathy by politicians, and a perceived lack of opportunities**
- **They also share a low self-worth and differ in this dimension from non-populist voters**
- **Right-wing populist voters have higher identity misperceptions regarding immigration and immigrant groups, while both groups have lower corruption misperceptions compared to non-populist voters**

Populism is a somewhat elusive concept. The term is often used in public discourse in a demeaning manner. It is used to dismiss the views of others as rather simplistic. Or it is used to devalue politicians' actions or proposals as simply driven by opportunistic motives (Schwörer 2021); politicians are accused of choosing the path of least resistance. In every part of the political spectrum, however, we can identify arguments that are not well-thought-out and politicians from all parties that want to please their electorates. In search of a sustainable definition of populism, many investigations refer to Mudde (2004, 543); "an ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, 'the pure people' versus 'the corrupt elite', and which argues that politics should be an expression of the *volonté générale* (general will) of the people." Hence, "us vs. the elite" is seen as the common denominator

of modern populism. This definition works reasonably well across the political spectrum and countries. On the left of the political spectrum, we find parties that do not just want to redistribute more towards the poor (as do traditional left-leaning parties) but combine this call for redistribution with anti-elitist rhetoric claiming that rich elites divert the true people's resources in their direction. On the right of the political spectrum, it is corrupt elites who allow immigration from other parts of the world, which is seen as a threat to traditional values, eliminating national cultures and endangering the well-being of the native masses. The definition paints parties like the AfD in Germany, Rassemblement National in France, the UK Independence Party in the United Kingdom, or Vox in Spain as right-wing populists. The Spanish Unidas Podemos, the German Die Linke, and the French La France Insoumise are their left-wing populist counterparts.

This concept of populism is beneficial for tracking the development of the "us vs. the elite" thinking in national elections. The vote share of populist parties – classified according to the PopuList (Rooduijn et al. 2023) – has increased in Europe from 12 percent in 1993 to more than 30 percent in 2022. It can also be effectively used to analyze whether such populist parties create different policy outcomes than traditional non-populist parties. Dornbusch and Edwards (1990) described the vicious economic cycle typically triggered by populist regimes. More recently, Funke et al. (2023) investigated the performance of populist regimes worldwide in the last 120 years. After 15 years, countries with a populist government lost 10 percent of their GDP per capita compared to their non-populist counterfactual.

But who are the voters of populist parties? To better understand the rise in populism, it might be help-



K. Peren Arin

is Professor of Economics at Zayed University, Abu Dhabi and Research Associate at the Centre of Applied Macroeconomic Analysis (CAMA), Australian National University, Canberra.



Efstathios Polyzos

is Associate Professor of Finance at Zayed University, Abu Dhabi and Research Associate at the Centre of Applied Macroeconomic Analysis (CAMA), Australian National University, Canberra.

Photo: © Zayed University



Marcel Thum

is Professor of Public Economics at TU Dresden and Director of the Dresden Branch of the ifo Institute.

Photo: © Klaus Gigga

ful to know more about the socio-demographics, attitudes, information sets, and psychological patterns of those who vote or intend to vote for a populist party. Several papers tried to pinpoint the determinants of populist voting, albeit approaching the issue from various angles and with different methodologies. To name just a few dimensions that have been investigated, gender significantly predicts populist voting, with radical right parties garnering more support from men than women (Spierings and Zaslove 2015 and 2017). Men are also more likely to favor populist politicians on social media, particularly Facebook (Bobba et al. 2018).

In contrast to what is commonly discussed in public, age does not uniformly go along with populist voting. While in the UK, the UKIP voters were predominantly older (Ford and Goodwin 2014), it is younger, better-educated people who tend to support left- and right-wing populists in continental Western Europe (Zagorski et al. 2021; Foa and Mounk 2019). Next to socio-demographics, populist votes are influenced by macroeconomic factors such as increased unemployment during economic crises, skill-biased trade, and inequality (Guriev 2018; Pastor and Veronesi 2021; Dijkstra et al. 2020). Often, the perception of the economic situation rather than personal vulnerability impacts populist voting (Rico and Anduiza 2019; Algan et al. 2017). Biased perceptions, in general, as demonstrated by Kuklinski et al. (2000) regarding welfare recipients and budget allocation, have a significant impact. Right- and left-wing populist voters exhibit low political trust but differ, for instance, in their attitudes towards migration and income redistribution (Akkerman et al. 2017).

In this article, we aim to describe the populist voter by highlighting those dimensions where left-wing populist voters differ from the most right-populist voters. We also identify those dimensions where there is hardly any difference between the two types of populists but they differ from non-populist voters. To achieve this goal, we use simple descriptive statistics for the determinants of populist votes.¹ Our analysis relies on a unique large-scale survey that contains a multitude of individual-level information (socio-demographics, attitudes, misperceptions, behavioral and psychological facets) for individuals in four major European countries.

SURVEY DATA

The survey, created by the authors using Qualtrics, was executed across four European countries: France, Germany, Spain, and the UK.² The survey was distributed via e-mail with the assistance of Respondi,³

a company known for its access to representative samples of survey participants. The survey was distributed in the national language of each country; compensation was offered only to those participants who successfully finished the survey.

The questionnaire prompted respondents to disclose their voting history in the previous election and indicate their intended vote in the upcoming one. Furthermore, the questionnaire gathered information on the respondents' self-identified political orientation, from left to right. We also collected details about the respondents' demographics and socio-economic status. Additionally, the survey included a series of questions regarding the individuals' perceptions of economic security, trust in political parties and institutions, and their ability to discern fake news. Additionally, respondents were asked about their sentiments regarding declinism and social loneliness. Finally, the questionnaire explored potential misperceptions of economic status, migration, religion, and corruption. Factual questions were posed to assess respondents' understanding of these issues, and their responses were compared with actual figures.

A total of 31,568 responses were received, with an average completion time of 24 minutes. We excluded from the analysis any respondents who did not complete all the questions and those who completed the survey unusually quickly (in less than 3 minutes). We performed manual grouping to manage the various name variants of a party.⁴ Cases with no responses to the questions of previous and future votes were disregarded. In addition, we filtered out participants whose responses regarding their previous or next vote included political parties that could not be matched with recognized parties in each country.

The final sample comprises 12,027 respondents aged 18 to 92 who completed the questionnaire. The sample closely approximates a representative distribution in each country, with final per-country sample sizes of 3,551 for Germany, 2,556 for France, 3,214 for the UK, and 2,706 for Spain.

The final step was to assign populist tags to the political parties that the respondents voted or planned to vote for, categorizing them as left or right based on classifications from Rooduijn et al. (2023) and the Pew Research Center (2019). We scrutinized party programs and publicly available information for parties absent from these sources to determine their classification as populist, adhering to the criteria in Rooduijn et al. (2023) and the Pew Research Center (2019).⁵ Depending on the stated voting behavior, we classified the respondents as right-wing populists, left-wing populists, or non-populist voters. For the subsequent analysis, we calculated the mean responses to each of the roughly 100 questions in the survey for the three voter groups. This allowed us to identify characteristics where left- and right-wing

¹ In an academic companion paper, we employ more advanced regularization methods (BMA, Lasso and Ridge regressions, as well as variations of Random Forests) to isolate statistically important drivers of populist votes; see Arin et al. (2024).

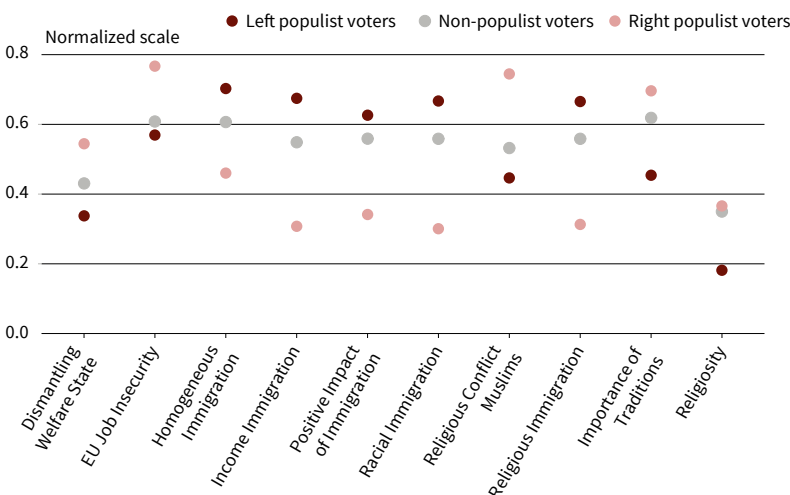
² For more details on the survey, see Arin et al. (2022, 2023 and 2024).

³ The company was recently renamed to Bilendi.

⁴ For instance, National Front and National Rally in France.

⁵ The classified list of populist parties is available upon request.

Figure 1
Responses with Highest Distance between Left and Right Populist Voters



Note: All response scales are normalised between 0 and 1 to facilitate comparability. 1. Dismantling Welfare State: In order to face the competition of other countries, we will have to dismantle our welfare state. 2. EU Job Insecurity: Opening the European frontiers means that our employers will prefer the low-cost workers from poorer countries to our own workers. 3. Homogeneous Immigration: To what extent do you think the home country should allow people of the same race or ethnic group as the majority of the home country people to come and live here? 4. Income Immigration: To what extent you think the home country should allow people from poorer countries outside Europe to come and live here? 5. Positive Impact of Immigration: To what extent you think the home country has become a worse or a better place to live by people coming to live here from other countries? 6. Racial Immigration: To what extent you think the home country should allow people of the different race or ethnic group than the majority of the home country people to come and live here? 7. Religious Conflict Muslims: The relationship between Christians and Muslims is bound to become violent in the future. 8. Religious Immigration: To what extent you think the home country should allow people of different religious faith than the majority of the home country people to come and live here? 9. Importance of Traditions: It is important to follow traditions and customs handed down by religion or family. 10. Religiosity: How religious are you?
Source: Authors' survey.

© ifo Institute

populists differ but also where populists agree and diverge from non-populists.

RESULTS

Figure 1 displays the survey questions where right- and left-wing populist voters differ the most. We have normalized all response scales between 0 and 1 to facilitate comparability. For instance, when confronted with the statement, “In order to face the competition of other countries, we will have to dismantle our welfare state,” left-wing populist voters express a strong stance against dismantling the welfare state, emphasizing their commitment to social safety nets. Right-wing populist voters show a high degree of consent for the need to dismantle the welfare state; non-populist voters’ views are in between the two populist groups. Hence, the design and extent of the welfare state is a policy area where left and right populist voters diverge from each other but also from non-populist voters.

Left and right populist voters also diverge in their responses regarding job insecurity due to EU borders opening (“Opening the European frontiers means that our employers will prefer the low-cost workers from poorer countries to our own workers”). Voters of right-wing populists view the EU’s open borders for goods, services, capital, and, to some extent, labor as a threat to job security, while the approval of those voting for left-wing populists is even below the non-populist voters, suggesting another area of the

ideological divide. It is somewhat surprising that left-wing populist voters express so little concern about the threats from globalization, while left-wing populist parties typically emphasize that globalization increases the income and wealth of the elites at the expense of “normal people.”⁶ As we will see below, the response of left-wing populist voters is more negative when directly asked about globalization rather than indirectly via the openness of borders.

Several questions in this top-ten list of divergent views deal with immigration and its consequences. These inquiries explore the willingness of respondents to accept immigrants of the same race or ethnicity (“homogeneous immigration”), different races or ethnicities (“racial immigration”), different religions (“religious immigration”), or from poorer countries (“income immigration”). The immigration-related questions also elicit the respondents’ beliefs about whether immigration has a positive or negative impact on their country (“positive impact of immigration”) and whether immigration has the potential for violent conflicts between Muslims and Christians in the future (“religious conflict Muslims”). In all these dimensions, there is a noticeable disparity in responses between left- and right-wing populist voters. Left-wing populist voters express a notably more positive outlook, irrespective of the immigrants’ race, religion, or income, surpassing even the optimism of non-populist voters.

The last two areas of divergence between left- and right-wing opinions pertain to religiosity and the significance attributed to traditions (“importance of traditions”). Left-wing populist voters are significantly less religious than both non-populist voters and right-wing populist voters. Also, they do not assign considerable importance to traditions, and their responses here also differ from non-populist voters. In these particular questions, non-populist voters align more closely with right-wing populist voters.

Except for the importance attributed to traditions and religion, where non-populist voters align more closely with the right wing, those voting for non-populist parties tend to share opinions more akin to the left wing than the right wing. Especially regarding immigration-related questions, there is a significant divide between right-wing populist voters and the broader electorate.

Our analysis also uncovers several noteworthy commonalities between the two groups of populist voters. In Figure 2, we demonstrate the questions where the mean responses of left- and right-wing populist voters are almost identical but differ – to some extent – from non-populist voters; we disregard items where all three groups show the same average responses. First, both groups of populist voters share concerns about economic insecurity, a (lack of) empathy by politicians, and a perceived lack of

⁶ Note that the question does not aim at labor migration but more generally at international differences in labor costs.

opportunities. Despite their ideological differences, there is a common ground in recognizing and experiencing economic uncertainties and limited opportunities, but also in challenging the political status quo of their country. Both groups also view globalization as harming them and their families and are wary of the proliferation of multinational corporations (“SME suffering”). Finally, somewhat surprisingly, both groups tend to receive news from news websites or apps with a lower frequency than non-populist voters.

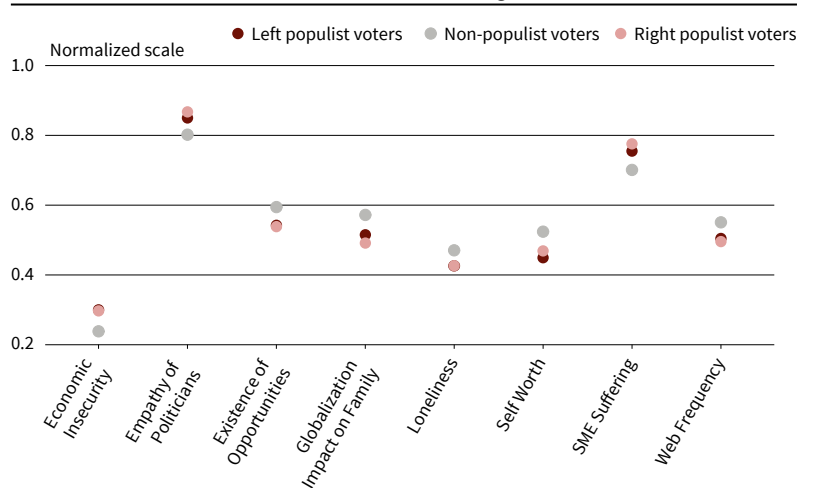
Voters affiliated with populist parties, whether leaning left or right, tend to possess a lower self-perception of their societal standing (“self worth”). This illuminates a shared mechanism that might contribute to individuals aligning with populist voting patterns. In contrast to voters of non-populist parties, who, on average, position themselves slightly above the midpoint in terms of their perceived societal hierarchy, supporters of populist parties (both left and right) tend to place themselves slightly below the midpoint. Based on our survey, right-wing populist voters have even somewhat higher incomes than non-populist and left-wing populist voters.⁷ The variance in self-perception could potentially be a factor leveraged by populist politicians.

This perceived below-average standing in society – somewhat surprisingly – is not driven by being marginalized or isolated in terms of personal contacts. When asked whether they “miss having people around” (“loneliness”), populist voters from the left and right feel less lonely than non-populist voters. We cannot tell whether populist voters are, per se, better connected to other people, or whether their sense of being different from the rest of the population creates a sentiment of camaraderie among like-minded people, which may reduce feelings of loneliness. This sense of “belonging” may be strengthened by the language of “us against them” often used by populist politicians.

Some differences in the assessment of migration, globalization, and the welfare state might stem from different perceptions of reality. In recent years, comprehensive literature on various misperceptions has emerged (Arin et al. 2021). In Figure 3, we demonstrate some key differences in misperceptions among the three groups. We have normalized each type of misperception to values between 0 and 1, with the voter group with the highest mean assigned a value of one and the group with the lowest mean a value of zero.

Right-wing populist voters exhibit higher misperceptions regarding both immigration and immigrant crime, as measured here by the (estimated) proportion of foreign-born prison inmates. This aligns with our earlier findings that concerns about immigration and potential demographic shifts in the future are pronounced among right-wing populist voters. While

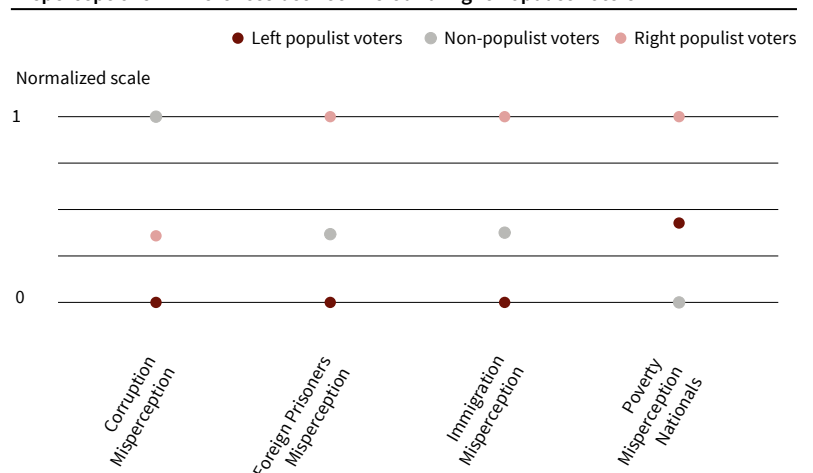
Figure 2
Responses with Lowest Distance between Left and Right Populist Voters



Note: All response scales are normalised between 0 and 1 to facilitate comparability. 1. Economic Insecurity: How you feel about your household's income nowadays? 2. Empathy of Politicians: Politicians should listen more closely to the problems the people have. 3. Existence of Opportunities: I have enough opportunities to advance in life. 4. Globalization Impact on Family: Globalization has had a negative or a positive effect on you and your immediate family. 5. Loneliness: I miss having people around me. 6. SME Suffering: Multinational enterprises will become increasingly powerful, small enterprises are bound to suffer. 7. Self Worth: There are people who tend to be towards the top of our society and people who tend to be towards the bottom. Where would you put yourself? 8. Web Frequency: How often do you get news from a news website or app?
Source: Authors' survey. © ifo Institute

we had expected a higher misperception of income inequality among left-wing populist voters, the survey data does not confirm this. The right-wing populist voters even overestimate the poverty rate of the native population slightly more than the left-wing populist voters. Also, somewhat surprisingly, both groups of populist voters expect a better rank in terms of corruption in their countries than non-populist voters. While, on average, populist voters are approximately right about their country's rank, non-populist voters believe that corruption is more prevalent than it actually is. We can only speculate that populist voters have their preferred parties or politicians in

Figure 3
Misperceptions – Differences between Left and Right Populist Voters



Note: 1. Corruption Misperception: In which position do you think the home country is on the Corruption Perceptions Index among the 27 European Union countries and the UK (28 countries in total)? 2. Foreign Prisoners Misperception: What percentage of the prison population in your country are foreign national prisoners? 3. Immigration Misperception: Out of every 100 people in the home country, how many are born in another country (legal immigrants only)? 4. Poverty Misperception Nationals: Out of every 100 adult people born in your country, how many live below the poverty line?
Source: Authors' survey. © ifo Institute

⁷ The question about incomes uses fixed scales to gauge the average weekly income of the respondents.

mind when answering this question and believe in their honesty.

POLICY CONCLUSION

Our analysis highlights significant differences between left-wing and right-wing populist voters and between both populist groups and non-populist voters. Immigration emerges as the key area of divergence, with left-wing populist voters emphasizing the positive effect of immigration. In contrast, right-wing populists view immigration as negative and see it as a bigger threat to domestic workers and the welfare state. Both populist groups share concerns about economic insecurity, perceived political disconnect, limited opportunities, and a cautious view of multinational corporations. The lower self-perception of societal standing among populist voters, regardless of left or right affiliation, suggests a shared mechanism that might contribute to their alignment with populist ideologies.

As our modest goal was to depict similarities and differences across populist and non-populist voter groups, we are cautious in drawing policy conclusions from our descriptive exercise. However, it suggests potential areas for further investigation and policy considerations, emphasizing the importance of addressing issues related to the perceived lack of opportunities and high economic uncertainty shared by populist voters across the political spectrum. Long-term strategies could focus on enhancing intergenerational mobility and reducing policy-induced economic uncertainty to mitigate the appeal of populist agendas.

REFERENCES

- Akkerman, A., A. Zaslove and B. Spruyt (2017), “‘We the People’ or ‘We the Peoples’? A Comparison of Support for the Populist Radical Right and Populist Radical Left in the Netherlands”, *Swiss Political Science Review* 23, 377–403.
- Algan, Y., S. Guriev, E. Papaioannou and E. Passari (2017), “The European Trust Crisis and the Rise of Populism”, *Brookings Papers on Economic Activity* 48, 309–400.
- Arin, K. P., J. A. Lacomba, F. Lagos, D. Mazrekaj and M. Thum (2021), “Misperceptions and Fake News during the COVID-19 Pandemic”, *CESifo Working Paper* 9066.
- Arin, K. P., J. A. Lacomba, F. Lagos, A. I. Moro-Egido and M. Thum (2022), “Exploring the Hidden Impact of the COVID-19 Pandemic: The Role of Urbanization”, *Economics and Human Biology* 46, 10119.
- Arin, K. P., D. Mazrekaj and M. Thum (2023), “Ability of Detecting and Willingness to Share Fake News”, *Scientific Reports* 13(1), 7298.
- Arin, K. P., E. Polyzos and M. Thum (2024), *The Populist Voter: A Machine Learning Approach for the Individual Characteristics*, Zayed University, February, Mimeo.
- Bobba, G., C. Cremonesi, M. Mancosu and A. Seddone (2018), “Populism and the Gender Gap: Comparing Digital Engagement with Populist and Non-populist Facebook Pages in France, Italy, and Spain”, *The International Journal of Press/Politics* 23, 458–475.
- Dijkstra, L., H. Poelman and A. Rodriguez-Pose (2020), “The Geography of EU Discontent”, *Regional Studies* 54, 737–753.
- Dornbusch, R. and S. Edwards (1990), “Macroeconomic Populism”, *Journal of Development Economics* 32, 247–277.
- Foa, R. S. and Y. Mounk (2019), “Youth and the Populist Wave”, *Philosophy & Social Criticism* 45, 1013–1024.
- Ford, R. and M. Goodwin (2014), *Revolt on the Right: Explaining Support for the Radical Right in Britain*, Routledge, London.
- Funke, M., M. Schularick and C. Trebesch (2023), “Populist Leaders and the Economy”, *American Economic Review* 113, 3249–3288.
- Guriev, S. (2018), “Economic Drivers of Populism”, *AEA Papers and Proceedings* 108, 200–203.
- Kuklinski, J. H., P. J. Quirk, J. Jerit, D. Schwieder and R. F. Rich (2000), “Misinformation and the Currency of Democratic Citizenship”, *The Journal of Politics* 62, 790–816.
- Mudde, C. (2004), “The Populist Zeitgeist”, *Government and Opposition* 39, 541–563.
- Pástor, L. and P. Veronesi (2021), “Inequality Aversion, Populism, and the Backlash against Globalization”, *The Journal of Finance* 76, 2857–2906.
- Pew Research Center (2019), *European Public Opinion Three Decades after the Fall of Communism*, Technical Report, <https://www.pewresearch.org/>.
- Rico, G. and E. Anduiza (2019), “Economic Correlates of Populist Attitudes: An Analysis of Nine European Countries in the Aftermath of the Great Recession”, *Acta Politica* 54, 371–397.
- Rooduijn, M., A. L. P. Pirro, D. Halikiopoulou, C. Froio, S. van Kessel, S. L. de Lange, C. Mudde and P. Taggart (2023), *The PopuList 3.0: An Overview of Populist, Far-left and Far-right Parties in Europe*, www.popu-list.org.
- Schwörer, J. (2021), “Don’t Call Me a Populist! The Meaning of Populism for Western European Parties and Politicians”, *Electoral Studies* 72, 102358.
- Spierings, N. and A. Zaslove (2015), “Gendering the Vote for Populist Radical-right Parties”, *Patterns of Prejudice* 49, 135–162.
- Spierings, N. and A. Zaslove (2017), “Gender, Populist Attitudes, and Voting: Explaining the Gender Gap in Voting for Populist Radical Right and Populist Radical Left Parties”, *West European Politics* 40, 821–847.
- Zagorski, P., J. Rama and G. Cordero (2021), “Young and Temporary: Youth Employment Insecurity and Support for Right-wing Populist Parties in Europe”, *Government and Opposition* 56, 405–426.

Eugenio Levi and Steven Stillman

External Shocks and Populism

Based on a minimal definition, populism is “an ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, ‘the pure people’ versus ‘the corrupt elite’, and which argues that politics should be an expression of the *volonté générale* (general will) of the people” (Mudde 2004, 543). While populism has been around since at least the end of the 19th century, its resurgence in Western countries is quite recent.¹ In the political debate of recent years, populism has become an uncomfortable guest, unrelated to political orientation and typically denied by those who invited it in. However, the negative consequences usually associated with populism – among others, illiberalism, bad economic policies, lack of competence – beg for a better understanding of the causes of its initial development and long-lasting success.

In a recent paper (Levi et al. 2024), we examine the impact that two large external shocks, one related to structural reform and another to immigration policy, had on the initial development and long-term success of New Zealand First (NZF), one of the oldest populist parties in the OECD. We use electoral survey data with very localized geographic identifiers to examine the impact that these shocks had: (i) on voting for NZF in the first years of its existence; (ii) on individual beliefs and political preferences; and (iii) on long-term persistence in voting for NZF, as well as long-term impacts on individual beliefs and political preferences. Importantly, we build instruments for these shocks and provide unbiased estimates. This policy report describes the research design and the main findings of the aforementioned article.

After introducing some background context about New Zealand (NZ) and presenting the main results of the paper, we conclude by drawing some policy implications that may help foster a debate on how to tackle the challenges posed by populist political parties.

NEW ZEALAND FIRST

Founded in 1993, NZF can clearly be categorized as a populist party because of an anti-elite stance fueled by disgruntlement toward traditional politics. However, unlike most European populist parties that clearly belong to either the left or the right, NZF promotes a mixture of (far-) right and (far-) left policies. It is against big business, unions, and big government, critical of the 1980s pro-market reforms discussed below and wants NZ to go back to a “golden age” where

¹ Most political scientists agree that the American People’s Party and the Russian Narodniks were the first populist parties appearing in the late 1900s.

KEY MESSAGES

- **In this report, we examine the impact that two large external shocks, one related to structural reform and another to immigration policy, had on the initial development and long-term success of New Zealand First (NZF), one of the oldest populist parties in the OECD**
- **Using survey data together with localized geographic identifiers, we investigate a rich set of mechanisms underlying the impact of the shocks, namely political beliefs and preferences, individual and community characteristics**
- **We find that both shocks had an important role in the initial development of NZF**
- **Economic, cultural, and political explanations of the development of political populism in NZ are found to be highly intertwined. The shocks caused an increase in mistrust towards the mainstream parties and in feelings that a strong leader is needed, while “losers” of structural reforms and of immigration flows are not found to be more inclined to vote for NZF. Furthermore, the impact of these shocks was found to be concentrated in rural or less cosmopolitan geographical areas**
- **The impact of these shocks on populist voting persisted in the medium term and still had an influence after 20 years. It also led to a rightward shift in political preferences**

the country was more isolated from the rest of the world.

It exploded onto the scene in 1996, getting a remarkable 13 percent of the vote and entering government as a coalition partner with the mainstream center-right National Party. After 1996, NZF never reached the same percentage of votes, ranging from a high of 10.4 percent in 2002 to a low of 2.6 percent in 2020. It succeeded in becoming part of the government again in 2005 and 2017, both times in coalition with the center-left Labour Party, and in the most recent elections in 2023, this time in coalition with the National Party. Hence, even though it is in many ways a marginal party in NZ, it has played an important role in helping to set the policy agenda, in particular on immigration policy and on support for older individuals and rural interests.

NZF attracts very similar voters in terms of observable characteristics as current populist parties in Europe (Levi et al. 2024). Additionally, the Mixed-Member Proportional (MMP) electoral system



Eugenio Levi

is an Assistant Professor at the Free University of Bozen-Bolzano. His main research interest is behavioral political economy with a mixture of experimental and empirical methods.



Steven Stillman

is a Professor of Economics at the Free University of Bozen-Bolzano. His research focuses on empirical labor economics, specializing in the behavior of individuals and households, and the interplay between government policy and human behavior.

in NZ is nearly identical to that in Germany and thus similar to that in other European countries with proportional representative parliaments. Hence, it presents an ideal case study for understanding the birth and development of a modern populist party, without confounding effects from the recent global emergence of populism, and to provide insights into the potential future development of populism, particularly in Europe.

STRUCTURAL CHANGE

Until 1984, NZ had a highly regulated economy, with subsidies for agriculture, protection for industry, and a closed capital account. By that time, the country was facing unsustainable fiscal and current account deficits, runaway inflation, and a foreign exchange crisis. This led to widespread recognition that macroeconomic reforms were needed to

correct imbalances and reduce inflation, and microeconomic reforms were needed to improve productivity (McMillan 1998).

From 1984 to 1990, a Labour government increasingly deregulated the economy, opened the capital account, eliminated subsidies to agriculture, and privatized most publicly owned companies. After the 1990 election, a new government led by the National Party pushed through large reforms. Welfare was scaled back from universal provision to a tightly targeted system (Boston et al. 1999) while the labor market was deregulated (Evans et al. 1996).

As a consequence of these reforms, from 1986 and 1991, real per capita GDP growth averaged – 0.83 percent and unemployment rose from 5 percent in 1984 to almost 11 percent in 1992. Mean real household income dropped by 4.7 percent between 1986 and 1991.

NEW IMMIGRATION POLICY

NZ is historically a high-immigration country with most migrants settling in the larger cities of Auckland, Wellington, and Christchurch (Maré et al. 2007). In 1986, 15 percent of the population was already foreign-born, but immigrants were mostly of European descent (49 percent of them were British compared with 6 percent Asian). Independent of the economic reforms discussed above, the Immigration Act of 1987 removed the traditional source country preference for European and Anglo-Saxon countries. The Immigration Amendment Act of 1991 then replaced the

previous “occupational priority list” system with a point system.

Combined, these acts inverted a previous trend in net migration by increasing arrivals. While between 1980 and 1989, NZ lost a net 122,500 migrants out of a population of slightly more than 3 million, mainly because of unfavorable economic conditions, from 1990 net migration turned positive even though the economy was still struggling. In 1995, a peak net inflow of 28,500 was reached and by 1996, immigrants made up 21 percent of the total population. More importantly, these policy changes led to a large change in the composition of the immigrant population in terms of skills and country of birth; by 1996, 15 percent of the immigrant population was of Asian descent and 33 percent of the new migrants had a university degree.

DATA AND EMPIRICAL STRATEGY

We utilize the New Zealand Election Study (NZES), which is fielded after each election by the University of Auckland and offers detailed data on individual voters’ characteristics, political opinions, and behaviors, to examine the impact of structural reform and immigration shocks on voting for NZF. The “structural reform shock” is defined as the change in average income in a local market area (LMA) between 1986 and 1991, a period known for significant industry-specific economic changes. The “immigration shock” is measured by the inflow of new migrants into an LMA over the five years preceding an election. This period witnessed a substantial and ethnically diverse influx of migrants, making it a significant factor in the study.

We use a regression model to examine the impact of these two shocks on whether an individual voted for NZF, controlling for other variables such as gender, age, ethnicity, education, and location. We also control for contemporary local area characteristics such as population, unemployment rate, average income, and demographic details to account for indirect impacts of the shocks. Additionally, we control for several socio-economic local area characteristics measured in 1981, including variables closely related to our shock measure, which helps ensure that we are picking up purely exogenous variation in shock exposure at the local level. We also control for the electoral district in which a person resides to avoid any confounding factor due to localized political reactions.

To address endogeneity concerns, we use a shift-share instrumental variable strategy. This approach predicts the spatial distribution of new migrants based on earlier immigration patterns and the spatial distribution of structural reforms based on the geographical location of different industries. These predicted shocks should be purged of any endogenous relationship between actual economic shocks and populist opinions and voting behavior.

THE IMPACT OF SHOCKS ON THE DEVELOPMENT OF NZF

Using this instrumental variable approach, we find that in 1996, a 1 percentage-point increase in recent arrivals causes a 5.7 percentage-point increase in the NZF vote share while a one percentage-point greater income loss causes a 1.2 percentage-point increase in vote share relative to a mean vote share of 10.7 percent for NZF. In Figure 1, we illustrate the size of these impacts by predicting the vote share for NZF in 1996 across the quantile distribution of each shock variable, holding all other variables constant. In LMAs where recent arrivals are in the first quartile, NZF is predicted to get 2.4 percent of the votes, while if the arrivals are in the highest quartile, the votes share for NZF would instead be 28.5 percent. For the structural reform shock, the vote share for NZF increases from 6.9 percent in LMAs in the first quartile of the structural reform shock distribution to 18.2 percent in the highest quartile. These numbers suggest that the impact of the shocks on the initial development of NZF was sizeable.

In the paper, we also have several extensions: (a) we find a large statistically significant impact of Asian immigration compared to non-Asian immigration, suggesting that the changing composition of migration to NZ was an important component leading to the development of NZF; (b) when we control for a wide range of political opinions and previous voting behavior, the estimated coefficients on the immigration shock decrease by 24 percent and that on the structural reform shock by 33 percent, so between one-quarter and one-third of the impact of shocks on voting for NZF occurs because of the impact of these shocks on political opinions, beliefs, and policy preferences; (c) we do not find any significant impact of the shocks on the other political parties or turnout, consistently with shocks pushing people towards populism as opposed to towards parties with particular policy platforms.

WHY DO THESE SHOCKS MATTER?

Employing the same econometric model, we now examine the impact of these shocks on a wide range of political beliefs in 1996. Figure 2 presents the results of this analysis: each label on the y-axis corresponds to a separate regression run for a different dependent variable. Experiencing a larger immigration shock causes individuals to report themselves as favoring reduced immigration and that defense and law and order should be more important policy areas. Experiencing a larger income loss from structural reforms causes individuals to report themselves as being more in favor of redistribution, and that unemployment should be a larger policy concern, economic growth a smaller one. Crucially, we find that experiencing a larger size of either shock causes people to think that

Figure 1
Predicted Impact of Shocks on Voting for New Zealand First in 1996

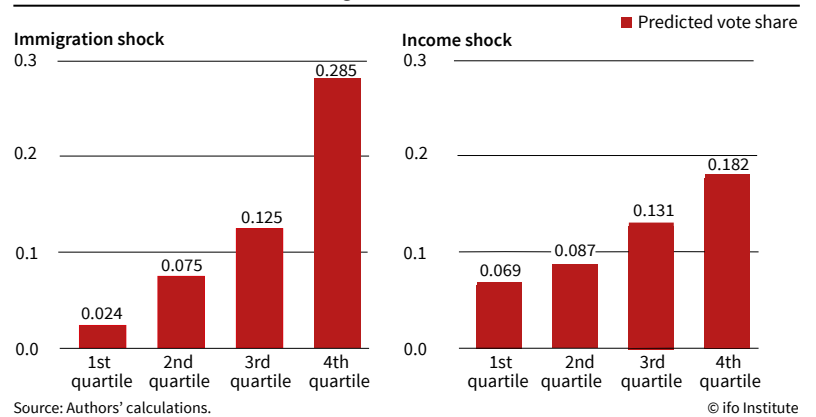
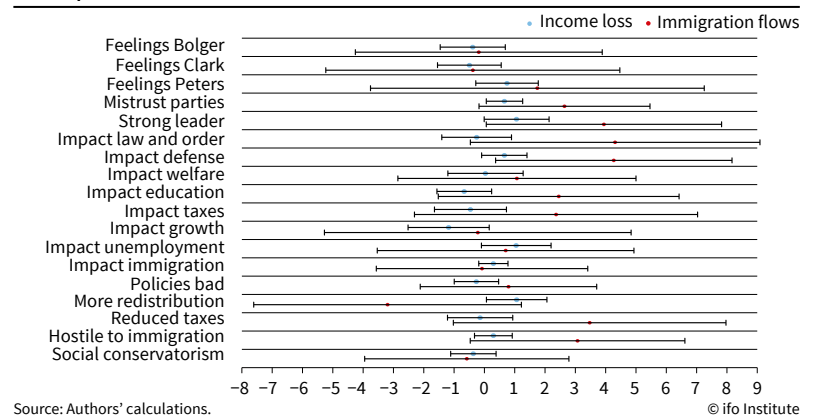


Figure 2
The Impact of the Shocks on Political Beliefs in 1996



a strong leader is needed and increases their mistrust of traditional parties. The magnitudes of the effects are similar in size to the impacts that the shocks have on voting for NZF. Overall, changing political beliefs are an important part of the story of how NZF initially developed.

We next examine how the impact of the shocks varies by individual and community characteristics. In general, we find little evidence of heterogeneous impacts of shocks across individual characteristics. The only exceptions are that we find that structural reform shocks have larger effects on voting for NZF for older individuals and individuals who are not employed. NZF has a strong focus on improving policies for older individuals, such as free use of health services and public transit, and keeping the retirement age from increasing, which may explain these results. Taken together, this evidence suggests that standard economic explanations for populism are not what drove the emergence of NZF.

We also examine the role of community characteristics. Specifically, we examine whether the shocks have differential impacts in urban versus rural areas and in areas with a longer history of immigration. Consistent with previous research (Dustmann et al. 2019; Levi et al. 2020), we find that in high density areas

neither immigration nor structural reform shocks impact voting for NZF. The impact of shocks is fully concentrated in lower density LMAs.

We also find that the impact of the immigration shocks on voting for NZF is much higher in areas that historically had less immigration and that there is no impact in areas that already had high levels of immigration in 1986. This may be because the distinction between rural areas and urban areas carries forward long-lasting political preferences and different ways of organizing political life (Cramer 2016) or because people in more densely populated regions are exposed to cosmopolitan beliefs. This is consistent with the cultural channel being particularly important for understanding how immigration shocks lead to populist voting.

DO THESE IMPACTS PERSIST?

We next examine if the impact of the shocks on political opinions and voting persists over time. During the period from 1999 to 2008, we find that having experienced a larger immigration shock led to a rightward shift in both political attitudes, specifically preferences for redistribution, and voting behaviors, specifically an increased likelihood to vote for NZF and National and a decreased likelihood to vote for Labour. On the other hand, having experienced a larger structural reform shock led to a persistent increase in voting for NZF. Interestingly, the short-term impact of having experienced a larger structural reform shock on increased preferences for redistribution disappears in the medium term. We also find no medium-term effect of having experienced shocks on populist attitudes or voting turnout.

Turning to the period from 2011 to 2020, where there was much more economic uncertainty due to the 2008 global economic crisis, we find less persistence in the impact of these shocks. There is some evidence that having experienced a larger immigration shock led to long-term hostility to immigration and a rightward shift in political attitudes. We do not find an impact of either shock on voting for NZF or on populist attitudes in the long run. We believe this is the case because of an increasing shift of the mainstream political parties in NZ towards more populist policy positions (Vowles and Curtin 2020).

POLICY CONCLUSIONS

In our paper, we find several important explanations for the initial development and persistence of an “old” OECD populist political party consistent with prior research. First of all, populist parties usually emerge in combination with large economic shocks such as structural reforms that lead to substantial income losses or immigration reforms that lead to increased migration from culturally distant countries. In NZ, both occurred. Second, populism configures itself

as a multi-faceted phenomenon: not fully driven by economic reasons, but also not fully driven by political or cultural motives. In our analysis, economic shocks triggered increased political populist attitudes within the population. Furthermore, the impact of these shocks was found to be concentrated in rural or less cosmopolitan geographical areas. Overall, then, economic, political, and cultural explanations are highly intertwined. Third, large economic shocks lead to persistent impacts on voting behavior and political opinions that last at least a decade. More specifically, the impact of these shocks on populist voting persisted over time, and it also led to a rightward shift in political preferences.

Policymakers may learn several lessons from our findings. The most important one is that economic and immigration shocks need to be openly addressed. Attempts by mainstream political parties to downplay the relevance of these shocks among the population is doomed to fail. People seem to take notice of the shocks and, without any leader addressing their concerns, turn to populist political parties who often offer the simplest solutions. This taps into the problem of which policies to propose to address citizens’ concerns so as to turn them away from the populist ones. There is no simple answer as it depends on the specific nature of the shock and on the specific country.

However, based on our results, we can argue that redistribution policies and more convincing migration policies may be a first step. Indeed, in NZ, individuals changed their preferences exactly in the direction of asking for more redistribution and having immigration flows reduced. In Europe, this could be translated to additional welfare state measures, more border controls, and integration policies. It is important to note that these grievances do not seem to be specific to the “losers” of globalization or of immigration flows, but to everyone who lived in areas affected by shocks, especially in rural and less cosmopolitan areas.

Policymakers (or better, politicians) also need to take seriously people’s blaming of mainstream political parties for the arrival of shocks. These parties need to become more conscientious about having an open public debate on how to address structural issues in our societies, such as low economic and productivity growth, worsening inequality, and low social mobility. And when individuals express dissatisfaction with the political response to economic or cultural shocks, politicians and policymakers need to address the consequences as much as the causes because the two cannot be easily distinguished once populist attitudes are unleashed. Therefore, they should also return to producing a political culture, participation, and a competent ruling class at all electoral levels, recovering a sense of purpose beyond winning elections and the survival of individual leaders.

To conclude, NZ is in many ways a forerunner to many of the current trends affecting OECD countries. The structural reform process that occurred in the

1980s increased competition for certain industries in a way similar to how China's joining the WTO impacted industries in the rest of the developed world in the 2000s. Similarly, NZ was one of the first countries to develop a skilled migration system that had no restrictions on country of origin. In this sense, it is unsurprising that populist parties are emerging in European countries that in recent years have featured increased competition in many economic sectors and a large inflow of ethnically diverse migrants.

REFERENCES

Boston, J., P. Dalziel and S. St John (Eds., 1999), *Redesigning the Welfare State in New Zealand: Problems, Policies, Prospects*, Oxford University Press. Auckland.

Card, D., C. Dustmann and I. Preston (2012), "Immigration, Wages, and Compositional Amenities", *Journal of the European Economic Association* 10, 78–119.

Cramer, K. J. (2016), *The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker*, University of Chicago Press, Chicago.

Dustmann, C., K. Vasiljeva and A. P. Damm (2019), "Refugee Migration and Electoral Outcomes", *The Review of Economic Studies* 86, 2035–2091.

Evans, L., A. Grimes, B. Wilkinson and D. Teece (1996), "Economic Reform in New Zealand 1984-95: The Pursuit of Efficiency", *Journal of Economic Literature* 34, 1856–1902.

Levi, E., R. D. Mariani and F. Patriarca (2020), "Hate at First Sight? Dynamic Aspects of the Electoral Impact of Migration: The Case of Ukip", *Journal of Population Economics* 33, 1–32.

Levi, E., I. Sin and S. Stillman (2024), "The Lasting Impact of External Shocks on Political Opinions and Populist Voting", *Economic Inquiry* 62, 349–374.

Maré, D. C., M. Morten and S. Stillman (2007), "Settlement Patterns and the Geographic Mobility of Recent Migrants to New Zealand", *New Zealand Economic Papers* 41, 163–195.

McMillan, J. (1998), "Managing Economic Change: Lessons from New Zealand", *World Economy* 21, 827–843.

Mudde, C. (2004), "The Populist Zeitgeist", *Government and Opposition* 39, 541–563.

Vowles, J. and J. Curtin (2020), *A Populist Exception?: The 2017 New Zealand General Election*, ANU Press, Canberra.

Manuel Funke, Moritz Schularick and Christoph Trebesch

Populists in Power: Economic and Political Consequences*

KEY MESSAGES

- **Populism at the government level is on the rise and we are living in a populist era**
- **Populist leaders cling to power and populism often returns to countries**
- **Populist governments are a drag on economic growth**
- **Economic nationalism and protectionism are a common feature of populists in power**
- **Populist leaders typically undermine democratic institutions**

There are now numerous academic studies that examine the reasons why citizens vote for populist parties. However, it is long past time to go one step further. In our new study (Funke et al. 2023), we examine the economic and political consequences of populism. We find that populism leads to slower economic growth, undermines democratic institutions, and can make a country more vulnerable to future populist governments.

The rise of populism over the last two decades has motivated much work on the determinants of populist electoral success – see the overview by Guriev and Papaioannou (2020), or Guiso et al. (2017), and Rodrik (2017). In contrast, we still know little about the economic and political consequences of populism.

* This is an abridged, edited, and updated version of the article “Populist Leaders and the Economy” by M. Funke, M. Schularick, and C. Trebesch, published in the *American Economic Review* in December 2023. To parts of this text and the figures, the following copyright notice may apply: “Copyright American Economic Association; reproduced with permission.”

How does the economy develop after a populist government comes to power? Is populism a threat to liberal democracy or not? These questions have not yet been sufficiently investigated. Most existing analyses of populism focus on the causes and on individual countries or on data from the last 20 or 30 years. What is missing is a bigger picture and a global, historical perspective on populism.

To answer these questions, in Funke et al. (2023) we built a comprehensive cross-national database on populism and identified 51 populist presidents and prime ministers in the period from 1900 to 2020. To code populist leaders, we rely on the definition commonly used in political science today, according to which populism is a political strategy that focuses on the conflict between “the people” and “the elites” (see e.g., Mudde 2004). More specifically, we define a leader as populist if he or she places the alleged struggle of the true people (“we”) against the corrupt elites (“they”) at the center of his or her political campaign and style of governance. Based on this definition, Vladimir Putin, Ronald Reagan, and Barack Obama, for example, cannot be classified as populists, but Jair Bolsonaro, Silvio Berlusconi, and Donald Trump clearly can.

For the data collection, we collected, digitized, and analyzed more than 20,000 pages of academic literature on populism and identified 51 leaders who clearly fit the above definition of a populist. More specifically, we analyzed approximately 1,500 leaders (i.e., president, prime minister, or equivalent) in 60 countries from the year 1900 or the year in which the country in question gained its independence. We begin our survey with the year 1900, as there is little evidence of populists in government power at the country level before this date (in 1896, populist



Manuel Funke

has been Deputy Head of the Research Center “International Finance and Macroeconomics” at the Kiel Institute for the World Economy since 2017. Before coming to Kiel, he received his Ph.D. in Economics from the Free University of Berlin.



Moritz Schularick

is President of the Kiel Institute for the World Economy and Professor of Economics at Sciences Po (Paris). Before coming to Kiel, he was Professor of Macroeconomics at the University of Bonn.



Christoph Trebesch

has been Director of the Research Center “International Finance and Macroeconomics” at the Kiel Institute for the World Economy and Professor of Macroeconomics at Kiel University since 2017. Before joining the Kiel Institute, he was Assistant Professor at the University of Munich.

William Jennings Bryan ran for president in the US, but lost).

Based on this comprehensive selection of cases, we conducted a historical analysis of the ups and downs of populist governments worldwide over the last 120 years and assessed their political and economic consequences.

POPULISM HAS A LONG HISTORY AND IS SERIAL IN NATURE

Figure 1 summarizes the historical development of populism, by plotting the proportion of independent countries in our sample of 60 countries ruled by populists in each year since 1900 (bold red line). The figure shows that populism has existed at the country level for more than 100 years and that it reached a historic peak in the past decade.

The first populist president was Hipólito Yrigoyen, who came to power in the 1916 elections in Argentina. Since then, populism has experienced two major peaks: during the Great Depression in the 1930s and in the 2010s. The 1980s were the low point for populism in power. After the fall of the Berlin Wall, however, the phenomenon returned with full force from 1990 onward. The year 2018 marked a historic high with 16 countries (i.e., more than 25 percent of the sample) governed by politicians labeled as populists in the political science literature. This recent rise can mainly be attributed to the rise of a new populist right in Europe and beyond.

One particularly interesting finding from our long-term data is the recurrence of populist episodes of power over time. Figure 2 shows the 27 countries (from our 60-country sample) that have been governed by populists in the past (i.e., at least one populist government in power since 1900 or since independence). For each country, the gray bars represent the periods with populist leadership.

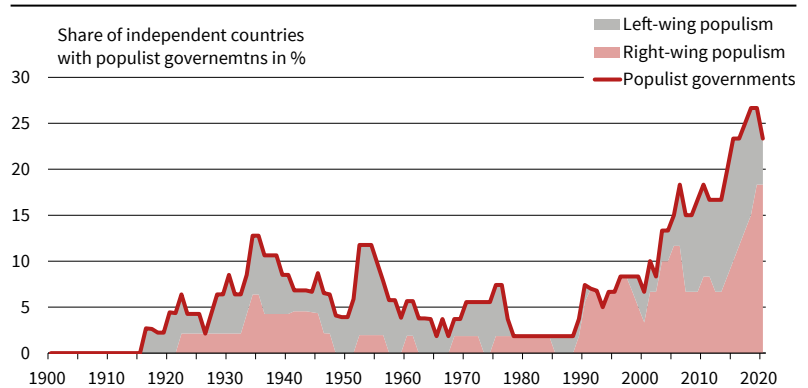
The key message of Figure 2 is that populism at the government level appears to be serial in nature, as it can be observed again and again in the same countries. We find long and recurring periods of populist governance. Moreover, our results suggest that the fact that a country has experienced a populist period of government in the past is a strong predictor of populist rule in recent years. Interestingly, in half of the countries in Figure 2 that have been repeatedly governed by populist forces, there has been a shift from left-wing to right-wing populism or vice versa.

POPULISM HAS HIGH ECONOMIC COSTS

Figure 3 gives an indication of the economic consequences we can expect from the global rise of populist politics in recent years. Panel A shows four average growth gaps in annualized real GDP growth after populists came to power. The method borrows from

Figure 1

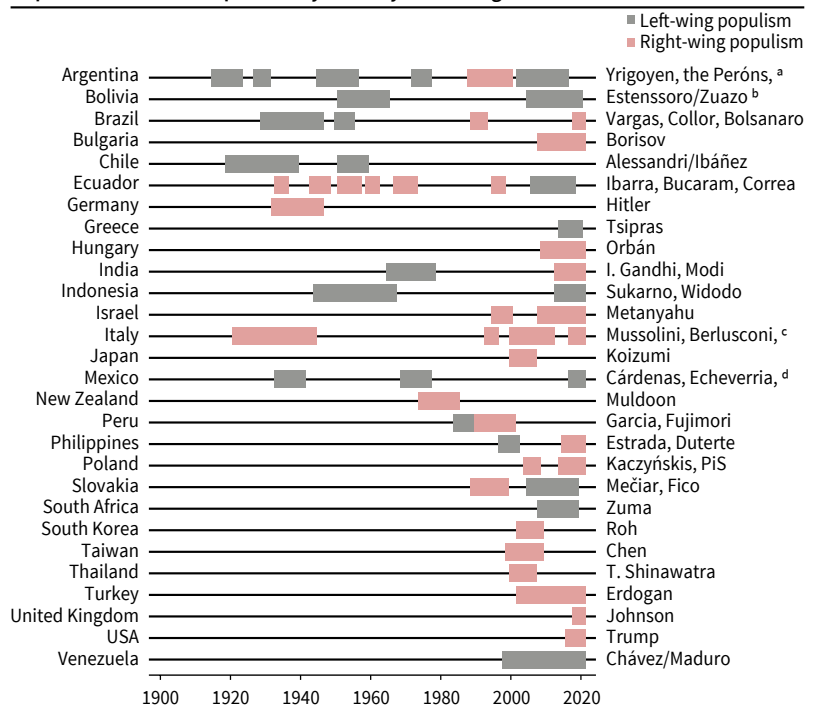
Populist Governments: Share of Countries in the Sample



Source: Funke et al. (2023).

Figure 2

Populist Government Episodes by Country: Recurring Patterns



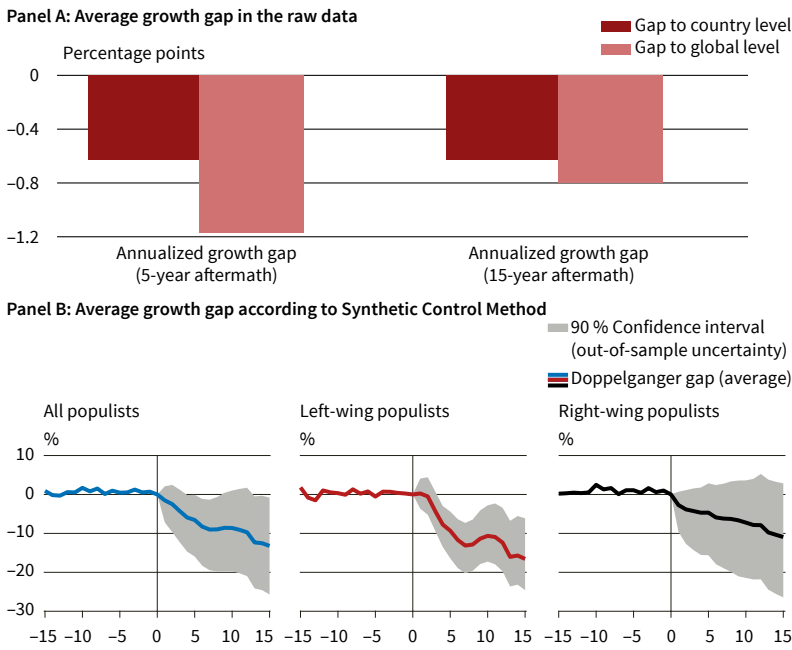
^a Menem, the Kirchners. - ^b (MNR), Morales. - ^c Lega/M5S. - ^d Obrador.
Source: Funke et al. (2023).

Blinder and Watson’s (2016) measure of a potential growth gap between Democratic and Republican presidents in post-war US data. The trend from the data is clear. After a populist government came to power, countries performed about 1 percentage point worse per year compared to both their country’s typical long-term growth rate (red bars) and the current (at the time of measurement) global growth rate (pink bars). This applies to both the short-term period of five years and the long-term period of 15 years after the populist government took office.

However, the results in Panel A do not consider the economic events surrounding the entry into power of the populist forces or the year-on-year dynamics, and they do not use a strict control group. All of this is particularly important, however, as the inclusion

Figure 3

The Economic Costs of Populism: GDP Growth Gaps



of a country in our group of countries with populist governments is highly unlikely to be random regarding the economy (see Funke et al. 2016).

For this reason, in Panel B we take a more scientifically rigorous approach by using the Synthetic Control Method (SCM) developed by Abadie et al. (2010) to construct a “doppelganger” for each populist power grab. More precisely, for each case, we use an algorithm that determines which weighted combination of non-populist “donor countries” matched the growth trend of the populist-affected country with the highest possible accuracy before the populist government came to power.

Comparing the evolution of this synthetic doppelganger with the actual data of the populist economy quantifies the total cost of the populist government episode. We calculate the average values of key indicators +/- 15 years around the populist governments in our sample taking office and compare them with

their estimated counterfactual average performance. Subtracting the synthetic control values from the values of the actual populist group yields the so-called “doppelganger gap,” which measures the average growth differential due to populism.

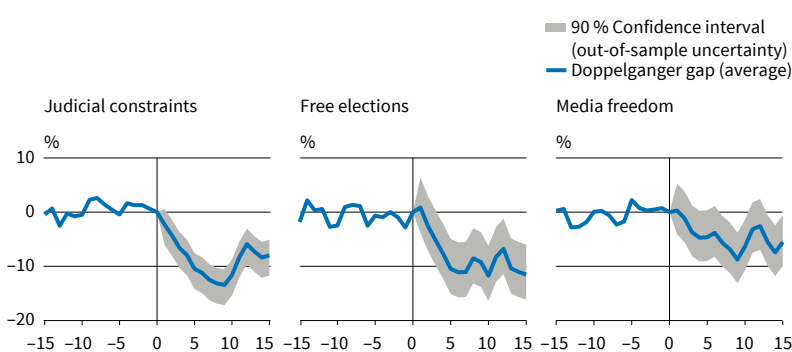
Panel B in Figure 3 shows the results of this analysis. The blue line represents the average difference (or gap) in GDP dynamics between the entire populist-governed group of countries and its synthetic control group (non-populist), based on a time horizon of 15 years before and after the start of government. The red and black lines represent the left-wing populist and right-wing populist dimensions respectively. The gray shaded areas are simulation-based confidence intervals at the 90 percent level based on the methods in Cattaneo et al. (2021) and Cattaneo et al. (2022).

The cumulative difference to the doppelganger economy is large and amounts to more than 10 percentage points after 15 years. Soon after the populist governments take office, GDP development deviates significantly from that under the synthetic counterfactual case constellation, and the economy does not recover before the end of our observation period.

Importantly, all these results remain robust not only when we split our case selection along the dimension of left- or right-wing populism, as shown in the figure, but also for several other dimensions: geographic regions, historical era, duration of rule, and initial economic conditions, such as major financial crises before or in the election year. We also conduct “country-placebo” and “time-placebo” tests, in which we assign the populist episodes to randomly selected groups of countries and years not actually affected and apply the synthetic control method to these groups. Here we find no negative economic effects, confirming our main results for the truly affected group. The results also hold when using more rigorous SCM estimates that explicitly take into account that we consider many countries and years at once, i.e., examine both simultaneous populism in multiple countries and recurring episodes of populism within a country (Abadie and L’Hour 2021; Ben-Michael et al. 2021).

Figure 4

The Political Consequences of Populism: Institutional Decline



POPULISM WEAKENS DEMOCRATIC INSTITUTIONS

Populism is also costly for democratic institutions. To give three examples, here we look at the restriction of executive power by the judiciary, the freedom and fairness of elections, and the freedom of the press, before and after the populist takeovers respectively. The indices used are taken from the Varieties of Democracy (V-Dem) database. Higher values indicate a higher degree of institutional strength in each case.

Figure 4 shows the SCM results for the three institutional metrics on average for all populists in our sample (similar to the blue line in Panel B of Figure 3 on GDP). As can be seen from the negative dop-

pelganger gaps, executive control and electoral and press freedom decrease significantly with the start of populist regimes, compared to the otherwise identical situation without populist leadership. These results also remain robust when the sample is divided into left- and right-wing populist governments. The erosion of democratic norms can explain both the serial nature or persistence and the negative economic consequences of populism (see e.g., Acemoglu et al. 2005; Acemoglu et al. 2013; Acemoglu et al. 2019; Guriev and Treisman 2019).

ECONOMIC NATIONALISM AND SHORT-SIGHTED MACRO POLICIES

In terms of the potential causes of GDP loss under populism, we find confirmation in the data for two channels of impact in particular, which are core areas of any government policy and which also play an important role in the populism literature: first, economic nationalism, particularly through protectionist trade policies (see e.g., Born et al. 2019), and, second, short-sighted macroeconomic policy measures that lead to rising government debt and inflation, as already outlined in the classic macro-populism studies by Sachs (1989) and Dornbusch and Edwards (1991).

The results are shown in Figure 5, again using the SCM (doppelganger gap). Panel A indicates higher import tariffs and lower trade and financial transactions with foreign countries under populist economics. Panel B shows, albeit somewhat less precisely measured, increased government debt and inflation after the populist takeover compared to the control group.

CONCLUSION AND POLICY IMPLICATIONS

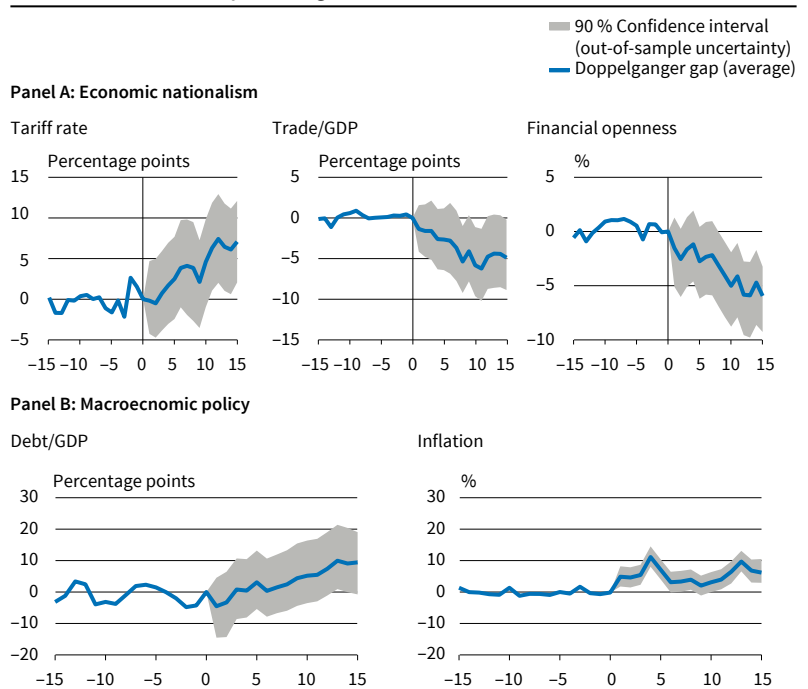
Populist governments can cause lasting economic and political damage. On average, countries with populist regimes experience a significant decline in real GDP per capita. The erosion of democratic institutions, protectionist trade policies, and accelerated debt dynamics are typical characteristics of populism in power.

The erosion of democratic norms could be an important reason for the negative economic consequences of populism, as democracy and strong institutions have a positive impact on economic prosperity in the long term. Institutional uncertainty and high polarization among populist-led countries discourage investors and innovation, including capital flight and brain drain, i.e., the emigration of the country's best-educated minds.

The damage to democratic institutions may also explain why one populist is often followed by another and why populist governments often slip into authoritarianism and cling to power for a long time. Although populists produce economic grievances, they prevent the democratic process of a change of power by erod-

Figure 5

Populist Economic Policy: Disintegration, Debt and Inflation



Source: Funke et al. (2023).

ing the separation of powers, distorting elections, or influencing the judiciary and media.

The serial nature of populism is a major risk for the future. The historical data we have collected suggests that populism is a highly persistent phenomenon, with countries such as Argentina or Ecuador experiencing populist leadership on and off over the past 100 years. The big question is whether Western industrialized countries will suffer a similar fate in the future and experience “serial populism” in the coming years and decades. In the light of history, this is unfortunately not an unlikely scenario. The West might be only at the beginning of a prolonged populist era if politicians do not act now.

REFERENCES

- Abadie, A., A. Diamond and J. Hainmueller (2010), “Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California’s Tobacco Control Program”, *Journal of the American Statistical Association* 105, 493–505.
- Abadie, A. and J. L’Hour (2021), “A Penalized Synthetic Control Estimator for Disaggregated Data”, *Journal of the American Statistical Association* 116, 1817–1834.
- Acemoglu, D., G. Egorov and K. Sonin (2013), “A Political Theory of Populism”, *The Quarterly Journal of Economics* 128, 771–805.
- Acemoglu, D., S. Johnson and J. A. Robinson (2005), “Institutions as the Fundamental Cause of Long-Run Growth”, in P. Agion and S. Durlauf, eds., *Handbook of Economic Growth*, Vol 1A, 385–472, Elsevier, Amsterdam.
- Acemoglu, D., S. Naidu, P. Restrepo and J. A. Robinson (2019), “Democracy Does Cause Growth”, *Journal of Political Economy* 127, 47–100.
- Ben-Michael, E., A. Feller and J. Rothstein (2021), “Synthetic Controls with Staggered Adoption”, *NBER Working Paper* 28886.
- Blinder, A. S. and M. W. Watson (2016), “Presidents and the US Economy: An Econometric Exploration”, *American Economic Review* 106, 1015–1045.

- Born, B., G. J. Müller, M. Schularick and P. Sedlacek (2019), "The Cost of Economic Nationalism: Evidence from the Brexit Experiment", *Economic Journal* 129, 2722–2744.
- Cattaneo, M. D., Y. Feng and R. Titiunik (2021), "Prediction Intervals for Synthetic Control Methods", *Journal of the American Statistical Association* 116, 1865–1880.
- Cattaneo, M. D., Y. Feng, F. Palomba and R. Titiunik (2022), "scpi: Uncertainty Quantification for Synthetic Control Estimator", *arXiv:2202.05984*.
- Dornbusch, R. and S. Edwards (Eds., 1991), *The Macroeconomics of Populism in Latin America*, University of Chicago Press, Chicago.
- Funke, M., M. Schularick and C. Trebesch (2016), "Going to Extremes: Politics after Financial Crises, 1870–2014", *European Economic Review* 88, 227–260.
- Funke, M., M. Schularick and C. Trebesch (2023), "Populist Leaders and the Economy", *American Economic Review* 113, 3249–3288.
- Guiso, L., H. Herrera, M. Morelli and T. Sonno (2017), "The Spread of Populism in Western Countries", *VoxEU.org*, 14 October.
- Guriev, S. and E. Papaioannou (2020), "The Political Economy of Populism", *CEPR Discussion Paper* 14433.
- Guriev, S. and D. Treisman (2019), "Informational Autocrats", *Journal of Economic Perspectives* 33, 100–127.
- Mudde, C. (2004), "The Populist Zeitgeist", *Government and Opposition* 39, 541–563.
- Rodrik, D. (2017), "Economics of the Populist Backlash", *VoxEU.org*, 3 July.
- Sachs, J. D. (1989), "Social Conflict and Populist Policies in Latin America", *NBER Working Paper* 2897.

Luisa Dörr, Niklas Potrafke, Felix Rösel and Tuuli Tähtinen

What Policies Do Populists Pursue When in Power? Results of Selected Studies*

The party landscape in many Western industrialized nations is becoming increasingly fragmented. More and more voters are turning their backs on the established (popular) parties, while populist parties are gaining popularity.¹ There are many reasons for the rise of such parties, including disappointment with the established parties, which have often failed to make their mark in government and set themselves apart from the political competition. Immigration policy also plays an important role, with many populist parties intent on limiting immigration from abroad.

A key question is the extent to which populist parties, when they are in government, also pursue different policies than the established parties or parties of the political center. In this article, we describe some research findings that show which policies populists have pursued in office and what consequences a populist government has for the economy and society. We do not provide a comprehensive literature review, but rather focus on studies that we consider to be important.

WHAT DO POPULISTS STAND FOR AND WHAT CAN WE EXPECT FROM THEM?

Populists are characterized by their criticism of the social “elite.” Populist parties use a strong rhetoric that decouples the “elites,” who are linked to the politicians of the established parties, from the “common people.” Populists position themselves as advocates of the common people and at the same time want to limit the influence of the elites. They also want to pursue different policies to those of the elites.

There are left-wing and right-wing populist politicians and parties. Prominent examples from Latin America are the left-wing populist Evo Morales (2006–2019 President of Bolivia) and the right-wing populist Jair Bolsonaro (2019–2023 President of Brazil). Alexis Tsipras (2015–2019 Prime Minister of Greece) is another example of a left-wing populist and Donald Trump of a right-wing populist. Right-wing populist parties include the Alternative for Germany (AfD), the Rassemblement National (RN) in France, and the Freedom Party of Austria (FPÖ).

* The German version of this article was published in *ifo Schnelldienst* 3/2024.

¹ Green parties are also increasingly being elected in many industrialized countries. See Potrafke and Wüthrich (2020) for the effects of the first Green-led state government in Germany on outcomes such as economic growth, unemployment, and energy policy.

KEY MESSAGES

- Populist-led countries tend to experience lower economic growth and less integration into the global economy compared to countries not governed by populists
- Recent studies at the municipal level provide convincing evidence of the impact of populists in office
- During their tenure, populist mayors have restricted immigration and social polarization has increased
- The election of populist mayors with anti-immigration agendas also influences attitudes toward foreign migrants, leading to a higher probability of hate crimes against immigrants
- Populist representation in municipal councils can lead to shifts in the ideological positions of other parties

Regarding sociopolitical issues such as how to deal with immigration from abroad, populist parties take a clear stance: they want to restrict it. As far as economic policy issues are concerned, the positioning of populist parties is not clear: some populist parties want to expand the size and scope of government (more spending, more redistribution of income and wealth, more state regulation of labor and product markets, etc.), while others want to decrease the size and scope of government. This ambiguity cannot be resolved by dividing the parties into left-wing and right-wing populist parties. For example, there are some parties that are described as right-wing populist and want to expand state activity. Which economic policies populist parties and politicians in office actually pursue and what economic effects these policies have remains an empirical question.



Luisa Dörr

is a Postdoctoral Researcher at the ifo Center of Public Finance and Political Economy and a Junior Faculty Member at LMU Munich.



Niklas Potrafke

is Director of the ifo Center for Public Finance and Political Economy and Professor for Public Economics at LMU Munich.

EMPIRICAL RESULTS AT THE NATIONAL LEVEL

One of the first studies on the impact of populists at the national level, by Rode and Revuelta (2015), shows that market-oriented economic reforms have been slowed down under populist heads of state. The authors analyzed data for 35 countries in the period 1990–2012, using indicators of economic freedom to measure economic policies. Gründler et al. (2024) also use indicators of economic freedom for a larger data set of 101 countries over the period 2000–2020. The results show that market-oriented economic reforms have been slowed down, particularly under left-wing populist heads of state. However, the empirical methods used in these studies do not allow any causal interpretation. The relationship between economic freedom or economic reforms and populist heads of state could be driven by third variables that cannot be controlled for in the empirical models.

The study by Funke et al. (2023) suggests that countries with populist heads of state experienced significant growth losses compared to countries without populist heads of state. The authors examined economic growth and other macroeconomic variables in 41 countries over the 1900–2020 period. During this period, out of a total of 1,482 heads of state, 51 are classified as populists (one of whom is Adolf Hitler). The results show that GDP fell by around 10 percent over a 15-year period when populists were in office. Populists shielded domestic economies from globalization: foreign trade volumes as measured by GDP and financial integration fell and tariffs on foreign trade rose.

A recent example comes from the United States. The Trump administration implemented protectionist trade policies, increasing tariffs on several countries and products. That was met with retaliatory tariff increases from its trading partners and an escalating trade war. Fajgelbaum et al. (2020) show that the cost to the US economy was high: the average real income loss was USD 7.2 billion. Most of the consequences were borne by US consumers and firms that buy imports, whose real income declined by USD 51 billion.



Felix Rösel

is Professor of Urban and Regional Economics at TU Braunschweig, Research Professor at ifo Institute Dresden, and a CESifo Affiliate.



Tuuli Tähtinen

is a Postdoctoral Researcher at the ifo Center of Public Finance and Political Economy and a Junior Faculty Member at LMU Munich.

RESULTS AT THE LOCAL LEVEL

Empirical studies at the municipal level succeed in convincingly estimating the causal effects of populists in office. Cause and effect can be easily distinguished in these studies. Scholars compare municipalities in which populist mayors were narrowly elected to office with municipalities in which populist candidates were narrowly defeated in the election. In these cases, only a few votes or chance decide whether a municipality is governed by a populist mayor or not. The data used came from Italy and Austria, for example, where mayors of right-wing populist parties such as the Lega Nord, Five Star Movement, or FPÖ were in office.

In Italy, narrowly elected mayors of the Lega Nord have ensured that fewer immigrants have come to their municipalities than to other municipalities, as Bracco et al. (2018) find for the period 2002–2014. However, if mayors of other political parties who also want to restrict immigration are taken into account alongside the Lega Nord, a strong effect of mayors who want to restrict immigration can be found only after 2014 (Cerqua and Zampollo 2023). In the period 2014–2018, the proportion of immigrants (inflow) in municipalities with mayors who want to restrict immigration was 16 percentage points lower than in municipalities with mayors who do not want to restrict immigration.

In addition to influencing immigrant behavior, the election of populist mayors also influences attitudes and behavior toward immigrants. In particular, the election of anti-immigration candidates can normalize hostility towards immigrants (Bursztyjn et al. 2020). Romarri (2022) shows that Italian municipalities with narrowly elected mayors from the Lega Nord or other far-right parties (including Brothers of Italy, the party of the current prime minister) have a 5-percentage-point higher probability of hate crimes against immigrants than in comparable municipalities where the far-right parties were not in a ruling position.

Italian mayors from right-wing populist parties have not only influenced immigration. They also paid off the debts of their municipalities to a slightly lesser extent than mayors from other parties in the period 1998–2020 (Bellodi et al. 2024). Moreover, they awarded more public contracts that exceeded the planned costs: the proportion of public contracts with unplanned high costs was a good 5 percentage points higher for mayors of right-wing populist parties than for mayors of other parties. There was also higher personnel turnover in the civil service: mayors of right-wing populist parties replaced 50 percent of the top civil servants in their municipalities.

The results of a study with data for Austria do not show that FPÖ mayors have influenced outcomes such as the unemployment rate, debt, or budget composition (Dörr et al.

2021). However, FPÖ mayors have increased political polarization. One instrument used to ascertain this was a political polarization index, in which the ideological positions of the parties and voting behavior in the municipalities are considered. Another instrument was soccer matches in the municipalities. As in Germany, soccer is also the most important community sport in Austrian municipalities. Results show that the proportion of players of foreign nationality in municipalities decreases when the municipalities are governed by FPÖ mayors.

A study for Finland examines the question of how established political parties react to the increasing presence of populist parties (Tähtinen 2022). Party positions in local elections are determined using candidate-level survey data from a voting advice application. The study shows that a stronger representation of populist parties in municipal councils influences the ideological positions of the established parties, prompting them to move closer together especially on social and cultural issues, the most important political dimension of populist parties.

POLICY CONCLUSION

Policymakers and citizens alike should be aware of the potential consequences when populists are in power, such as lower economic growth, reduced global integration, and increased social polarization.

Recent research highlights that populist policies that claim to shield domestic firms, workers, and consumers from globalization can backfire and have the opposite effect. While populists claim to protect cultural identity, normalizing hostility toward immigrants can lead to increased violence.

The ideological shifts observed in other parties when populist parties hold representation in municipal councils suggest the importance of fostering political dialogue and coalition-building to mitigate polarization.

REFERENCES

- Bellodi, L., M. Morelli and M. Vanonni (2024), "A Costly Commitment: Populism, Economic Performance, and the Quality of the Bureaucracy", *American Journal of Political Science* 77, 193–209.
- Bracco, E., M. D. Paola, C. P. Green and V. Scoppa (2018), "The Effect of Far Right Parties on the Location Choice of Immigrants: Evidence from Lega Nord Mayors", *Journal of Public Economics* 166, 12–26.
- Bursztyn, L., G. Egorov and S. Fiorin (2020), "From Extreme to Mainstream: The Erosion of Social Norms", *American Economic Review* 110, 3522–3548.
- Cerqua, A. and F. Zampollo (2023), "Deeds or Words? The Local Influence of Anti-immigrant Parties on Foreigners' Flows", *European Journal of Political Economy* 77, 102275.
- Dörr, L., N. Potrafke and F. Rösel (2021), "Populists in Power", *CESifo Working Paper* 9336.
- Fajgelbaum, P., P. Goldberg, P. Kennedy and A. Khandelwal (2020), "The Return to Protectionism", *Quarterly Journal of Economics* 135, 1–55.
- Funke, M., M. Schularick and C. Trebesch (2023), "Populist Leaders and the Economy", *American Economic Review* 113, 3249–3288.
- Gründler, K., A. Hackenberger and N. Potrafke (2024), "Government Ideology and Economic Freedom: New Empirical Evidence", in N. Berggren, ed., *Handbook of Research on Economic Freedom*, Edward Elgar, Cheltenham.
- Potrafke, N. and K. Wüthrich (2020), Green Governments, *CESifo Working Paper* 8726.
- Rode, M. and J. Revuelta (2015), "The Wild Bunch! An Empirical Note on Populism and Economic Institutions", *Economics of Governance* 16, 73–96.
- Romarri, A. (2022), "Strongmen in Power Are Not without Consequences: Far-right Mayors and Hate Crimes", *Working Paper*.
- Tähtinen, T. (2022), "Populism and Ideological Convergence: Evidence from a Multiparty System", *Working Paper*.

Vincenzo Galasso

The Effects of Fighting Populism on the Populist Dynamic

KEY MESSAGES

- Populism is on the rise globally and poses an existential threat to mainstream political parties
- Traditional parties may try to debunk the populist rhetoric or fight back using populist tactics
- A field experiment during the 2020 referendum in Italy shows that fighting back may be effective
- Political ads blaming populist politicians demobilized their electoral base at low economic cost
- Fighting populists backfires in the medium term as new populists benefit from the increased abstention

Populism is still on the rise in Western democracies. Populist politicians may be feared, admired, praised, or even demonized – but they are never ignored. This is not surprising, since populist parties tend to portray society as divided into two antagonistic groups: the “pure people” and the “corrupt elite” (Mudde and Rovira Kaltwasser 2017). The populist rhetoric also features anti-expert sentiments, anti-globalization stances, and aggressive communication styles on social media (De Vries 2018). This polarizing narrative thus pushes people to take a clear stand: in favor or against populism.

A large literature has analyzed the causes that have led to this rise in populism. The demand for populism is pinned down to two main determinants: economic and socio-cultural factors (Guriev 2018; Margalit 2019). Losers from many economic phenomena of the last decades, such as globalization, automation, financial crises, austerity policies, and welfare state retrenchments, have demanded protection and turned away from traditional parties (Guriev and Papaioannou 2022). The “silent revolution” (Inglehart 2015) promoted

by the progressive elites that supported the rise of progressive and post-materialist values in Western democracies met with the strong disapproval and dissatisfaction of social conservatives, leading to polarization over cultural issues. These voters turned away from traditional, particularly center-left, parties. Hence, both these socio-cultural and economic determinants of the

demand for populism eroded the support for traditional parties and led to a new political offer by the populist parties.

An open debate is taking place on the consequences of this rise of populism. The ability to articulate the economic and socio-cultural grievances of segments of the population within Western democracies and to advocate for their concerns within the political sphere is a notable aspect of populist parties. On the other hand, populist parties are often criticized for their extreme views on social and economic policies and for polarizing the political debate. However, regardless of one’s perspective on the role of populist parties, it is clear that traditional parties are finding it increasingly difficult to compete with them.

An old perspective (Dornbusch and Edwards 1991) suggests that populism could be self-defeating. By adopting “poor” economic policies, populist parties sow the seeds of their own political downfall, as voters may remove them from power when economic conditions deteriorate. This prediction hinges on the belief that politicians are accountable to voters and that elections serve as an effective mechanism for holding them accountable. But it also assumes that populist parties are less competent than traditional parties and will implement detrimental economic policies. Reality, however, may be more nuanced.

Voters might hold populist parties accountable for different actions compared to traditional parties. Populist parties often pledge straightforward and easily verifiable policies to their potential supporters instead of seeking a broad mandate (*carte blanche*), as traditional parties do. Consequently, voters may primarily hold populist parties accountable for fulfilling their promises. Furthermore, populist parties may opt to focus on non-economic issues such as law and order or immigration, which are harder for voters to assess. Even if populist parties clearly fail to deliver on their promises, voters may not necessarily return to traditional parties but instead turn to other populist alternatives.

If populist parties are here to stay, it’s imperative for traditional parties to devise a more effective political strategy. This is not only crucial for the survival of traditional parties but also for fostering broader democratic representation, diverse electoral choices, and enriching political discourse. What steps should mainstream parties take to effectively combat populism? Several key considerations come into play. Should they avoid engaging with populist-friendly issues such as anti-establishment or anti-immigration sentiments? Or should they directly confront these issues? If traditional parties are compelled to address these popu-



Vincenzo Galasso

is Professor of Economics and Head of the Department of Social and Political Sciences at Bocconi University, and a Research Fellow at CESifo and CEPR. His research is in political economics.

list-friendly issues, how should they approach them? Should they adopt a fact-based approach aimed at refuting populist rhetoric and persuading voters? Alternatively, could they adopt elements of the populist playbook themselves, using similar tactics to portray populist politicians as a new opportunistic and corrupt establishment? Essentially, should they fight fire with fire?

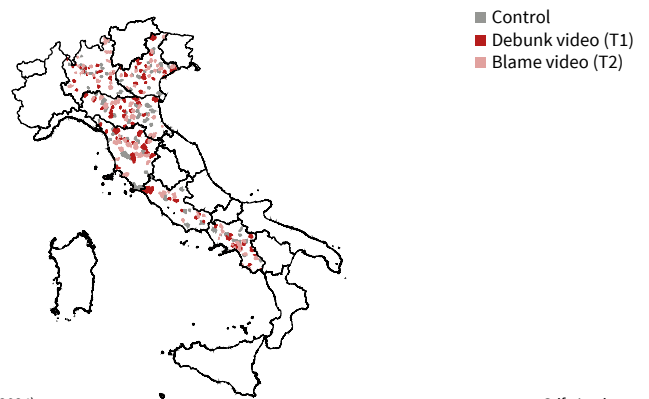
In our recent study (Galasso et al. 2024), we explore various strategies for traditional parties to counter populism and examine their short- and long-term implications. Our primary objective is to analyze how the political responses of traditional parties may influence the political dynamics surrounding populist parties. The previous questions serve as the focal point of our paper's analysis.

OUR FIELD EXPERIMENT IN THE 2020 ITALIAN REFERENDUM

In 2020, we conducted a randomized controlled trial in Italy during the electoral campaign for a constitutional referendum aimed at reducing the number of Members of Parliament (MPs). This issue carried significant appeal to populists, stemming from widespread skepticism or outright aversion towards legislative bodies, and was championed by two populist parties, the Five Star Movement and the League. The referendum sought to ratify a constitutional reform slashing the number of MPs in the Lower House from 630 to 400 and in the Senate from 315 to 200. Initially, polls in early 2020 forecast a 90 percent–10 percent victory for the “Yes” vote, endorsing the reduction of MPs, over the “No” vote, which sought to maintain the status quo. However, in September 2020, the “Yes” vote emerged victorious by a margin of only 70 percent to 30 percent, with a turnout rate of 51 percent.

Traditional political parties approached the issue with varied strategies – some refrained from taking a stance, while others faced internal divisions. Our experiment was conducted in collaboration with a national committee advocating for the “No” vote, associated with the Democrats. Utilizing *programmatic advertisements*, we delivered almost one million video impressions to Italian voters residing in 200 small to medium-size municipalities in six regions. Figure 1 shows the locations of these 200 municipalities and of the control municipalities used in the empirical analysis. Two 30-second video ads endorsing the “No” vote were employed in the campaign. These videos were deployed as pre-load rolls and placed before a regular content video as a 30-second advertisement, which could not be removed or skipped. They were placed on a host of websites, such as online newspapers, sport, entertainment, travel, health, etc. Although differing in tone and message, both ads were identical in length and graphics. The first video – randomly assigned to 100 municipalities – aimed at debunking the populist claims that cutting the number of MPs

Figure 1
Italian Municipalities in the Field Experiment



Source: Galasso et al. (2024).

© ifo Institute

would lead to large cost savings with no consequences for democratic representation. The second video – assigned to another 100 municipalities – featured a direct attack on populist politicians, who were criticized for their opportunism and corruption.

Overall, 59 percent of the recipients watched the videos until the end, and 74 percent watched them for at least 15 (out of 30) seconds. Yet, the more assertive “blame” ad proved slightly more effective in capturing the viewers’ attention. Both videos influenced voting behavior in the same direction: diminishing the share of the “Yes” vote – namely those in favor of reducing the number of MPs. This effect is mostly driven by discouraging voters and increasing abstention rates. The “blame” ad produced also stronger effects than the “debunk” ad. The increase in abstention ranges from 1.3 to 1.8 percentage points, translating into a marginal effect of 4.6 percent relative to the average abstention (see Table 1). The persuasion rates of the randomized video ads (DellaVigna and Gentzkow 2010) range between 8.7 and 14.7 percent for the blame video and are in line with the existing literature (DellaVigna and Kaplan 2007; Enikolopov et al. 2011; Gerber and Green 2000). The entire persuasion effort is explained by convincing potential “Yes” voters to abstain rather than convincing someone to switch to the “No” vote. Moreover, this dissuasion effect is cheap. The monetary cost of convincing an eligible voter, who would have otherwise gone to the polls to vote “Yes,” to abstain is EUR 1.66 per (demobilized) person. In fact, a campaign that costed EUR 17,500 managed to persuade 10,541 citizens to not vote “Yes” by keeping them at home. This cost is an order of magnitude lower than the cost of get-out-the-vote efforts as estimated in the literature (Green and Gerber 2008), which ranges from USD 31 for door-to-door campaigns to USD 91 for direct mail campaigns.

Given the socio-cultural and economic cleavage highlighted in the literature on the determinants of populism, we expected the effects of the electoral campaign to differ based on the socioeconomic and political characteristics of the municipalities. Indeed, consistent with the demobilization explanation, the

Table 1

Main Outcomes: 2020 Referendum in Italy

	Not Voting Yes		Abstaining		Voting No	
	(1)	(2)	(3)	(4)	(5)	(6)
T1	0.002 (0.006)	0.007 (0.006)	0.003 (0.008)	0.007 (0.008)	-0.001 (0.004)	-0.000 (0.004)
T2	0.011* (0.006)	0.016*** (0.006)	0.013* (0.008)	0.018** (0.008)	-0.002 (0.004)	-0.002 (0.003)
T1 = T2	0.143	0.132	0.170	0.185	0.663	0.687
T1 + T2	0.235	0.026	0.258	0.072	0.639	0.744
Sample	Triplets	Quadruplets	Triplets	Quadruplets	Triplets	Quadruplets
FE	✓	✓	✓	✓	✓	✓
Obs	300	400	300	400	300	400

Note: Estimated WLS regressions: $Y_i = \alpha_1 T1_i + \alpha_2 T2_i + \gamma_k + \epsilon_i$, where $K \in \{T, Q\}$, γ_T are triplet fixed effects, γ_Q are quadruplet fixed effects. T1 = T2 reports the p-value of the Wald test for the null hypothesis: $H_0: \alpha_1 = \alpha_2$. T1 + T2 reports the p-value of the Wald test for the 0 hypothesis: $H_0: \alpha_1 + \alpha_2 = 0$. Robust standard errors are in parentheses. Significance at the 10% level is represented by *, at the 5% by **, and at the 1% by ***.

Source: Galasso et al. (2024).

effects were more pronounced in municipalities with lower rates of college graduates, higher unemployment levels, and a history of supporting populist parties. In essence, in areas where some peripheral voters feel disconnected from politics and are already less inclined to participate, demobilization emerges as an effective strategy for thwarting the electoral ascendance of populist parties. This body of evidence suggests that countering populism, even through the use of similar tactics, can provide immediate advantages for traditional politicians at a relatively low economic expense. However, is there a political toll to be paid? Certainly, exacerbating polarization in political discourse carries a clear cost for democratic functioning. But are there other, more explicit, direct consequences that traditional parties might face if they choose to adopt populist rhetoric? The literature on negative campaigning suggests that in addition

to a “receiver effect,” which penalizes the subject of the negative advertisement, there may also be a “sender effect” that penalizes the sender, potentially benefiting other politicians who abstain from negative campaigning (Galasso et al. 2023). Could the current electoral gains for traditional parties that adopt populist-fighting tactics be followed by future electoral setbacks?

THE NEXT POPULIST IN TOWN?

The anti-populist campaign did have unforeseen consequences in the long term. In the subsequent national election of 2022, municipalities targeted by the campaign witnessed a surge in support for a burgeoning populist party, Brothers of Italy. Brothers of Italy was the new populist kid in town. During the previous term, Brothers of Italy was the only major party not to

Table 2

Dynamic Outcomes: 2022 National Election in Italy

	(1)	(2)	(3)	(4)	(5)
	Turnout	Democrats	Populists	Centrists	Brothers of Italy
T1	0.002 (0.004)	-0.007** (0.003)	-0.003 (0.004)	-0.003 (0.002)	0.009** (0.004)
T2	0.004 (0.004)	-0.007** (0.003)	-0.004 (0.004)	-0.003 (0.002)	0.013*** (0.004)
T1 = T2	0.608	0.907	0.775	0.931	0.364
T1 + T2	0.346	0.011	0.295	0.067	0.000
Controls	NO	NO	NO	NO	NO
Sample	Quadruplets	Quadruplets	Quadruplets	Quadruplets	Quadruplets
FE	✓	✓	✓	✓	✓
Obs	400	400	400	400	400

Note: Estimated WLS regressions: $Y_i = \alpha_1 T1_i + \alpha_2 T2_i + \gamma_k + \epsilon_i$, where $K \in \{T, Q\}$, γ_T are triplet fixed effects, γ_Q are quadruplet fixed effects. T1 = T2 reports the p-value of the Wald test for the null hypothesis: $H_0: \alpha_1 = \alpha_2$. T1 + T2 reports the p-value of the Wald test for the 0 hypothesis: $H_0: \alpha_1 + \alpha_2 = 0$. Democrats stands for “Partita Democratico” (PD); Populists for “Lega – Matteo Salvini Premier” plus “Movimento 5 Stelle” (M5S); Centrists for “Forza Italia” (FI); Brothers of Italy for “Fratelli d’Italia” (FdI). Robust standard errors are in parentheses. Significance at the 10% level is represented by *, at the 5% by **, and at the 1% by ***.

Source: Galasso et al. (2024).

provide political support to the technocratic government led by Mario Draghi. This decision, together with other stands on social issues, led to a large electoral success. Brothers of Italy largely increased its vote share in all Italian municipalities, won the election, and was able to unseat the Prime Minister. However, in the municipalities previously treated by the “de-bunk” video, this populist force gained an additional 0.9 percentage points more than the control group (+3.3 percent with respect to the average), and in the municipalities treated by the “blame” video, it gained 1.3 points more (+4.8 percent). Simultaneously, in the treated municipalities, there was a decline in support for both traditional political parties and the “old” populists who had championed the 2020 reform (see Table 2).

A follow-up survey conducted in 2023 confirmed these findings and revealed further significant shifts. Residents of municipalities exposed to the 2020 campaign demonstrated heightened political engagement, diminished trust in political institutions, and a rise in anti-political sentiments. Surprisingly, countering populism using similar tactics appeared to have favored the new populist party rather than the traditional political parties. While we don’t attribute these effects directly to the 2020 campaign, considering the two-year gap since the dissemination of the video ads, we suggest that the campaign acted as an external shock that initially influenced voting behavior. These changes may have persisted due to path dependence and the formation of habits in political beliefs. It appears that engaging in tit-for-tat with populist parties may not be the most effective strategy for mainstream parties.

POLICY CONCLUSIONS

What can we learn from our findings? They caution against the enduring efficacy of negative campaigning by traditional parties against populist movements, underscoring the necessity for forward-thinking strat-

egies – such as positive narratives that won’t boomerang over time – in combatting populism. While our study didn’t delve into the internal and external obstacles traditional parties face in embracing forward-thinking strategies, addressing these challenges is essential to reinvigorating political participation and confidence in political institutions. Party leaders who find themselves in weak positions may be tempted to gamble for resurrection and fight populists with fire. However, engaging in tit-for-tat risks unraveling the delicate tapestry of our democracies. Hence, a prudent approach is paramount.

REFERENCES

- DellaVigna, S. and M. Gentzkow (2010), “Persuasion: Empirical Evidence”, *Annual Review of Economics* 2, 643–669.
- DellaVigna, S. and E. Kaplan (2007), “The Fox News Effect: Media Bias and Voting”, *Quarterly Journal of Economics* 122, 1187–1234.
- De Vries, C. E. (2018), *Euroscepticism and the Future of European Integration*, Oxford University Press, Oxford.
- Dornbusch, R. and S. Edwards (1991), “The Macroeconomics of Populism”, in R. Dornbusch and S. Edwards, eds., *The Macroeconomics of Populism in Latin America*, University of Chicago Press, Chicago, 7–13.
- Enikolopov, R., M. Petrova and E. Zhuravskaya (2011), “Media and Political Persuasion: Evidence from Russia”, *American Economic Review* 101, 3253–3285.
- Galasso, V., M. Morelli, T. Nannicini and P. Stanig (2024), “The Populist Dynamic: Experimental Evidence on the Effects of Countering Populism”, *CESifo Working Paper* 10949.
- Galasso, V., T. Nannicini and S. Nunnari (2023), “Positive Spillovers from Negative Campaigning”, *American Journal of Political Science* 67, 5–21.
- Gerber, A. S. and D. P. Green (2000), “The Effects of Canvassing, Telephone Calls, and Direct Mail on Voter Turnout: A Field Experiment”, *American Political Science Review* 94, 653–663.
- Green, D. P. and A. S. Gerber (2008), *Get Out the Vote: How to Increase Voter Turnout*, Brookings Institution Press, Washington DC.
- Guriev, S. (2018), “Economic Drivers of Populism”, *AEA Papers and Proceedings* 108, 200–203.
- Guriev, S. and E. Papaioannou (2022), “The Political Economy of Populism”, *Journal of Economic Literature* 60, 753–832.
- Inglehart, R. (2015), *The Silent Revolution: Changing Values and Political Styles among Western Publics*, Princeton University Press, Princeton.
- Margalit, Y. (2019), “Economic Insecurity and the Causes of Populism, Reconsidered”, *Journal of Economic Perspectives* 33, 152–170.
- Mudde, C. and C. Rovira Kaltwasser (2017), *Populism: A Very Short Introduction*, Oxford University Press, Oxford.

Gylfi Zoega

The Great Slowdown and Political Populism

KEY MESSAGES

- Populism embeds truth in a welter of lies
- Populism erodes trust in mainstream political parties, institutions, ideas, and ideologies
- Stagnating productivity, large trade imbalances, and waves of immigration have contributed to increased discontent in the West and eroded trust
- Inclusive growth would lift all boats and rebuild trust
- Populist policies are an impediment to such growth

Populist parties are gaining ascendancy in many Western countries. Giorgia Meloni, the leader of the populist Brothers of Italy party, is the prime minister of Italy. In recent opinion polls, the populist AfD party in Germany has polled above 20 percent, much higher than the ruling SPD party of Chancellor Scholz. In France, a recent poll shows that Marine Le Pen could win the second round of the 2027 presidential election and places her party at an all-time high in public voting intentions. In 2023, the government of Mark Rutte in the Netherlands fell due to disagreements on immigration policies and the populist Party for Freedom led by Geert Wilders became the largest party.

Populism, as defined by Mudde (2007), poses a threat to our rules-based order and democratic institutions in its blindly following a leader, in defining a common enemy, and in defying the lessons coming from universities, the media, and international institutions, which we disown at our peril. For those of us

who consider populism to be a threat to liberal democracies, it is important to think about the causes of this development and about how to deal with the challenge it poses.



Gylfi Zoega

is a Professor of Economics at the University of Iceland and part time at Birkbeck Business School, University of London. He is an author of the recently published book *The Great Economic Slowdown* with Edmund Phelps and Hian Tech Hoon and *Fault Lines After Covid-19* with Már Gudmundsson and Robert Z. Aliber (editors).

CAUSES OF POPULISM

There is a large literature on the causes of populism, surveyed by Guriev and Papaioannou (2022). These include the role of secular economic factors such as trade and automation; the Great Financial Crisis of 2008–2009 and the austerity policies that followed; the cultural backlash to identity politics; the effects of immigration

and the recent refugee crisis; and, finally, the effect of the internet and social media.

Voters for populist parties share a distrust of mainstream political parties, the media, universities, and other established institutions as well as mainstream ideas and ideologies. The distrust is usually acquired through disappointment with current economic performance. In one study, Dustmann et al. (2017) found that both high unemployment and low GDP growth weakens support for European integration and also trust in both European and national parliaments.¹ Economic insecurities and opposition to immigration are often related.²

I start with the causes of the upsurge in populism before turning to the consequences of spreading populism and the possible policy responses.

The Great Economic Slowdown

There is a hidden development behind much of the turbulence in the modern world. The prelude to the emergence of populism in many Western countries can be found in the falling rates of productivity growth in the West in recent decades.³ Falling productivity growth has affected societies in a myriad of ways and created disillusion with the economy and anxieties among workers. Wages have stagnated in many countries. Real interest rates have fallen. Lower interest rates have caused the price of stocks and homes to rise, making the distribution of wealth ever more unequal. In some countries, the share of profits in national income has risen due to higher markups of prices over the cost of production, this development being reinforced by the rising market power of the likes of Google and Apple. Non-democratic countries such as China have managed to catch up with the US, threatening the rules-based global order.

Figure 1 shows the growth of labor productivity and the growth of real GDP per capita in six developed economies. Note the upward-sloping relationships in each of the figures that show falling growth rates since the early 1950s. In France, Germany, and Italy there is rising growth of productivity in the early

¹ Algan et al. (2017) also found a strong relationship between increases in unemployment and voting for populist parties across European regions in the years following the Great Recession.

² Arnorsson and Zoega (2018) found that the less educated, the older generations, and those on low incomes were more likely to vote for Brexit; feared EU enlargement more; did not want to have immigrants as neighbors; and thought immigrants were taking jobs away from natives, undermining cultural life, increasing crime, and being a burden on the welfare system.

³ This is the topic of the recently published book *The Great Economic Slowdown* (Phelps et al. 2023), which describes the falling rate of productivity growth over the past four decades and its manifold macroeconomic consequences.

1950s but then both productivity growth as well as real GDP growth start to fall in the middle of the decade and continue to fall until 2022.

The pattern is somewhat more complicated in the UK and the US, although these countries also show falling rates of productivity growth over the past decades. In the UK, real GDP growth increased during the Thatcher years in the 1980s while labor productivity growth did not. The most noteworthy departure from falling productivity growth is found in the US in the 1990s, the period of the internet boom in the second half of the decade when productivity growth was increasing. The growth of real GDP per capita has also increased more in the US than in the other countries since the financial crisis of 2008.

Were productivity growth to rebound with new technologies, many of the developments we have seen in the past would be reversed. Real interest rates would rise, the stock market decline, house prices fall, and wages start to grow at a faster rate, most of these developments conducive to increased satisfaction among the population, making populism less attractive.

Trade Imbalances

Another long-term feature of the world economy is persistent and large current account imbalances. These separate the surplus savings countries, such as Germany and the Netherlands, from the chronic deficit countries, such as the United States. The current account balances of several countries in 2022 are shown in the table below. In the group of surplus countries we have Germany and the Netherlands, and three Nordic countries, Switzerland, Ireland, and then China and Japan. The US is by far the biggest deficit country, followed by the UK. The US, on its own, could spend the surplus savings of China, Germany, Norway, and Saudi Arabia, the UK the surplus savings of the Netherlands and so forth. This pattern has persisted over a long period.

There are two main reasons why this pattern matters. First, the persistent US trade deficit has made the US lose manufacturing jobs to lower-cost producers such as China, pushing workers into lower-wage service-sector jobs. Nations seldom complain about having trade surpluses: the desirability of a persistent trade surplus for Germany is not being debated in that country; this is not the case in chronic deficit countries such as the US.

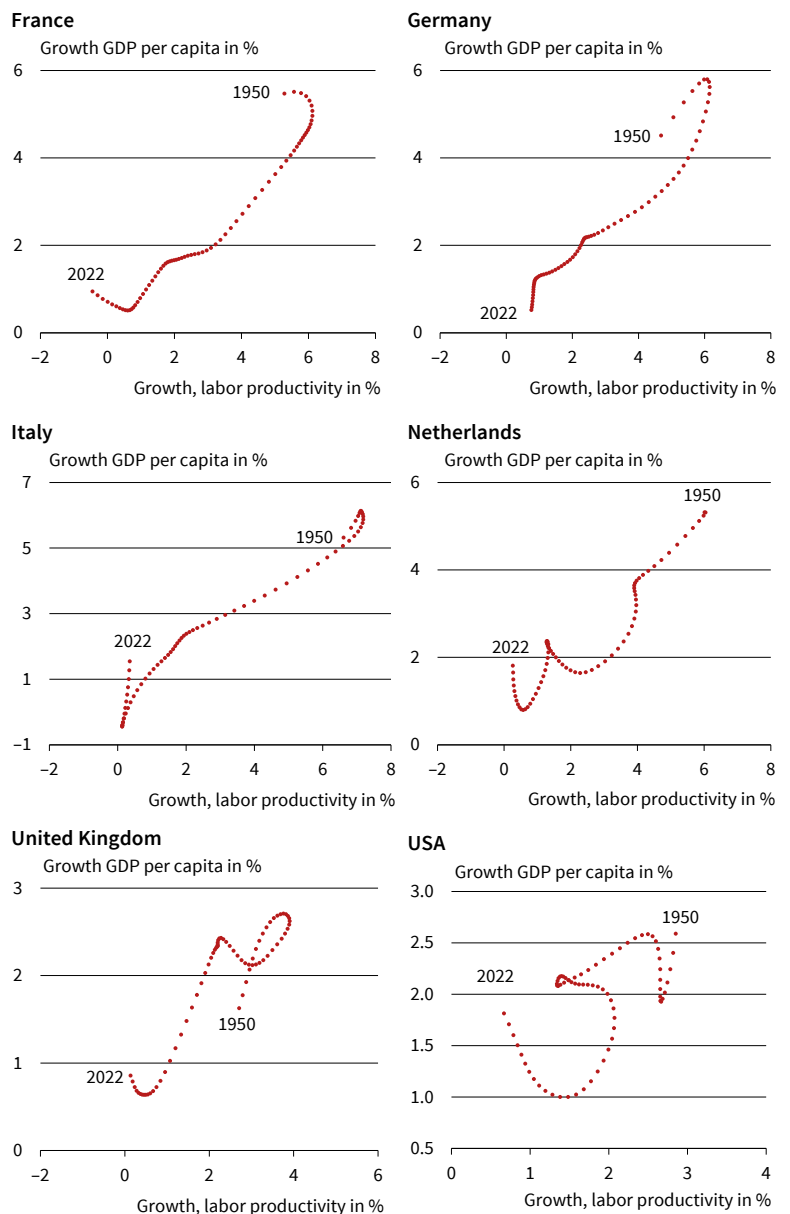
Surpluses on the current account measure, by definition, the excess of the sum of private and public saving over domestic investment. If a surplus country, such as Germany, saw its savings invested in the US because of government deficits in the US or a lack of private saving or attractive and profitable investment opportunities in that country, one would expect complaints coming from the Germans. The fact that they do not complain suggests that it is the surplus Ger-

man (or Dutch or Norwegian and so forth) savings that contribute to the US current account deficit by raising the value of the dollar and making imports cheaper.

It follows that the US trade deficits are more likely to stem from excess savings in other countries than from fiscal deficits in the US. Thus, in the late 1990s the US had fiscal surpluses but there were trade deficits (Aliber 2023).

The second reason current account imbalances matter is that they have historically caused financial turbulence. As pointed out by the American economist Robert Aliber, the period after the collapse of the Bretton Woods system was characterized by multiple financial crises, from Mexico and Latin America in the early 1980s, to Japan and Southeast Asia in the late 1980s, to the US and Europe in 2008 (Aliber 2011).

Figure 1
The Growth of Real GDP per Capita and Labor Productivity (Waves)



Source: Bergeaud et al. (2022).

© ifo Institute

Table 1

Current Account, 2022 in Millions of Dollars

Surplus countries		Deficit countries	
China	401,855	United States	- 971,594
Germany	183,622	United Kingdom	- 95,175
Norway	180,054	India	- 79,520
Saudi Arabia	153,431	France	- 52,519
Netherlands	91,291	Turkey	- 48,411
Japan	79,101	Italy	- 31,370
Switzerland	77,248	Greece	- 22,359
Ireland	54,775	New Zealand	- 20,605
Denmark	54,287	Poland	- 16,601
Sweden	34,548		

Source: OECD.

Each of these episodes was preceded by capital flows from surplus countries to deficit countries ending with a sudden stop and a financial crisis. This has implications for populist politics because far-right populist parties have historically increased their vote share in the aftermath of financial crises (Funke et al. 2016).

The Pull of Liberal Democracies in Moderate Climates

The rules-based Western democracies attract migrants. Some are escaping political persecution while others are seeking to improve their standard of living. In the US, the populists want to build a wall from the Pacific to the Atlantic to prevent illegal immigration across the border with Mexico; Europe faces a constant influx of migrants from North Africa and the Middle East. This presents both an economic and a social challenge. While working-age immigrants can be looked at as “adopted children” in societies with low fertility rates, their skill levels may pose a more direct threat – real or apparent – to the employment opportunities of the less skilled native population. Moreover, it is difficult or impossible to maintain a welfare state with open borders, which may convince many to rein in the pace of immigration.

At a more social level, rapid immigration from countries whose culture – values and attitudes – differ from that of the destination country may make it more difficult to maintain social cohesion.

A warming climate and political instability can only increase the pressure of migrants coming from hotter climates to Europe. Declining birth rates and increased pressure from immigration will in the future force Western nations to formulate policies where the interests of employers, who need workers, and the local population, who fear the arrival of too many immigrants, are reconciled.

Stagnating living standards, disappearing jobs in manufacturing, and an influx of immigrants create worries and insecurities about the future that populist politicians can harness to their benefit.

THE CONSEQUENCES OF SPREADING POPULISM

What makes populist politicians dangerous is their ability to combine truth with fiction. Listening to them, one can only conclude that they are on to something and that is exactly what makes them dangerous.

The world witnessed four years of the economic management of President Trump. He embraced a populist policy to protect jobs in declining industries, emphasized the identity of workers who differ along ethnic lines, and followed nativist policies against the interests of immigrants. His economic management resembled that of Mussolini in Italy almost a century ago, who thought nothing of the individual, a free mind, and ability to innovative and replaced this with the interests of “the people” as defined by himself. The MAGA doctrine is thus about America as a unit led by a leader, not about fostering the creativity of individuals in a market economy.

There is a problem with the US having large and persistent trade deficits, as described above, if jobs in manufacturing are more valuable than service-sector jobs. But the former president Trump is on record claiming that German car exports pose a national threat to the US, which is clearly not the case since production takes place in the US. This brings us to economics.

Were tariffs to be imposed on German car imports, US consumers would simply buy Japanese cars instead. If a tariff were imposed on all imports, the dollar would simply appreciate, making imported goods, including cars, cheaper.

The populist politician is often oblivious to the fact that the structure of the economy is changing, that productivity improvements will occur in services in the future, in high-tech sectors and in health care, and that the future is uncertain and impossible for a dictator to predict or to control.

Populists see the economy as a zero-sum game and as rivalries between nations instead of seeing the mutual benefit of trade and collaboration. This brings out some of their worst instincts, such as a preference for unilateralism based on transactions

and dealmaking instead of establishing rules that all countries abide by. The populist thrives best in a world of dictators where national interests clash and the stronger countries prevail over the weaker.

POLICY CONCLUSION: GROWTH TO THE RESCUE

What can mainstream parties and politicians do in response to the response to the populist temptation?

A large piece of the answer would be “inclusive growth.” The growth part of the phrase makes living standards improve over time and the inclusive part makes all or most workers benefit from the growth. Inclusive also applies to workers having a sense of belonging in the economy, feeling that they have a role and are valued and given opportunities.

The economics profession should go back to the Stolper Samuelson theorem and acknowledge that globalization and trade create both winners and losers, and although the former could compensate the latter, this rarely occurs without the intervention of a government. This can take the form of education and training of workers who lose their livelihoods due to a rapidly advancing technology or by granting relocation allowances. A more radical solution is for a government to instate a system of wage subsidies to lift the disposable income of low-income workers in order to encourage them to participate in the labor market instead of living off benefits (Phelps 1997).

A higher rate of productivity growth provides a large piece of the solution to the populist challenge. It will make real wages grow, alleviating the cost-of-living crisis as well as generating a more satisfied society in the long run. Wealth distribution would become more equal and homes more affordable.

The advent of AI technologies has already created hopes of higher labor productivity growth in the future. AI enables workers to perform tasks they could not do in the past, raising their wages (Brynjolfsson 2017). However, the full effect of the new technologies will take time to materialize. There is the implementation lag from the time the new technologies are invented until the necessary investments have been made and institutional changes have taken place (Eggertsson 2005), and technological innovations take a long time to be fully implemented through a series of microinventions (Mokyr 1993). While AI is a macroinvention, using the terminology of Joel Mokyr, it will generate many microinventions that will raise workers’ productivity.

But what can countries do to promote productivity growth? The beginning of the answer is a simple one, which is to avoid the populist temptation. Nothing is as detrimental to productivity growth than a ruler who thinks he knows where the economy should go, who sets one ethnic group up against another, who thinks that one country’s gain is another country’s loss, and who deliberately ignores the lessons of science and economic policy making.

What is most important for the long-term growth of the economy is an economy where people have expanding opportunities to learn, to participate in the economy, and to find new ways of solving tasks. Ned Phelps describes such an economy in his 2013 book *Mass Flourishing* (see also Hoon et al. 2023). Here, jobs are rewarding and a source of life satisfaction. Such an innovative capitalist system requires investors, a stock market, company law, and good corporate governance in addition to the protection of property rights, a noncorrupt public sector, and the rule of law.

Populist politicians have no appreciation for such an economy. Their politics do not provide a solution to current economic problems. Instead, they are an impediment to growth.

REFERENCES

- Algan, Y. S. (2017), “The European Trust Crisis and the Rise of Populism”, *Brookings Papers on Economic Activity*, 309–382.
- Aliber, R. Z. (2011), “Monetary Turbulence and the Icelandic Economy”, in R. Z. Aliber, *Preludes to the Icelandic Financial Crisis*, Palgrave Macmillan, Basingstoke, Hampshire and New York, 302–326.
- Aliber, R. Z. (2023), “Management of the U.S. Dollar 1971–2022”, *Atlantic Economic Journal* 51, 13–26.
- Arnorsson, A. and G. Zoega (2018), “On the Causes of Brexit”, *European Journal of Political Economy* 55, 301–323.
- Bergaud, A., G. Clette and R. Lecat (2022), *The Long-term Productivity Database*, Paris, 24 November, <http://www.longtermproductivity.com/about.html>.
- Brynjolfsson, E. and T. Mitchell (2017), “What Can Machine Learning Do? Workforce Implications”, *Science* 358, 1530–1534.
- Dustmann, C., S. Otten, B. Eichengreen, A. Sapir, G. Tabellini and G. Zoega (2017), *Europe’s Trust Deficit: Causes and Remedies*, CEPR Press, London.
- Eggertsson, T. (2005), *Imperfect Institutions: Possibilities and Limits of Reform*, University of Michigan Press, Ann Arbor, MI.
- Funke, M., M. Schularick and C. Trebesch (2016), “Going to Extremes: Politics after Financial Crises, 1870–2014”, *European Economic Review* 88, 227–260.
- Gurieff, S. and E. Papaioannou (2022), “The Political Economy of Populism”, *Journal of Economic Literature* 60, 753–832.
- Hoon, H. T., E. S. Phelps and G. Zoega (2023), “The Need for Growth”, in R. Z. Aliber, M. Gudmundsson and G. Zoega, eds., *Fault Lines After COVID-19: Global Economic Challenges and Opportunities*, Palgrave Macmillan, Cham, Switzerland, 335–345.
- Mokyr, J. (1993), *The New Economic History and the Industrial Revolution*, Westview Press, Boulder, CO.
- Mudde, C. (2007), *Populist Radical Right Parties in Europe*, Cambridge University Press, New York.
- Phelps, E. S. (1997), *Rewarding Work: How to Restore Participation and Self-Support to Free Enterprise*, Harvard University Press, Boston, MA.
- Phelps, E. S. (2013), *Mass Flourishing: How Grassroots Innovation Created Jobs, Challenge, and Change*, Princeton University Press, Princeton, NJ.
- Phelps, E. S., H. T. Hoon and G. Zoega (2023), *The Great Economic Slowdown: How Narrowed Technical Progress Brought Static Wages, Sky-High Wealth, and Much Discontent*, Palgrave Macmillan, Cham, Switzerland.

Massimo Morelli

Sad Populism and the Policies of Hope*

KEY MESSAGES

- **The erosion of trust in liberal representative democracy, institutions, and parties generated a shift to commitment politics, in which identitarian and nationalist protection commitments are perceived as feasible (right-wing populism), whereas left-wing welfare policy commitments as not credible during times of low fiscal space**
- **People who demand commitments by the executive power may want the weakening of all other powers, which are perceived as obstacles for such desired policy commitments: a dangerous path from economic populism to illiberal populism**
- **This populist time is characterized by two paradoxes: a political paradox (demand for fewer checks and balances at a time of growing distrust) and an economic paradox (greater demand for national sovereignty in times of global challenges, not solvable by nation-level policies)**
- **Distrust goes hand in hand with low hopes and aspirations. It is difficult to invert the trend at the national level, but carefully chosen European policies can achieve it**
- **Corporate and capital taxation at the EU level is feasible and could give resources for greater economic security of the masses, e.g., with an EU unemployment insurance scheme, while at the same time helping to reduce national-level labor income taxes. This type of policy can generate trust and hope in supranational institutions**

The problems in private life are usually different from those we face in scientific work. If they start to be the same, then we know that we live at a critical juncture of history; when you as a social scientist as well as a person wake up every day thinking about what to hope for the day, for your family, for society. Populism is not only the most debated phenomenon in the social sciences, from politics to economics, sociology to psychology. It is also a synthesis of personal worries for society and for future generations. As scientists, we have first focused on trying to explain populism, looking at the economic and cultural changes that could be behind it, and also dueling back and forth on its meaning. As a citi-



Massimo Morelli

is Professor of Political Science and Economics and Director of the Pericles Unit at Bocconi University.

zen, I wonder not only what I should hope for but also what it is feasible to hope for.

In this article, I aim first to convey the growing awareness that these two spheres are sadly converging. Second, I want to share some preliminary thoughts about which policy decisions we could advocate that could perhaps invert the trend. I believe that the trend towards distrust and low levels of hope and aspirations can be inverted only at the European level, whereas at the national level, it is very difficult to break the vicious circles that the erosion of trust has created at the economic and political levels.

EROSION OF TRUST AND THE SHIFT TO POPULIST COMMITMENTS

For many in liberal Western democracies, the 90s were a decade of growing optimism: the end of the Cold War and perceived stability of the systems based on democracy and the free market; the many growth prospects offered by institutional integration in Europe and technological development; emerging markets and the end of dictatorships, and China joining the WTO. In the new century, the roaring 90s seem a thing of the distant past.

Economists and political scientists have mostly focused on the downsides of globalization and automation – causing greater inequality and economic insecurity especially among low-skilled workers – and on the growing perceptions of economic and cultural threat associated with immigration. The financial crisis around 2008 played a crucial watershed role: it extended distrust in open real and financial markets to the middle class, as shown in Guiso et al. (2021). At the same time, the accumulation of debt in almost all liberal democracies increased awareness that the inequality and external threat of open markets cannot be offset by government welfare policies. In turn, a growing distrust in free markets and government welfare systems, the two pillars of liberal democracy, determined growing distrust in existing institutions, domestically and internationally. The compounded effect of distrust in markets and governments is documented in Guiso et al. (2021) – where we show that the financial crisis had political consequences significantly worse in countries with low fiscal space – and in Guiso et al. (2019), where we show that the market fears due to globalization exposure became politically relevant only within the Eurozone, due to the perceived straitjacket constraining policymakers in the Eurozone.

Lower trust in markets, governments, and political institutions led naturally to a crisis among traditional

* The author would like to thank Giunia Gatta for her assistance with the revision.

parties: they were perceived as unable to protect the people from all those threats, due to their perceived tendency to be influenced by elites, broadly interested in the conservation of a convenient status quo. It is at this juncture that populist politicians entered the scene with almost immediate success, gladly accepting their description – prevalent in political science – as the new champions of the necessity to protect the people from the corrupt elites.

As we argue in Bellodi et al. (2023a), the natural consequence of a generalized erosion of trust in delegated representatives is a shift to commitment politics. On the demand side, voters left and right want monitorable policy commitments more than consistency with philosophical principles; however, the economic welfare commitments typically associated with the left may not be credible in times of looming austerity, while the typical commitments to protect identity and national interest offered by right-wing politicians do not suffer from budget constraints. In other words, the demand for commitments is there on left and right, but the right-wing commitments look more feasible. This explains why the current success of populist politicians in Europe falls disproportionately on the right, while in other historical and geographic contexts, the prevalent populist commitments had been more to left-wing redistributive policies.

THE MAIN CONSEQUENCES OBSERVED SO FAR

Macroeconomic studies reveal that populist governments have large negative consequences for growth: Funke et al. (2023), for example, used a sample of 1,827 leaders in 60 countries from 1900 to 2018 to show that after 15 years of populist government, GDP per capita and aggregate consumption are more than 10 percent lower compared to a reasonably similar country with a non-populist leader.

Second, cross-municipality studies have shown negative consequences of populist mayors for various measures of economic performance as well as a deterioration of local public management (Bellodi et al. 2023b).

A third (and perhaps most concerning) consequence of greater demand for policy commitments (from border protection to protection of national interests in general) is the growing desire to reduce the power of bureaucracies and the judiciary systems, perceived as limitations to the power of the populist executive to implement those commitments effectively – Poland, Hungary, Mexico, and Turkey, among others, all display wider support for a reduction of checks and balances. This leads to a double paradox:

- first, in a world of growing distrust in institutions, the checks and balances to executive power are paradoxically seen as less desirable;
- second, in a world of global challenges, politics sadly drifts towards nationalism.

This double paradox is the essence of democratic backsliding and de-globalization, which can make us worry about the future even more than the evidence about the negative economic performances of populist governments.

THE RELEVANCE OF HOPE

It's no coincidence that in 2008, at a time in which the financial crisis was dealing trust a crucial blow, Obama decided to campaign with a “Yes, we can!” campaign of hope: trying to restore hope in the ability of a progressive government to master the various challenges was the key to winning the election. In 2016, Trump instead ran on distrust and the failure of those hopes. The collapse of trust in Washington helped him gain the support of all those who did not buy into the connection between institutions and hope. The commitment to protecting the people against the threats posed by immigration, the commitment to nationalist protectionism and disengagement from international relations combined to push moral universalism and liberal values out of the political debate.

In Europe, the trend is very similar, with growing distrust in bureaucrats, judicial systems, integration policies, and the European Green Deal. The double paradox mentioned above can help to summarize the critical juncture in which the upcoming European elections will take place: at a time of global challenges and climate and geopolitical transitions, one side views strengthening of European-level responses and the ability of the EU to respond collectively and decisively as ever more important, while the other, stoked by distrust, portends potential growth in support for identitarian nationalist parties, which would want to maintain intergovernmentalism and national sovereignty protection.

If my neighbor, my taxi driver, my plumber, and my lawyer all tell me that they support populist parties because of distrust in representative democracy and frustration with bureaucracy, the first instinct is to argue that a populist leader may be an even worse representative and that (s)he will make bureaucracy even worse. However, this type of reaction further contributes to reducing hope and trust, creating a vicious circle. Their distrust and frustration become my fear about the future, strangled in the double paradox. The liberal values of ingenuity, prudence, and industry were at the heart of the Smithian hope that people would trust the invisible hand of markets and would be driven by aspirations of economic and social improvement that they could achieve by the exercise of those values. This virtuous circle has been broken by growing inequality and a shriveling of hopes in social and economic mobility. The frustrated middle class now fears the people “below” them, and hate and envy the unreachable wealthy. Thus, distrust in institutions and elites goes hand in hand with lower

hopes, lower aspirations, and lower incentives to work towards achieving dreams. The causes of populism may well be exacerbated also by some of its consequences, because the double paradox does not allow us to think that populist policies can restore dreams of self-realization or moral values.

POLICIES FOR HOPE AND TRUST IN INSTITUTIONS

Given that the collapse of hope and trust are cause and consequence of populism, it follows that the policy debate should focus on such concerns. “Next Generation EU” was a great name for the European effort to finance reforms and policies to rebound from the Covid-19 crisis, because it is exactly the creation of hope for the next generation that can save us from a vicious circle of divisions, walls, and conflicts. European funds for reform and infrastructure that everyone needs were important to increase awareness of the global/national paradox, and such awareness could be further increased if we manage to go towards common corporate sales taxes and capital taxes that could reduce some of the inequality-related frustrations and show the relevance of EU policies. Since the labor share of national income is falling and national taxes on labor income are typically already too high, the enlargement of European resources for public goods, infrastructure, defense, and research can only come from European corporate and capital taxes, which are self-defeating when collected at the national level. Trust in institutions may be restored if new policies allow wealth to be redistributed more equally, while at the same time allowing increases in disposable labor income. A European capital income tax scheme can allow each state to reduce its labor income taxes, and this could help trust to rebound.

One example of a policy on the welfare protection side – one that is sometimes unfeasible at the national level but that could make people feel protected by European institutions, restoring some trust and hope among lower-income classes – could be a European unemployment insurance scheme or European-level citizenship income. While the latter would require a significant increase in Europe’s own resources, the former is feasible with only a minor enlargement of own resources. Strengthening Erasmus programs and supporting access to high-level education for all could of course also play a significant role for the creation of trust in European institutions among this and the next generations.

As for tackling the other paradox – the lowering of appreciation for checks and balances – it is necessary to avoid the multiple layers of European, national, and regional bureaucracies and reduce the legal uncertainty due to the ill-defined boundaries of

jurisdiction of the various courts. An independent judiciary and an efficient bureaucracy can be desirable for voters if reforms are made to reduce the concern that such agencies are influenced by the same elites that they fear exert a hold over politicians. The use of self-certification and interim controls should expand, while preliminary checks on business creation should be reduced. The preservation of bureaucracy and judiciary independence depends not only on the level of trust in their motivation and competence, but also on whether the general perception is one of their being an “obstacle” to the implementation of policies with broad support, or as a “protection” against the unwise judgement of rushed executive decisions. In a climate of eroded trust, the latter concern should dominate, but it is difficult to fulfill such an objective without risking depicting bureaucracy and judiciary independence as obstacles to the achievement of populist objectives.

EU policies should be policies of support, public goods provision, and coordination, and should not go in the direction of “additional” constraints, which can further foster nationalist attitudes. The recent protests about agriculture constraints are telling: if setting minimum standards is necessary for the Green Deal, then anti-European attitudes can be avoided only if the European institutions counterbalance the new constraints with income policies that would be unfeasible at the national level. Nationalism is a “trap,” precisely because the demand of greater security cannot be addressed economically and politically by nations non-cooperatively (Morelli 2020). This implies that even though populism thrives within the borders of individual states, the greatest hope for saving representative democracy with checks and balances lies with Europe. Perhaps this is an additional paradox, given that the creation of the United States of Europe is still a distant dream.

REFERENCES:

- Bellodi, L., M. Morelli, A. Nicolò and P. Roberti (2023a), “The Shift to Commitment Politics and Populism: Theory and Evidence”, *CEPR Discussion Paper* 18338.
- Bellodi, L., M. Morelli and M. Vannoni (2023b), “A Costly Commitment: Populism, Economic Performance and the Quality of Bureaucracy”, *American Journal of Political Science* 68, 193–209.
- Funke, M., M. Schularick and C. Trebesch (2023), “Populist Leaders and the Economy”, *American Economic Review* 113, 3249–3288.
- Guiso, L., H. Herrera, M. Morelli and T. Sonno (2019), “Global Crisis and Populism: The Role of Euro Zone Institutions”, *Economic Policy* 34, 95–139.
- Guiso, L., M. Morelli, T. Sonno and H. Herrera (2021), “The Financial Drivers of Populism in Europe”, *CEPR Discussion Paper* 17332.
- Morelli, M. (2020), “The Paradox of Endogenous Nationalism and the Role of Quantitative Easing”, *SUERF Policy Note* 140, <https://www.suerf.org/publications/suerf-policy-notes-and-briefs/the-paradox-of-endogenous-nationalism-and-the-role-of-quantitative-easing/>.

Sarah Gust, Eric A. Hanushek and Ludger Woessmann

A World Unprepared: Missing Skills for Development

How far away is the world from ensuring that every child obtains at least basic skills? And what would it mean for world development to reach the goal of global universal basic skills? We address these two intertwined questions in a new study (Gust et al. 2024).¹ We draw on the individual-level test data from available international and regional student assessments to develop world estimates of the share of children not achieving basic skills in each country and then show the economic costs of these deficits.

The 17 separate Sustainable Development Goals (SDGs) emphasize a broad set of laudable development outcomes, ranging from eliminating poverty to conserving the oceans (UNESCO 2021). But achieving the hope of these broad improvements is highly dependent on expanding resources to pay for and bring about change. On this score, past evidence suggests that upgrading the skills of each country's population is the key to getting the necessary productivity improvements and economic growth (Hanushek and Woessmann 2016). We therefore focus on SDG 4 – ensuring equitable and inclusive quality education for all – which we believe is the key to developing the skills of a country's workforce and thus to addressing the other SDGs.

MEASURING SKILLS ON A GLOBAL SCALE

While very low learning levels have been highlighted for selected low-income countries (e.g., Pritchett 2013; Pritchett and Viarengo 2023), the limited country coverage of internationally comparable skill data means that it is unclear how many children globally currently fail to reach basic skill levels. Still, the universe of extensive –

¹ The underlying research paper, "Global Universal Basic Skills: Current Deficits and Implications for World Development," has just been published in the *Journal of Development Economics*. This summary is an updated version of a text first published on VoxEU.org.



Sarah Gust

is a PhD student at the ifo Center for the Economics of Education.



Eric A. Hanushek

is the Paul and Jean Hanna Senior Fellow at the Hoover Institution of Stanford University.



Ludger Woessmann

is Director of the ifo Center for the Economics of Education and Professor of Economics at the University of Munich.

KEY MESSAGES

- Ensuring that all children in the world obtain at least basic skills is paramount for world development
- At least two-thirds of the world's youth do not even reach basic skill levels – i.e., the world is short of meeting the Sustainable Development Goal of universal quality education
- This is the result of our new study, which combines multiple data sources from international tests to conduct a cross-country analysis of basic skills using a common achievement scale
- Skill deficits range from 24 percent in North America and the European Union to 89 percent in South Asia and 94 percent in sub-Saharan Africa
- An economic analysis suggests that the world is missing out on over USD 700 trillion in economic output over the remaining century, or 12 percent of future GDP, by failing to reach the goal of global universal basic skills

but not directly comparable –achievement information could in principle provide a detailed picture of how far the world is from achieving basic skills for all children.

We define basic skills as the skills needed to participate effectively in a modern international economy, which we measure by mastering at least the most basic skill level of the Programme for International Student Assessment (PISA) – i.e., PISA Level 1 skills. This entails, for example, being able to carry out obvious routine procedures, but not employing basic formulae or making literal interpretations of results (OECD 2019).

We first combine test information from the various international tests. PISA and PISA for Devel-

opment (PISA-D) cover a total of 90 countries. The Trends in International Mathematics and Science Study (TIMSS) contributes 14 additional countries (that have not participated in PISA). An additional 20 countries are added by regional achievement tests – TERCE and SERCE in Latin America and SACMEQ and PASEC in sub-Saharan Africa. Two countries have participated in PISA on a sub-national basis – India and China. These 126 countries with direct assessments of students represent 85 percent of the world population and 96 percent of world GDP.

A central element of our analysis is the development of a method for reliably combining the available assessment information to place the countries of the world on a common achievement scale. Even though the different tests were not designed with that objective in mind, we show that it is possible to transform student-level achievement on all tests into a PISA-equivalent score while introducing minimal constraints on the underlying score distributions. Our method equates the scales of the different tests by using the student-level distributional information found in the group of countries that participate in each pair of test regimes.

Estimating achievement of basic skills in countries without representative participation in the international tests adds an additional level of complexity. For the two countries with no international assessments except for PISA in selected provinces or states – India and China – we use additional within-country achievement information to provide estimates of national achievement on the PISA scale. For countries that never participated in any of the international tests, we impute achievement using cross-country regressions of achievement on educational enrollment, GDP, and indicators of world regions and income groups.

Finally, the international tests provide data on children in school, but over one-third of the world's children are not in secondary school, so their skills are not measured. We use information from PISA-D and from the Programme for the International Assessment of Adult Competencies (PIAAC) to estimate the skill levels of children who are not in school (relative to children in school in the specific country).

Using these varied approaches, we can estimate achievement deficits in 159 countries with a population of at least one million or a GDP that is at least 0.01 percent of world GDP. These 159 countries cover 98 percent of the world population and 99 percent of world GDP.

SIX STYLIZED FACTS ON THE WORLD DISTRIBUTION OF BASIC SKILLS

Our results suggest that the world has a long way to go to reach global universal basic skills. The map in Figure 1 shows visually how the skills of countries vary. The world distribution of basic skills can be summarized in six stylized facts:

1. At least two-thirds of the world's youth are not obtaining basic skills.
2. The share of children not reaching basic skills exceeds 50 percent in 101 countries and rises above 90 percent in 36 of these countries.
3. Even in high-income countries, one-quarter of children lack basic skills.
4. Skill deficits reach 94 percent in sub-Saharan Africa and 89 percent in South Asia, but also hit 68 percent in Middle East and North Africa and 65 percent in Latin America.
5. While skill gaps are most apparent for the third of global youth not attending secondary school, 63 percent of the global youth who are in secondary school fail to reach basic skills.
6. Half of the world's youth live in the 35 countries that fail to participate fully in international tests (which includes India and China) and thus lack regular and reliable foundational performance information.

Table 1 provides the numbers for all country income groups and world regions. The results indicate that the lack of quality education in schools weighs much more heavily on the overall lack of skills than does incomplete school enrollment.

WHAT MISSING SKILLS MEAN FOR WORLD DEVELOPMENT

We use our skill measures to quantify the economic gains that the world could reap from reaching the goal of having every child achieve at least a basic skill level. Using estimates of the association between skills and long-run growth rates from existing empirical growth models with worker skills (Hanushek and Woessmann 2012), we project, country by country, the future path of GDP with improved skills.

The discounted added world GDP amounts to over USD 700 trillion compared to the status quo GDP trajectory over the remaining century. This economic gain from reaching the goal of global universal basic skills is over five times the current annual world GDP, or 12 percent of the discounted future GDP over the same horizon. Put the other way around, this amount documents the lost economic output due to missing the goal of global universal basic skills. Importantly, the gain from lifting all students who are currently in school to at least basic skill levels turns out to be more than twice as large as the gain from enrolling the children currently not attending school in schools of current quality levels.

Our work extends the existing literature on global skill measurement (e.g., SDG 4). Our method of combining achievement information from different international tests using the full underlying student distributions augments previous contributions such as Hanushek and Woessmann (2012), Patel and Sandefur (2020), and Angrist et al. (2021). Like Pritch-

Table 1

Basic Skill Deficits on a Global Scale

	Share of students below basic skills (1)	Share of children not enrolled in secondary school (2)	Share of all children below basic skills (3)
World	0.631	0.355	0.672
<i>By income group</i>			
Low-income countries	0.905	0.693	0.956
Lower-middle-income countries	0.813	0.440	0.858
Upper-middle-income countries	0.383	0.189	0.423
High-income countries	0.239	0.069	0.255
<i>By region</i>			
Sub-Saharan Africa	0.893	0.665	0.941
South Asia	0.850	0.402	0.892
Middle East & North Africa	0.639	0.195	0.679
Latin America & Caribbean	0.612	0.210	0.652
Central Asia	0.400	0.094	0.421
East Asia & Pacific	0.311	0.219	0.354
Europe	0.259	0.102	0.284
North America	0.222	0.069	0.239

Notes: Col. 1: Estimated share of current students who do not reach at least basic skill levels in math and science (equivalent to PISA Level 1). Col. 2: One minus net secondary enrollment rate. Col. 3: Estimated share of children (incl. those currently out of school) who do not reach at least basic skill levels in math and science.

Source: Gust et al. (2024).

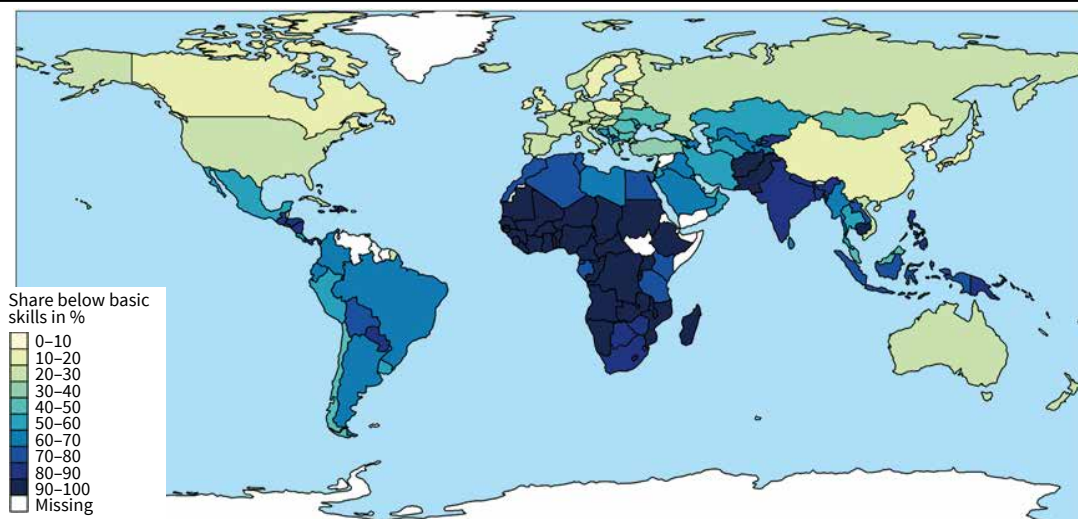
ett and Viarengo (2023), who focus on the extremely poor learning in a few developing countries, our results highlight the low level of learning outcomes of large shares of children in poor countries and extend the perspective by providing consistent estimates for the whole world. Following previous applications for OECD countries (Hanushek and Woessmann 2011, 2015 and 2020) and US states (Hanushek et al. 2017a and 2017b), our projection model provides a global perspective to the literature on human capital and economic growth.

POLICY CONCLUSIONS

All member states of the United Nations endorsed the Sustainable Development Goals in 2015. An essential element of these 17 goals was the call to ensure inclusive and equitable quality education for all. Because of the fundamental importance of education for economic development and, by implication, for meeting the other 16 SDGs, education is the cornerstone to the entire effort. Our results, which show that the world is short of meeting the goal of universal qual-

Figure 1

World Map of Lack of Basic Skills: Share of Children Who Do Not Reach Basic Skill Levels



Note: Estimated share of children (incl. those currently out of school) who do not reach at least basic skill levels in math and science (equivalent to PISA Level 1). Source: Gust et al. (2024).

ity education, underscore the urgent need for policymakers worldwide to prioritize and significantly enhance efforts toward ensuring quality education for all children.

The developing world faces the dual problem of access to and quality of schools. Over one-third of the global youth of secondary-school age do not attend school. But the fact that 63 percent of the world's enrolled students do not reach basic skills suggests that attendance at low-quality schools will not solve the problem of missing basic skills. Solving the school quality problem, of course, is not simple. The more developed countries have generally resolved school attainment issues, but they have not entirely overcome the quality challenges as significant shares of their students are still left behind.

Our analysis provides a global picture of the distribution of basic skills around the world, but it comes with uncertainty, particularly for the large part of the world that does not regularly participate in international testing. The neediest countries in the world do not routinely participate in either national or international tests. As a result, they have no information about the current level of skill development (as seen from the vantage point of the international economy). Nor do they have information about whether their schools are improving or not as measured in terms of international skill levels. Echoing the conclusions by the World Bank (2018), it would be a great service to world development if there were a regular, internationally standardized test of representative samples of students in all countries of the Global South. Just like what PISA has done for richer countries, such a globally comparative test would provide policymakers with much better information for focusing their energies and devising suitable policies. Ideally, the test would be both linked to the PISA scale and geared towards measuring basic levels, so that the tested content is relevant in countries that struggle to reach interna-

tional levels. Developing and funding assessment instruments benchmarked to international educational standards is likely to have much more long-run payoff than much of the current development aid.

REFERENCES

- Angrist, N., S. Djankov, P. K. Goldberg and H. A. Patrinos (2021), "Measuring Human Capital Using Global Learning Data", *Nature* 592, 403–408.
- De la Fuente, Á. and R. Doménech (2024), "Cross-Country Data on Skills and the Quality of Schooling: A Selective Survey", *Journal of Economic Surveys* 38, 3–26.
- Gust, S., E. A. Hanushek and L. Woßmann (2024), "Global Universal Basic Skills: Current Deficits and Implications for World Development", *Journal of Development Economics* 166, 103205.
- Hanushek, E. A., J. Ruhose and L. Woessmann (2017a), "Economic Gains from Educational Reform by US States", *Journal of Human Capital* 11, 447–486.
- Hanushek, E. A., J. Ruhose and L. Woessmann (2017b), "Knowledge Capital and Aggregate Income Differences: Development Accounting for U.S. States", *American Economic Journal: Macroeconomics* 9, 184–224.
- Hanushek, E. A. and L. Woessmann (2011), "How Much Do Educational Outcomes Matter in OECD Countries?", *Economic Policy* 26, 427–491.
- Hanushek, E. A. and L. Woessmann (2012), "Do Better Schools Lead to More Growth? Cognitive Skills, Economic Outcomes, and Causation", *Journal of Economic Growth* 17, 267–321.
- Hanushek, E. A. and L. Woessmann (2015), *Universal Basic Skills: What Countries Stand to Gain*. Organisation for Economic Co-operation and Development, Paris.
- Hanushek, E. A. and L. Woessmann (2016), "Knowledge Capital, Growth, and the East Asian Miracle", *Science* 351, 344–345.
- Hanushek, E. A. and L. Woessmann (2020), "A Quantitative Look at the Economic Impact of the European Union's Educational Goals", *Education Economics* 28, 225–244.
- OECD (2019), *PISA 2018 Results (Volume I)*, Organisation for Economic Co-operation and Development, Paris.
- Patel, D. and J. Sandefur (2020), "A Rosetta Stone for Human Capital", *CGD Working Paper* 550, Center for Global Development, Washington DC.
- Pritchett, L. (2013), *The Rebirth of Education: Schooling Ain't Learning*, Center for Global Development, Washington DC.
- Pritchett, L. and M. Viarengo (2023), "The Learning Crisis of Developing Country Elites: Lessons from PISA-D", *World Bank Economic Review* 37, 177–204.
- UNESCO (2021), *Global Education Monitoring Report 2021/2: Non-State Actors in Education - Who Chooses? Who Loses?*, United Nations Educational, Scientific and Cultural Organization, Paris.
- World Bank (2018), *World Development Report 2018: Learning to Realize Education's Promise*. World Bank, Washington DC.

Maximilian Blömer, Elena Herold, Max Lay, Andreas Peichl, Ann-Christin Rathje, Paul Schüle and Anne Steuernagel

Inequality Trends in the Context of Changes in Labor Market Outcomes, Composition and Redistribution in Germany*

With ongoing demographic and economic changes, documenting the distribution of economic resources within a society is a recurring task for applied economic research that can never be considered complete. In Germany, several studies have investigated trends in earnings and income inequality in the past few years (e.g., Drechsel-Grau et al. 2022; Fuchs-Schündeln et al. 2010; Card et al. 2013). However, a recent and comprehensive account of inequality in Germany that also considers dimensions other than earnings and income inequality is currently not available.

Our research project in the context of the Deaton Review documents the development of inequalities in Germany over the years from 1983 to 2020.¹ This period spans the last few years before reunification for West Germany and the thirty years thereafter for both West and East Germany. We then compare our findings to analogous statistics from Europe's and North America's major economies that have been obtained within a coherent framework.

DATA AND FINDINGS

Our analysis is based on the German Socio-Economic Panel (SOEP),² a nationally representative household survey of the German population established in 1984 (for details, see Goebel et al. 2019). Compared to other available statistics in Germany, such as administrative tax or labor market data, the SOEP has the advantage of being a multipurpose survey, covering

* Details of the study reported here can be found in Blömer et al. (2023). The project on which this report is based was funded by the Bundesministerium für Bildung und Forschung as part of the project "Ein transatlantischer Vergleich von Einkommensungleichheit und Chancengleichheit über fünf Jahrzehnte (TACI)" under the funding code 01UG2214 and is embedded into a larger effort to examine a broad set of inequalities in a coherent framework across the major economies of Europe and North America in the context of the Deaton Review Country Studies. The responsibility for the content of this publication lies with the authors.

¹ The Deaton Review Country Studies initiative is a collaborative effort involving 17 countries from Europe and North America aiming to harmonize data and measurement methods to gain a comprehensive understanding of the drivers of economic inequalities across high-income nations.

² For this publication, the SOEP-Core v38.1 was used; see doi:10.5684/soep.core.v38.1.eu.

KEY MESSAGES

- We examine how inequality evolved in Germany during the 1983-2020 period
- Labor market participation of women increased significantly, while average weekly working hours of women changed little
- Gender differences in earnings are still pervasive and more pronounced for individuals with children
- Inequality in earnings and disposable household income increased from the 1990s until 2005
- Since then, inequality in earnings has decreased, despite labor force compositional changes, such as high rates of net migration, that tend to push up inequality

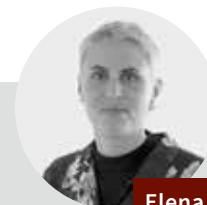
not only income and employment but also education, household composition, and parental background. We can, therefore, examine very different kinds of inequalities in the same data set and obtain a consistent set of results.

We restrict our sample to all individuals aged between 25 and 60 for all the available survey years from 1984 to 2021, unless otherwise noted. We rely mainly on previous-year information relative to the time of the interview. Therefore, our analysis spans the period from 1983 to 2020. Nominal earnings and income variables are converted into real terms based on cal-



Maximilian Blömer

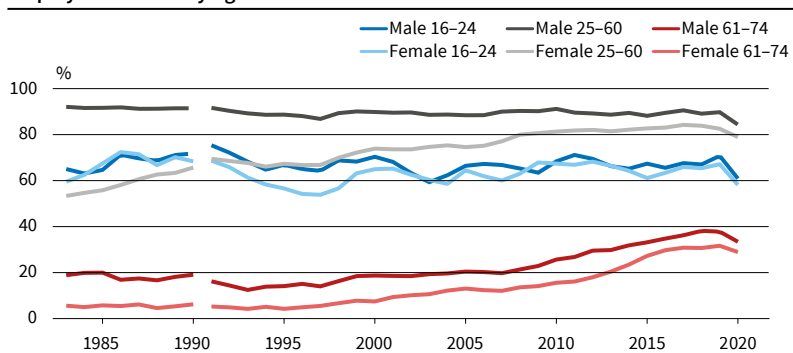
is a Postdoctoral Researcher at the ifo Center for Macroeconomics and Surveys.



Elena Herold

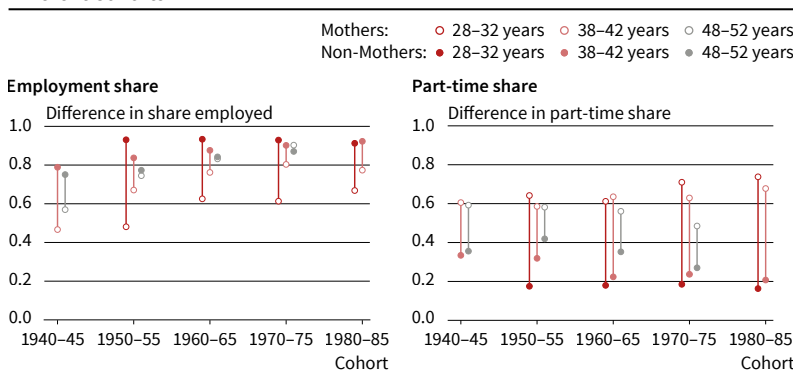
is a Junior Economist at the Research Group Taxation and Fiscal Policy and a Doctoral Candidate at the University of Munich.

Figure 1
Employment Rates by Age and Sex



Note: This figure shows employment rates by age and sex in a sample of all individuals aged 16-74. Until 1990: West Germany only.
Source: Authors' calculations using data from SOEP v38.1. © ifo Institute

Figure 2
Differences in Employment and Part-Time Share across Mothers and Non-mothers, Different Cohorts



Note: This figure shows the differences in the employment and part-time rates of mothers and non-mothers of different ages over different cohorts. The sample contains women aged 28-32, 38-42, or 48-52 of the cohorts 1940-45, 1950-55, 1960-65, 1970-75, and 1980-85, their employment status and parenthood status. Employment is defined as working at least an average of one hour per week over the last year.
Source: Authors' calculations using data from SOEP v38.1. © ifo Institute

endar year 2019 using the Consumer Price Index of Germany. Furthermore, to account for household size, disposable household income is adjusted according to the modified OECD equivalence scale. For further details on definitions and income concepts used, see Blömer et al. (2023).

INCREASED LABOR FORCE PARTICIPATION AMONG WOMEN AND THE ELDERLY

Labor force participation among older workers increased significantly in the past decade (Figure 1).

Among older men and women (age group 61-74), the employment rate rose from about 10 percent in 2010 to about 35 percent in 2019. This development reflects gradual increases in the retirement age, as well as enhanced possibilities and incentives for part-time employment during retirement.

The most significant trends in the German labor market in the past decades relate to the increasing labor market participation of women. Since 1983, Germany has seen a steady and sustained rise in the employment rate for prime-working-aged women (aged 25 to 60), increasing the employment in this age group from little more than 50 percent in the early 1980s to more than 80 percent today (Figure 1). For prime-working-aged men, the employment rate has been very stable at around 90 percent throughout the period, so that the gender employment gap has narrowed from almost 40 to around 7 percentage points.

An analysis of the employment rates over the life cycle also shows that labor force participation of women has increased significantly in recent decades overall, but especially for women after the age of 25. The dip in employment rates around the age of 30 shrinks significantly and later on this leads into even larger employment gains for women past the child-bearing age. Among other things, this indicates that the phenomenon of mothers dropping entirely out of the labor market after their first child has become less common in Germany.

GENDER GAP CLOSSES SLOWLY – STRONG IMPACT OF CHILDBIRTH REMAINS

Nevertheless, after starting a family, it is still women who are more likely to work fewer hours (in part-time jobs or marginal employment) or to no longer work at all. This becomes apparent in the differences in employment rates between mothers and non-mothers (Figure 2) or between mothers and fathers. Younger mothers around the age of 30, even of the youngest cohorts, are more than 20 percentage points less likely to be employed and are four times more likely to work part-time than women without children. It is not until the age of 50 that the gap in the employment rate between mothers and non-mothers closes.

But mothers around the age of 50 are still more likely to work part-time than non-mothers. Fathers in the labor market are not negatively impacted by parenthood. Instead, they are slightly more likely to be employed and earn slightly more than non-fathers.

The decrease in labor supply from mothers is associated with sharply increasing differences between men and women in earnings over the working life, even among younger cohorts (Oberfichtner 2022). We find that mothers' labor earnings around the age of 30 are, on average, 70 percent to 80 percent lower than fathers' in the same



Max Lay

is a Specialist at the ifo Center for Macroeconomics and Surveys.



Andreas Peichl

is the Director of the ifo Center for Macroeconomics and Surveys and Professor of Economics at the University of Munich.

age group. For childless individuals, the gender earnings gap is less pronounced and has decreased over the past decades. In particular, for childless women around the age of 30, it has decreased to less than 5 percent for the most recent cohort (1980s). An analysis of hourly wages for different time periods also shows that the wage differential between men and women at age 25 declined substantially and is almost non-existent in more recent years. However, while the employment rates of women with and without children converge again around the age of 50, the labor earnings of mothers remain lower than those of non-mothers. In addition, significant gender gaps in earnings at older ages remain, regardless of parenthood.

Compared to other European countries, the employment rate of women of working age in Germany is relatively high and, at 80 percent, well above the EU average (Eurostat 2023).

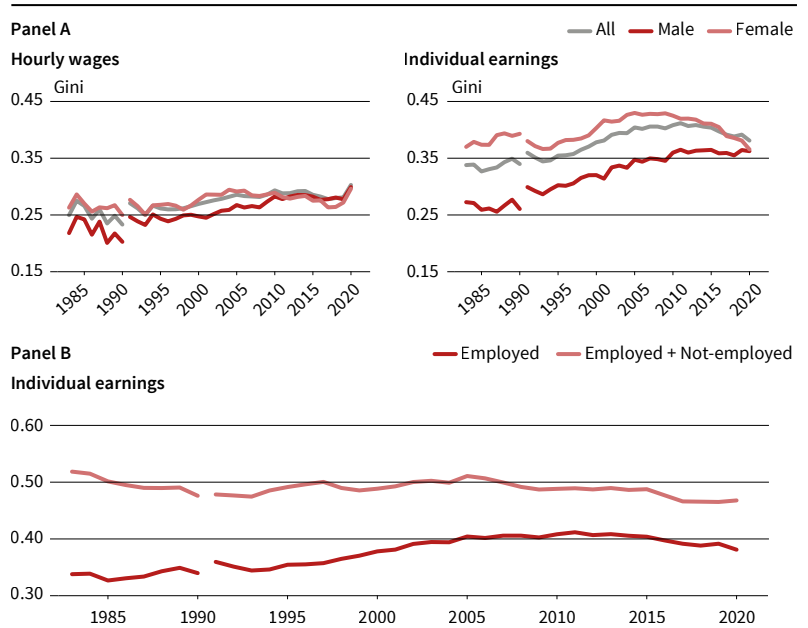
The gender employment gap is also less pronounced in Germany than in many other European countries. However, due to the high share of part-time working mothers, the earnings gap between fathers and mothers has been relatively large in Germany despite the low employment gap when compared to other developed countries (Kleven et al. 2019).

SIMILAR EVOLUTION OF INEQUALITY IN HOURLY WAGES AND EARNINGS

Average hours worked among employees have remained very stable over the past decades. Employed men work almost always full-time. The actual average number of hours worked among male employees decreased only slightly from 1983 to 2019, from about 42 to 40 hours per week. In comparison, the average working time for women in 2019 is around 31 hours per week, which increased only marginally in the past two decades. In line with the results presented above, which showed that the increase in labor supply of women happened predominantly at the extensive and not at the intensive margin, the gender gap in working hours is closing very slowly.

Compared to other countries studied in the Deaton Review (IFS 2023), the difference in average

Figure 3
Gini Coefficient of Real Gross Hourly Wages and Individual Earnings



Note: Panel (A) shows the Gini coefficient (overall and by sex) of real gross hourly wages in a sample of employees aged 25–60 and for individual earnings in a sample of individuals in work aged 25–60. The sample of employees does not include individuals with earnings from self-employment. We exclude the bottom and top 1% of the gender-specific distribution of hourly wages from the analysis. Individuals are considered in work if they worked at least 52 hours in the year preceding the survey and received earnings either from labor-income or self-employment. Panel (B) shows the Gini coefficient of gross individual earnings in a sample of individuals aged 25–60, once only including employed persons (as above) and once also including the not employed, for which the hourly wage is set to zero. Wages are in 2019–20 prices. Until 1990: West Germany only. Source: Authors' calculations using data from SOEP v38.1. © ifo Institute

weekly working hours between male and female employees in Germany was still relatively high: over eight hours in 2019. Large gender differences in working hours can also be found in the Netherlands and the UK. However, in many other countries, including the US, Canada, France, and Spain, the gap in working hours is only around four hours per week. In Finland, the difference was barely two hours per week on average in 2019.

Overall, real median hourly wages grew little between 1983 and 2019. In 1990, a long period of growth in median wages came to an end with German reunification, since the lower level of hourly wages in East Germany led to a drop in overall median hourly wages when the East German states were integrated into the sample in 1991. Since then, wage growth in median wages has been limited to the last few years before



Ann-Christin Rathje

is a Specialist at the ifo Center for Macroeconomics and Surveys.



Paul Schüle

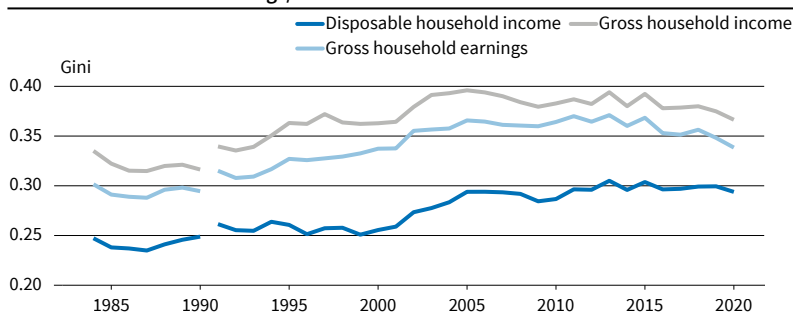
is a Junior Economist at the ifo Center for Macroeconomics and Surveys and a Doctoral Candidate at the University of Munich.



Anne Steuernagel

is a Junior Economist at the Ludwig Erhard ifo Center for Social Market Economy and Institutional Economics and a Doctoral Candidate at the FAU Erlangen-Nuremberg.

Figure 4
Gini Coefficient of Disposable Household Income and Gross Household Earnings/Income

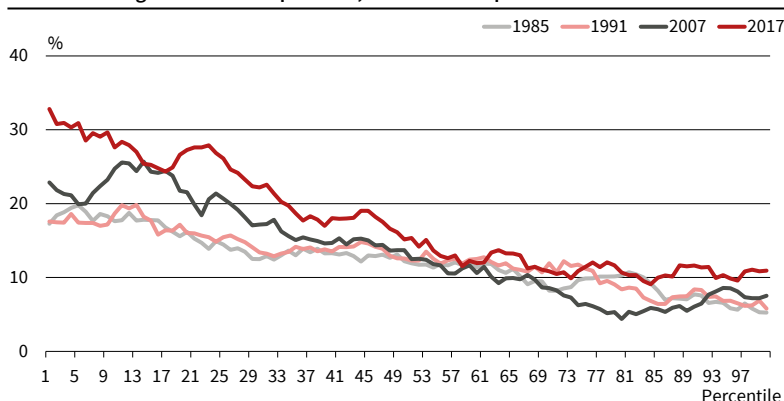


Note: This figure shows the Gini coefficient of disposable household income, gross household earnings and gross household income in a sample of individuals aged 25–60. Gini in gross household labor earnings is calculated for households in which at least one household member is in work. Individuals are considered in work if they worked at least 52 hours in the year preceding the survey and received earnings either from labor-income or from self-employment. Gini in household disposable income and household gross income for all households. Until 1990: West Germany only.

Source: Authors' calculations using data from SOEP v38.1.

© ifo Institute

Figure 5
Share of Immigrants in the Population, across the Disposable Income Distribution



Note: This figure shows the share of immigrants in the population across the disposable income distribution. Sample is individuals aged 25–60. Incomes are in 2019–20 prices. Disposable household incomes have been equivalized using the modified OECD equivalence scale. Five-year averages have been calculated and smoothing across five percentile points has been applied. Until 1990: West Germany only.

Source: Authors' calculations using data from SOEP v38.1.

© ifo Institute

the Covid-19 pandemic. The decade-long stagnation of median real hourly wages is observed for both men and women and in all education groups.

Taken together, inequality in hourly wages and individual earnings has developed very similarly in Germany for the past decades. After increases in wage and earnings dispersion from 1993 to 2010, the Gini coefficient for both hourly wages and individual earnings has fallen in the last decade, as shown in Figure 3.³ The recent decline in the Gini coefficient can be partially attributed to a reduction in inequality in female wages and working hours. Other studies confirm above-average growth rates in general at the lower end of the earnings distribution of employees in the past few years (Felbermayr et al. 2016), linked to the introduction of a nationwide EUR 8.50/hour minimum wage in 2015 (Bossler and Schank 2023; Peichl and

³ Other studies also find growing inequality measures in gross incomes among full-time employees (see Dustmann et al. 2009 and 2014; Card et al. 2013) and a reversal in more recent years (Möller 2016; Drechsel-Grau et al. 2022).

Popp 2022) and the positive wage agreements of trade unions in recent years (Felbermayr et al. 2016).

The Deaton Review Country Studies show that inequality in real gross hourly wages has increased in many countries in recent decades. Moreover, in an international comparison, the Gini coefficient of hourly wages in Germany was at a relatively high level in 2019, with only a few countries, such as the US or the UK, showing higher inequality values.

INCREASING LABOR FORCE PARTICIPATION AMONG LOW-INCOME EARNERS MASKS DECLINING INEQUALITY IN THE WORKING-AGE POPULATION

In the years around the turn of the millennium, Germany was often referred to as the “sick man of Europe” and unemployment was high, reaching almost 12 percent in 2005. This motivated the most important transformation of the German welfare state in the last decades, known as the Hartz reforms, which took place in the early 2000s. The aim of the Hartz reforms was to increase the efficiency and flexibility of the labor market, reduce unemployment, and make the welfare system more responsive to the needs of individuals. The core element, Hartz IV, which became the moniker for the new benefit, was a substantial reduction in long-term unemployment benefits, reducing the generosity of the transfer system. By causality or correlation, unemployment rates decreased substantially in the years following the reforms, down to 7.4 percent in 2008 and just 5.2 percent in 2019 (Bundesagentur für Arbeit 2023).⁴

The strong growth in employment since 2006 has played a major role in the dynamics of income inequality, as employment increased disproportionately in the lower half of the income distribution (Felbermayr et al. 2016). To shed light on this, we follow Felbermayr et al. (2016) and compute the Gini coefficient of real gross individual earnings by setting the income of individuals without labor income to zero. The result is depicted in Panel B of Figure 3. The Gini coefficient for the sample of employed people and individuals without employment decreased from 2005 to 2011. Due to the reduction in the unemployment rate, the share of individuals with zero income became smaller and earnings inequality in the working-age population decreased.

THE TAX AND TRANSFER SYSTEM HAS REDUCED INCOME INEQUALITY

Two important factors affect the way in which inequality in individual earnings translates into inequality in household incomes: patterns of assortative matching and the tax and benefit system. We first find that assortative matching has increased recently. For ex-

⁴ For an overview on the role of the Hartz reforms, see for example Dustmann et al. (2014) and Hochmuth et al. (2021).

ample, compared to 1984, the share of individuals not married or living with a partner is today systematically lower for individuals with low levels of formal education (ISCED 0-2) than among the rest of the population. Conditional on individual earnings, this tends to depress disposable household income in the group compared to individuals that have acquired more formal education.

Assortative matching is evident, to varying degrees, in all countries studied in the Deaton Review. Similar to Germany, most countries see below-average marriage and cohabitation rates for low-educated groups. Additionally, in almost all countries, the earnings percentile of a partner increases in the earnings distribution of the spouse, although the gradient of the partner's earnings differs considerably between countries and is much higher for some countries, such as the US.

As a second factor, changes in the German tax and benefit system have altered the mapping between individual labor earnings and disposable household income. Until the Hartz reforms came into effect in 2005, the share of benefits in total gross household income had increased steadily, in particular in the bottom quarter of the income distribution. Since then, this trend has been broken, and the share of benefits in total income has been slowly but continuously declining. This development corresponds to the increase in the unemployment rate before and the decline after the Hartz reforms (Bundesagentur für Arbeit 2023), reflecting lower aggregate unemployment-related benefit payments.

However, unemployment and social assistance benefits constitute just one part of the tax and transfer system, which has changed along numerous dimensions in the past decades. To obtain a comprehensive picture of the role of taxes and transfers in reducing inequality, Figure 4 plots the Gini coefficient in gross and net household income. In line with the increase in earnings inequality, both have increased in the early 2000s. The Gini of net income was consistently lower in all years, documenting that the tax and transfer system has been progressive up to today, thus reducing inequality. Both elements of the welfare system, taxes and transfers, contribute to the overall redistributive character. Most social transfers are typically targeted to households in the lower bottom of the income distribution, leading to a high benefit/income ratio in these households. The transfer system is accompanied by the progressive income tax scheme, where households with high gross income pay higher marginal tax rates. Between 1984 and 2020, the difference between the Gini coefficient in gross household income and disposable household income has been relatively stable, between 0.08 and 0.12, despite larger reforms to the tax and transfer system like the Hartz reforms.

The Gini coefficient for real gross individual earnings in Germany is relatively high in an international

comparison with other advanced economies in Europe and Northern America. However, the Gini coefficient for real disposable household income in Germany is close to the international average. Surprisingly, following increases in recent decades, the Gini coefficient based on disposable household income in the Scandinavian countries is now at a similar level to that of many Western European countries.

IMMIGRATION HAS CHANGED THE INCOME DISTRIBUTION COMPOSITION

After the disruption caused by German reunification in 1990–1991, which increased the population in the Federal Republic of Germany by 16 million, immigration has considerably changed the composition of the German population. Most recently, Russia's invasion of Ukraine has triggered large migration movements to Germany. According to the latest projections, this trend will continue, with 2022 marking the highest net migration balance ever recorded. In total, the share of immigrants in Germany substantially rose from under 10 percent in the 1980s to nearly 20 percent most recently.

Also, before Russia's military aggression against Ukraine, a large share of migration towards Germany was from conflict regions, e.g., from Syria since 2015. It is perhaps not surprising therefore that immigrants are at least initially more likely to be located in the bottom half of the income distribution, as shown in Figure 5. In 2017, the share of immigrants at the bottom of the income distribution was 30 percent, compared to 10 percent at the top. This gap of now 20 percentage points was substantially smaller in the 1980s and 1990s. Via this mechanical channel, immigration has been – at least in the short term – a factor pushing towards greater earnings inequality in Germany, also compared to other countries. While immigration in the US and the Netherlands, for example, is also more concentrated in the lower half of the income distribution, the immigrant share along the income distribution has been quite stable over the past 20 years for those countries. In the UK, immigrants have spread evenly across the income distribution in recent years.

POLICY CONCLUSION

In this report, we document that inequality in earnings and disposable household income remained stable in recent years despite compositional changes in the labor force that tend to push up inequality. The most important development in the German labor market in the past decades was the increasing labor market participation of women. However, most of these employment gains took place in part-time positions, and conditional on working, female work hours changed little. Hence, gender differences in earnings are still pervasive.

Policy reforms that could tackle gender differences in earnings should target, for example, incentives to increase participation at the intensive margin, or reforming the joint taxation of married couples, a proposal that has been discussed thoroughly in the past and again more recently. This, in interaction with the marginal employment scheme, creates strong economic incentives for the second earner, in most cases women, to remain in part-time jobs. Blömer and Peichl (2023) discuss and simulate several reform proposals that could increase female labor market participation.

REFERENCES

- Blömer, M. and A. Peichl (2023), *Reformoptionen im deutschen Grundversicherungs- und Transfersystem sowie bei der Ehegattenbesteuerung*, ifo Forschungsberichte 140, Munich.
- Blömer, M., M. Lay, A. Peichl, A. C. Rathje, T. Ritter, P. Schüle and A. Steuernagel (2023), *Inequality in Germany: 1983-2019*, Deaton Review - Country Studies, <https://ifs.org.uk/inequality/%20country-studies-germany/>.
- Blömer, M., P. Brandt and A. Peichl (2021), *Raus aus der Zweitverdienerinnenfalle: Reformvorschläge zum Abbau von Fehlanreizen im deutschen Steuer- und Sozialversicherungssystem*, ifo Forschungsberichte 126, Munich.
- Bossler, M. and T. Schank (2023), "Wage Inequality in Germany after the Minimum Wage Introduction", *Journal of Labor Economics* 41(3), <https://doi.org/10.1086/720391>.
- Bundesagentur für Arbeit (2023), *Arbeitslosigkeit im Zeitverlauf: Entwicklung der Arbeitslosenquote (Strukturmerkmale)*, Bundesagentur für Arbeit Statistik, <https://statistik.arbeitsagentur.de/>.
- Card, D., J. Heining and P. Kline (2013), "Workplace Heterogeneity and the Rise of West German Wage Inequality", *The Quarterly Journal of Economics* 128, 967–1015.
- Drechsel-Grau, M., A. Peichl, K. D. Schmid, J. F. Schmieder, H. Walz and S. Wolter (2022), "Inequality and Income Dynamics in Germany", *Quantitative Economics* 13, 1593–1635.
- Dustmann, C., B. Fitzenberger, U. Schönberg and A. Spitz-Oener (2014), "From Sick Man of Europe to Economic Superstar: Germany's Resurgent Economy", *Journal of Economic Perspectives* 28, 167–188.
- Dustmann, C., J. Ludsteck and U. Schönberg (2009), "Revisiting the German Wage Structure", *The Quarterly Journal of Economics* 124, 843–881.
- Eurostat (2023), "Gender Statistics", *Statistics Explained*.
- Felbermayr, G., M. Battisti and S. Lehwald (2016), "Einkommensungleichheit in Deutschland, Teil 1: Gibt es eine Trendumkehr?", *ifo Schnelldienst* 69(13), 28–37.
- Fuchs-Schündeln, N., D. Krueger and M. Sommer (2010), "Inequality Trends for Germany in the Last Two Decades: A Tale of Two Countries", *Review of Economic Dynamics* 13, 103–132.
- Goebel, J., M. M. Grabka, S. Liebig, M. Kroh, D. Richter, C. Schröder and J. Schupp (2029), "The German Socio-Economic Panel (SOEP)", *Jahrbücher für Nationalökonomie und Statistik* 239, 345-360.
- Hochmuth, B., B. Kohlbrecher, C. Merkl and H. Gartner (2021), "Hartz IV and the Decline of German Unemployment: A Macroeconomic Evaluation", *Journal of Economic Dynamics and Control* 127, 104114.
- IFS (2023), *The IFS Deaton Review: Country studies*, <https://ifs.org.uk/inequality/country-studies/>.
- IMF (2019), "Tax Pressures and Reforms Options", in International Monetary Fund, ed., *Germany, Selected Issues, IMF Country Report No. 19/214*, Washington DC., 25–47.
- Kleven, H., C. Landais, J. Posch, A. Steinhauer and J. Zweimüller (2019), "Child Penalties across Countries: Evidence and Explanations", *AEA Papers and Proceedings* 109, 122–126.
- Lembcke, F. K., L. Nöh and M. Schwarz (2021), "Anreizwirkungen des deutschen Steuer- und Transfersystems auf das Erwerbsangebot von Zweitverdienenden", *Sachverständigenrat Arbeitspapier* 06/2021, https://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/Arbeitspapiere/Arbeitspapier_06_2021.pdf.
- Möller, J. (2016), "Lohnungleichheit – gibt es eine Trendwende?", *IAB Discussion Paper* 9.
- Oberfichtner, M. (2022), "Erwerbsverläufe von Frauen und Männern", *ifo Schnelldienst* 75(10), 5–8.
- Peichl, A. and M. Popp (2022), "Can the Labor Demand Curve Explain Job Polarization?", *CESifo Working Paper* 9799.

Anselm Küsters

Semantic Shifts in EU Competition Law: A Data-driven Study of Policy Goals

Since its inception, European competition law has been a battleground for different interpretations and ideologies. The founding Treaties did not explicitly subscribe to any particular school of competition thought and included many vaguely defined economic concepts (Küsters 2023; Wegmann 2008). As a result, concepts ranging from market integration and individual freedom to socially optimal market structures have constantly vied for influence alongside efficiency-oriented arguments reminiscent of the Chicago School. This tapestry of ideas underscores the multifaceted nature of competition policy – a policy that is inextricably linked to the specific “DNA” of its legal regime and its hierarchy of policy goals (Ezrachi and Stucke 2016).

In order to dissect and understand this DNA for the European case, this article uses natural language processing (NLP), also known as text mining, to examine over 11,000 EU competition law decisions and judgments from 1961 to 2021.¹ As we know from recent corpus linguistic work on US jurisprudence, economic ideas can directly influence legal decisions by persuading judges (Ash et al. 2019). Understanding the dynamic characteristics of the European competition regime is crucial not only for legal interpretation, but also because it influences economic behavior at both the micro and macro levels. For example, the expected approach taken by competition authorities in assessing mergers can have a significant impact on business strategies and ultimately on market dynamics (Lyons 2003).

Methodologically, this strand of research aims to advance the study of EU competition law by introducing distant reading methods. Typically, legal scholars analyze selected cases or focus on specific doctrinal considerations. The comprehensive corpus compiled for this analysis is larger and more diverse than previous datasets (Brook 2020; Stylianou and Iacovides 2022), covers all four pillars of European competition law (cartels, dominant positions, merger

¹ This paper draws on a dataset constructed as part of a larger research project on the influence of ordoliberalism on EU competition law. The resulting doctoral thesis, entitled *The Making and Unmaking of Ordoliberal Language. A Digital Conceptual History of European Competition Law*, was accepted by Goethe University, Frankfurt am Main, in June 2022 and has been published as a monograph by Klosterman in late 2023 (Küsters 2023). In essence, this paper presents the main findings from Chapter 8 of this monograph, which introduces the EU competition law dataset. More information on this research project can be found at: <https://www.lhlt.mpg.de/phd-project/making-and-unmaking-of-ordoliberal-language>.

KEY MESSAGES

- **Text mining and corpus linguistic methods are used to analyze 11,000 EU competition law decisions and judgments**
- **This reveals a shift in the competition vocabulary from ordoliberalism in the 1970–80s to neoliberalism in the post-2000s**
- **While the Commission has partly adopted a neoliberal vocabulary, the courts have stuck to ordoliberal rhetoric**
- **This shift in economic thinking is also reflected in enforcement actions and institutional priorities**
- **Understanding semantic shifts in EU law is crucial to aligning policy with underlying theories and doctrines**

control, and state aid), and spans the entire period of application of the law. By using text mining, the study avoids the pitfalls of subjective selection and interpretation inherent in manual coding and provides a more objective, large-scale analysis of legal texts.

The empirical results provide a quantitative perspective on the dynamic relationship between EU institutions and their legal output. Above all, they challenge the notion that EU competition law has consistently adhered to its founding principles, showing instead that the regime has undergone ideological and semantic shifts over time.

DATA

The quantitative analysis of EU competition law relies on the manual creation of a new corpus of texts, compiled from the EUR-Lex website through web scraping and further validated using DG COMP’s case search tool. The compilation process involved a carefully tailored search focusing on cases related to the tag “competition policy.” Using the relevant search criteria, 8,635 acts for the Commission and 2,391 judgments



Anselm Küsters

is Head of the Department of Digitisation/New Technologies at the Centre for European Policy (cep) in Berlin. He works in the field of Digital Humanities as an Affiliated Researcher at the Max Planck Institute for Legal History and Legal Theory in Frankfurt am Main and as a Postdoctoral Researcher at the Humboldt University in Berlin.

for the Court of Justice were identified, resulting in a total corpus of around 11,000 observations, including corrigenda, amendments, and consolidated versions. This approach ensured the extraction of relevant and comprehensive information such as title, date, and full text in English, together with directory codes where applicable.

Transforming this vast collection of documents into a coherent and analyzable dataset presented its own set of challenges, particularly due to the diverse formats of the original documents, ranging from PDFs to HTML files. This diversity required a rigorous conversion process, which occasionally resulted in minor spelling errors. In order to facilitate a detailed corpus linguistic analysis, the data was pre-processed via the programming language R and analyzed using several specific NLP packages related to the *tidyverse* format (Silge and Robinson 2017). This process included tokenization, the removal of stop words, and the appending of important metadata such as the year of the document and the institution responsible for it. For specific types of analysis, such as n-gram segmentation and sentiment analysis, the data was further refined to suit these methods.

Basic descriptive statistics of the corpus shed light on the Commission’s focus over time. There has been a trend towards a greater emphasis on merger control in recent years, alongside a shift from restrictive practices to dominant positions and state aid. This temporal pattern is consistent with existing literature and historical analyses of EU competition policy. However, a closer look at the underlying classification reveals certain challenges, such as the potential for bias and data discrepancies. For example, the decline in certain types of cases, such as those under Art. 101 TFEU (which covers agreements between undertakings), could be attributed to regulatory changes such as the abolition of the notification system or

increased activity by national authorities. In addition, the potential for classification errors in EUR-Lex could affect the reliability of the text mining analysis.

Still, the corpus is comparatively more comprehensive and detailed than other databases in this field. It is characterized by its focus on the full-text content of decisions and judgments, moving away from the subjective classification criteria often used in previous studies. However, it is important to recognize the limitations inherent in such a large collection of data, particularly when considering potential biases in sampling procedures and the challenges of combining data from different time periods and legal frameworks.

METHODS AND RESULTS

Based on this corpus, the following research makes use of modern NLP methods, including counting and dictionary methods and machine learning applications. These techniques allow a nuanced analysis of large-scale semantic patterns, moving from traditional qualitative analysis to a more data-driven “text as data” approach, which assumes that the frequency of certain words and their concurrence in a corpus are reliable indicators of underlying themes, sentiments, and theoretical discourses (Grimmer et al. 2022).

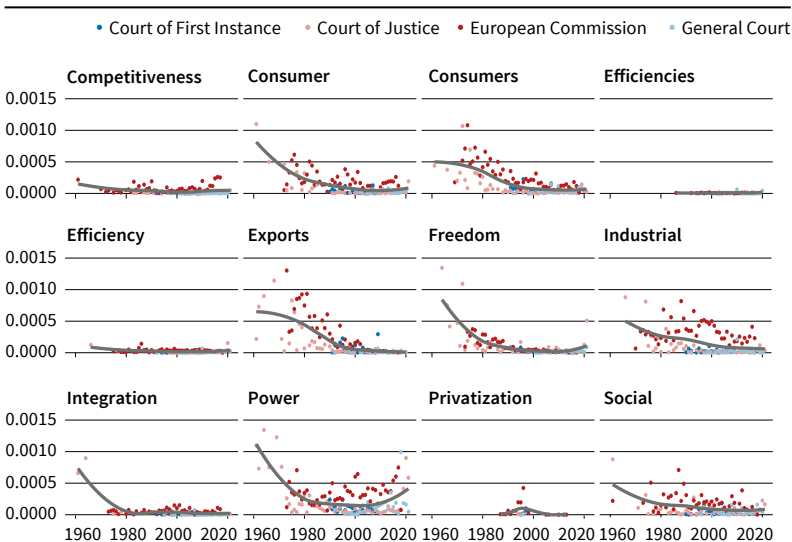
Counting Policy Goals

The first analysis uses a basic counting approach to evaluate the most prominent hypotheses concerning the objectives of EU competition law. This analysis draws on the diverse literature of historians, economists, political scientists, and lawyers, all of whom have sought to identify the underlying ideas shaping the origins and objectives of European competition law (Schweitzer and Patel 2013; Warloutzet 2010). A common thread in current understanding is that EU competition policy, while based on common principles, has subtle differences in emphasis compared to other jurisdictions.

To begin with, Gerber’s seminal analysis suggests a strong ordoliberal influence, focusing on minimizing economic power and protecting the competitive process and economic freedom (Gerber 1998). This view has been nuanced by subsequent studies but remains an important hypothesis. Critics such as Buch-Hansen and Wigger (2011) argue for a less decisive role of ordoliberalism in the application of rules, citing influences such as national mercantilism and neoliberal discourse. Other scholars have pointed to the role of market integration as a distinctive feature of EU competition law, often linked to other objectives such as economic freedom, efficiency, and consumer protection.

The corpus linguistic analysis reveals the shifting relevance of different policy objectives (Figure 1). The temporal pattern shows that ordoliberal terms such

Figure 1
Policy Goals in EU Competition Law
% frequency of terms in corpus



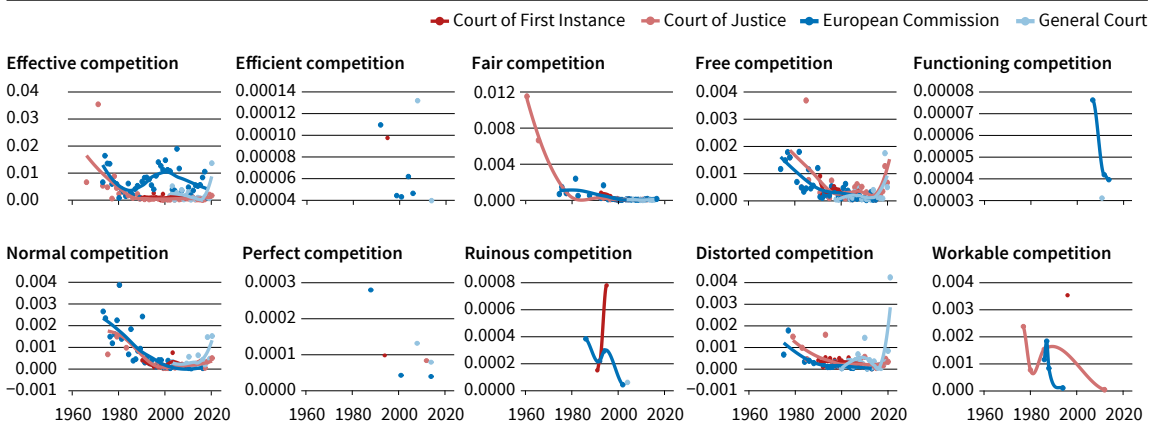
Source: Author’s analysis in Küsters (2023).

© ifo Institute

Figure 2

Competition Collocates in EU Competition Law

% frequency of bigram in corpus



Source: Author's analysis in Küsters (2023).

© ifo Institute

as “freedom” and “power” predominated in the law until 1980, in line with Gerber’s chronology. The use of mercantilist-neoliberal language such as “competitiveness” and “privatization” was limited (although “exports” were frequently mentioned), in line with empirical studies negating protectionism in EU law (Cremieux and Snyder 2016). Contrary to Akman and Kassim (2010), “efficiency” was minimally mentioned, especially in the 1960s. The 1970s and 1980s saw an increase in Keynesian themes related to “industrial” and “social” policy and consumer aspects. Since these considerations seem to be present only in the decisions of the Commission during this period, but not in the judgments of the Court, this result supports the argument put forward in the literature that these two institutions were influenced differently by the Keynesian paradigm (Pérez and Scheur 2013). Despite rare explicit mentions of “integration,” frequent references to “exports” imply its underlying importance in European trade unification.

However, the methodological limitations of word frequency analysis must be acknowledged. Terms such as “exports” can appear in different contexts, and ordoliberal keywords such as “power” are almost obligatory in certain legal cases. This requires a more nuanced approach for accurate interpretation.

Counting Competition Collocates

In contrast to everyday language or economic theory, European law lacks a clearly defined concept of “competition,” with different actors associating the term with different objectives. To better understand this, an analysis of competition collocates – word pairs such as “competition” and an accompanying adjective – was undertaken. This involves breaking down all texts into sequences of two words (collocates) rather than single words (tokens). This approach is particularly useful for capturing ideological nuances in the case law, since qualified nouns and phrases

“carry more ideological meaning” in legal language (Dumas 2019, 393).

Based on the historical reconstruction of different schools of thought and the analysis of European treaty negotiations (Küsters 2023), it is possible to trace certain collocates in order to detect subtle intellectual influences in the field of competition law. In particular, key qualifiers such as effective, undistorted, free, normal, complete, efficient, performance, workable, functioning, perfect, fair, and ruinous were examined (Figure 2). The complete absence of distinctively ordoliberal collocates such as “complete competition” and “performance competition” is surprising but may be explained by translation problems (see below), while the other collocates listed above appeared to varying degrees.

Among the frequently used collocates, “effective competition” emerged as the most prominent, appearing significantly more often than “normal competition,” “undistorted competition,” and “free competition.” The quantitative prominence of “effective competition” is unexpected, as legal scholars typically emphasize “free competition” and “undistorted competition” as significant in EU competition law. As a close reading of the identified passages shows, “effective competition” is a plausible translation of the ordoliberal expression *vollständiger Wettbewerb* (literal translation: “complete competition”), suggesting a strong ordoliberal period between the 1970s and the early 2000s, followed by a decline. Similarly, the collocate “normal competition” was often used by European translators in cases dealing with *Leistungswettbewerb* in the ordoliberal sense, especially in the early decades. A landmark judgment of the Court of Justice in this respect is *Hoffmann-La Roche* (1979). The problem of multilingual translation in European law is particularly relevant for ordoliberal terms such as *Leistungswettbewerb*, which is often – but not exclusively – translated as “competition on the merits,” as an additional n-gram analysis underlined.

This finding, supported by a close reading, is important as the idea of healthy “competition on the merits” is now back at the center of current competition law discourse. The Court’s recent judgment in the *Superleague* case, which will likely set crucial precedents, contains several references to the notion of “competition on the merits.” This concept has already been invoked in recent European cases against Big Tech, such as *Google Shopping* (Lindeboom 2022). In this context, it is important to note that the German variant of the concept, i.e., *Leistungswettbewerb*, was strongly influenced by ordoliberal lawyers such as Franz Böhm and Ernst-Joachim Mestmäcker. They believed that only economic actions that do not infringe on the freedom of others are fair contributions to the competitive game. Accordingly, ordoliberals would define dominance as the position of a company that can hinder effective competition by distorting the structure of the market and the resulting ability to compete through actions that do not qualify as true *Leistungswettbewerb*. From an ordoliberal perspective, the reason why this concept is based on the (arguably strong) assumption that it is possible to distinguish between lawful and unlawful behavior ex ante is mainly a political economy argument: if one relies too much on empirical, effects-based analysis, one risks ending up with an enforcement system that is too lenient and leaves too much room for lobbying and vested interests. The ordoliberals recognized this from their personal experience in the 1930s and 1940s. Since then, conflicting translations and variations of this concept have led to divergent legal interpretations, which explains why the ordoliberal origins of the expression are often forgotten outside Germany.

Other collocates such as “perfect competition” and “efficient competition,” indicative of Chicago-style neoliberalism, have played only a minor role in European competition language. Similarly, the terms “workable competition” and “functioning com-

petition,” both of which originate from US antitrust thinking, were not utilized frequently. This contradicts claims of strong US influence on European competition policy in the 1960s and 1970s. In addition, the collocate “fair competition,” often seen as representing a uniquely European perspective on competition, was not prominently used in decisions and judgments. This is in sharp contrast to the development of EU competition policy speeches since the late 1990s, which have often called for “fair competition.”

As a robustness check, the use of these competition expressions can be compared with their use in the Common Market Law Review (CML Rev.), a leading European law journal (results not shown here). The convergence towards a small set of key collocates in CML Rev. articles closely followed the trends seen in the legal texts, suggesting that a homogenized, coherent rhetoric emerged over time that paralleled the case law.

Measuring Competition Language

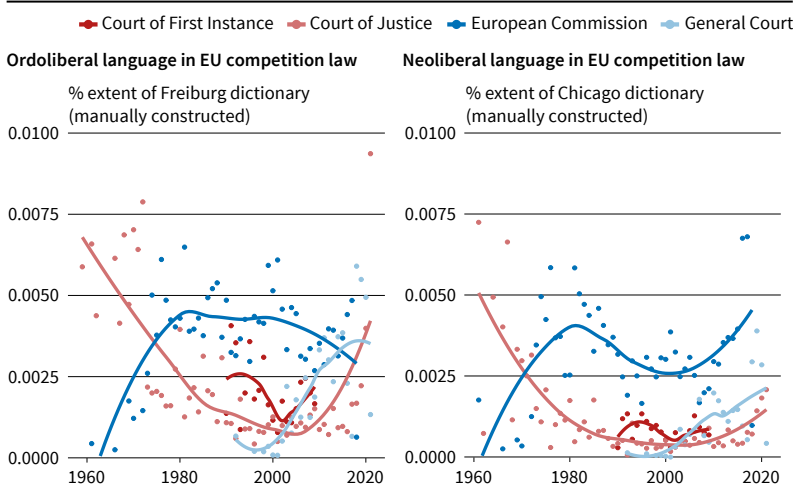
The analysis of EU competition language through the construction and application of so-called dictionaries offers a more fine-tuned approach to measuring the intellectual influence of different schools of thought on European competition policy than counting individual policy objectives or adjectives. This method involves compiling extensive lists of terms characteristic of particular schools, such as ordoliberalism and the Chicago School, and then quantifying their presence in the corpus of EU competition law over time. This deductive method is in line with Gerber’s view that the “leading vehicle” for the influence of the ordoliberals was their “new language” (Gerber 1994).

For this study, dictionaries were constructed in two ways. First, an informed selection of keywords was based on a qualitative analysis of key works from the ordoliberal and Chicago schools. For the latter, it was possible to draw on the “Law & Economics” dictionary recently developed to assess the influence of the Chicago School on legal language in the US (Ash et al. 2019) and to supplement it with typical post-Chicago terms. Second, school-specific dictionaries were automatically extracted from the digital corpora of the schools’ flagship journals, ORDO, and the Journal of Law and Economics (JLE). For each journal corpus, an algorithm extracted the 2,000 most distinctive bigrams, where distinctiveness was measured by the commonly used tf-idf metric.² In general, the automated dictionaries derived from the ORDO and JLE corpora confirmed the trends identified by the manually constructed dictionaries, particularly in the case of ordoliberal vocabulary.

² The tf-idf method evaluates the importance of a word in a text by considering not only its frequency in that specific text, but also its rarity in a wider range of documents. This approach identifies words as characteristic of an author or document if they are frequently used in that context, but less frequently in a wider collection of texts.

Figure 3

Policy Goals in EU Competition Law



Source: Author’s analysis in Küsters (2023).

© ifo Institute

Visual analysis of the trajectories of ordoliberal and Chicago School language in the context of EU competition law reveals three key observations (Figure 3). First, there is a striking similarity in the patterns of these two schools, possibly reflecting their common roots in neoliberalism, as evidenced by their frequent use of economic terminology. However, this similarity is nuanced by the distinct influences of different keywords that drive their respective lexicons: ordoliberalism's presence in case law is characterized by terms such as “power,” “choice,” and “order,” while the Chicago School is more associated with “welfare,” “productivity,” and “consumer.” Second, it highlights the predominance of ordoliberal vocabulary in the Court's early stages, underscoring its initial influence and supporting Gerber's historical account. Finally, the analysis reveals a significant shift over the past twenty years, marked by a decline in ordoliberal language and a concurrent increase in Chicago-style terminology within the Commission. This trend, which is accentuated when considered in absolute terms (results not shown here), suggests a semantic realignment of EU competition law with its US counterpart, a change likely spurred by the More Economic Approach (MEA).

Overall, using large-scale and specialized dictionaries in this way makes it possible to trace the making and unmaking of ordoliberal language within EU competition law. While the ordoliberal vocabulary has had a larger share overall, the influence of the Chicago School has become more pronounced in recent decades. Contrary to the common narrative of a neoliberal turn, Sutherland's term in office (1985–1988) did not contribute significantly to this shift. Instead, it was Monti's term (1999–2004) that saw a more pronounced neoliberalization of the language of EU competition law.

Quantifying Competition Sentiment

Sentiment analysis in bureaucratic contexts – such as DG COMP – is complex, but can reveal meaningful shifts over time (Ourednik et al. 2018). Accordingly, the study of competition sentiment in EU law offers a fascinating perspective on the emotional tonality and ideological shifts within the language of competition policy. Ordoliberal language, particularly in its initial manifestations, is often characterized by an emotional, negative tonality. This reflects both the ideological nature of the school and the broader context of generally positive attitudes towards anti-competitive behavior in the inter-war period, which early ordoliberals sought to challenge. The use of sentiment analysis could be a useful tool for tracking these tonal shifts over time, with a particular focus on the de-emotionalization of competition language that occurred with the technical MEA reforms.

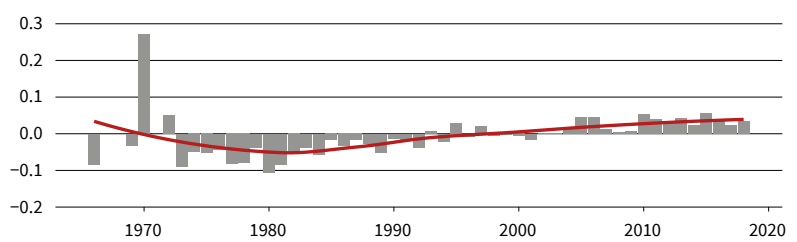
For this part of the research, a specific sentiment dictionary is used that is capable of handling

Figure 4

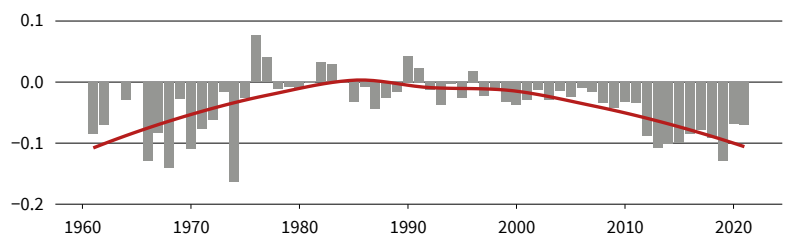
Sentiment on Competition

Average sentiment

In Commission sections



In Court sections



Source: Author's analysis in Küsters (2023).

© ifo Institute

the complexity of legal texts. The sentiment dictionary chosen here is based on a list of 11,709 words classified as negative/positive in the range $[-2, 1]$ and implemented with the R *sentiment* package. This algorithm incorporates weighting for valence shifters, i.e., negators and amplifiers or de-amplifiers, which respectively reverse, increase, and decrease the effect of a sentiment word (Naldi 2019). The consideration of this complexity was considered important in the context of long legal sentences. In addition, the analysis is restricted to sections of Commission decisions and Court judgments that deal explicitly with competition, identified by a keyword in context (KWIC) method, in order to avoid averaging over parts of the text that are not relevant to the discussion of the phenomenon of competition. A search for the term “competition” at a distance of ten words yields 43,563 “hits” for the Commission and 42,484 for the courts.

The results of this sentiment analysis show a noticeable shift towards more positively connotated vocabulary in Commission decisions since the early 2000s (Figure 4). This change may reflect the trade-off nature of modern welfare analysis introduced during the MEA period. The positive tone in these contexts is typically related to passages finding no infringement of competition rules. Conversely, earlier Commission decisions in the 1970s and 1980s had a more negative tone, often condemning anti-competitive behavior and calling for strict enforcement and heavy fines. This harsher language, often present in cases classified as “per object” restrictions, is consistent with the ordoliberal preference for per se rules and a broad application of Art. 101 TFEU. In contrast to the Commission, the Court's language has remained negative in almost all years, with recent cases suggesting an even more negative tone. The few positive statements by the Court have typically linked compe-

tion to the fundamental freedoms of movement and establishment, reflecting the ordoliberal strategy of intertwining competition rules with strong protection of the fundamental freedoms.

Despite some ambiguities, the sentiment analysis points to a structural change in the language of competition around the turn of the century, particularly within the Commission. This shift away from the earlier negative tone of ordoliberal language towards a more neutral or even positive tone reflects broader ideological changes in EU competition policy. It suggests a move away from the emotionally charged, interventionist approach of early ordoliberalism towards a more technocratic and possibly more neoliberal approach in line with the MEA.

Detecting Competition Topics

The final section of this article uses structural topic modeling (STM) to aggregate semantic information from Commission decisions and Court judgments in order to infer broader themes about competition as a topical category within the EU competition law corpus. Topic modeling works by identifying groups of terms that frequently appear together in large collections of documents, such as journal corpora and case law, thereby maximizing their distinctiveness (Blei et al. 2003). These term clusters are interpreted as topics. However, the statistical distinctiveness of co-occurring terms does not always correspond to conceptual themes. It is therefore important to inter-

pret the results of topic modeling with caution and to guard against confirmation bias.

STM, a semi-automated approach that incorporates metadata such as responsible institution and year into the topic estimation, offers advantages over traditional legal research by reducing subjectivity in the categorization and interpretation of legal texts (Roberts et al. 2019). The estimated STM, based on a 60-topic model, organizes the large volume of text data into coherent categories.³ These categories include competition parameters, concrete market examples, geographical boundaries, procedural issues, state aid, and merger control. The topics can be manually grouped into six main categories, each providing insights into different facets of EU competition law.

Analysis of these themes over time provides a historical context for the development of EU competition law (Figure 5). Initially, the focus was on cartels, concerted practices, and selective distribution systems, reflecting the early priorities of European competition policy. Between the 1980s and 2000s, the focus shifted to the definition of abuse under Art. 102 TFEU and state aid. The last two decades have seen an increase in issues related to patents, services of general economic interest, and mergers. The results of the STM analysis support the broader narrative of

³ The literature proposes several metrics for selecting the statistically optimal number of topics when estimating a topic model. Combining these metrics and calculating the so-called held-out likelihood and semantic coherence suggests that in the case of the EU competition law corpus, the optimal number is in the range of 55–60 topics.

Figure 5
Competition-related Topics over Time
Expected topic proportion in corpus



Source: Author's analysis in Küsters (2023).

© ifo Institute

a shift from ordoliberal to neoliberal influences in EU competition law around the year 2000. This shift is evidenced by a decreasing focus on issues related to cartel behavior and increasing attention to product quality and transaction-related vocabulary, which is consistent with the Chicago School's emphasis on economic efficiency and quantitative assessments. Moreover, the recent decline in "free movement" rhetoric coincides with neoliberal MEA reforms. This shift may reflect a move away from the ordoliberal concept of an "economic constitution" towards a more market-oriented approach.

Notably, the STM analysis also reveals statistically significant differences in the way the Commission and the courts addressed these topics (results not shown here). For example, the Commission focused more on price cartels, product quality, and transactions, while the Court focused almost exclusively on free movement issues. This suggests that the Commission grounds its cases purely in the competition rules, while the Court of Justice might relate them to other treaty provisions, such as the fundamental freedoms. Moreover, the transaction vocabulary identified by the STM is tied to the Commission variable. This may be explained, at least in part, by the fact that the Court refrains from assessing the "complex economic assessments" made by the MEA and instead checks them only for "manifest errors," which limits its scope for referring to economic concepts (van der Woude 2019).

POLICY CONCLUSIONS

This corpus linguistic analysis of European competition law over sixty years revealed a nuanced evolution, initially marked by ordoliberal influences and later moving towards neoliberalism. This shift was not predetermined by the treaty or by a single dominant school but evolved through the interplay of different intellectual currents within EU competition policy. In particular, the study highlights a strongly ordoliberal period from the 1970s to the early 2000s. This period was characterized by the dominance of "effective competition" as a key concept, a focus on merit-based rhetoric in case law under Art. 102 TFEU, attention to cartel issues under Art. 101 TFEU, and a firm tone sanctioning "by object" restrictions. However, the advent of the MEA in the early 2000s marked a significant shift in the language of EU competition law. This neoliberal phase is characterized by a departure from traditional ordoliberal language, an increase in Chicago-style vocabulary, a growing reliance on quantified merger control techniques, and a shift towards a more positive language indicative of welfare economics.

With its novel quantitative findings, this study underscores the dynamic and evolving nature of competition law in the EU, influenced by the interplay between law and economics and the choices made by members of the Commission and the courts in se-

lecting concepts and arguments for their cases and institutional interests. The analysis shows that while the Court has largely adhered to ordoliberal vocabulary, the Commission initiated the neoliberal shift especially after 2000, which has affected the Court to a lesser extent. Interestingly, the timing of this neoliberal shift in EU competition law contrasts with the traditional narrative that places the shift in the 1980s or early 1990s. This later transition is consistent with changes in Commissioner speeches (Küsters 2023) and suggests that internal factors, such as the MEA reforms and increasingly formalized merger control, played an important role.

Methodologically, this analysis contributes to the understanding of how NLP methods can be applied to legal and economic history. It points to the importance of contextual knowledge in interpreting quantitative results and highlights the challenges posed by politicization, conceptual change, and multilingual translation in European law.

In terms of policy recommendations, the study suggests that recognizing and accepting semantic and conceptual differences in competition law can lead to more effective mediation of these divergent views. The development of a common economic code and vocabulary for competition may be necessary for the next phase of European competition policy. For example, similar efforts to agree on a common language and definitions for regulating artificial intelligence are currently underway in the EU-US Trade and Technology Council. This approach would not only reconcile different visions of how to order European markets, but also contribute to a deeper understanding of the political use of economic concepts within the EU's evolving legal framework.

REFERENCES

- Akman, P. and H. Kassim (2010), "Myths and Myth-Making in the European Union: The Institutionalization and Interpretation of EU Competition Policy", *Journal of Common Market Studies* 48, 111–132.
- Ash, E., D. L. Chen and S. Naidu (2019), "Ideas Have Consequences: The Impact of Law and Economics on American Justice", *Center for Law & Economics Working Paper Series 4/2019*.
- Blei, D. M., A. Y. Ng and M. I. Jordan (2003), "Latent Dirichlet Allocation", *The Journal of Machine Learning Research* 3, 993–1022.
- Brook, O. (2020), "Priority Setting as a Double-Edged Sword: How Modernization Strengthened the Role of Public Policy", *Journal of Competition Law & Economics* 16, 435–487.
- Buch-Hansen, H. and A. Wigger (2011), *The Politics of European Competition Regulation: A Critical Political Economy Perspective*, Abingdon, Routledge.
- Cremieux, P. and E. A. Snyder (2016), "Enforcement of Anticollusion Laws against Domestic and Foreign Firms", *The Journal of Law and Economics* 59, 775–803.
- Dumas, M. (2019), "Detecting Ideology in Judicial Language", in M. A. Livermore and D. N. Rockmore, eds., *Law as Data*, SFI Press, Santa Fe, 383–405.
- Ezrahi, A. and M. E. Stucke (2016), *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy*, Harvard University Press, Cambridge, MA.
- Gerber, D. J. (1994), "Constitutionalizing the Economy: German Neo-Liberalism, Competition Law and the "New" Europe", *The American Journal of Comparative Law* 42, 42–67.

- Gerber, D. J. (1998), *Law and Competition in Twentieth-Century Europe: Protecting Prometheus*, Oxford University Press, Oxford.
- Grimmer, J., M. E. Roberts and B. M. Stewart (2022), *Text as Data: A New Framework for Machine Learning and the Social Sciences*, Princeton University Press, Princeton.
- Küsters, A. (2023), *The Making and Unmaking of Ordoliberal Language. A Digital Conceptual History of European Competition Law*, Vittorio Klostermann, Frankfurt am Main.
- Lindeboom, J. (2022), “Rules, Discretion, and Reasoning According to Law: A Dynamic-Positivist Perspective on Google Shopping”, *Journal of European Competition Law & Practice* 13, 63–74.
- Lyons, B. (2003), “Could Politicians Be More Right Than Economists? A Theory of Merger Standards”, *Working Paper*, EUI RSC 2003/14.
- Naldi, M. (2019), “A Review of Sentiment Computation Methods with R Packages”, *arXiv:1901.08319 [Cs]*, January, 1–11.
- Ourednik, A., G. Koller, P. Fleer and S. Nellen (2018), “Feeling Like a State. The Sentiments Tide of Swiss Diplomacy through the Eye of the Algorithm”, *Administrity* 3, 112–146.
- Pérez, S. M. R. and S. van de Scheur (2013), “The Evolution of the Law on Articles 85 and 86 EEC [Articles 101 and 102 TFEU]”, in K. K. Patel and H. Schweitzer, eds., *The Historical Foundations of EU Competition Law*, Oxford University Press, Oxford, 19–53.
- Roberts, M. E., B. M. Stewart and D. Tingley (2019), “Stm: R Package for Structural Topic Models”, *Journal of Statistical Software* 92, 1–40.
- Schweitzer, H. and K. K. Patel (2013), “EU Competition Law in Historical Context”, in K. K. Patel and H. Schweitzer, eds., *The Historical Foundations of EU Competition Law*, Oxford University Press, Oxford, 207–230.
- Silge, J. and D. Robinson (2017), *Text Mining with R: A Tidy Approach*, O’Reilly, Beijing and Boston.
- Stylianou, K. and M. Iacovides (2022), “The Goals of EU Competition Law: A Comprehensive Empirical Investigation”, *Legal Studies*, March, 1–29.
- Van der Woude, M. (2019), “Judicial Control in Complex Economic Matters”, *Journal of European Competition Law & Practice* 10, 415–423.
- Warloutzet, L. (2010), “The Rise of European Competition Policy, 1950–1991: A Cross-Disciplinary Survey of a Contested Policy Sphere”, *Working Paper*, EUI RSCAS 2010/80.
- Wegmann, M. (2008), *Der Einfluss des Neoliberalismus auf das Europäische Wettbewerbsrecht 1946–1965: Von den Wirtschaftswissenschaften zur Politik*, Nomos, Baden-Baden.

Gerome Wolf

Pandemics, Payments and Fiscal Policy: Lessons from Four Years after the Outbreak of Covid-19

The outbreak of an unprecedented global health crisis about four years ago put the very foundations of our communities, economies and politics to the test. Policymakers had to learn and react fast to limit human and economic costs at the same time. While the role of health policies such as non-pharmaceutical interventions (NPIs) and the arrival of vaccines for the overall pandemic performance (Baum et al. 2021) are undisputable, certain measures turned out to be more effective than others (Faria-e-Castro 2021; Levelu and Sandkamp 2022; Bayer et al. 2023). Whereas explicit measures such as shelter-in-place orders and shop closures received much attention and met widespread support, less is known about the effectiveness of pre-existing characteristics inherent in the transactional nature of economic interactions. This article highlights the importance of existing markets, technological features such as payments systems and economic decisions at the transactional level in combating the spread of a contagious disease while stabilizing aggregate economic activity.

First, e-commerce, i.e., the sale of goods and services online, offers the opportunity to shift consumption from established, contact-intense shopping towards a less contact-intense mode that substantially reduces consumers' exposure to infection risk and, ultimately, potential death.

Second, recognizing that certain means of payments do not only facilitate the exchange of goods and services but provide additional benefits inherent to them, such as access to credit for consumption smoothing as it is in the case of credit and debit cards, underlines an important channel in consumer spending to cope with adverse shocks. Also, the means of payment may affect consumers' choices directly due to strong complementarity and fragmentation in markets (i.e., some goods can only be purchased with a particular means of payment).

The interaction of e-commerce and electronic payments provides the least contact-intense mode of consuming that is attainable. About half of all online spending is conducted with credit cards; the other half stems from other electronic payment systems with similar characteristics, namely low duration of transaction completion, some form of credit smoothing (e.g., buy now, pay later) and minimum in-person interaction.

Lastly, given that NPIs and stabilization measures can interact with the two aforementioned aspects of

consumer spending, their implementation can jointly determine the effectiveness of the endogenous reallocation of consumption. Generous fiscal support such as direct cash transfers or unemployment insurance can render the substitution from offline to online consumption more effective as (a) the income effect and (b) lower risk premiums both amplify and accelerate consumer spending and the fiscal multiplier during pandemics.

HOUSEHOLD SPENDING DURING PANDEMICS

As the virus spread and became first priority to policymakers, scientists and the public, a large body of literature and evidence on the (potential) consequences and implications of the pandemic evolved. Early descriptive evidence on household spending was produced for the US, such as an "economic tracker" (Chetty et al. 2020) that showed an overall drop in economic activity as a consequence of social distancing and decreased consumption spending mainly by high-income households. Baker et al. (2020), using transaction-level household financial data, found consumption spending reactions

KEY MESSAGES

- Existing and well-functioning e-commerce markets and electronic payment systems improve pandemic performance by providing an effective layer of protection against contagious diseases
- Covid-19 caused a major reallocation shock to consumer spending
- Revolving credit is an effective though underutilized instrument for consumption smoothing during times of economic slack
- Generous fiscal support incentivized social distancing stronger and longer and had heterogeneous effects across the wealth distribution



Gerome Wolf

is a Junior Economist and Doctoral Candidate at the ifo Center for Macroeconomics and Surveys. His research interests lie at the intersection of macroeconomics, financial markets, and machine learning.

Table 1

Consumption Expenditures for Germany

	2015	2019	2020
Private consumption expenditures (billion euros)	1,602.97	1,804.53	1,708.67
Retail turnover (billion euros)	528.23	595.42	635.24
E-Commerce share (percent of total retail)	9.1	13.3	16.0
E-Commerce share (percent of total in Mastercard SpendingPulse)	-	14.0	15.5
E-Commerce share (percent of total private consumption expenditures)	3.0	4.4	6.0

Source: Federal Statistical Office; Mastercard; own calculations.

particular to the means of payment, points of sale and types of goods. Coibion et al. (2021) analyzed the relationship between public mental health and different public containment strategies in Italy, Sweden, and the UK, and found different pre-existing culturally relative dispositions towards death-related anxiety as well as country-specific sensitivities towards the pandemic. Born et al. (2021) constructed a counterfactual scenario for Sweden for how the pandemic would have evolved if this country had imposed an early lockdown (which it in fact did not); they concluded that the number of infected and deaths could have been reduced significantly without additional output loss, since much of the social restraint happened voluntarily.

Lastly, Mishra et al. (2022), documenting stylized facts for 47 economies based on credit card data scaled to represent total consumer spending, found that the share of online transactions in total consumption increased more in economies with higher pre-pandemic e-commerce shares as well as persistently higher online spending shares in retail and restaurants.

Clearly, containing the transmission of a contagious disease at the transactional level was a key policy prescription, even under limited knowledge about the virus' characteristics. One way to achieve a fast reduction of contacts in the short-run was to restrict consumption and work opportunities that would usually happen in-person and, as a consequence, suppress economic activities, resulting in income losses, losses of tangible and intangible capital, as well as higher uncertainty.

Above and beyond internalized containment measures, households had own incentives to reduce the number of contacts to decrease their infection risk. Allowing for a multi-sector consumption and production economy, incorporating infection risk in the household's optimal consumption decision would induce the household to endogenously reallocate consumption from the contact-intensive, high infection risk to the less contact-intensive, low infection risk consumption mode (Krueger et al. 2022). In other words, in a two-sector economy with online and offline consumption, households could purchase goods and services online rather than in-person and effectively reduce the degree of contact intensity, regard-

less of muted in-person consumption opportunities. In addition, active NPIs would increase the price of in-person consumption, mainly through transaction costs, relative to consuming remotely or after delivery, providing an even stronger incentive to shift towards online consumption and electronic payments. All in all, Covid-19 can be seen as a large reallocation shock (Barrero et al. 2020).

Indeed, e-commerce seems to have played a major role in the containment of the virus. The Brookings Institution titled early on in April 2020 that "e-commerce—defined broadly as the sale of goods and services online—is emerging as a key pillar in the fight against Covid-19. [...] In China, e-commerce companies played a key role in keeping the residents of Wuhan supplied during their two-month lockdown earlier this year."

German private consumption expenditures accounted for approximately 52 percent of total GDP in 2019. For many other countries this share goes up to 80 percent, with some countries experiencing rapid growth in private income and consumption, and others decreasing relative weight of that component of total output. Also, the composition of private consumption expenditures changes over time as new products and services appear, and markets adjust to serve changing consumer preferences. E-commerce has seen continuous growth in the US, amounting to 5 percent of total consumption expenditures in 2007 (USD 117 billion) to 8 percent in 2017 (USD 160 billion), according to Dolfen et al. (2023).

For Germany, e-commerce expenditures accounted for about 3 percent of total consumption expenditures in 2015 but doubled within five years. Within retail, this share increased by seven percentage points within five years, to 16 percent in 2020.

Apparently, existing e-commerce markets (or the ability to rapidly expand them) provide an insuring capacity to shift¹ consumption from contact-intense to less contact-intense channels while maintaining economic activity. From a theoretical point of view, the elasticity of substitution can be thought of as a technological constraint that is a function of market structure. The higher the elasticity of substitution is, the easier it is to switch between inputs and maintain the same level of utility or productivity without incurring costs. An additional reduction of physical interactions stems from payment systems that facilitate the transactions. While electronic payment systems such as debit and credit cards are commonly used in some economies such as the US or the Nordics (50-70 percent of citizens aged 15+ owned a credit card in 2017), even some developed economies such as Germany are surprisingly cash-based (53 percent of citizens aged 15+ owned a credit card in 2017 but 74 percent of all transactions were cash-based; see Deutsche Bundesbank (2017)). The determinants of payment

¹ This capacity is also referred to as the elasticity of substitution.

systems adoption are an interesting subject to study in its own right, but private incentives such as rewards and cashbacks, regulations such as interchange fees and cultural stances towards means of payment and debt (e.g., anonymity and moral standards) seem to be important (Humphrey et al. 1996; Schuh et al. 2012; Kay et al. 2014).

E-commerce relies mainly on well-functioning electronic payment systems,² which facilitate least contact-intensive interaction on both transactional methods.

Figure 1 shows, at the country-level, how a larger penetration of credit card ownership was associated with a faster decline in the virus's reproduction number,³ a critical indicator quantifying the multiplicity of an infected individual and used by policymakers to plan their responses. This plot provides suggestive but not necessarily causal evidence, even after controlling for income per capita, that payment systems such as those used on e-commerce platforms are associated with a faster containment of the virus.

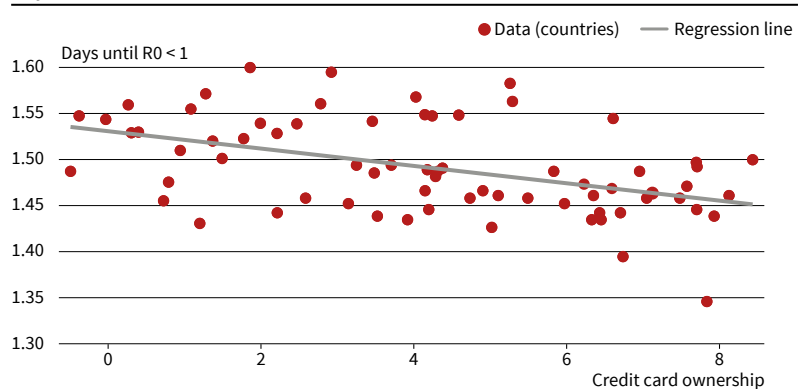
Credit cards are not only a means of payment but provide, as the name suggests, access to credit (Fulford and Schuh 2018). Unsecured, revolving credit is the most common form of consumer credit and is also the source of debt that is the easiest to access (Fulford and Schuh 2023). Therefore, consumption decisions operated through a particular payment system exhibit not only strong product and service complementarities and fragmentation, meaning that certain goods and services can only be purchased through a particular means of payment, but also a channel to incorporate credit as a means of consumption-smoothing (Fulford and Schuh 2017; Hundtofte et al. 2019). With credit as an additional instrument to allocate consumption inter-temporally, borrowing conditions may affect the consumer choice. Monetary and fiscal policy can affect borrowing costs directly (e.g., through the nominal interest rate) or indirectly (e.g., through unemployment insurance or direct transfers), whereas different households may face different financial frictions or borrowing costs. For example, more financially healthy households enjoy more favorable borrowing conditions, in terms of higher credit volume and/or lower interest rates. Also, households that reveal more information about themselves through a long spending or credit history (e.g., by using electronic payment systems) can be more appropriately assessed in terms of risk to the lender, which should be reflected in the costs of debt (Kotkowski and Polasik 2021). Under informational frictions (or simply limited information), these costs of debt tend to be higher relative to the more transparent borrower.

² In fact, the reason why Mastercard put an end to their Maestro system is that "it wasn't suitable for online retail platforms anymore."

³ Values above one would lead to an exponential spread of the virus while under a value below one the virus would mechanically die off after some time without additional interventions.

Figure 1

Days until $R_0 < 1$ vs. Credit Card Ownership



Source: The World Bank; author's calculation.

© ifo Institute

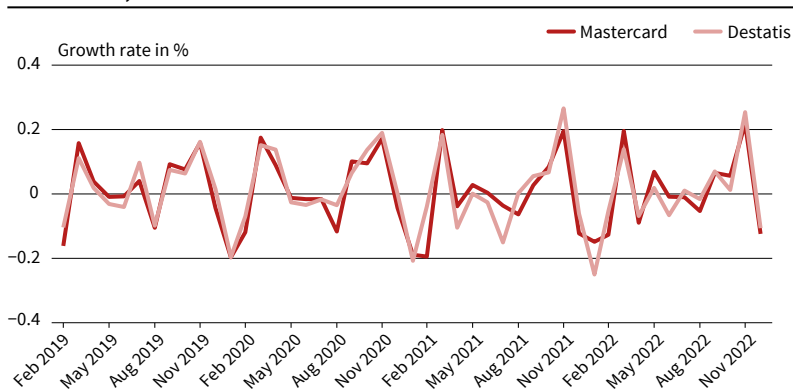
As monetary and fiscal policymakers responded to the pandemic to stabilize incomes and risk premiums, borrowing conditions for households and firms remained largely unchanged, despite a bleaker economic outlook. This should have also improved households' consumption choices if they used credit cards not only for facilitating transactions, but also tapping them as readily available source of credit to smooth consumption against adverse income and health shocks (Sandri and Grigoli 2022; Baker et al. 2023). In theory, the reallocation effects should differ across the two regimes, with one regime characterized by rather accommodative (or generous) fiscal or monetary stances, and the other regime being rather austere (or less generous) if the risk premium channel matters; consequently, the economic effectiveness in terms of the fiscal multiplier would differ as well (Kinda et al. 2022).

(BIG) DATA FOR PANDEMICS AND CONSUMPTION

Scarcity of timely data and information on the behavior of the virus, households, and businesses posed major challenges to coordinate appropriate policies to balance adverse direct health effects and economic costs. Four years after the onset of the Covid-19 pandemic, policymakers and researchers are in a better position to assess the direct and indirect effects of the pandemic and related policies by drawing from relatively high-frequency data (for economic indicator standards) of daily epidemiological and economic outcomes.

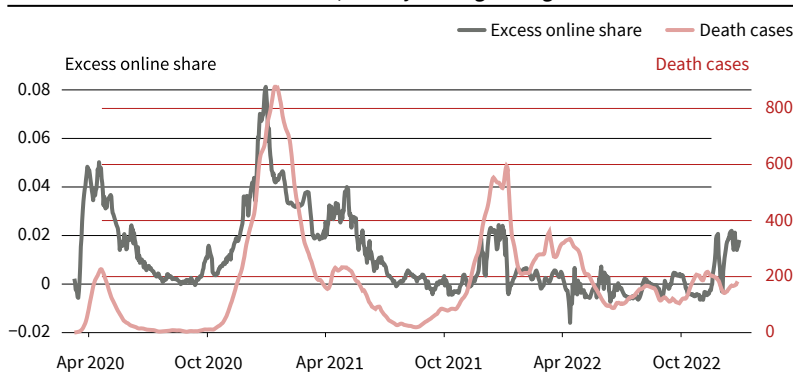
Epidemiological indicators were reported on a daily basis first, allowing to compare the predicted infections and death cases from a standard epidemiological SIR (susceptible-infected-removed) model (Calabrese et al. 2023) with the actual numbers to capture exogenous variation ("shocks") that households did not foresee. Grounded on consumer theory, household consumption should react to (adverse) income and health shocks by scaling down overall consumption. Although reported infection numbers were omnipresent among the public, there was substantial

Figure 2
E-Commerce, Destatis vs. Mastercard



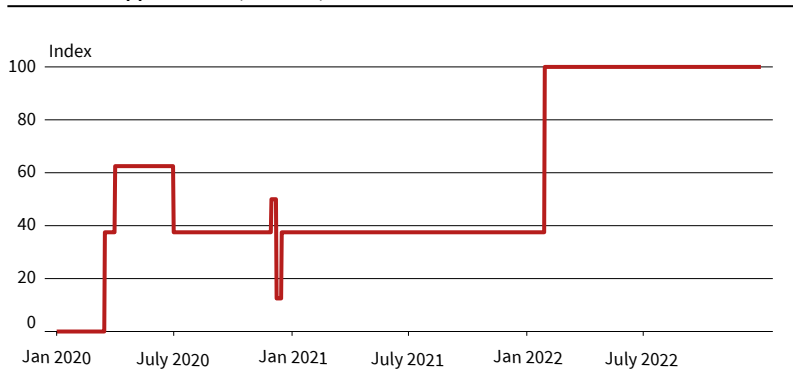
Source: Mastercard SpendingPulse; Federal Statistical Office; author's calculations. © ifo Institute

Figure 3
Excess Online Share vs. Death Cases, Weekly Moving Averages



Source: Mastercard SpendingPulse; Our World in Data; author's calculations. © ifo Institute

Figure 4
Economic Support Index (OxCGRT)



Source: The Oxford Covid-19 Government Response Tracker (OxCGRT). © ifo Institute

measurement error due to limited testing capacities and timely assessment capabilities. The measurement error in the reported number of covid-related deaths is arguably much smaller and, as death rather than an infection is the ultimate consequence that households want to avoid by changing behavior (Coibion et al. 2021), the number of deaths was chosen as a shock variable.

Daily data for Germany from Mastercard provides real-time information on households' consumption expenditures at the national and subnational level

across different spending categories and spending channels, i.e. online and in-store transactions.

These nominal expenditures were extrapolated by Mastercard to be representative of all consumption expenditures across all payment types, based on aggregate sales activity in the Mastercard payments network, survey-based estimates for other payment types (including cash), and broader macroeconomic factors. As Figure 2 illustrates, online spending from Mastercard's Spending-Pulse tracks the official statistics by the Federal Statistical Office (Destatis) very well. The correlation coefficient between the monthly growth rates of Versand- und Internet-Einzelhandel (i.e., e-commerce) reported by the Federal Statistical Office and those transactions measured by Mastercard is about 0.9, and the e-commerce share computed based on Mastercard data (15.5 percent, 2020) matches the e-commerce share reported by the Federal Statistical Office (16.0 percent) almost exactly (Table 1).

Importantly, this procedure ensures that all electronic payment types that offer some form of credit smoothing are included, not only credit cards from the Mastercard network.

Figure 3 shows weekly moving averages of the excess online spending share (share of online transactions in total expenditures) for 2020-2022 relative to its value on the same day-month pair in 2019, which is taken as the reference level in the absence of a pandemic (LHS, solid line). This year-over-year differencing does not only capture the excess amount but also removes seasonal effects (Brave et al. 2021) as well as variation due to changes in the price level. The dashed line on the RHS shows weekly moving averages of the reported number of deaths.

Clearly, both time series co-move strongly with each other, indicating a positive relationship. This does not, however, account for physical shop closures or endogeneity but rather suggests that within the consumption basket there was a substantial reallocation from in-store consumption towards online consumption, reaching peaks of about 5 percent higher online shares during the first wave in March 2020 and 8 percent during the second wave at the end of 2020. To put that into perspective, on that day total expenditures were 30 percent lower compared to the previous year but online expenditures were 50 percent higher, amounting to 400 million EUR in consumption expenditures, or 0.05 percent of GDP in that quarter on a single day.

Lastly, policy responses such as the stringency of implemented measures or the degree of economic support granted by governments were recorded by the Oxford Covid-19 Government Response Tracker (Hale et al. 2021) on a daily basis. The Economic Support Index by OxCGRT identifies periods where households that lost their jobs or couldn't work received direct cash payments covering less—or more—than 50 percent of lost salary, and periods where households (and firms) were provided with some form of debt or

contract relief, such as stopping loan repayments, preventing suspension of services like water, or banning evictions to a narrow or broader extent. As Figure 4 shows, the degree of fiscal support in Germany was rather low in the beginning but increased over the course of the pandemic.

SIMULATION RESULTS

What is the effect of an unanticipated increase in the number of deaths on the reallocation from contact-intensive, in-store consumption towards the less contact-intensive, online consumption channel and what are its dynamics? To answer this question, the aforementioned identified death shock series⁴ was projected on the endogenous variable of interest (Finck and Tillmann 2022), the (excess) online spending share at different horizons using the local projections method by Jordà (2005), including the stringency index⁵ of NPIs to control for “mechanically” limited consumption opportunities in the offline channel and the VDAX, an options-implied volatility measure to capture overall uncertainty that would dampen demand. The result is a so-called Impulse Response Function (IRF), which measures the marginal effect of the shock on the y-axis at different points in time along the x-axis (here days).

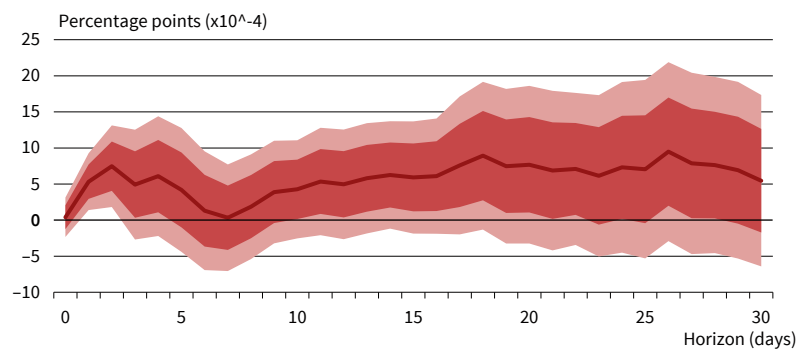
There is an initial increase in the online spending share in the first week after an unanticipated, one-standard-deviation increase in the number of deaths (about ten death cases) followed by a drop and a steady buildup thereafter. The distributed effect of the shock increases over time and is highly persistent, indicating that households adjust their spending habits over that horizon. The marginal effects appear to be small but accumulate over the simulation horizon of 30 days to around 2 percent higher online spending share compared to the old steady state. Ten unanticipated deaths would therefore translate into a 2 percent higher online spending share within a given month, equivalent to an inflow of around 1.6 billion EUR of consumption expenditures in the online sector.

Given that electronic means of payment often provide access to some form of credit for consumption smoothing, the intertemporal substitution decision by the households is subject to borrowing conditions. Monetary and fiscal policies stabilized risk premiums through accommodative stances, in addition to lower aggregate demand for credit and falling costs of debt during the pandemic. The degree of fiscal policy support can be quantified using the Economic Support Index by OxCGRT. By interacting the shock with the empirical CDFs (= cumulative density functions, see Born et al. 2020) of the different regimes (high economic support vs. low economic support) one can

⁴ The shock series was standardized, i.e., demeaned and scaled to have unity variance in order to interpret the shock size in standard deviations.

⁵ An index between 0 and 100, where higher values indicate more stringent measures.

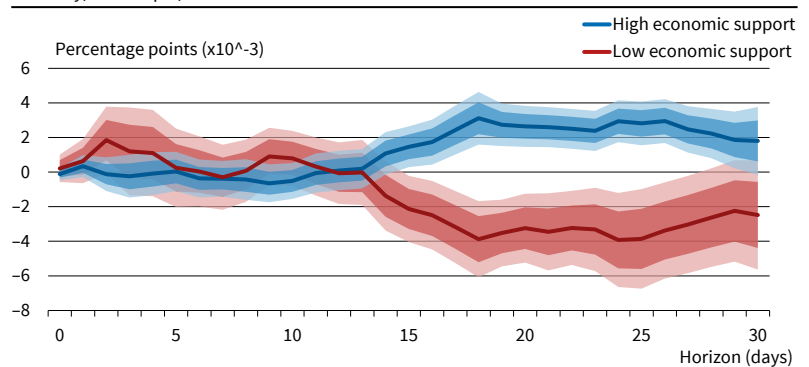
Figure 5
Impulse Response Function
Germany, full sample; online share



Source: Author's calculations.

© ifo Institute

Figure 6
State-dependent Impulse Response Function
Germany, full sample; online share

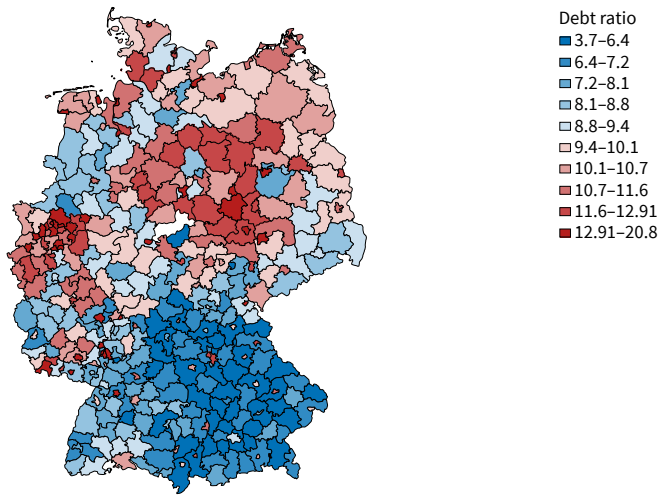


Source: Author's calculations.

© ifo Institute

compute IRFs that show the state-dependent effects (Auerbach and Gorodnichenko 2012; Ramey and Zubairy 2018; Auerbach et al. 2020) of a death-cases shock to the reallocation between offline and online consumption. Indeed, the marginal effects seem to be much stronger in the high fiscal support regime, confirming a stronger incentive to substitute between offline and online spending if fiscal policy lowers the risk premium and electronic payments allow for credit smoothing. The two regimes' effects start to diverge after two weeks, with the cumulative effect in the high economic support regime amounting to 4 percent, an effect twice as high as in the unconditional IRF. The low economic support regime, on the other hand, invertedly mirrors almost perfectly the other regime's effect dynamics and magnitude. Two observations can be made from this simulation: First, the degree of fiscal support takes some time to show an effect on the substitution between offline and online consumption. Financial intermediaries might need some time to effectively pass on more favorable borrowing conditions through risk assessment to the households, and households may require some time to adjust their portfolios. Second, higher economic support appears to incentivize social distancing through stabilizing incomes. In the low economic support regime, households substitute away from online consumption and

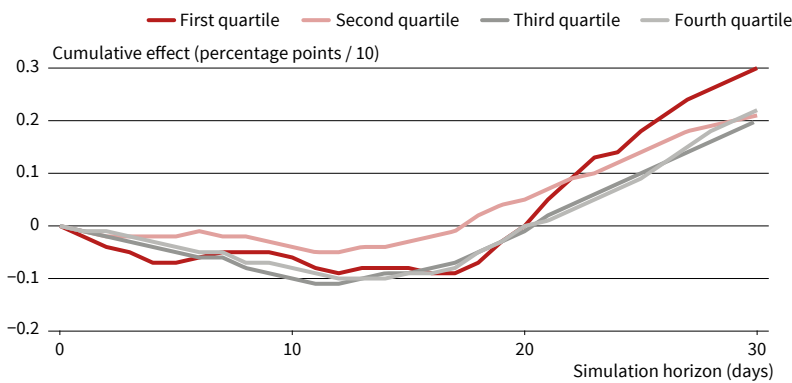
Figure 7
Private Debt (Number of Debtors/100 Inhabitants)



Source: Healthcare-Datenplattform; infas360.

© ifo Institute

Figure 8
Impulse-Response-Functions by Debt Quartile, High Fiscal Support Regime



Source: Author's calculations.

© ifo Institute

towards more in-person consumption and interactions, perhaps out of need to generate incomes despite infection risk and consume closer to where they work.

Lastly, there is large heterogeneity in initial asset positions of households, a fact that provides different incentives for how to allocate additional stimulus payments (Koşar et al. 2023). Households can either spend the additional money directly, save it to spend it later, or repay existing debt (Sahm et al. 2012). The more indebted a household is, the higher is the incentive to repay existing debt in anticipation of increasing borrowing costs once the stimulus is phased out (Koşar et al. 2023).

Figure 7 displays the heterogeneity of indebtedness across German counties. As spending data from Mastercard is available at the subnational level of Regierungsbezirke, each county had to be assigned to its corresponding Regierungsbezirk, a non-trivial task, since for many counties this level of aggregation does not exist in official statistics conventions and had to be inferred from geographic boundaries. Within each Regierungsbezirk the private-debt rate

(number of debtors/1000 inhabitants) was averaged and Regierungsbezirke were partitioned according to their quartiles.

Re-running the state-dependent simulation for four debt quartiles samples separately confirms the conjecture that less-indebted households (or counties populated by these households) have a higher marginal propensity to consume and a lower marginal propensity to save/repay debt when receiving fiscal support. Figure 8 shows that the cumulative reallocation effect towards online consumption lies in the low-debt quartile (1st quartile), about 1 percent point larger in the high-debt quartile (4th quartile) when those households are provided with generous fiscal aid, which is consistent with the findings of Chetty et al. (2020) and Drummond and Hasnine (2023) for the US.⁶

The simulation results are based on pandemic shocks at the national level. Even though spending and NPI data exist at the subnational level, one-day-ahead forecasts at the subnational level were missing. Most likely, local epidemic dynamics affect local consumption more strongly than national deaths and infections. This analysis, which can be easily done with a calibrated SIR model at the local level, remains to be concluded.

POLICY IMPLICATIONS

E-commerce and electronic payment systems can be considered as structural characteristics of an economy that are associated with greater resilience against a contagious disease. To be better prepared against a potential future pandemic, technological and legal conditions related to the progress towards digitization, such as public investment in research and development, appropriate data protection laws, and efficient processes in public administration bodies should be designed in such a way that e-commerce markets encompass the entire supply chain, including the payment systems, storage and delivery of goods and services that are ideally in line with sustainability aspects.

Recognizing electronic payment systems such as credit cards and debit cards not only as a means of payment, but through its overall penetration also as an effective instrument for consumption-smoothing and reduction of financial frictions in the economy would prescribe supporting higher electronic payment system adoption through private incentives, regulatory measures and cultural campaigns.

Fiscal and monetary policymakers, however, should be aware of the incentives and trade-offs they pose to households' consumption decisions. In particular, lockdown restrictions should not have been imposed without generous fiscal support—and also

⁶ The IRFs depicted here differ from the linear model and state-dependent model, as they show the cumulative effect and not the marginal effects at different time horizons.

not in an environment that did not provide much capacity to shift consumption from the contact-intense to the less contact-intense channel, in order to be as effective as possible in both pandemic as well as economic terms.

A thorough analysis of pandemics, e-commerce, payments and fiscal policy could inform about the extent to which automatic stabilizers such as regular unemployment insurance may have contributed to social distancing. More liberal economies such as the UK would have required more explicit policy interventions, such as the early lockdown it imposed, together with substantial fiscal stimulus hitting the public budget in order to combat the crisis, whereas social-market economies with automatic stabilizers such as Germany could have fared better without additional public expenditures, exhibiting lower uncertainty and also recovering faster.

REFERENCES

- Auerbach, A. J. and Y. Gorodnichenko (2012), "Measuring the Output Responses to Fiscal Policy", *American Economic Journal: Economic Policy* 4(2), 1–27.
- Auerbach, A. J., Y. Gorodnichenko and D. Murphy (2020), "Effects of Fiscal Policy on Credit Markets", *AEA Papers and Proceedings* 110, 119–124.
- Baker, S. R., R. A. Farrokhnia, S. Meyer, M. Pagel and C. Yannelis (2020), "How Does Household Spending Respond to an Epidemic? Consumption during the 2020 COVID-19 Pandemic", *The Review of Asset Pricing Studies* 10, 834–862.
- Baker, S. R., R. A. Farrokhnia, S. Meyer, M. Pagel and C. Yannelis (2023), "Income, Liquidity, and the Consumption Response to the 2020 Economic Stimulus Payments", *Review of Finance* 27, 2271–2304.
- Barrero, J. M., N. Bloom and S. J. Davis (2020), "COVID-19 Is Also a Real-location Shock", *Brookings Papers on Economic Activity* 2020(2), 329–383.
- Baum, F., T. Freeman, C. Musolino, M. Abramovitz, W. De Ceukelaire, J. Flavel, S. Friel, C. Giugliani, P. Howden-Chapman, N. T. Huong, L. London, M. McKee, J. Popay, H. Serag and E. Villar (2021), "Explaining Covid-19 Performance: What Factors Might Predict National Responses?", *The BMJ*, 372.
- Bayer, C., B. Born, R. Luetticke and G. J. Müller (2023), "The Coronavirus Stimulus Package: How Large Is the Transfer Multiplier", *The Economic Journal* 133, 1318–1347.
- Born, B., A. M. Dietrich and G. J. Müller (2021), "The Lockdown Effect: A Counterfactual for Sweden", *PLoS ONE* 16(4), e0249732.
- Born, B., G. J. Müller and J. Pfeifer (2020), "Does Austerity Pay Off?", *Review of Economics and Statistics* 102, 323–338.
- Brave, S. A., M. Fogarty, D. Aaronson, E. Karger and S. D. Krane (2021), "Tracking U.S. Consumers in Real Time with a New Weekly Index of Retail Trade", *Federal Reserve Bank of Chicago Working Paper* 2021-05.
- Calabrese, J. M., L. Schüler, X. Fu, E. Gawel, H. Zozmann, J. Bumberger, M. Quaas, G. Wolf and S. Attinger (2023), "A Novel, Scenario-based Approach to Comparing Non-pharmaceutical Intervention Strategies across Nations", *medRxiv*, <https://doi.org/10.1101/2023.09.14.23294544>.
- Chetty, R., J. N. Friedman, N. Hendren and M. Stepner (2020), "How Did Covid-19 and Stabilization Policies Affect Spending and Employment? A New Real-Time Economic Tracker Based on Private Sector Data", *NBER Working Paper* 27413.
- Coibion, O., Y. Gorodnichenko, Y. and M. Weber (2021), "The Cost of the COVID-19 Crisis: Lockdowns, Macroeconomic Expectations, and Consumer Spending", *NBER Working Paper* 27141.
- Deutsche Bundesbank (2017), *Zahlungsverhalten in Deutschland 2017. Vierte Studie über die Verwendung von Bargeld und unbaren Zahlungsinstrumenten*, <https://www.bundesbank.de/resource/blob/634056/ae10b-24377fa62d6c5873886d8f48f1d/mL/zahlungsverhalten-in-deutschland-2017-data.pdf>.
- Dolfen, P., L. Einav, P. J. Klenow, B. Klopach, J. D. Levin, L., Levin and W. Best (2023), "Assessing the Gains from E-Commerce", *American Economic Journal: Macroeconomics* 15(1), 342–370.
- Drummond, J. and M. S. Hasnine (2023), "Online and In-Store Shopping Behavior during the COVID-19 Pandemic: Lessons Learned from a Panel Survey in New York City", *Transportation Research Record: Journal of the Transportation Research Board*, <https://doi.org/10.1177/03611981231158>.
- Faria-e-Castro, M. (2021), "Fiscal Policy during a Pandemic", *Journal of Economic Dynamics and Control* 125, 104088.
- Finck, D. and P. Tillmann (2022), "Pandemic Shocks and Household Spending", *Oxford Bulletin of Economics and Statistics* 84, 273–299.
- Fulford, S. and S. D. Schuh (2017), "Credit Card Utilization and Consumption over the Life Cycle and Business Cycle", *Research Department Working Papers* 2017-17–14, Federal Reserve Bank of Boston.
- Fulford, S. L. and S. Schuh (2018), *Credit Cards and Consumption, Bank for International Settlements*, https://www.bis.org/events/eoipix_1810/schuh_paper.pdf.
- Fulford, S. L. and S. Schuh (2023), "Revolving versus Convenience Use of Credit Cards: Evidence from U.S. Credit Bureau Data", *Journal of Money, Credit and Banking* 55, 1667–1701.
- Hale, T., N. Angrist, R. Goldszmidt, B. Kira, A. Petherick, T. Phillips, S. Webster, E. Cameron-Blake, L. Hallas, S. Majumdar and H. Tatlow (2021), "A Global Panel Database of Pandemic Policies (Oxford COVID-19 Government Response Tracker)", *Nature Human Behaviour* 5, 529–538.
- Humphrey, D. B., L. B. Pulley and J. M. Vesala (1996), "Cash, Paper, and Electronic Payments: A Cross-Country Analysis", *Journal of Money, Credit and Banking* 28, 914–939.
- Hundtofte, S., A. Olafsson and M. Pagel (2019), "Credit Smoothing", *NBER Working Paper* 26354.
- Jordà, Ò. (2005), "Estimation and Inference of Impulse Responses by Local Projections", *American Economic Review* 95, 161–182.
- Kay, B. S., M. D. Manuszak and C. M. Vojtech (2014), "Bank Profitability and Debit Card Interchange Regulation: Bank Responses to the Durbin Amendment", *Finance and Economics Discussion Series* 2014(77), Board of Governors of the Federal Reserve System.
- Kinda, T., A. Lengyel and K. Chahande (2022), "Fiscal Multipliers during Pandemics", *IMF Working Papers* 2022/149.
- Koşar, G., D. Melcangi, L. Pilosoph and D. Wiczor (2023), "Stimulus through Insurance: The Marginal Propensity to Repay Debt", *CESifo Working Paper* 10498.
- Kotkowski, R. and M. Polasik (2021), "COVID-19 Pandemic Increases the Divide between Cash and Cashless Payment Users in Europe", *Economics Letters* 209, 110139.
- Krueger, D., H. Uhlig and T. Xie (2022), "Macroeconomic Dynamics and Reallocation in an Epidemic: Evaluating the 'Swedish Solution'", *Economic Policy* 37, 341–398.
- Levelu, A. and A. Sandkamp (2022), "A Lockdown a Day Keeps the Doctor Away: The Effectiveness of Non-pharmaceutical Interventions during the Covid-19 Pandemic", *Kiel Working Paper* 2221.
- Mishra, P., A. Cavallo and A. Spilimbergo (2022), "E-commerce during Covid: Stylized Facts from 47 Economies", *IMF Working Papers* 2022/019.
- Ramey, V. A. and S. Zubairy (2018), "Government Spending Multipliers in Good Times and in Bad: Evidence from US Historical Data", *Journal of Political Economy* 126, 850–901.
- Sahm, C. R., M. D. Shapiro and J. Slemrod (2012), "Check in the Mail or More in the Paycheck: Does the Effectiveness of Fiscal Stimulus Depend on How It Is Delivered?", *American Economic Journal: Economic Policy* 4(3), 216–250.
- Sandri, D. and F. Grigoli (2022), "Monetary Policy and Credit Card Spending", *IMF Working Papers* 2022/255.
- Schuh, S. D., O. Shy and J. Stavins (2012), "Who Gains and Who Loses from Credit Card Payments? Theory and Calibrations", *Public Policy Discussion Paper* 10-03, Federal Reserve Bank of Boston.



POLICY DEBATE OF THE HOUR IN THE NEXT ECONPOL FORUM:

EconPol FORUM 3/2024 will be published in May 2024

EU Policy Priorities: How to Ensure Europe’s Competitiveness and Future Prosperity?