Annual Report 2021

The 2021 Election Year – New Start Marked by Major Challenges

ifo Institute Proposals for the New Legislative Period



THE YEAR IN REVIEW

PAGE 42

€ 6.6 m

per birth cohort is how much the German government could save by extending maternity leave to prevent young adults with behavioral disorders from needing inpatient treatment.

PAGE 66

400,000

is the number of new jobs created by the ifo proposal for reforming income tax.

PAGE 80

691

CESifo Working Papers were published in 2021.

PAGE 62

77%

of migrants who arrived in Europe via the Mediterranean Sea in 2015 and 2016 stated that conflict and persecution were the main reasons for their decision to migrate.

PAGE 50

Online lessons

are supported by 74% of Germans in the event of school closures.

PAGE 46

41%

of manufacturing companies are planning to change their procurement strategy in the future.

PAGE 72

€ 5.1 to 6.7 bn

is how much Germany would earn if a global minimum tax rate of 15% were introduced for multinational companies.

PAGE 78

10-15%

would be the reduction in property tax – to which all residents are subject – in municipalities with direct democracy.

CONTENTS

| | REPORT OF THE EXECUTIVE BOARD |
|--|---|
| 4 | An Interview with Clemens Fuest and Stephanie Dittmer |
| 8 | Highlights of the ifo Institute's Work |
| 14 | ifo at a Glance |
| 16 | Personnel Development and Junior Economists |
| 18 | Financial Development |
| | FOCUS |
| 20 | The 2021 Election Year - New Start Marked by Major Challenges |
| | RESEARCH |
| 38 | The ifo Institute and Its Research |
| | ifo Centers for |
| 40 44 48 52 56 60 64 68 | Labor and Demographic Economics International Economics Economics of Education Energy, Climate, and Resources Industrial Organization and New Technologies International Institutional Comparisons and Migration Research Macroeconomics and Surveys Public Finance and Political Economy |
| 72 | Research Group Taxation and Fiscal Policy |
| 76 | Dresden Branch |
| 80 | Munich Society for the Promotion of Economic Research – CESifo GmbH |
| 84 | Business Surveys |
| 86 | Economic Forecasts |
| | MANAGEMENT AND SERVICES |
| 88 | Reinventing the ifo Institute as a Place of Work |
| 96 | Publishing Details |



In year two of the pandemic, the ifo Institute turned its attention to the future. Its employees want to use big data to help them research pressing economic questions and explore the modernization of the social market economy.

Dr. Stephanie Dittmer

A member of the ifo Institute Executive Board since September 2017, Dr. Dittmer was previously Head of Strategy and the Initiative and Networking Fund at the Helmholtz Leadership Academy, Helmholtz Association of German Research Centres e.V.

Prof. Clemens Fuest

Before becoming president of the ifo Institute in April 2016, Prof. Fuest was president and Scientific Director of the ZEW – Leibniz Centre for European Economic Research and Professor of Economics at the University of Mannheim.

"International economic research is changing - and at an ever faster pace."





"Education, digitalization, and climate change will be key topics, even long after the pandemic is over."

Prof. Clemens Fuest

Prof. Fuest, Dr. Dittmer, in 2021 the ifo Institute really shaped the debate about the future viability of our economy and society. Would you say that the ifo Institute's role has changed?

CLEMENS FUEST In the first year of the pandemic, there was huge demand for research findings because there were so many unknowns that policymakers and the public were looking for guidance. In the second year, I have the impression that studies, data, and facts were discussed less because the debate between advocates and critics of infection control measures became increasingly polarized. So we turned our attention to the future and, in addition to analyzing the current economic situation, we focused on insights related to the election year. This is because future-defining topics such as digitalization, education, and climate change

will be key even long after the pandemic is over. This has allowed us to further extend our lead in the media over other economic research institutes.

STEPHANIE DITTMER Within the ifo Institute, we always make it a priority to be working together on the most important topics of the day. One such topic is the social market economy and its future. In 2022, we're opening a new ifo Institute branch at the Ludwig Erhard Zentrum in Fürth: the ifo Center for Social Market Economy and Institutional Economics. There we'll be collaborating closely with Friedrich-Alexander-Universität Erlangen-Nürnberg to explore the future of the social market economy. This will be an excellent opportunity for us to weave even more future-defining topics into the debate.

"Germany's new federal government has explicitly stated that it intends to directly involve research institutes in the development of reform concepts."

Prof. Clemens Fuest ifo President

What influence has the ifo Institute had on policy decisi-

ons and proposals during the coronavirus crisis?

FUEST It's always difficult to prove a direct link between studies or economic policy proposals made by researchers and actual policy decisions. Nevertheless, scientific advice –

often in the form of a dialogue among science, policymakers, and government – and public debate do have a considerable influence. The ifo Institute has been heavily involved. Our analyses allow us to honor our social obligation to provide information. Since they feature strongly in the media, and

thus in the public consciousness, we do indirectly influence policy decisions.

In Germany, 2021 was an election year. How relevant were economic policy issues to the campaign race and to what extent did they affect the outcome of the election?

by debates about the mistakes and weaknesses of individual candidates. At that point, it was difficult to debate specific policy issues; these attracted more attention later on. The subsequent focus was on climate policy, which of course has economic implications, but also on taxes and labor market policy. Individual economic policy issues probably didn't affect the outcome of the election all that much. My feeling is that the German people wanted a change of government, but didn't want to take any great risk. That worked out well for Olaf Scholz, because his profile was the closest to Angela Merkel's.

How would you rate the new government's creative power? What course should it set and what steps will it have to take?

FUEST The parties that make up the governing coalition have very different ideas when it comes to economic policy. With that in mind, the coalition agreement is astonishingly ambitious. Many of the projects are innovative and point in the right direction. But it's time for the government to set its priorities. Driving digitalization forward in public administration, combining the decarbonization of industry with the safeguarding of Germany's competitiveness as an industrial base, helping European integration to move forward in smart ways – these would be my priorities. In the short term, the government is taken up with the coronavirus crisis, which must be overcome.

What can the ifo Institute do to support the new government's efforts and to help ensure that policymakers take appropriate decisions?

FUEST The ifo Institute is active through consulting projects and through its researchers' participation in bodies that consult on economic policy. We are also involved in the processes that shape public opinion on policy. Germany's new federal government has explicitly stated that it intends to directly involve research institutes in multiple projects aimed at developing reform concepts, such as for overhauling the tax and transfer system.



"We need new, flexible ways of organizing economic research that uses big data."

Dr. Stephanie Dittmer Member of the Executive Board

The ifo Institute is asking for a willingness among policymakers and the public to pursue reform. How willing is the ifo Institute to effect change? What innovations do you want to get off the ground?

DITTMER International economic research is changing, and the pace of that change is constantly increasing. This transition is being driven by new data and methods. At the ifo Institute, we're in the process of establishing a new research focus: economic research using big data. To harness the opportunities this transition presents, we're always having to add to our skill set. At the same time, we need new, flexible ways of organizing this new research. These include more indepth collaboration with the companies and government departments that provide the data. ifo, like other areas of business and society, is reorganizing the way it works. Since our colleagues now have greater flexibility to work for us remotely, we're investing heavily in our digital infrastructure. We're also investing in our diversity because we believe it to be a key factor in productivity.

What are your main goals for 2022? A year from now, what will you measure the success of the ifo Institute against?

FUEST Our goals are research excellence, advancing the next generation of economists, participating in public debate, advising policymakers, and providing valuable services such as making data from our Business Surveys available. We measure our success against how well we have made improvements in all these areas.

DITTMER We're also aware that for the past two years, we've been working in crisis mode - and this continues to be the case even as we speak. Another of our key goals for 2022 is to make ifo a place in which we can once again regularly experience a sense of community, teamwork, and mutual respect.

The interview was conducted by Dr. Cornelia Geißler, **Head of Communications**









Highlights of the ifo Institute's Work in 2021

n 2021, the ifo Institute paved the way for several important future projects. At the same time, the pandemic meant that ifo researchers continued to work under difficult conditions. One of the key events of the year was the election of the new German Bundestag in September. After 16 years under Angela Merkel's government, the signs point to a new start: reforms are urgently needed in some areas. The ifo Institute outlined the ten most important economic policy challenges for Germany in the post-Merkel era. We also devoted ourselves to the question of how to make Germany's tax system growth-friendly and fair. The output that the research areas generated can be found in our focus section starting on page 20. Aside from this, the ifo Centers continued with their scientific work and projects. A selection of the most important research papers and results is provided in the chapters starting on page 38.

We were also still dealing with the coronavirus pandemic and its economic fallout; together with scientists from various disciplines, the ifo Institute developed the NoCovid strategy at the beginning of 2021, which envisions a proactive, regionally differentiated policy to reduce infections and open up schools and the economy. Our monthly Business Climate Index was expanded to included sectors affected by the pandemic, and now includes solo self-employed persons and microenterprises along with the event industry. The ifo Business Surveys have also been a key tool during the crisis. The special questions about supply bottlenecks, material shortages, and price expectations provided valuable up-to-date information for decision-makers in business and politics.

We also made significant progress in our preparations for opening our Ludwig Erhard ifo Center for Social Market Economy and Institutional Economics in Fürth. The lectures given by the candidates for the position of director, which is tied to a professorship at Friedrich-Alexander-Universität Erlangen-Nürnberg, were concluded in June. The Center is scheduled to open in summer 2022.



RESEARCH

Update: Big Data Economics at the ifo Institute

Work continued to establish the ifo Institute as a leading location for research based on company data. In addition to the ongoing expansion of the LMU-ifo Economics and Business Data Center (EBDC) as a central infrastructure facility for big data, 2021 saw the launch of a pilot phase of initial collaboration projects aimed at tapping new sources of data for innovative research. This resulted, for example, in agreements to collaborate with a leading financial service provider and a telecommunications company. The use of big data extracted from company data paves the way for exploring existing research questions better and, most importantly, with greater accuracy than before.

Publication Performance – ifo Institute Among the Top 10 in Europe

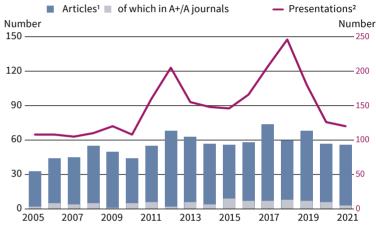
| RANK | INSTITUTION | SCORE |
|------|--------------------------------------|-------|
| 1 | London School of Economics | 1.8 |
| 2 | University of Zurich | 2.4 |
| 3 | Paris School of Economics | 3.8 |
| 4 | Barcelona School of Economics | 4.8 |
| 5 | University College London | 5.0 |
| 6 | Università Commerciale Luigi Bocconi | 5.4 |
| 7 | Sciences Po, Paris | 5.8 |
| 8 | University of Groningen | 10.0 |
| 9 | ifo Institute | 11.5 |
| 10 | CEPR, London | 11.6 |

RePEc ranking of the top 10 most successful business schools and research institutes in Europe (as of December 2021). The ranking looks at the publications that an institution's top ten authors have published over the last ten years. When calculating the institutions' scores, RePEc considers only researchers registered in its system.

Source: https://ideas.repec.org/top/top.europe.html.

Prolific Research Output

In 2021, a total of 55 articles written by ifo authors were published in peer-reviewed journals, including in three A+/A journals. ifo researchers delivered 120 presentations at international conferences with a referee.



¹ Articles in peer-reviewed journals. ² Presentations at international scientific conferences with selection process (right scale).

As of: December, 31, 2021.

© ifo Institute

Pathways to Inclusive Labor Markets: PILLARS

In the past decade, three developments have had a profound effect on European labor markets: automation, globalization, and structural change. The questions of how these developments change our labor markets, which new skills are required, and how education and training systems should be reformed are the focus of work for PILLARS (Pathways to Inclusive Labor Markets). Initiated by the ifo Institute, this project is funded by the European Union as part of Horizon 2020. Three ifo Centers – for Industrial Organization and New Technologies, for International Institutional Comparisons and Migration Research, and for International Economics – are involved in the study and managing a consortium of ten outstanding international partners. The findings will help develop inclusive labor market policy.

Honors and Awards

At the Annual Meeting, the Society for the Promotion of Economic Research presented Dr. Thomas Fackler with an award for his article "How Antitrust Enforcement Can Spur Innovation: Bell Labs and the 1956 Consent Decree," which was published in American Economic Journal: Economic Policy. His co-authors were Markus Nagler, Monika Schnitzer, and Martin Watzinger. The authors explored the role of patents and mandatory licenses for follow-on innovations. They also received the 2021 AEJ Best Paper Award for this work.

The award for outstanding achievements in third-party funded research went to the project team of Anita Fichtl, Sabine Rumscheidt, and Prof. Oliver Falck for the project "Framework Agreement on Conducting Economics Studies."



Dr. Thomas Fackler

Junior Researchers Honored



Sarah Reiter, doctoral student at the ifo Center for International Institutional Comparisons and Migration Research, won the Deutsche Bundesbank Young Researcher Award for Financial Literacy.



Lavinia Kinne, doctoral student at the ifo Center for the Economics of Education, was awarded an Add-on Fellowship for Interdisciplinary Economics by the Joachim Herz Foundation. She is one of 58 junior researchers selected from the natural and economic sciences.

New Incentive System for Outstanding Publications

In summer 2021, an new incentive system was introduced that takes up key aspects of the ifo Institute's mission. The goals are to help shape public debate through excellent scientific contributions and to further develop the social market economy. By rewarding outstanding publications, the system ensures that ifo research has a high degree of effectiveness and visibility in science, politics, business, and among the general public – with a view to benefiting junior researchers above all.

An Overview of the Awards

IFO OUTSTANDING PUBLICATION AWARD

This award recognizes outstanding scientific publications appearing in top journals and is presented at the ifo Annual Meeting.



IFO TRANSFER PRIZE

This prize honors the preparation of relevant research findings that are then made available to a broad audience by appearing in one of our periodicals or on social media. In 2021, a total of 30 papers received this prize.



IFO RESEARCH AND POLICY PRIZE

This prize honors a scientific publication in a peer-reviewed journal with research findings made available to a broad audience by appearing in one of our periodicals or on social media.



The Ifo Research and Policy Prize was awarded for the first time in 2021. Dr. Valeriya Azarova received this prize for her article "Preferences for Community Renewable Energy Investments" – which appeared in *Europe Energy Economics* 100, 2021 – and the article "All for One and One for Green Energy: Community Renewable Investments in Europe" – published as *EconPol Policy Brief* 37, 2021.



Dr. Valeriya Azarova

POLICY ADVICE

Shaper of the Economic Policy Debate

In 2021, ifo succeeded in using scientific findings to help shape the policy debate on numerous topics. Here is a brief overview of some examples:

Germany Lagging Behind in Digitalization

A study for the Chamber of Industry and Commerce for Munich and Upper Bavaria (IHK) indicates that Germany ranks only in the middle of the digitalization table. The ifo researchers propose an expansion of digital skills throughout the education system, a simplified regulatory framework for the digital economy, less bureaucracy, and better access to venture capital.

The findings were presented in a joint ifo Institute-IHK press release, in a social media campaign that highlighted the individual aspects using multiple tweets over a sustained period, in the ifo Podcast "Where Is Germany in Terms of Digitalization," and as a headlining topic in an edition of ifo Schnelldienst.

ifo Calls for Ways to Offset the Education Economics Effects of the Pandemic

The ifo Institute published several studies that showed the vastness of the psychological, social, and economic costs resulting from school closures, with educational losses having a life-long effect. The ifo researchers advocated that schooling be given priority in the battle against the pandemic. But if schools must be closed, there should be compulsory online classes and increased support for children from difficult social backgrounds.

The recommendations were presented at two press conferences, in numerous press releases, and in guest commentary by Prof. Ludger Wößmann, Director of the ifo Center for the Economics of Education, in the *Frankfurter Allgemeine Zeitung*, *Welt*, and *Süddeutsche Zeitung* newspapers.

From Basic Social Security to a Basic Income

How can means-tested basic social security be designed? Prof. Andreas Peichl, Director of the ifo Center for Macroeconomics and Surveys, presented analyses and recommendations as part of a study for Stiftung Grundeinkommen in a press release, in an ifo Podcast, and in guest commentary in the *taz* newspaper.

Germany's new government took up the topic: the coalition agreement envisions fundamental reform of social benefits – including basic income and housing benefit – as proposed by the ifo Institute.

Paving the Way for a Sustainable Future

In an open letter, leading scientists from a wide range of disciplines appealed to German policymakers to provide a strategy for the rapid transition to climate neutrality while also maintaining competitiveness and preventing social divisions. Among the signatories was Prof. Karen Pittel, Director of the ifo Center for Energy, Climate, and Resources.



Prof. Karen Pittel

SELECTED IFO EMPLOYEES WITH MEMBERSHIPS IN POLITICAL BODIES

Dr. Stephanie Dittmer Member of the Programme Advisory Board at the Leibniz Leadership Academy

Prof. Oliver Falck Member of the Council for Technological Sovereignty of the German Federal Ministry of Education and Research (BMBF)

Prof. Clemens Fuest Member of the Advisory Board to the German Federal Ministry of Finance (BMF) and member of the Presidium of the Bavarian Economic Advisory Committee

Prof. Andreas Peichl Member of the Scientific Advisory Council at the BMF

Prof. Karen Pittel Co-Chair of the German Advisory Council on Global Change and member of the Bavarian Climate Council

Prof. Panu Poutvaara, PhD Member of the Expert Council of German Foundations on Integration and Migration

Prof. Marcel Thum Member of the Advisory Board to the BMF

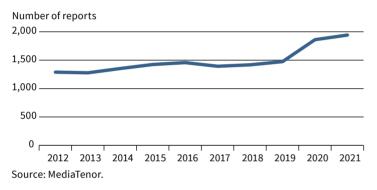
Prof. Ludger Wößmann Member of the Board of Academic Advisors for the German Federal Ministry for Economic Affairs and Climate Action (BMWK)

The ifo Institute in the Public Debate

According to analyses the ifo Institute commissioned from MediaTenor, the Institute successfully defended its position as the most frequently cited institute in 2021 and even strengthened its media presence.

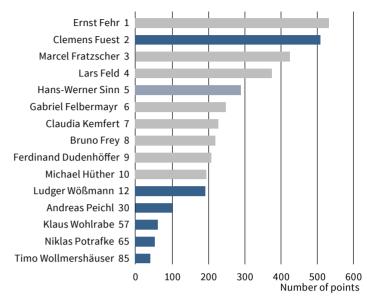
ifo Expands Its Leading Position among Economic Research Institutions

The ifo Institute's presence in selected media increased once again year over year. This is due to a broader range of voices and topics.



ifo Economists Are Influential

According to the latest FAZ ranking, ifo President Clemens Fuest remains one of Germany's most influential economists.

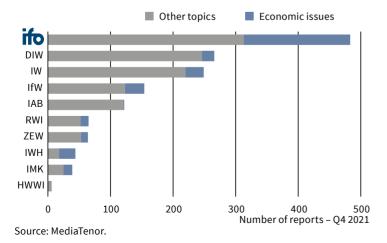


Source: FAZ Economist Ranking. Overall Ranking (Media, Politics, Social Media, Science)
Evaluation period: September 2020 to August 2021.

© ifo Institute

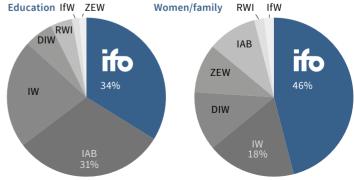
ifo Institute Dominates Public Debate on Economic Issues

The Business Surveys about working from home, material shortages, and the use of short-time work are key information sources, as are the Economic Forecasts.



ifo Positions Itself on the Topic of Women and Family

Through its publications in 2021, the ifo Institute raised its profile on the topics of education as well as women and family. In several studies, ifo researchers called for greater equality of opportunity between men and women, especially through enabling a better work-life balance.



Mentions of the Institute in the media on these topics. Source: MediaTenor.

Most Downloaded Schnelldienst Articles of 2021

2,737

Ludger Wößmann, Vera Freundl, Elisabeth Grewenig, Philipp Lergetporer, Katharina Werner, and Larissa Zierow: "How Did Schoolchildren Spend the School Closures of Early 2021?" in *ifo Schnelldienst* 5/2021 1,255

Jean-Victor Alipour, Oliver Falck, Andreas Peichl, and Stefan Sauer: "Remote-Working Potential Still Not Fully Exploited" in *ifo Schnelldienst digital* 6/2021

1,343

Mathias Dolls, Clemens Fuest, Florian Neumeier, and Daniel Stöhlker: "How Has the Berlin Real Estate Market Developed?" in *ifo Schnelldienst* 3/2021

Events

IFO ANNUAL MEETING

At the ifo Annual Meeting 2021, **Oliver Zipse**, Charman of the Board of Management of BMW, and **Armin Nassehi**, Professor of Sociology at LMU Munich, were joined by Lisandra Flach and Clemens Fuest to discuss "Economic Policy Challenges in the Post-Merkel Era."





Prof. Clemens Fuest, Oliver Zipse, and Prof. Armin Nassehi (right) at the Annual Meeting

MUNICH ECONOMIC DEBATES

Umbrella topics for the 2021 Munich Economic Debates were "The New World (Dis)Order – How Business and Politics Can Build a New Normal after the Pandemic" and "Germany's Economic Policy Challenges in the Post-Merkel Era."













The pandemic affects women in a very particular way. Some of the existing structural differences in the working environments of men and women are becoming much more apparent. As part of the Munich Economic Debates, Janina Kugel (Boston Consulting Group), Prof. Monika Schnitzer (LMU Munich), and Prof. Michèle Tertilt (University of Mannheim) discussed how the coronavirus crisis is changing women's working environment.

Is the pandemic accelerating social inequality and reinforcing the divide between rich and poor? As part of the Munich Economic Debates, **Thomas Piketty**, Professor at the École des Hautes Études en Sciences Sociales in Paris, discussed his ideas about how our society could achieve fairer distribution overall in the future.

THE IFO INSTITUTE AT A GLANCE

ifo Institute – Leibniz Institute for Economic Research at the University of Munich

1949

Founded in Munich Member of the Leibniz Association

Since 2002

Status as "Institute at the University of Munich"

Committees

Annual Meeting, Administrative Council, Board of Trustees, Scientific Advisory Council, User Advisory Council



www.ifo.de/en/about-ifo

"Shaping the economic debate." In keeping with this motto, the ifo Institute shapes the debate on economic and economic policy issues with its activities. As one of the leading economic research institutes in Europe. ifo economists work on economically and politically relevant issues at the highest scientific level, developing research-based recommendations for action by government, business, and society in Germany, Europe, and around the world. They systematically collect data over long periods of time and provide input for political and public debates. This exchange, in turn, gives rise to new research tasks. In this way, ifo plays an important role in the development of appropriate economic policy decisions as a basis for innovation and social development.

PARTNERS AND NETWORKS

The ifo Institute cooperates closely with Ludwig-Maximilians-Universität (LMU) in Munich, especially in the promotion of junior researchers and through the joint Economics and Business Data Center (EBDC). In addition, each ifo Center Director is part of the LMU and holds a chair at the Department of Economics.

CESifo, the second largest economics research network worldwide, also has a close relationship with the ifo Institute. CESifo organizes numerous conferences, workshops, and seminars for economists worldwide. Such events enable scientific exchange among the members of the CESifo research network, while offering ifo economists an opportunity to establish contacts and discuss their scientific work with other network members.

OTHER COLLABORATIONS

- → CIRET (Centre for International Research on Economic Tendency Surveys) and EUROCONSTRUCT
- → 52 research professors and ten research affiliates, research associates, and senior research associates
- → Despite travel and other restrictions due to the pandemic, nine guest researchers from all over the world came to Munich to work on joint projects with ifo economists in 2021.
- → The European Economic Advisory Group (EEAG) researches key European policy areas. Its goal is to furnish decision-makers and the public with research-based insights.
- → EconPol Europe the European Network for Economic and Fiscal Policy Research is a network of 14 policy-oriented university and non-university institutions across twelve countries. They contribute scientific expertise to the discussion on the future of the European Union.



www.econpol.eu/

www.cesifo.org/en/eeag

RESEARCH

The ifo Institute's economic policy model is the social market economy, i.e., the combination of economic success with social balance as championed by Ludwig Erhard, who was one of ifo's founders. The ifo Institute analyzes the role of government action with the aim of maintaining economic prosperity and social cohesion over the long term. Government action should secure prosperity, support the stability and sustainability of economic development, safeguard social security, and ensure that as many people as possible can take advantage of the opportunities available to them in a free and open society. ifo economists apply the Leibniz Association's "Rules of Good Scientific Practice" to their work.

The five main research topics at the ifo Institute

- Economic growth and sustainability
- 2 Equal opportunities and integration
- 3 Public tasks, taxation, and political economy
- Digitalization of the economy
- **5** European integration, globalization, and the "the third type of intersystem competition"

The eight ifo Centers

- Labor Market and
 Demographic Economics
- 2 International Economics
- 3 Economics of Education
- 4 Energy, Climate, and Resources
- **5** Industrial Organization and New Technologies
- 6 International Institutional Comparisons and Migration Research
- Macroeconomics and Surveys
- 8 Public Finance and Political Economy

In addition, specific topics are dealt with in the ifo Dresden Branch and the Research Group Tax and Fiscal Policy.

Five Fields of Action

PROMOTION OF JUNIOR ECONOMISTS

At any given time, there are usually more than 40 doctoral students conducting research at the ifo Institute. The Institute offers scientists an ideal environment for top performance in research and policy advising and bases its work with junior economists on international standards. Most of these doctoral students are studying at LMU's Munich Graduate School of Economics (MGSE). With this dual connection to University and Institute, the junior economists can combine academic research with practical work in policy advising right from the start. The ifo Institute is fully dedicated to systematically recruiting more women at all hierarchical levels.



European Charter for Researchers (EURAXESS) www.ifo.de/en/euraxess

Code of Conduct for Recruitment https://euraxess.ec.europa.eu/jobs/charter/code



Research

INFORMATION & SERVICES

Any organization interested in economic issues can use data, information, and other services provided by the ifo Institute. Its best-known offering is the ifo Business Climate Index, which is published each month. Based on the ifo Business Surveys, the Index is an early indicator of economic development in Germany that has been respected worldwide for decades. DICE (Database for Institutional Comparisons in Europe) has also significantly expanded and enriched the range of services provided by the ifo Institute to the scientific community. The database was established in 1999 and overhauled in 2019, both technically and in terms of content.

CONTRIBUTION TO THE PUBLIC DEBATE

The ifo Institute expertly prepares its research results for a wide variety of target groups. Its website serves as a central communication tool, and offers all information in German and English. The ifo Institute communicates with its target groups through various other channels: active PR work, digital formats such as social media or e-newsletters, and events and publications as a platform for expert exchange. Two of the Institute's key publications are *ifo Schnelldienst* and *CESifo Forum*.

POLICY ADVICE

The ifo Institute produces a large number of expert reports for public and private, national and international clients on current economic policy issues. In addition, ifo economists contribute their expertise to a wide range of committees and advisory boards.

PERSONNEL DEVELOPMENT AND JUNIOR ECONOMISTS

Diversity at the ifo Institute

KEY TOPIC: GENDER BALANCE

The ifo Institute wants to enhance its appeal to female academics even further. Women are still underrepresented among postdocs; the aim is to increase the current proportion of 31 percent to 50 percent by 2025. To attract these highly sought after top women researchers, the Institute launched the Gender Balance and Diversity task force in summer 2021. In addition to a member of the ifo Executive Board and the head of Human Resources and Law, the task force is made up of the Equal Opportunity Officer, and representatives of the departments, postdocs, and doctoral students.

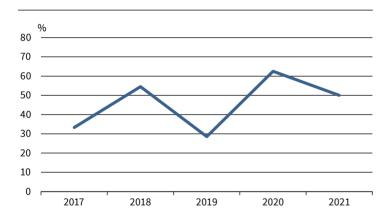




TWO WOMEN FOR THE SCIENTIFIC ADVISORY COUNCIL

Following the scheduled departure of its Chair, Anthony Venables, the Advisory Council of the ifo Institute has a new Chair: Prof. A. Abigail Payne of the University of Melbourne. In November 2021, a new member was appointed: Prof. Beata Javorcik, University of Oxford, currently EBRD Chief Economist, who will serve an initial term in office of four years. Women currently make up one-third of the Scientific Advisory Council.

Proportion of Women among All Completed Doctorates 2017–2021



16

female academic employees of non-German nationality worked at the ifo Institute in 2021.

50

doctoral students were working at ifo at the end of 2021, of which 25 were women.



ifo mourns the loss of

Heinrich Ursprung

On August 17, 2021, Heinrich W. Ursprung, Professor Emeritus of the University of Konstanz and a close collaborator of the ifo Institute and CESifo, passed away. He acted as ombudsperson for good scientific practice and previously belonged for many years to ifo's Administrative Council and Advisory Council.

From Working from Home to "Mobile Working"

The ifo Institute is always working to enhance itself as an employer and as a state-of-the-art organization. It is therefore fully committed to offering its employees the best possible work-life balance. It became clear that the old rules about working from home were no longer in line with this aspiration. In addition, positive experiences with digital communication tools during the pandemic had shown just how flexible arrangements can be when push comes to shove. At the same time, it was also clear that we wanted to come together again at the Institute to exchange ideas and collaborate on new projects after the pandemic is over. It was now a matter of laying the foundation for these con-



ifo President Prof. Clemens Fuest and Chairman of the Works Council Markus Siebler sign the new agreement.

ditions and striking the right balance between working onsite and working remotely. A new Works Council agreement was developed over several months. Employees now have much more freedom as to when and where they work. And we hope that the ifo Institute has become a more attractive place to work to applicants from Germany and abroad. The new rules came into effect in November, but had to be temporarily suspended due to more far-reaching pandemic measures.

Number of Employees at Year-End, 2020 and 2021

| | TOTAL EMPLOYEES | | WOMEN | |
|--|------------------------------------|-------|----------------------|------|
| Research and Services | 2021 | 2020 | 2021 | 2020 |
| Postdocs / expert speakers | 55 | 57 | 20 | 20 |
| Doctoral students ¹ | 50 | 50 | 25 | 25 |
| Specialists | 26 | 23 | 16 | 15 |
| Technical staff / assistants | 20 | 21 | 19 | 20 |
| Infrastructure | | | | |
| Non-scientific employees | 63 | 62 | 42 | 41 |
| of which staff with management responsibilities ² | 17 | 16 | 10 | 9 |
| Trainees | 3 | 1 | 0 | 1 |
| TOTAL | 217 | 214 | 122 | 122 |
| | PART-TIME STAFF | | FIXED-TERM CONTRACTS | |
| Research and Services | 2021 | 2020 | 2021 | 2020 |
| Postdocs / expert speakers | 17 | 15 | 28 | 32 |
| Doctoral students ¹ | 46 | 45 | 50 | 50 |
| Specialists | 8 | 7 | 4 | 4 |
| Technical staff / assistants | 12 | 12 | 0 | 0 |
| Infrastructure | | | | |
| Non-scientific employees | 28 | 28 | 3 | 3 |
| of which staff with management responsibilities ² | 7 | 7 | 1 | 1 |
| Trainees | 0 | 0 | 3 | 1 |
| TOTAL | 111 | 107 | 88 | 90 |
| | POSTDOCS/HABILITATIONS, PROFESSORS | | WOMEN | |
| | 2021 | 2020 | 2021 | 2020 |
| Postdocs / expert speakers | 48/19 | 50/17 | 13/2 | 13/2 |



¹ Excluding guest doctoral students ² Non-scientific staff compensated according to TV-L E13 and upwards.

FINANCIAL DEVELOPMENT

Financial Statement for 2021

The Institute's financial statement for 2021 shows a surplus of EUR 123,000. This increased the Institute's assets to a total of EUR 3,059,000 as of December 31, 2021. To further expand the digitalization of internal processes,

key investments were made and first-year licenses for new software were financed. In addition, the ifo Institute has begun extensive conversion and renovation work at its Munich location.

Balance Sheet of the ifo Institute for 2021 (summary)

In EUR thousands

| ASSETS | Dec. 31, 2021 | Dec. 31, 2020 |
|--|---------------|---------------|
| Fixed assets | 73 | 73 |
| Current assets | | |
| Inventory | 546 | 1.865 |
| Receivables, accruals, and deferred income | 1,189 | 1,050 |
| Liquid funds | 7,383 | 9,494 |
| TOTAL ASSETS | 9,191 | 12,482 |

| LIABILITIES | Dec. 31, 202 | Dec. 31, 2020 |
|-----------------------------|--------------|---------------|
| Net worth | | |
| Earmarked funds | 861 | 850 |
| withdrawals/ | 0 | 0 |
| additions | 10 | 11 |
| Research reserves | 2,198 | 2,086 |
| withdrawals/ | 0 | 0 |
| additions | 112 | 231 |
| Short-term debt | | |
| Reserves | 3,976 | 3,794 |
| Liabilities vis-à-vis banks | 0 | 0 |
| Down payments received | 1,515 | 3,515 |
| Other liabilities | 641 | 2,237 |
| TOTAL LIABILITIES | 9,191 | 12,482 |

Income From Contract Activities¹

2020 2021

€7,011,000 €7,259,000

¹Earmarked financial support, income from publications and database services, income from contract studies (contract-based research), change in stock of non-invoiced services, and other revenue.

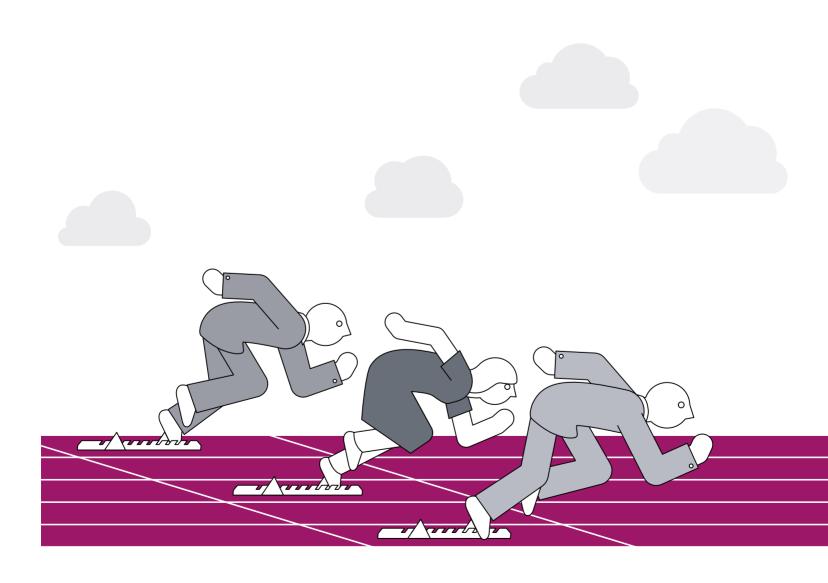
Profit and Loss Statement of the ifo Institute for 2021

In EUR thousands

| | Dec. 31, 2021 | Dec. 31, 2020 |
|--|---------------|---------------|
| Public grants | 11,647 | 11,829 |
| Earmarked financial support | 3,174 | 2,812 |
| Obligatory membership fees | 109 | 112 |
| Voluntary membership fees | 10 | 11 |
| Income from publications and data bank services, conferences | 282 | 294 |
| Income from contract studies | 5,008 | 3,281 |
| Other revenue | 104 | 122 |
| Change in stocks of non-invoiced services | - 1,309 | 502 |
| Operating income | 19,025 | 18,963 |
| Expenditure for material and purchased services | 1,839 | 1,753 |
| Personnel expenditure | 13,961 | 14,123 |
| Regular depreciation | 0 | 3 |
| Unplanned depreciation | 231 | 231 |
| Other operating expenses minus income | 2,906 | 2,571 |
| Operating expenses | 18,937 | 18,681 |
| Operating profit | 88 | 282 |
| Financial profit | - 22 | - 17 |
| Taxes on income and profit | 43 | - 26 |
| Neutral income and income unrelated to the accounting period | 14 | 3 |
| Annual profit | 123 | 242 |
| Withdrawals from research reserves | 0 | 0 |
| Additions to research reserves | 112 | 231 |
| Withdrawals from statutory reserves | 0 | 0 |
| Additions to statutory reserves | 11 | 11 |
| Profit brought forward | 0 | 0 |

The 2021 Election Year-New Start Marked by Major Challenges

ifo Institute Proposals for the New Legislative Period



longside the pandemic, the main topic of 2021 was Germany's federal election in September. After 16 years under Angela Merkel's government, the signs point to a new start. Conspicuously lacking in content, the campaign race sidestepped many current challenges altogether. Now that the new government is in place, it must attend to some urgent issues: What effects is demographic change having on the labor market, and how should we manage them? What are the structural implications of digitalization, and how should we respond? How can Germany dovetail its climate policy with growth and social balance? How is the growing influence of China and other Asian countries shifting trade flows, and how should Germany and Europe position themselves?

Germany's new government must find bold, innovative ways of answering these questions. This task is not made any easier by the fact that the coronavirus pandemic has demanded so much attention and tied up so many financial resources over the past two years. Germany had to take on considerable debt to cushion the economic consequences of the pandemic. As a result, the financial scope for new government spending is narrow:

an election marks a key turning point, especially when it becomes clear that a new administration will take office. It is crucial that such a fresh start be carefully prepared. Complex economic and policy challenges need to be tackled with targeted measures. The new coalition's economic and fiscal policies must stabilize the fragile economy from the effects of the coronavirus crisis and initiate economic growth.

Last year, ifo experts used their own scientific findings to develop an economic policy agenda for the new legislative period. This agenda is linked to the fundamental and long-term goals of the social market economy – securing prosperity, equality of opportunity and inclusion, sustainability, and economic stability. The Institute drew up proposals, in particular for tax and fiscal policy, but also for "uncharted territory" – in other words, topics such as policy on international economics and on education, which were sidestepped during the campaign.



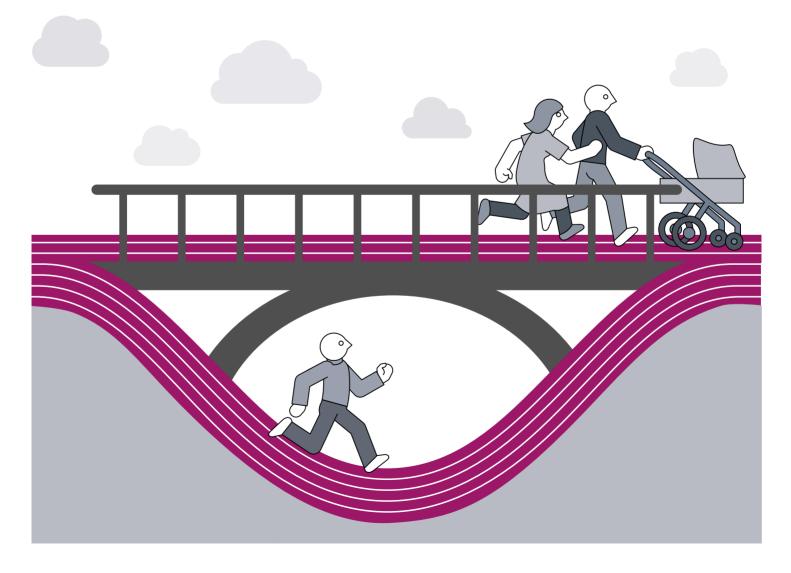
fter many years of "black zero" and falling public debt, the coronavirus pandemic has swollen Germany's debt to a new record level. Since future fiscal and tax policy is a key topic for the new governing coalition, the ifo Institute drafted particularly detailed concepts in this area. Researchers explored how various tax policy measures affect economic development – from income tax to tax incentives for innovation and investment to reforming international corporate taxation. They also examined the effects that the reforms proposed in the election platforms would have on tax revenue, employment, and income distribution among the population. This involved developing a separate reform proposal for income tax and the transfer system that distributes burdens fairly and removes

tax barriers that act as disincentives to participation in the labor market. Better incentives ought to ensure that as many people as possible can be in gainful employment, and that the public and private sectors make sensible investments

SMART INVESTMENTS INSTEAD OF NET WEALTH TAX

One topic that was discussed extensively in the lead-up to Germany's federal election was the demand for more redistribution through a net wealth tax. Advocates justify their position by citing the fiscal burdens of the coronavirus crisis: they demand that winners in the crisis play their part in alleviating these burdens. In an article for The Foundation

Creating a Growth-Friendly Tax and Financial System



for Family Businesses, ifo President Clemens Fuest stated that taxpayers who made no losses or made a profit during the crisis are already doing their fair share through their corporate income tax contributions. For companies operating under low profitability and high competitive pressure, net wealth tax is almost akin to doubling corporate income tax. Fuest thus fears this would have negative effects on investment, growth, and employment.

The ifo Institute therefore believes that it would be wiser for policymakers to focus on measures that promote both inclusion and growth. The priorities are investment in education, start-up assistance, the promotion of property formation among people with low incomes – for example through hire-purchase models – and an effective competition policy. Monopolies and cartels damage economic growth and exacerbate inequality.

KEEP THE DEBT BRAKE

In their article "Taxation and Fiscal Policy: Positioning for Growth," Clemens Fuest and Niklas Potrafke, Director of the ifo Center for Public Finance and Political Economy, voiced their opposition to raising taxes and recommended closely examining government final consumption expenditure and subsidies. The authors described how the debt ceiling should not be abolished; it offers plenty of leeway for public investment. Rather, it should remain suspended, but only until the economy has recovered from the coronavirus cri-

sis. In the future, unexpected fiscal policy challenges will arise from time to time: "In those years not marked by any exceptional emergency, balanced budgets must prevail," Potrafke writes.

FUNDING RESEARCH VIA THE TAX SYSTEM

In corporate taxation, accelerated depreciation and better opportunities for offsetting losses could provide incentives to set up new production facilities and establish innovative companies in Germany. However, while the accelerated tax depreciation (super depreciation) planned by Germany's traffic light coalition is an effective instrument for promoting investment, it should not be limited to investment in climate action and digitalization measures, as proposed. In a joint study, a team of authors led by Clemens Fuest proposes the broad use of depreciation, since limiting it to a given series of measures or to certain sectors hampers innovation. There is also a particular need to support companies whose equity base has been weakened as a result of the coronavirus crisis.

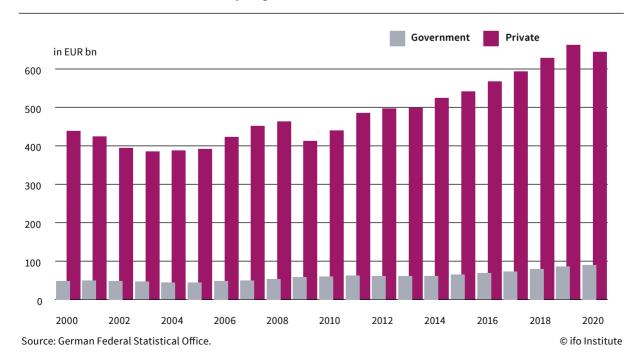
Research funding via the tax system has a positive effect on investment in innovation projects, according to a metastudy by the ifo Center for Industrial Organization and New Technologies. It summarized findings on quantitative evaluation studies in Europe, Japan, Canada, China, Australia, and the United States. "Germany has been operating this type of funding since 2020. Because it generates much less



www.ifo.de/en/jb21/ investitionen

www.ifo.de/en/jb21/ steuerpolitik

Private Investments Are Particularly Important for Growth



Reforms proposed by the ifo Institute envision focusing more on children when it comes to tax benefits for marriage and family.

Key components of the reforms are:

- Reforming family taxation to include high child allowances
- Switching from tax splitting for married couples to real splitting
- Adapting the transfer payments reduction to eliminate the low-income trap
- Completely abolishing the solidarity surcharge
- Marginally increasing the top income- and wealth-tax rates
- Raising the basic tax-free allowance and the lump sums

bureaucracy, it is of particular benefit to small and medium-sized enterprises," explained Oliver Falck, the Center's Director.

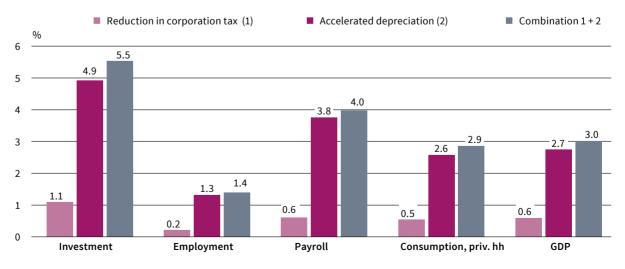
REMOVING BARRIERS TO EMPLOYMENT

Prosperity for as many people as possible helps ensure social cohesion. So it makes sense to support economic recovery while also paving the way for new economic growth. It is therefore necessary to remove barriers to employment in the tax and transfer system. This is particularly important for people who do not earn much: for them, the unfavorable interaction of Hartz IV rules and other transfers ensures that working any more than a part-time job is often not worthwhile.

The current tax conditions also do not provide optimum support for second earners – who are mostly women – to participate in the labor force. In July, Helmut Rainer, Director of the ifo Center for Labor and Demographic Economics, and Andreas Peichl, Director of the ifo Center for Macroeconomics and Surveys, put forward proposals for expanding women's labor force participation. The authors describe this as a necessary step toward stabilizing the social security systems when the baby boomers retire. Reform for minijobs, a change in the taxation of spouses to real splitting, and a further expansion of childcare would increase employment, especially among women. A study conducted by the ifo Institute in October on behalf of the Bertelsmann

Effects of Tax Cuts and Accelerated Depreciation Similar to Those of Investments

Combining tax cuts and accelerated depreciation has a measurable effect on economic growth



Source: Calculations by the ifo Institute using the CGE model.

© ifo Institute

Foundation found that implementing these measures could provide relief to the bottom 40 percent of earners. At the same time, these reforms would impose only a moderate burden on higher income groups and result in no additional costs for the government budget overall. Maintaining regular contribution rates would allow for tax cuts. The calculations supplement the broader tax policy reform proposal published by the ifo Institute: a more comprehensive reform of the tax and welfare system would lead to an even higher increase of up to 400,000 full-time jobs.

report on behalf of the Bündnis 90/Die Grünen parliamentary group found that the basic child allowance as envisioned by the Green Party could reduce the risk of poverty for families with children and provide significant relief for low- and middle-income earners. This reform is expected to cost EUR 27–33 billion, with parents working less. When the SPD, the Greens, and the FDP signed their coalition agreement on November 24, they reached a consensus to introduce the basic child allowance.



www.ifo.de/en/jb21/ ehegattensplitting

www.ifo.de/en/jb21/ kindergrundsicherung

INTRODUCING BASIC CHILD ALLOWANCE

Improving the situation for families and making it easier for people to receive benefits is also the aim of basic child allowance: this measure was already discussed during the new government's coalition negotiations in October. An ifo

"A combined reform of mini-jobs and marital splitting would reduce gender inequality on the labor market by removing disincentives for women to work."

Prof. Helmut Rainer Director of the ifo Center for Labor and Demographic Economics



Rethinking Climate Policy

nother factor that framed the debate in 2021 was climate change: In April, Germany's Federal Constitutional Court awarded climate action quasi constitutional status. In June, the Bundestag passed a reform of the German Climate Change Act, adding even more ambitious climate targets. Many industry representatives were up in arms because it was often unclear how the targets described in the Act were to be achieved. None of the election platforms provided satisfactory answers. In July, hundred-year floods devastated large parts of Germany and Europe. These floods once again gave climate action a tragic currency, focusing more attention on the question of what policymakers can do to help adapt to climate change.

For instance, compulsory insurance against flood damage can help or even hurt depending on its provisions – as ifo President Clemens Fuest and ifo Dresden Director Marcel Thum wrote in a guest article in Handelsblatt.

OVERCOMING REMAINING CHALLENGES

In July, Karen Pittel, Director of the ifo Center for Energy, Climate, and Resources, provided her input to the "Ten ifo Institute Proposals for the Coming Legislative Period." She predicts that even given a rapid rollout of the necessary encompassing climate policy measures would be faced with bottlenecks in almost all areas. She emphazises that emission reductions and eventually reaching climate neutrality



www.ifo.de/en/jb21/ co2-price

www.ifo.de/en/jb21/ green-monetary-policy1

www.ifo.de/en/jb21/ green-monetary-policy2 requires fundamental shifts in technologies. At the same time, climate policy has not been sending clear signals that would offer a foundation for making such investments. She adds that in the transport sector, decarbonization is yet to make any headway at all, and the available time window is getting smaller all the time. At the same time, in the building sector refurbishments have not always been carried out with a view to achieving long-term climate targets. An additional complicating factor is that the sectoral targets in the Climate Protection Act increase the risk of a short-term focused, inefficient climate policy. Pittel argues that, considering the sheer number of challenges, the coming legislative period will be dominated by climate and energy issues, and federal policymakers will spend even more time on them than before. She sees a chance to make improvements here, provided the new legislative period yields a further reform of the law.

PUT THE CARBON PRICE AT THE HEART OF ALL MEASURES

Instead of emission reductions and blanket prohibitions and requirements, ifo President Clemens Fuest believes that the carbon price should be the pivotal point of any climate policy measure. He argues that many politicians rely too much on rigid sectoral targets and blanket prohibitions and requirements that make climate action unnecessarily expensive. Fuest cites the examples of banning combustion engines and the obligation to install solar cells on every roof, even if the house is in the shade. It would be better to give priority to the carbon price and the Europe-wide system of trading emission rights, and to ensure progress on important investments in the development of infrastructure such as electric-vehicle charging points and railway lines.

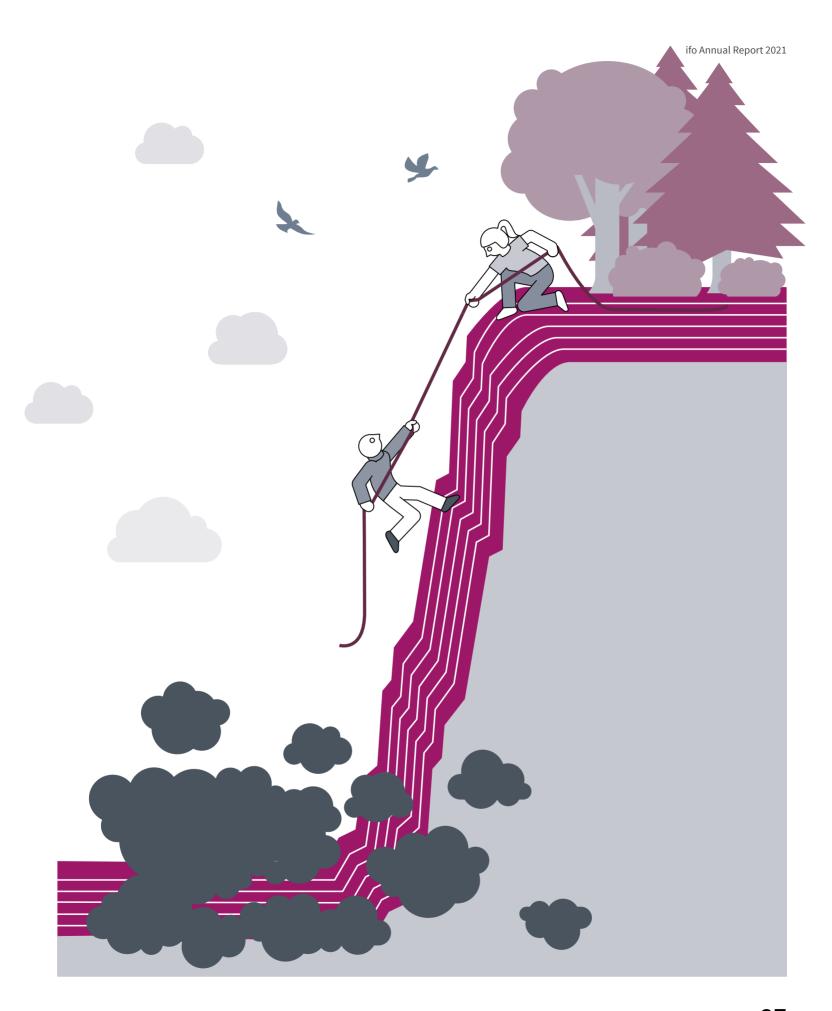
GREEN MONETARY POLICY FROM THE CENTRAL BANKS

In spring 2021, there was a public debate over whether central banks such as the European Central Bank (ECB) or the Deutsche Bundesbank should add the pursuit of climate policy targets to their traditional mandate. In July, the ECB published an action plan for taking climate issues into account.

ifo researchers Celine Li and Marie-Theres von Schickfus analyzed what would motivate central banks to get involved in climate action. According to the authors, central banks concerned themselves mainly with price stability and the resilience of the financial system. They assert that what motivates such institutions to tackle climate change is the fact that climate risks are endangering this very financial stability. This is because floods, droughts, storms, and also longterm changes such as the rising sea level can cause harm to all involved (private individuals, countries, insurers, and companies). Such harm might manifest itself in resource scarcity or interruptions to supply chains. In the public debate, opinion was ultimately split over whether central banks like the ECB should take a stand on climate action. ifo President Clemens Fuest expressed his views on the subject in an ifo Viewpoint, together with Hans Peter Grüner (University of Mannheim) and Volker Wieland (University of Frankfurt). The three economic experts made their position clear: by pursuing so-called green monetary policy, the ECB is failing to take the limits of its mandate seriously and undermining its independence in the long run.

"Germany's new federal government must respond to the EU's new climate policy. If the new EU Emissions Trading System comes into force, the national carbon price should be abolished or at least fundamentally reformed."

Prof. Karen Pittel, Director of the ifo Center for Energy, Climate, and Resources



ince the beginning of the coronavirus crisis, the ifo Center for the Economics of Education has been conducting in-depth research into how the pandemic and the coronavirus measures are affecting children and young people. "For the children and young people affected, 2020 must not be allowed to go down in education history as the lost year," warned the Center's Director Ludger Wößmann two years ago. But 2021 was no better, starting with nationwide school closures that persisted well into the spring. And although politicians of various parties reiterated again and again that the top priority during the crisis must be the welfare and education of children and young people. when Wößmann presented the ifo Education Survey 2021, he concluded the that adults rated coronavirus schools policy negatively overall. It failed, for instance, to universally establish effective concepts for distance learning. Wößmann sees the challenge facing now education policy to be drafting suitable concepts to counteract losses in study time caused by any future school closures. Moreover, effective support measures must be put in place to mitigate educational losses.

EDUCATION SYSTEM MUST BECOME MORE DIGITAL

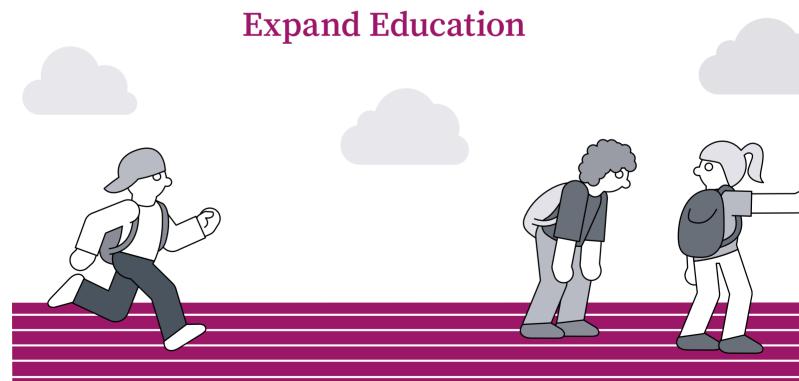
The ifo Education Survey revealed which education policy measures the participants favored to overcome the current challenges.

An overview of the results:

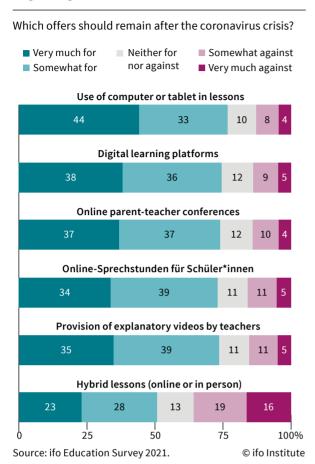
- 74% of respondents are in favor of compulsory online classes in the event of school closures to mitigate coronavirus-related learning deficits.
- 83% are in favor of children from difficult social backgrounds receiving increased support.
- 77% are in favor of making the use of computers mandatory in school lessons even after the pandemic is over.
- Over 75% are in favor of teaching democratic, scientific, and economic skills at secondary schools.
- Large majorities are in favor of national education standards, regular comparison tests, as well as compulsory training for teachers.

Based on the findings of the Education Survey, the ifo Institute urged Germany's new government to invest in a digital transformation of the education system. At the same time, the educational opportunities of disadvantaged children must be promoted through early-childhood, in-school, and out-of-school support. Nationwide intermediate and final examinations, as well as structural and operational reforms,

Exploit Potential:



Lag in Digital Formats in Schools



could help to deploy resources in the education system more effectively. Funding for universities should be augmented by deferred tuition fees and the range of clearly certified education options must be expanded.

In view of demographic change, Germany will face an increasing shortage of skilled workers in the coming years. Qualifying its own citizens won't be enough for Germany to solve this problem. The coronavirus pandemic tightens the bottleneck even further as it has led to a drop in international applications. Panu Poutvaara, Director of the ifo Center for International Institutional Comparisons and Migration Research, examined how Germany's Immigration of Skilled Workers Act is promoting immigration for these urgently needed people. In an article in ifo Schnelldienst, he demonstrates that while the Immigration of Skilled Workers Act has brought about progress, further improvements would be required during the new legislative period. These include optimizing the visa process and appointment scheduling and expanding employment opportunities for immigrants while they seek work in their field.



www.ifo.de/en/jb21/ educationsurvey2021

www.ifo.de/en/jb21/ fachkraefte

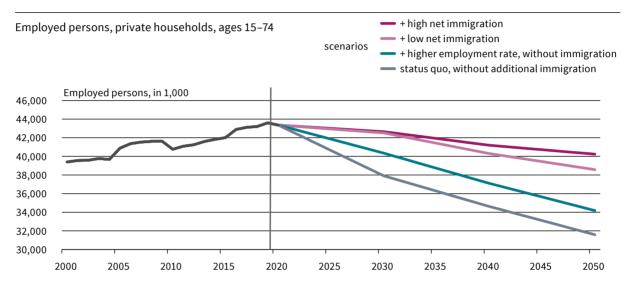




www.ifo.de/en/jb21/ sozialsystem It's also time Germany got its pension system in shape to cope with demographic change. But the equity pension scheme proposed by the new coalition can be only one of many components. In a study, Joachim Ragnitz, Felix Rösel, and Marcel Thum stated that to make financing the pension system sustainable in the long term, there is no way around raising the standard retirement age in Germany. The in-

crease in the standard retirement age should be rule-based – linked to life expectancy or to years of life with good health. And a higher standard retirement age should be accompanied by social measures to ensure that people who are in poorer health or in occupations that are particularly physically demanding receive a fair share of pension benefits

How Immigration Could Stabilize the Labor Market



Note: Low or high immigration: Average of 133,000 and 311,000 respectively per year / continuous increase in labor force participation rate according to the cohort principle.

Source: Eurostat, German Federal Statistical Office scenarios; independent calculations by the ifo Institute. © ifo Institute



t the European and international level, Germany should counter increasing protectionism. And although German companies are greatly affected by material shortages as a result of the coronavirus crisis, the most effective solution is not to reshore production, but rather to amend trade agreements – because it's these that make global supply chains more robust. Any crisis reveals a system's weak spots and tests its resilience. The Covid-19 pandemic has fundamentally compromised global trade flows, supply chains, and sustainable economic growth.

Shortages caused by the coronavirus crisis were a key issue at companies throughout the year. In an analysis, researchers from the ifo Center for International Economics showed that supply chain disruptions during the pandemic are closely linked to the container shipping market: around 80 percent of EU exports to non-EU member states are transported by ship. Following the incident in the Suez Canal in March 2021, supply difficulties reached an interim high in Germany. In September, when the ifo Business Cli-

mate fell to 98.8 points (down from 99.6 points in August), hold-ups worsened further, threatening the recovery that was beginning in manufacturing. For the first time, ifo President Clemens Fuest spoke of a "bottleneck recession," in which companies had plenty of orders, but couldn't process them because they were unable to source the requisite intermediate products.

In the ifo Business Survey for December, 81.9 percent of manufacturing companies reported supply problems concerning intermediate products. Consumers braced themselves for problems procuring many everyday products. In trade, 81,6 percent of businesses reported supply bottlenecks in December.

"German manufacturing faces a paradox. Order books are full, but the shortage of materials means companies can't ramp up production accordingly" said Klaus Wohlrabe, Head of Surveys at ifo. According to ifo surveys, companies were expecting the shortages to persist well into the new year. This is also true in retail: on average, companies in the sector expect the shortages to lastanother ten months.



www.ifo.de/en/jb21/ lieferketten1

www.ifo.de/en/jb21/ lieferketten2

For Robust Supply Chains: Avoid Bottlenecks



GLOBAL MARKETS MUST REMAIN OPEN

Since reshoring production would have enormously negative consequences for the German economy, it would be the wrong course of action. "The German economy benefits more than almost any other from open global markets and is highly integrated into international value chains," said Lisandra Flach, Director of the ifo Center for International Economics. She called for clear, reliable conditions for companies, and for direct state intervention to generally be reserved for exceptional cases. Instead, the Center's international economics experts recommend that the new

government strengthen and consolidate the single market – especially when it comes to cross-border services. Flach points out that the integration of a European digital market plays a key role here, for instance with consistent data protection standards. Policymakers should establish bilateral trade agreements with a view to reducing the costs associated with transferring goods and services. In addition, Flach says they should continue to focus on strengthening multilateral, rules-based trading systems, such as that of the WTO.

Driving the Digitalization of the Economy and Administration Forward

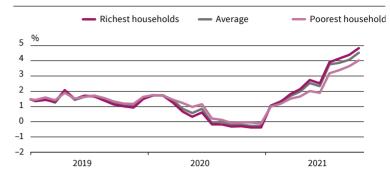
hen it comes to the digital transformation of the economy and society, there's still plenty to do—whether by expanding the digital infrastructure or digitalizing public administration. Digitalization may have taken a giant leap forward when the coronavirus crisis took hold in 2020, but the shortcomings in its technical implementation were also plain to see. Oliver Falck, Director

of the ifo Center for Industrial Organization and New Technologies, called upon policymakers to drive digitalization forward, especially in schools, healthcare, and public administration. In July 2021, a change in the E-Government Act provided access to data from the public sector. Falck believes that Germany is still a long way from making systematic use of public sector data. Because he



recognizes the vast growth potential that digitalization holds for the systematic use of data in generating new business models, Falck called for public debate on the issue: How far should data protection go, factoring in the consequences for lost growth and prosperity? And what would a growth-friendly data protection regime look like? Answers to these questions were also outlined by an ifo project team on behalf of the Chamber of Industry and Commerce for Munich and Upper Bavaria. The researchers identified Germany's low, declining enterprise birth rate as the key weakness in the country's digital transformation and innovation - especially because this is slowing the adoption of digital business models and technologies in business and society. To ensure that Germany continues to be a leading innovation country, the new government must urgently set the necessary framework for a successful digital transformation, the project team urged.

Inflation Rate by Private Household Income Groups



Note: Poorest households: monthly net income below EUR 1,300; richest households: monthly net income over EUR 5,000.

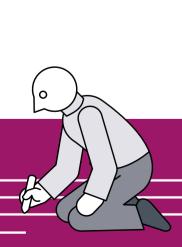
Source: German Federal Statistical Office. © ifo Institute

INFLATION - SHORT-TERM EFFECT OR LONG-TERM TREND?

By the end of 2021, the inflation rate in Germany was higher than it had been since the oil crisis. In September, economic expert Timo Wollmershäuser said that the accelerated price increases in 2021 can in part be explained by excessively low prices in 2020 – especially for energy, food, and services. That is why most forecasts predict that the high rate of inflation will drop significantly in 2022. Whether this trend stabilizes hinges on such factors as how wage settlements pan out in 2022.

WHO IS MOST AFFECTED?

Price increases could lead to distributional effects, because lower income groups suffer most from rising food and energy prices. In November, an ifo study showed that such distributional effects do not stem from different cost of living increases for individual income groups. Instead, the price of a basket of goods for poorer households has been going up much more gently than for richer households since mid-2021 at the latest.





TIMELINE FOR 2021

Germany's federal election in the fall was framed by discussions about the economic policy' agenda for the coming years. At the same time, economic recovery in 2021 was plagued by new virus variants, supply bottlenecks, and rising prices.

JANUARY

1/5 Federal and state decision to extend the general lockdown until January 31.

1/20 Extended lockdown leads to economic stagnation in Q1.

1/28 Scientists from various disciplines present an action plan for pan-European defense against new virus variants.

FEBRUARY

2/10 Conference of Federal State Prime Ministers reaches an agreement to extend lockdown until March 7.

2/10 An ifo study calculates the weekly cost of the second coronavirus wave to be

EUR 1.5 bn

→ www.ifo.de/en/jb21/pr-wave

MARCH

1.3. Munich Economic Debate: How Is the Working Environment of Women Changing Due to the Coronavirus Crisis? Panel: Monika Schnitzer, Janina Kugel, and Michele Tertilt.

3/3 An ifo study puts the potential for working from home in Germany at

56%

→ www.ifo.de/en/jb21/pr-homeoffice

3/23 The container ship "Ever Given" blocks the Suez Canal.

APRIL

4/15 Joint Economic Forecast puts GDP growth in 2021 at **3.9**%.



 $Hundreds\ of\ ships\ could\ not\ pass\ through\ the\ waterway,\ disrupting\ global\ trade.$

ifo survey data from April reveals that 45% of manufacturing companies and 23.3% of construction companies are experiencing supply bottlenecks and material shortages.

4/20

4.3 fewer hours per day

were spent on school-related activities by students during the second lockdown, according to an ifo study.

→ www.ifo.de/en/jb21/pr-lockdown

4/29 Federal Constitutional Court overturns Climate Protection Act. Bundestag approves revision in June.

MAY

SPD and FDP sign off on election platform for federal election.

5/6 Joint study by ifo and VDA shows that the transformation to electromobility will result in job losses totaling between 25,000 and 80,000.

JUNE

6/10 ifo Annual Meeting 2021 on the economic policy reforms in the post-Merkel era (2021–2025)



Oliver Zipse, Chairman of the Board of Management of BMW.

"Unfortunately, in its current form the draft law represents a missed opportunity for a more comprehensive reform of climate legislation."

Prof. Karen Pittel Director of the ifo Center for Energy, Climate, and Resources

11/6 Bundestag passes Supply Chain Act.

43%

of companies expect the Supply Chain Act to lead to more red tape, according to ifo survey data.

6/16 ifo lowers economic forecast for 2021 to **3.3%**.

The Greens, the Left, and the CSU sign off on their respective election platforms for the federal election.

JULY

7/8 ECB changes its inflation target to 2% annually. ifo expects a temporary increase in inflation over the coming months of over

4% inflation.



7/15 Hundred-year floods in Germany cause millions of euros worth of property damage.

7/14 ifo Schnelldienst focusing on the economic policy agenda for the post-Merkel era published.

→ www.ifo.de/en/jb21/sd7

7/19 ifo-immowelt study on residential preferences during the coronavirus pandemic: 13% are planning to move out of major cities 46% reported that the pandemic had influenced their decision.

→ www.ifo.de/en/jb21/corona-wohnen

7/28 Clemens Fuest and Marcel Thum come out in favor of compulsory insurance against damage from natural disasters with premiums that adequately reflect the local risks.

AUGUST

8/20 RKI warns of the start of the **fourth** wave of the coronavirus.

8/29 First televised debate among the CSU, SPD, and Green candidates for chancellor.

74% of Germans

are in favor of compulsory online classes in the event of school closures, according to the ifo Education Survey.

SEPTEMBER

9/5 ifo Institute at the IAA:
Prof. Oliver Falck joins other experts to discuss transportation and working from home.



9/15 ifo Schnelldienst focusing on "Consumer Congestion, Higher Energy Prices, Loose Monetary Policy: Is Massive Inflation Looming after Covid-19?"

→ www.ifo.de/en/jb21/sd9

9/16 ifo President Clemens Fuest proposes reforming tax splitting for married couples to introduce real splitting.

9/21 ifo Economists Panel: Economists expect left-wing alliance to provide lowest growth and lowest income inequality.

10/13 EconPol Europe Annual Conference on "The State of Fiscal Resilience – How Prepared Is Europe for Future Crises?"

10/14 Joint Economic Forecast expects GDP growth of **2.4%** in 2021.

9/26 Election of the 20th German Bundestag

OCTOBER

400000
full-time positions would be created by implementing if or recommen-

dationsfor reforming tax policy.

10/11 ifo President Clemens Fuest speaks about "Fair and Growth-' Friendly Tax Policy" at the Munich Economic Debates

10/18 Fiscal policy becomes central to coalition negotiations.ifo estimates that the traffic light coalition's tax compromise will reduce the burden on taxpayers by up to

16.4 EUR bn.

→ www.ifo.de/en/jb21/reform-est

"The focus of the new coalition government's tax policy should be on growth and employment.

Prof. Clemens Fuest President of the ifo Institute

10/21 Clemens Fuest, Gabriel Felbermayr, and Jens Südekum propose an EU climate plan ahead of the UN Climate Change Conference.

10/29 The ifo Institute estimates that supply bottlenecks have so far caused losses in value added in German industry of almost

40 EUR bn.

NOVEMBER

4th coronavirus wave begins: Infection rates go through the roof, especially in Bavaria, Saxony, and Thuringia.



ifo President Clemens Fuest at the ifo Industry Colloquium.

11/10 ifo Industry Colloquium on sustainability and the economic policy challenges related to energy and climate policy.

11/16 ifo study highlights distribution effects of the currently high inflation rates: Inflation Is Currently Hitting the Rich Harder than the Poor in Germany.

→ www.ifo.de/en/jb21/pr-inflation

"Setting up a commission to reform German social benefits is a step in the right direction. The pattern of higher gross salary meaning lower take-home pay has to end."

Prof. Andreas Peichl Director of the ifo Center for Macroeconomics and Surveys

and other tax experts
come out in favor of abolishing
tax privileges for real estate
and against expropriation.

→ www.ifo.de/en/jb21/reform-immost

11/24 Traffic light coalition presents coalition agreement for the new federal government.

The ifo Institute praises the coalition partners for social benefits reform and criticizes them for postponing major pension reform.

11/26 In the ifo Business Survey, an unprecedented number of companies report planned price increases. The ifo price expectations rise to their highest level since the surveys began.

DECEMBER

12/8 Bundestag elects Olaf Scholz as Germany's new chancellor; the new traffic light coalition is sworn in.



12/14 ifo Institute lowers growth forecast for 2022 to 3.7%.

12/23

81.9% of companies complain of supply bottlenecks – a new record to finish out the year.



Their primary interest is economic research relating to Germany's eastern Länder: Stefanie Knoll and Albert Landsberger at ifo Dresden



From left: Dr. Cornelia Geißler, (ifo Communication), State Secretary Roland Weigert, Dr. Sabine Maaßen (Audi AG), and Prof. Clemens Fuest at the first IAA Mobility in Munich



Colleagues from the ifo Center for Macroeconomics and Surveys at the second Covid-compliant ifo Summertime Bar and during a foosball break



Harald Schultz (Press Officer), Dr. Katharina Werner, and Prof. Philipp Lergetporer (ifo Center for the Economics of Education) at the press conference to present the ifo Education Barometer 2021



Interdisciplinary exchange continues during breaks in the event: Florian Dorn at the launch of the new CESifo Cluster, Economic Research with Firm Data

The ifo Institute and Its Research

election year. ifo research findings provided all parties with a scientific foundation for a fact-based debate. But we also evaluated party platforms to give the public a basis for deciding how they would vote. Ultimately, however, the heart of the ifo Institute is research. Each of our eight Centers has its own positioning, pursues a characteristic research program, and offers specific services. The ifo Institute's Dresden Branch and the Research Group Taxation and Fiscal Policy cover several subject areas as well. ifo economists also work on a wide array of cross-disciplinary topics. In 2021, these included issues relating to social policy, taxation, and budgetary policy. Another important partner is the CESifo network. Economists in this network produce a large number of working papers, many of which later appear in prestigious journals and are discussed in their own international scientific conferences. In addition to the CESifo network's eight Research Areas, 2021 saw the network establish its first CESifo Cluster: Economic Research with Firm Data.



www.ifo.de/en/research

ifo Center for

| Labor and Demographic Economics | 40 |
|---|----|
| International Economics | 44 |
| • Economics of Education | 48 |
| Energy, Climate, and Resources | 52 |
| Industrial Organization and New Technologies | 56 |
| International Institutional Comparisons and Migration Research | 60 |
| Macroeconomics and Surveys | 64 |
| Public Finance and Political Economy | 68 |
| Research Group Taxation and Fiscal Policy | 72 |
| Dresden Branch | 76 |
| Munich Society for the Promotion of Economic Research - CESifo GmbH | 80 |
| Business Surveys | 84 |
| Economic Forecasts | 86 |
| | |

ifo Center for Labor and Demographic Economics

RESEARCH FOCUS

Family Development

Integrating Immigrants

Adapting to Climate Change and Environmental Pollution

Changes in the labor market and among the population always have consequences for society and the economy. The ifo Center for Labor and Demographic Economics investigates these correlations and the most pressing social problems of our time.

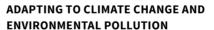
hy do families break apart, how do we integrate immigrants, and how can we adapt to climate change? With the help of theoretical analyses, state-of-the-art econometrics, and specific data sources, the Center is getting closer to resolving as yet unanswered questions relating to family and labor economics. The goal is to inform policymakers and the general public about the cause-and-effect relationships behind the most pressing social problems.

FAMILY DEVELOPMENT

Within the research focus of family economics, the Center examines the effects of social and family policy measures on work-life balance, on couples' fertility decisions, and on child development. Furthermore, the ifo researchers investigate the causes and effects of instability in married and family life. This is framed, for example, by the economic and family policy factors that affect divorce rates, but also by how children are affected when their parents separate or divorce. Another research focus is the causes of domestic violence: Do cultural factors, historical backgrounds, and economic conditions play a role? And what measures might help prevent violence against women?

INTEGRATING IMMIGRANT

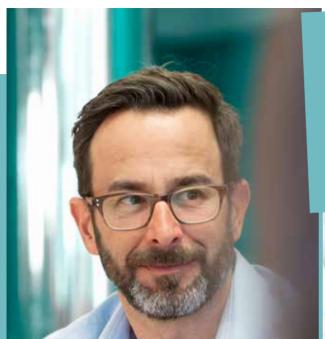
In many European countries, the descendants of immigrants are among the fastest growing population groups and will be instrumental in shaping these societies. Ensuring that the children of immigrants integrate successfully is therefore a top priority for policymakers and society at large. The Center is investigating the effectiveness of the German government's integration measures for this group.



It is not yet clear how severely climate change and environmental pollution will affect the economy, policy, and society. The key questions here are if and to what extent these effects can be reduced – by society adapting to, or protecting itself against, new climate conditions. The Center wants to find answers to these questions, analyzing adaptive measures within the contexts of Europe and the world as a whole.



www.ifo.de/en/ center-ab



3 QUESTIONS FOR

Prof. Helmut Rainer





- ? It's well known that demographic change leads to bottlenecks in the labor market. So why is this topic coming up again now?
- In contrast to other crises, we're characterizing the Covid-19 recession as a "shecession," because in the majority of developed countries, women are facing more negative effects in their jobs than men are.

You are proposing improvements in childcare – hasn't there already been a lot of progress there?

Since the expansion of daycare got to the halfway point and then ground to a complete halt, further action is urgently required in order to increase women's participation in the labor market.

And you recommend abolishing marital splitting? Why is that?

It creates disincentives: let's say that a woman, whose husband works full time, goes back to work 25 hours a week earning an average gross hourly wage. She's going to lose half of her paycheck in taxes. That's not fair. We recommend real splitting, which takes into account spousal support obligations.

Prof. Helmut Rainer, Director of the ifo Center for Labor and Demographic Economics

Clockwise: Stella Canessa, Leander Andres and Maria Waldinger, PhD (deputy director) **FAMILY ECONOMICS**

Paid Maternity Leave Promotes Children's Mental Health

n the late 1970s, maternity leave in Germany was extended to up to six months with financial support from the state in order to ease the burden on mothers. In a study over a protracted period, ifo researcher Marc Fabel now shows that this has also benefited children in their long-term development. Young men in their late twenties in particular are less likely to be affected by conditions such as addiction-related behavioral disorders. The author reached this conclusion by evaluating hospital medical data for the period 1995–2014.



per birth cohort is how much the German government could save by extending maternity leave to prevent young adults with behavioral disorders from needing inpatient treatment.

PUBLICATION IN JOURNAL OF PUBLIC ECONOMICSS

Citizenship from Birth Leads to Greater Social Interaction

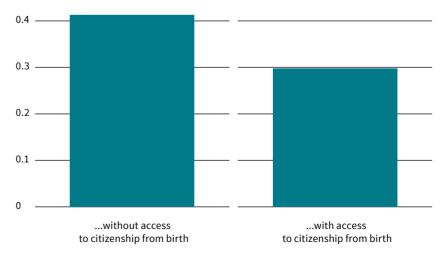
n Germany, adolescents with an immigration background do not mix much socially with their German peers. This makes it harder for them to integrate into society. We have been able to show, however, that these differences are not etched in stone. They can be changed by introducing German citizenship from birth. If the children of immigrants are given the same legal status as their German peers, and catch up to them in the academic arena, they are more willing to interact with them. This measure can be an important instrument of change in social behavior. However, our findings indicate that this measure is significantly less effective for girls than for boys. That is why measures aimed at children with an immigration background must factor in the various types of socialization pressures that girls and boys experience during the integration process.

Citizenship from Birth Reduces Discriminatory Behavior

Determining discriminarory behavior using experimental measurement of variations in willingness to collaborate

Young people with an immigration background...

Discriminatory behavior toward young Germans



Source: C. Felfe, M. G. Kocher, H. Rainer, J. Saurer, T. Siedler, »More Opportunity, More Cooperation? The Behavioral Effects of Birthright Citizenship on Immigrant Youth, «

Journal of Public Economics 200, August 2021, 104448.

DFG PROJECT

How Custody Affects Child Development

hen divorce breaks up a family, the custody arrangements made by the parents play a pivotal role in how their children develop. There is some question as to whether shared custody affects children and their family environment differently from when one parent has sole custody. Painting an accurate picture of causes and effects is both complex and difficult. The researchers attached to this DFG project are putting together a unique dataset in Sweden: they are collecting and digitalizing data on divorce cases that were heard by Swedish district courts between 1998 and 2021. This provides a large administrative dataset of personal accounts of children of divorced families and their parents.

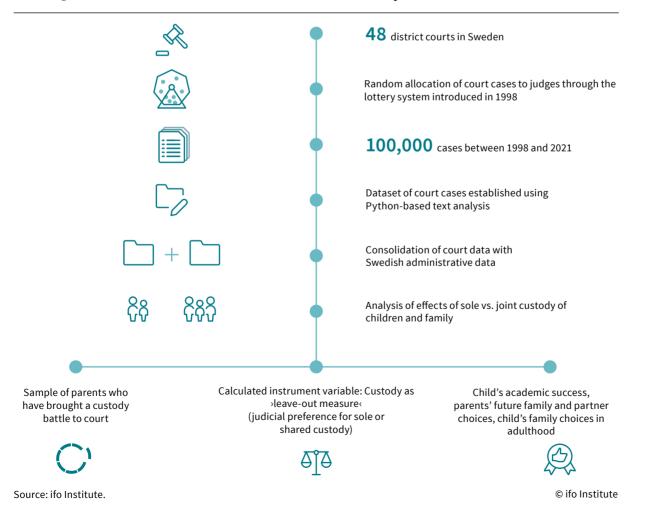


"Parents choose different custody setups based on unobservable factors. We want

to better understand these factors because we suspect that the setup they choose also plays a role in their children's development."

Anna Hasselqvist Doctoral student at the ifo Center for Labor and Demographic Economics

The Large Divorce Database - Dataset Structure for the DFG Project



43

ifo Center for International Economics

RESEARCH FOCUS

Trade Costs and Trade Policy

Globalization and Labor Markets

Trade, Environmental Policy, and Pandemics

Globalization and Innovation

How can globalization and technological change be combined, and how can international dialogue bring about welfare gains? The ifo Center for International Economics investigates these questions.

he global economic arena is characterized by increasing tensions over trade policy. This is leading to a noticeable slowing of growth in global trade, which poses challenges for an open economy such as Germany's. What's more, pandemics, natural disasters, and the effects of climate change are subjecting the global economy to an increasing number of unexpected shocks.

TRADE COSTS AND TRADE POLICY

Since the Uruguay Round came into effect in 1995, there has been no significant reduction in WTO tariffs. Several countries have attempted to counteract this stagnation by taking a more bilateral approach to their free trade efforts, signing a higher number of bilateral and regional free trade agreements. The Center investigates the role that trade agreements, tariffs, and non-tariff barriers play in welfare and employment in affected countries and in third countries. This work employs structural estimation models of general equilibrium. The Center also quantifies the costs of reintroducing trade barriers, for instance as a result of Brexit or the imposition of sanctions. Another area of focus is the improvement of the ifo trade model for income distribution in quantitative analyses.

GLOBALIZATION AND LABOR MARKETS

The international mobility of companies and workers holds opportunities and risks for employment and the wage structure. Skepticism about globalization has grown over the past few years. The Center researches how international trade in goods and the production decisions made by multinational companies affect the labor market. This involves evaluating the effects that trade policy and corporate offshoring have on the labor market. The researchers

also investigate how changes in competition in production markets transfer to labor markets, and how companies of different sizes moderate this transference.

TRADE, ENVIRONMENTAL POLICY, AND PANDEMICS

To better understand the connections between globalization and shocks such as climate change and pandemics, the Center examines global value chains and the effects of the partial collapse of supply chains. Another area of research is the role that trade policy plays in tackling the damage caused by climate change. The Center is currently exploring the role of international trade in coping with the costs of climate change.

GLOBALIZATION AND INNOVATION

The Center investigates the link between innovation – automation in particular – and globalization. Does international trade influence the innovation decisions companies make? Have automation and trade entanglements redefined production and the labor market in Latin American countries and contributed to greater inequality?



www.ifo.de/en/ center-aw

Almost

60%

of German value added in industry is exported to other countries.



3 QUESTIONS FOR

Prof. Lisandra Flach





Mercosur was established in 1991. How would you rate its achievements?

Trade among Mercosur members (Argentina, Brazil, Paraguay, and Uruguay) has been almost entirely liberalized. That's a major success. But the transformation into a customs union failed, as did deeper integration of Mercosur countries into the global production network.

Why are Latin American companies rarely part of global value chains?

This is due to Mercosur's protectionist trade policy: high tariff rates for most favored nations, non-tariff trade barriers within the region, and hardly any trade agreements. Plus, member countries are not allowed to sign any trade agreements of their own.

What role does the EU play as a trading partner?

In the past few years, Europe has lost importance as a trading partner for Mercosur countries, with trade flows shifting to the Chinese market. Ratification of the trade agreement between the EU and Mercosur could improve the situation.

Prof.
Lisandra Flach,
Director of the
ifo Center for International Economics

Clockwise: Andreas Baur, Isabella Gourevich and Camille Semelet **GLOBAL VALUE CHAINS**

Companies in Favor of International Production Facilities

Using value chains to globally link production processes is regarded as risky, especially in the current climate. Alternatives are being discussed, such as withdrawing from globalization. An ifo study conducted on behalf of the Konrad Adenauer Foundation examined what the costs and benefits of such a change would be. The calculations showed that both reshoring as well as nearshoring – shifting operations to a neighboring foreign country – would have profoundly negative effects on the German economy. Reshoring and nearshoring would mean a drop in real GDP of 9.7 percent and 4.2 percent respectively. Therefore, the risks that stem from linking international value chains would have to cause a potential drop in GDP of almost 10 percent before it would be worth reshoring production stages.

A survey of 5,000 companies revealed that although 41 percent of manufacturing companies surveyed want to

41%

of manufacturing companies are planning to change their procurement strategy in the future.

change their procurement strategy – among wholesalers and retailers, that figure was 35 percent and 27 percent respectively – only around 10 percent of the companies surveyed were considering reshoring production. Instead, the companies were planning to diversify their supply chains more strongly and scale up inventories. This is not easy, especially for small and medium-sized enterprises. For them, it often takes a great amount of time and effort to establish and coordinate business relationships with several foreign suppliers. Simplifying and harmonizing rules of origin could make it much easier for SMEs to use free trade agreements, which would open up new opportunities for diversification.



www.ifo.de/en/jb21/ wertschoepfung

MEGA-DEAL FOR ASIAN COUNTRIES

The World's Largest Free Trade Area

he signing of the Regional Comprehensive Economic Partnership (RCEP) created the largest free trade area in the world. This involves the ten ASEAN countries as well as China, Japan, South Korea, Australia, and New Zealand. Regional trade relations in the Asia-Pacific region were already very strongly established. However, in addition to fairly moderate tariff reductions, the agreement provides for harmonizing rules of origin, which until now have represented a high bureaucratic burden for exporters. The new deal will lead to an increase in intra-RCEP trade. An analysis conducted by Feodora Teti and Hannah-Maria Hildenbrand showed that the countries that would feel the trade diversion effects most and suffer losses will be India, the US, and the Mercosur countries. Europe is expected to face only slight negative effects because for EU countries, trade with RCEP plays a relatively minor role. To date, it has comprised only 9 percent of EU exports and 13 percent of imports. In contrast, RCEP countries account for 25 percent of US exports and 37 percent of US imports.

Now the US and Europe are under pressure to act. The EU should intensify trade policy relations with its Asian partners: more stable supply chains and more favorable production in the RCEP area represent an opportunity for companies operating there as well as for consumers.



www.ifo.de/en/jb21/

RCEP Country Shares in GDP, Trade, and Population



Source: World Bank and Comtrade; G. Gaulier and S. Zignano, "BACI: International Trade Database at the Product-Level. The 1993–2007 Version,"

CEPI Working Paper No. 23, 2010.

© ifo Institute

MATERIAL SHORTAGES

Bottleneck in Container Shipping

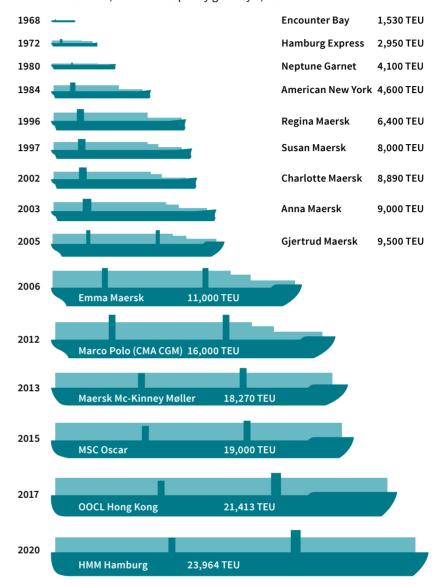
Container shipping plays a central role in international trade. The introduction of standardized containers led to strong growth in global trade and was of great importance for the development of global supply chains, because it made it easier to load, unload, and forward shipments via a variety of modes of transport. As a result, almost 80 percent of EU exports to non-EU member states are transported by ship.

Andreas Baur, Lisandra Flach, and Jasmin Gröschl examined the container shipping infrastructure and market. They demonstrated that the rapid price increase and the shortage of available containers during the pandemic can be explained by increasing market concentration and the size of the container ships. Nearly 83 percent of the global container shipping market belongs to three global alliances. This is linked to the trend toward larger and larger container ships; the biggest container ships in operation today have a capacity 1,500 percent greater than those of 1968. Both of these factors led to reduced flexibility, lower shipping frequency, and more concentrated route offerings, which in turn have made the shipping system far less adaptable.

The serious global collapse of imports and exports during the first half of 2020 was followed by a marked turnaround. The container ship infrastructure was unable to adapt quickly to these unforeseen circumstances. Container capacity is available, but often not where it is needed. In addition, pandemic-related constraints are causing handling at ports to stall, resulting in further backlogs in the system. Overall, it can be seen that every disruption to the shipping system represents a threat to the recovery of global trade.

Evolution of Container Ship Size





Note: TEU = twenty-foot equivalent unit. Source: ifo Institute presentation of data from Allianz Global Corporate & Speciality "Safety and Shipping Review 2020".

© ifo Institute



"The consequences of pandemic-related constraints and longer-term trends in the shipping industry show that container shipping is increasingly becoming an Achilles' heel

for international trade."

Dr. Jasmin Gröschl Academic employee at the ifo Center for International Economics

ifo Center for the Economics of Education

RESEARCH FOCUS

Education and Individual Outcomes

Education and Long-Term Development

Determinants of Education

Governance of Education

Changes in the level of education may be attributed to a number of factors and can, in some cases, have a significant impact on the economy. The ifo Center for the Economics of Education looks at equal starting opportunities, compares student performance, and evaluates vocational training to ensure that prosperity benefits more people.

ducation should enable people to share in the opportunities of an open society, hold their own against international competition, and exploit their opportunities for greater prosperity. Based on scientific findings, the staff write articles and draw up policy recommendations.

EDUCATION AND INDIVIDUAL OUTCOMES

Education is central to equipping people for their professional and daily lives. The Center studies the extent to which skills are a factor for labor market and social participation in a rapidly evolving society. The dual system of vocational education and training peculiar to German-speaking countries is instrumental in creating human capital. In addition, the Center explores the possibilities and limits of further education and training, and of lifelong learning.

EDUCATION AND LONG-TERM DEVELOPMENT

Education also determines a society's economic development over the long term. The Center researches the role that test scores achieved in international student assessments play in economic growth and social cohesion. Moreover, the Center traces how education developed before and after industrialization and considers the impact of long-term historical events on today's economic development.

DETERMINANTS OF EDUCATION

The Center also focuses on the factors influencing high academic achievement. These include cultural factors, such as family, values and standards, the resources expended, and the institutional framework of the education system. To analyze these, ifo researchers often refer to the extensive microdata sets compiled by different international comparisons of student performance. Some of the topics are the integration of children with an immigration background, the effectiveness of teaching staff, the compensatory effect of mentoring programs, digital teaching methods, and the effects of the coronavirus pandemic.

GOVERNANCE OF EDUCATION

Qualification systems, autonomy, competition, and tracking systems are among the central elements of governance for education systems. The Center researches how governance structures are implemented and how readily the general public accepts them. In so doing, it frequently draws on the findings of its own education policy survey. By evaluating policy measures with the help of experimental methods, the Center helps anchor evidence-based policy advice in the political decision-making process.



www.ifo.de/en/ center-bi



3 QUESTIONS FOR

Prof. Ludger Wößmann





- What is the Policy Lab for International Comparative Education?
- This project examines differences in education systems. Many aspects cannot be considered individually because countries apply a standard in their schools. To gain insights, we need to compare different countries that do things differently.

What is the research focus?

We ask what things lead to better education, and what their economic impact is.
We look at students, parents, and schools. For example, we consider the question of whether it is good to let schools make more decisions. This is something we can now study systematically because international data is available.

What insights do you hope to gain?

In education, many decisions are based not on evidence but on people's general feelings. The Policy Lab aims to confirm some of these sentiments – and show that others have no basis in science. It will provide new research so we can learn from other education systems and improve ours.

Prof.
Ludger Wößmann,
Director of the ifo Center for the Economics
of Education

Clockwise: Ulrike Baldi-Cohrs, Vera Freundl, Dr. Larissa Zierow (deputy director, in the background) and Pietro Sancassani **DATA ANALYSIS**

Grades for Behavior Achieve Nothing

The controversial practice of evaluating students' behavior through what are known as comportment grades has no meaningful impact on their educational success or school-to-work transition, finds an analysis by the ifo Center for the Economics of Education. ifo researchers Florian Schoner, Lukas Mergele, and Larissa Zierow com-

pared educational reforms of German states that have introduced comportment grades in their school systems. Using census data, household surveys, and nationwide student surveys, the team showed that grading students' behavior did not significantly affect these outcomes. In other words, the controversy surrounding these grades has been much ado about nothing. Due to opposing views on the benefits and drawbacks, there were multiple ministers of education in the 2000s who either abolished or reintroduced comportment grades. The team exploited the grades' staggered introduction among the federal states to examine the consequences this form of grading has for the students.



www.ifo.de/en/jb21/ pr-comportment-grades



"We found no discernible differences in academic performance, character traits, or career profiles between schoolchildren who received comportment grades and those who did not."

Dr. Larissa Zierow Deputy Director of the ifo Center for the Economics of Education

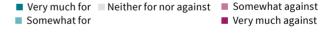
SURVEY

Germans Favor Online Classes during School Closures

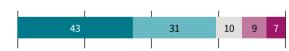
he coronavirus pandemic has hit education hard. School closures have cut students' study time nearly in half. In the ifo Education Survey for 2021, a large majority of Germans - 74 percent - supported mandatory online instruction in the event of school closures. The survey also revealed that 83 percent are in favor of children from difficult social backgrounds receiving increased support. There was also strong support (77 percent) for making the use of digital tools such as computers and tablets mandatory in the classroom and for continuing to offer digital office hours once the pandemic ends. During the coronavirus pandemic, 66 percent wanted education policy decisions to be standardized across Germany. Overall, the assessment of the coronavirus school policy was quite negative, especially with regard to the treatment of disadvantaged students.

What Measures Do Germans Support for School Closures?

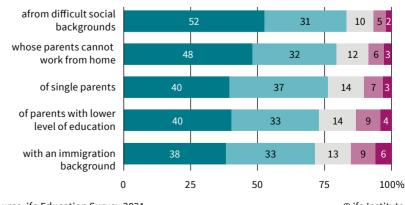
Clear support for compulsory online teaching, compulsory training for teachers, and more intensive support for disadvantaged groups



Obligating schools to provide online lessons if school is canceled for more than a week



Teachers providing increased support during school closures to children...



Source: ifo Education Survey 2021.

EQUAL STARTING OPPORTUNITIES

Mentoring Programs Help Disadvantaged Adolescents

hat can be done to improve the labor-market prospects of adolescents from highly disadvantaged backgrounds? One possible approach is mentoring programs that provide young people with volunteer students to support them. But do these programs really help? A study by the ifo Center for the Economics of Education found that mentoring programs significantly improve both the school performance and future-labor market prospects of disadvantaged adolescents. As part of this study, the ifo Center for the Economics of Education investigated the "Rock Your Life!" mentoring program. It found that the program significantly increased adolescents' overall labor-market prospects and helped fully close the existing gap in this group's prospects compared to adolescents

from more advantageous socioeconomic backgrounds. The positive effects are found for all three components studied: cognitive (math grades), non-cognitive (patience and social skills), and motivational (labor-market orientation) aspects. In terms of math grades, participants in the mentoring program improved by an average of 0.42 grade increments. The program has no positive effects on adolescents whose families are better off.

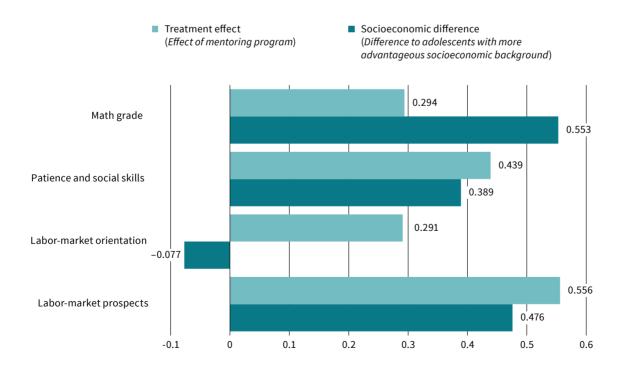
These findings suggest that mentoring can be effective precisely where it supplements a lack of support from the family. When weighing the program's benefits – measured in terms of the returns on the labor market that severely disadvantaged adolescents can expect as a result of their improved grades – against its costs, the picture is clear: the scale of the program's effects and its relatively low costs give it a benefit-cost ratio of 15 to 1. Focusing the program even more strongly on the target group of severely disadvantaged adolescents pushes the ratio as high as 31 to 1. Although such estimates are subject to many uncertainties, the order of magnitude suggests that the benefits of the mentoring program outweigh the costs many times over.



www.ifo.de/en/jb21/ mentoring

How Mentoring Programs Help Severely Disadvantaged Adolescents

he figure shows the mentoring program's effect on the labor-market prospects as well as the gaps between severely disadvantaged adolescents and those from more advantageous socioeconomic backgrounds.



Source: Presentation based on S. Resnjanskij, J. Ruhose, S. Wiederhold, and L. Woessmann (2021), »Can Mentoring Alleviate Family Disadvantage in Adolescence? A Field Experiment to Improve Labor Market Prospects, « CESifo Working Paper 8870, CESifo, Munich.

© ifo Institute

Climate and Climate Policy

Energy

Environment

ifo Center for Energy, Climate, and Resources

Climate change and dwindling resources pose major challenges for society. The ifo Center for Energy, Climate, and Resources focuses on the economic implications of climate change and promotes sustainability and climate action.

he year under review brought some groundbreaking resolutions in the field of climate action, not least the pledge to reach climate neutrality, in Germany and in Europe as a whole, by the turn of century at the latest. The EU has launched a comprehensive package of measures to meet this target, and major efforts will be required in Germany, too. Such measures are likely to impact practically every area of the economy and people's lives. The task will therefore be to ensure that climate action and adaptation to climate change are not only efficient but also equitable. This will bring sizable challenges on the political, economic, and social level.

The Center for Energy, Climate, and Resources focuses primarily on the impact and effectiveness of climate action from a global and a regional perspective. Its research provides policymakers with informed analysis of the policy instruments used in climate, energy, and environmental policy.

CLIMATE CHANGE AND CLIMATE POLICY

Areas of interest here include the analysis, both theoretical and empirical, of the impact of climate change and the effectiveness of climate policy instruments. Such analysis covers an assessment of the economic fallout from extreme weather events and of the incentives used to reduce emissions. Increasingly, it also factors in questions of political economy. In particular, the focus lies on the implications of climate change and climate policy for different social groups and for companies. The Center has taken an active part in current debates on the EU's "Fit for 55" package of climate measures and on the topic of sustainable finance.

It also made a substantial contribution to the annual report of the steering committee of the Scientific Platform on Climate Action and to the discussion on long-term strategies for climate action.



www.ifo.de/en/

ENERGY

The Center investigates transformation processes in energy systems, energy markets, and the energy industry, and how to design efficient energy policy. The focus here is on German energy markets and how German policy interacts with that of other national governments with regard to, for example, the regional distribution of investment in renewable energy. A further area of activity is the analysis of electricity markets, including issues that cut across sectors, such as how to reduce transport-related emissions. Using its own model, the Center develops different scenarios for the European electricity market which sheds light on transformation processes in the energy sector and provides valuable input for policy advice.

ENVIRONMENT AND RESOURCES

In the year under review, the Center analyzed the social costs of air pollution in Europe and the design of instruments to address this form of pollution. It also investigated the risks that arise when the value of assets and fossil-fuel reserves plummets as a result of the energy transition. In other activities, the Center was substantially involved in the drafting of Rethinking Land in the Anthropocene, a report produced by the German Advisory Council on Global Change (WBGU).







3 QUESTIONS FOR

Prof. Karen Pittel



Yes, but we need to take big decisions on climate and energy policy very soon. Postponing these decisions will make it very difficult – and considerably more expensive – because then we'll need to make rapid adjustments that will put serious strain on a lot of people and companies.

What do we need to do?

What both the economy and society need are clear signals that are comprehensive and can be relied upon. That's the only way to encourage long-term innovation and investment and to ensure lasting changes in behavior. To generate broad-based support, we need to make sure that carbon pricing, infrastructure expansion, and the energy transition are all implemented in a socially equitable way.

Should this fail, who would suffer the most?

If we continue to delay doing what is required to meet these targets, or if we fail to meet them at all, then the costs of climate change and of mitigating that change may well overwhelm those who are least able to bear them – because, for example, they are low earners.

Prof. Karen Pittel, Director of the ifo Center for Energy, Climate, and Resources

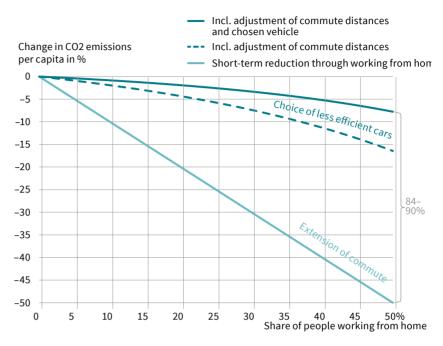
Clockwise: Jacqueline Adelowo, Dr. Marie-Theres von Schickfus and Julius Berger **CARBON EMISSIONS**

Working from Home Leads to Longer Commutes

he Covid-19 pandemic has profoundly changed mobility patterns in urban areas, not least because people have frequently been working from home. This has spawned hopes of a reduction in carbon emissions in the event that commuters continue to stay off the road. However, our research shows this optimism may be misplaced. In the medium term, people who commute less also tend to buy vehicles that are less fuel efficient. Furthermore, working from home makes a move to the countryside more attractive, where rents are cheaper. As a result, commuting distances increase and emissions bounce back from the initial fall caused by people working from home. These trends eliminate between 84 and 90 percent of the initial environmental gains. Meanwhile, policymakers should note that while mandatory standards on fuel economy slow the shift toward inefficient vehicles, they also exacerbate the longterm increase in commuting distances. Standards regulating the combined consumption of individual automaker fleets lead manufacturers, for example, to reduce the price of clean vehicles at the expense of dirtier ones.

Longer Commutes Cancel Out Carbon Reduction

Working from home reduces emissions initially; in the long term, people change their habits, move out of the city, and buy less efficient cars.



Source: CESifo Working Paper 9357.

© ifo Institute



"In the hunt for ways to limit the impact of climate change, we should also be taking a closer look at unorthodox measures such as geoengineering."

Prof. Christian Traeger Research Director at the ifo Center for Energy, Climate, and Resources

GEOENGINEERING

Unilateral Climate Management?

Geoengineering may well offer a route to combating global warming. In a recent project, researchers investigated a method of reducing solar radiation that involves injecting tiny particles of matter, for instance sulfur, into the stratosphere. As in the wake of a major volcanic eruption, the introduction of such particles leads to some incident sunlight being reflected back into space, thereby lowering global temperatures. Compared to the projected costs of

climate change, these measures are so inexpensive that individual countries or regions could use them to regulate global temperatures unilaterally. There are, however, some risks. The research paper looks at recent findings on the effectiveness of sulfur-based geoengineering in the context of an integrated assessment of climate change. A key scenario shows that individual countries, such as China or the United States, might have an interest in unilaterally mitigating the increase in global temperatures. Almost all regions would benefit from this, including Europe. Only Russia would lose out. However, most regions – except for Africa and India – favor a more limited use of geoengineering. Furthermore, geoengineering reduces the incentive worldwide to reduce greenhouse gas emissions; although, in the short term, this effect remains small.

EXTREME WEATHER EVENTS

Flood Risks Impact Homeowners Unevenly

The flooding that struck Germany in July 2021 damaged thousands of properties. It offered a portent of the potential costs of climate change. The increasingly frequent occurrence of increasingly extreme weather events can mean people paying higher insurance premiums, investing more in flood protection, and facing restric-

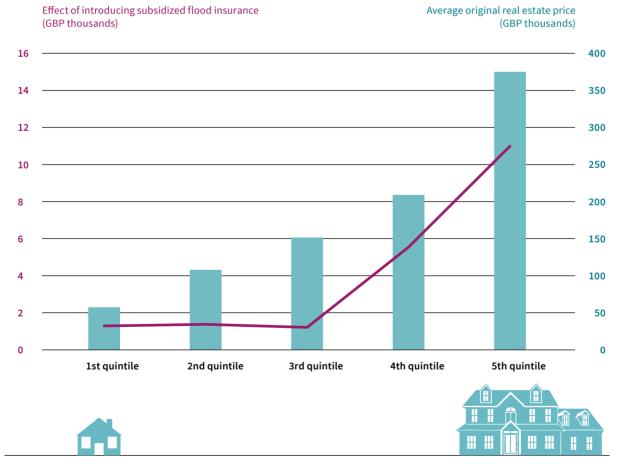
ted access to credit. Using data from the UK, we examined how the market for mortgages and real-estate insurance is impacted by spreading the risk between areas subject to flooding and those not. We discovered that the main beneficiaries of this distribution of risk are the owners of expensive real estate in areas with a high average income. The introduction in 2016 of subsidized insurance seems to have offset the negative effects of flooding on property prices. At present, the average impact of these effects is limited, though not negligible, and it may well rise should extreme weather events become more frequent. In the mortgage market, banks do not fully factor in the negative effects of flooding on real estate prices.



www.ifo.de/en/jb21/ extremwetterereignisse

Benefit of Subsidized Insurance Significantly Higher for Owners of More Expensive Real Estate

The effect of introducing subsidized flood insurance on real estate prices in the United Kingdom. The more expensive the real estate, the greater the effect.



Source: ifo Institute calculations.

© ifo Institute

Sectors, Institutions, and Regulation

Innovation

ifo Center for Industrial Organization and New Technologies

The ifo Center for Industrial Organization and New Technologies analyzes how policy can promote competitiveness and innovation and examines how technological progress, and particularly the digital transformation, affects society.

he Center uses empirical methods of counterfactual impact analysis for its research. It aims to derive policy measures from these findings that will enable companies and individuals to benefit more from technological progress within the social market economy system. In 2021, the researchers increasingly worked with new data sources and built up skills to evaluate them, enabling the team to answer current economics questions. Building up this expertise will make it possible to provide research-based findings more quickly as a basis for economic policy decision-making processes.

SECTORS, INSTITUTIONS, AND REGULATION

Many economic analyses are based on assessing each industry's competitiveness and productivity. The Center determines influencing factors and long-term prospects for German and European industry, and identifies and evaluates measures to strengthen competitiveness. Its staff economists also observe how new technologies are changing the structures of the various sectors. They research the impact of regulation, for example of innovations and supply chains. The Center received a lot of attention in 2021 with multiple projects on the transformation process in the automotive industry.

INNOVATION

The staff economists study the development of new and existing companies, especially with regard to how innovative they are. This work has a strong focus on practical application; it poses relevant questions and taps into institutional knowledge. The Center's research also ad-

dresses determinants of innovation and entrepreneurship and draws conclusions relevant for policymaking. In turn, the Center advises policymakers and can draw on an extensive network of relevant interest groups in politics and business.



www.ifo.de/en/ center-int

AUTOMOTIVE INDUSTRY

Age-related reductions in employment will not be sufficient to cushion job losses resulting from the transformation toward electromobility. Major efforts aimed at professional development and retraining of staff are urgently needed.

In 2030, depending on the scenario, the gap will be between

25,000 and 80,000 employees



- The ifo Institute was appointed coordinator of the EU Horizon 2020 Project. What issues does this project address?
- Business and society will soon have to tackle the technological transformation, globalization, and changes in industrial structures. We want to know what kind of (new) qualifications are required and what general and vocational education needs to encompass in order to enable people to obtain these qualifications.

Who are the partners in the consortium?

In total, besides the ifo Institute, nine scientific institutions are participating: one other from Germany, six European organizations, and one each from Latin America and China.

What methodology are you using?

We use a broad foundation of widely differing data sources – including online job ads, the spread of robots in various regions, and data on international trade in goods and services.

Prof. Oliver Falck, Director of the ifo Center for Industrial Organization and New Technologies

Clockwise: Nicolas Bunde, Dr. Anna Kerkhof and Jean-Victor Alipour **NEW WORK**

Companies Hiring More Remote Workers

individual flexibility, teamwork, and especially digital capabilities are becoming increasingly important for working from home.



www.ifo.de/en/jb21/ stellen

Rural Regions Catch Up in Working from Home

The graph shows the share of ads for jobs with the option of working from home in urban districts compared to those in rural districts. The difference has become markedly smaller since the start of the pandemic.

Urban-rural gap

3.5

3.0

2.5

2.0

1.5

1.0

0.5

2014

2015

2016

2017

2018

2019

2020

2021

Source: Authors' graph based on data provided by Emsi Burning Glass.

© ifo Institute

side from a health crisis, the Covid-19 pandemic inadvertently sparked one of the world's biggest social experiments: the switch from working on-site to working from home. The question is: how much is here to stay? Job advertisements provide a glimpse into the future. An analysis of the prevalence of working from home based on more than 35 million job ads from 2014 to 2021 shows several trends: In Germany, the share of online job postings with a work-from-home option more than tripled between 2019 and 2021, rising to nearly 12 percent. The sharpest increase in work-from-home jobs was seen in professions that previously had high untapped potential for working from home. Another interesting trend is that regional, occupational, and sectoral inequalities in access to working from home have decreased during the pandemic. The urban-rural disparity in the percentage of job ads with an option to work from home fell by 30 percent compared to 2019. This development seems to be solidifying, which is why skills such as

MODERN MEDIA MARKETS

Original Content Makes Users More Tolerant of Advertising

The increasing importance of modern media markets has raised some new questions. What is the connection between advertising revenues in social media markets and the quality and diversity of content? An ifo study exam-

ines the impact of advertising on content differentiation on YouTube, the second most visited website in the world. It concludes that the possibility for channels to increase advertising reduces the likelihood of YouTubers producing interchangeable mainstream content. This can be explained as follows: Many competing YouTubers offer mainstream content. Viewers tend to see advertising as a nuisance. Therefore, when a YouTuber adds more advertising, the barrier to switching to providers with similar content is low. In contrast, offering original and unique content gives YouTubers market power and reduces competition in the advertising market.



www.ifo.de/en/jb21/ youtube



"On social media, advertising acts as a price that users have to pay in order to consume original content."

Dr. Anna Kerkhof Postdoctoral student at the ifo Center for Industrial Organization and New Technologies

STRUCTURAL CHANGE

German Automotive Manufacturers Lead in Key Skills for the Future

utonomous driving, new mobility offers, and CO₂ emission reductions require a profound transformation of the automotive industry. Overcoming the challenges – of technologies, changing production processes, or new business models, for instance – calls for different skills than those needed in the past. In cooperation with the job net-

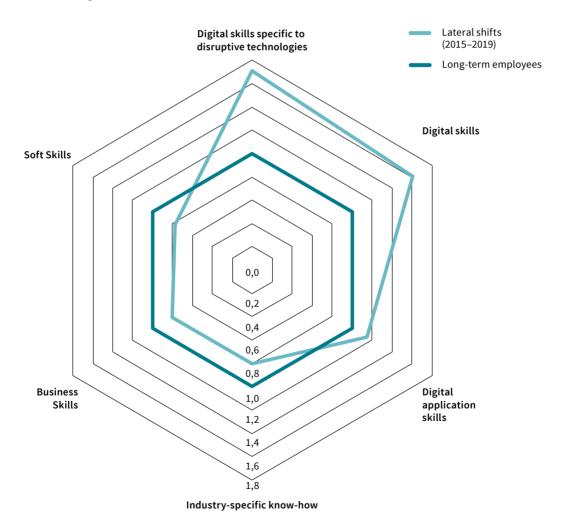
work LinkedIn, we looked at the profiles of LinkedIn members who work in the automotive industry and the skills they list there. This data provides the basis for a detailed analysis of how skills are developing within the German and global automotive industries. We noticed the biggest increase in new skills in the category of specialized digital skills for disruptive technologies. In 2015, they accounted for 3.7 percent of the skills listed in LinkedIn profiles globally; in 2020, this figure was already 8.6 percent. The share in Germany is considerably higher, and doubled from 6.5 percent in 2015 to 13.3 percent in 2020. The numbers also show that companies in the automotive industry largely acquire the necessary digital skills through new hires. The question is whether long-term employees are also being sufficiently equipped for the change.



www.ifo.de/en/jb21/ kompetenzen

Automakers Are Actively Recruiting New Employees with Digital Skills

While long-term employees outshine new recruits in soft skills, business skills, and industry know-how, the opposite is true for digital skills.



Long-term employee skills normalized to 1. Source: LinkedIn.

© ifo Institute

ifo Center for International Institutional Comparisons and Migration Research

RESEARCH FOCUS

Migration and Institutions

Migration and Political Economy

Institutions and Financial Intermediation

Institutions and Society

Institutions play a key role in economic growth. The ifo Center for International Institutional Comparisons and Migration Research examines the societal challenges that arise from this relationship.

nstitutions are of great importance for the long-term growth of an economy and for equal opportunities. The ifo Center for International Institutional Comparisons and Migration Research analyzes the reasons behind specific institutional framework designs and their economic impact. The focus is on migration, financial intermediation, and the interaction of institutions with beliefs and preferences.

MIGRATION AND INSTITUTIONS

Why do people decide to migrate? What role do economic incentives and institutional factors play? The ifo researchers also investigate ways to integrate refugees and to what extent integration depends on the economic and social environment in the destination country.

MIGRATION AND POLITICAL ECONOMY

This research area examines the interaction between politics and migration. The Center analyzes the relationship between intra-European migration and the economic and social challenges in the regions of origin. Both factors influence residents' voting behavior.

INSTITUTIONS AND FINANCIAL INTERMEDIATION

Another area of focus is the institutional underpinnings of financial markets. It explores how institutions, such as those protecting property rights, influence the credit market and how the removal of a government guarantee affects banks. In addition, the Center studies crowdfunding as a new form of finance.

INSTITUTIONS AND SOCIETY

Individual trust and beliefs play an important role in household decision-making and in public policy. Current institutions are shaped by history, such as formerly belonging to a long-gone empire. Researchers at the ifo Center for International Institutional Comparisons and Migration Research are investigating how beliefs affect redistributive preferences.



www.ifo.de/en/ center-ivm

With

> 100,000 entries

relating to rules and regulations from 198 countries, CoronaNet is the world's largest database of government responses to Covid-19.





3 QUESTIONS FOR

Prof. Panu Poutvaara



- How does having internet access affect the likelihood that people will emigrate?
- In a study conducted in collaboration with King's College London, we combined survey data from more than 600,000 people from 120 countries with data on the 3G mobile communications internet expansion of 2008–2018. We are able to show that internet access through 3G technology increases the desire and intention to emigrate.

Why is that?

First, access to the internet makes it easier to find information about opportunities in other countries. Second, mobile internet makes it easier to organize the migration. Third, being online provides a way of contacting family members and friends.

How pronounced are the effects?

An increase in 3G mobile coverage from 0 to 100% increases the share of the population that wants to emigrate by 2.7 percentage points and the share that plans to do so within 12 months by 0.9 percentage points. This means that in a country of 10 million people, the number of people willing to emigrate goes up by 270,000.

Prof. Panu Poutvaara, Director of the ifo Center for International Institutional Comparisons and Migration Research

Clockwise: Britta Rude, Joop Adema and Sarah Reiter **IFO PUBLICATION IN TOP JOURNAL**

Why People are Fleeing to Europe

Between January 2015 and December 2017, some 1.6 million refugees and irregular migrants arrived in Europe. Panu Poutvaara teamed up with Cevat Giray Aksoy from King's College London to investigate in a paper in the Journal of Development Economics the main motives and level of education of migrants who crossed the Mediterranean to reach Europe between 2015 and 2016. Poutvaara drew on a confidential survey of more than 20,000 migrants conducted by the International Organization for Migration. In addition to highlighting the reasons for migration, the investigation revealed that refugees and female irregular migrants have a higher level of education than non-migrants of both sexes in their countries of origin. Male irregular migrants have a lower level of education. The empirical patterns can be explained using an expanded version of the

77%

of those surveyed left their home country because of conflicts and persecution,

18%

cited economic reasons.

model by Roy and Borjas. This takes into account the risk factors associated with remaining in an unsafe country of origin as well as migration-related risks and gender-specific differences in returns on education.

"Refugees and irregular female migrants were better educated and irregular male migrants less well educated than the people who remained in their homeland. These differences in education between the sexes point to discrimination against women in the countries of origin."

Prof. Panu Poutvaara Director of the ifo Center for International Institutional Comparisons and Migration Research

RISK-TAKING

A Question of Perspective

ealth shocks, natural disasters, wars, and economic recessions affect people's willingness to take risks. In a study conducted by the ifo Institute in collaboration with external authors, people stated that they themselves were less and less willing to take risks as the coronavirus pandemic progressed. However, the measured willingness to take risks increased. For their study, the researchers collated surveys of students from four countries. The first survey was

completed in 2019 and a follow-up survey of the same people was taken in December 2020 and January 2021. Both surveys first had the students estimate their own willingness to take risks. Their risk preferences were then measured using a lottery exercise in which payment to winners depended on the decisions they had made previously. Before the winners were chosen at random, all participants had to choose whether they would rather receive a guaranteed payment of EUR 100, or gamble a portion of that sum as part of a highly risky investment. This investment provided a 50 percent chance of a 250 percent return and a 50 percent chance of zero return.



www.ifo.de/en/jb21/risk

FINANCIAL LITERACY

Knowing the Risks of Guarantees

What role does financial knowledge play in becoming a guarantor? To answer this question, Elisabeth Beckmann, Christa Hainz, and Sarah Reiter created a survey module for the "Third-Party Guarantees – The Role of Financial Knowledge and Social Norms" project, which ran for multiple years. Funded by the Think Forward Initiative, the project was carried out in collaboration with the Austrian central bank (OeNB). The module was integrated into the "OeNB Euro Survey", which is carried out annually in ten countries in central, eastern, and southeastern Europe. The authors asked private individuals what they knew about the legal consequences of guarantees as well as their experience of being a guarantor.

The results show that knowledge about guarantees varies considerably, both from country to country and among the different population groups. In Croatia, 70.4 percent of respondents reported being aware of the consequences. In Albania, only 40.4 percent were aware of the liability they were taking on. Knowledge of guarantees was particularly poor among people with a low level of general education and low income. No gender-specific differences were detected.

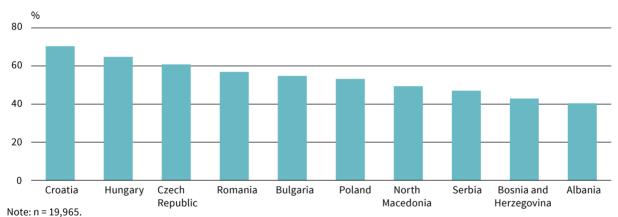
The study was able to show that the willingness to act as a guarantor for someone else – and thus accept financial liability – decreased in step with knowledge of the subject. This means that many people stand to benefit from financial literacy programs because on average, only about 55 percent of people in the ten countries surveyed were aware of the risks. Knowing the risks reduces the danger of suffering dramatic financial consequences. The results of the project will help political decision-makers establish financial literacy measures and thus promote the financial well-being of the population.



www.ifo.de/en/jb21/ third-party-guarantees

Proportion of People with Fundamental Knowledge of Guarantees

Proportion of People with Fundamental Knowledge of Guarantees.



Source: E. Beckmann, C. Hainz, and S. Reiter, »No Transaction, No Risk? The Influence of Financial Literacy on Going Guarantor, « *Think Toward Initiative*, March 22, 2021.

© ifo Institute

COLLECTING DATA ON CORONAVIRUS MEASURES

The pandemic has made it abundantly clear that political decision-makers and researchers must have access to high-quality, detailed, and up-to-date information. This is especially true when it comes to measures designed to combat the pandemic. CoronaNet – a joint initiative by the Hochschule für Politik at the Technical University of Munich and the ifo Institute – is a database of governmental responses to the coronavirus. It collects information about measures taken all over the world to combat the Covid-19 pandemic. The data is visualized on the ifo Institute's DICE website. The database is the most comprehensive documentation of such governmental policy worldwide and collects data in 20 policy categories.

https://www.coronanet-project.org/



www.ifo.de/en/dice

RESEARCH FOCUS

Economic Policy Analyses

Macroeconomic Research

Inequality and Redistribution

ifo Center for Macroeconomics and Surveys

Business cycles, economic policy analysis, and the topics of inequality and redistribution are the focus of research at the ifo Center for Macroeconomics and Surveys. Its economists collect, process, and interpret microdata. One key result of their collective efforts is the *ifo Business Climate*.

acroeconomic research, economic policy analysis, and questions of inequality and redistribution are focal points of the ifo Center for Macroeconomics and Surveys. Its economists collect, process, and interpret microdata on economic developments in Germany, the European Union, and other countries. The Center's ifo Business Climate Index receives particular interest from the public; this leading business cycle indicator is based on some 9,000 monthly reports from companies.

ECONOMIC POLICY ANALYSES

One main area of focus for the Center is the analysis of reform proposals for the design of fiscal integration in Europe. This examines the distribution and stabilizing effects as well as efficiency of the respective tax and transfer systems. The Center carries out these empirical analyses in part using the European tax and transfer microsimulation model EUROMOD, which can evaluate changes to tax and transfer legislation in each of the EU27 and simulate policy reforms. Another research topic in this area is the European Central Bank's monetary policy and its influence on the financial sector and the economy overall.

MACROECONOMIC RESEARCH

What are the causes and effects of macroeconomic shocks? In examining this question, the Center derives implications for applied business cycle analysis. Its work focuses on the influence of financial market frictions and the effects of monetary and fiscal policy measures on real and financial variables. Regarding methodology, the Center applies theoretical approaches as well as empirical time series met-

hods. Forecasters today have access to enormous amounts of data. That's why the Center explores how to condense and select information, including its own data from the company survey.



This area of research is focused on the distribution of income and wealth, as well as other indicators of inclusion and equal opportunity. The Center examines trends and identifies the causal effects of tax and transfer systems. Particular attention is given to the analysis of regional differences in income and wealth distribution. The economists investigate possible drivers of the development of inequality, such as globalization or demographic change. In addition, the Center conducts research on redistributive preferences and how to make taxation fair.



KEY SERVICES OFFERED BY THE CENTER

Economic forecasts:

- → See pages 86-87
- → www.ifo.de/prognosen

ifo Business Climate and Surveys:

- → See pages 84-85
- → www.ifo.de/umfrageergebnisse









3 QUESTIONS FOR

Prof. Andreas Peichl

- How are the economic consequences of the coronavirus crisis affecting different regions in Germany?
- Cities have been particularly hard hit. Between January and August 2020, unemployment there increased more than in other regions. In addition, the business situation of companies has seriously deteriorated.

Why is that?

Social consumption plays a bigger role in cities, and the effects of the pandemic are especially drastic there. There's also less in the way of manufacturing, which means the benefits of the manufacturing recovery in the second half of 2020 went largely to regions outside cities. In addition, Covid-19 has been pushing more people to move to the countryside, which cuts into consumption in the big cities.

How much is the coronavirus changing residential preferences?

Almost 13 percent of survey respondents in major German cities plan to move away in he next twelve months – especially people of young and middle age and households with children. In suburban and rural areas, the willingness to move is significantly lower.

Prof. Andreas Peichl, Director of the ifo Center for Macroeconomics and Surveys

Clockwise:
Julia Baarck,
Dr. Mathias Dolls (deputy director), Moritz
Schasching, Sabine
Rumscheidt, Dr. Klaus
Wohlrabe and Prof.
Timo Wollmershäuser
(both deputy director),
Manuel Menkhoff and
Justyna Klejdysz

TAX POLICY

Distributing Burdens Fairly

part from abolishing the solidarity surcharge for lower and middle incomes, there have been only minimal adjustments in German tax policy over the past ten years. At the same time, criticism of the tax and contribution system grew in public and political debate. In 2021, the ifo Institute presented a new proposal for the income tax and transfer system. It would reform family taxation, set high tax-free child allowances, and switch tax splitting for married couples to real splitting. The proposal also adapts the transfer payments reduction rate in order to eliminate the low-income trap, thus making it worthwhile to work more, even for people with low incomes. In addition, it completely abolishes the solidarity surcharge while simultaneously raising the top income and wealth tax rates as well as the basic tax-free allowance and the lump sums.

The ifo researchers suggest removing tax disincentives to labor market participation. They want to distribute bur-

dens fairly by focusing more on children when it comes to tax benefits for marriage and family. In doing so, the intent is to produce more winners than losers in all income brackets. The middle class would gain the most income under this reform proposal, with higher-income households with children among the biggest winners. Couples without children and with a high income difference would have to pay more taxes on average than before. The efficiency gains achieved by the reform would create more full-time jobs and open up the labor market for people who want to work. With regard to the government budget, the reform proposal would be nearly revenue-neutral.



www.ifo.de/en/jb21/ reform-est3

The efficiency gains of the reform lead to approx.

400,000 more full-time positions 275,000 more people in employm

FAMILY POLICY

Out of the Second-Earner Trap

The German tax and social security system provides the wrong incentives for many secondary earners, who are often women and mothers. Out of the 7.6 million married women of working age, about three-quarters have a lower income than their spouses and are therefore classi-

fied as secondary earners. The ifo Institute argues that reforming spousal taxation and introducing real splitting would result in secondary earners working more. Combined with a reform to the mini-job regulations, further incentive problems could be eliminated: women in particular could escape the "second earner trap" in which they find themselves due to low working hours. Moreover, this combined reform introducing real splitting and reforming mini-jobs at regular contribution rates would allow for tax cuts. Overall, that would increase the number of hours worked by the equivalent of 141,000 full-time positions and add 59,000 workers.



www.ifo.de/en/jb21/ falle

"A combined reform that both limits marital splitting and addresses the conversion of mini-jobs into employment subject to social security contributions sustainably reduces existing disincentives for women's supply of labor, thus ensuring greater gender equality."

Maximilian Blömer Doctoral student at the ifo Center for Macroeconomics and Surveys

GERMANY'S FEDERAL ELECTION

Tax Plans of the Parties

The ifo Institute compared the tax plans of all Germany's political parties in a simulation. Essentially, all of them aimed to ease the burden on households in terms of income taxation. However, the amount of relief varied between the parties, so their proposals could be compared only to a certain extent. There were also similarities and differences in the structure of the relief. All parties wanted their reform plans to improve things for the middle-income strata of the population. All parties wanted to create positive incentives for gainful employment. More employment would bring in more tax revenue – however, not enough to offset the loss of revenue from the relief.

The FDP planned the most significant relief in 2021, resulting in an average 4.5 percent increase in disposable income. The impact on the supply of labor would be greatest here, with about 330,000 additional workers. Of all the party plans, however, the FDP's would have created the

largest fiscal deficit of over EUR 60 billion, even when taking the labor supply effects into account. By contrast, the Greens' reform proposal for the government budget was almost budget-neutral, with a deficit of only EUR 2 billion. However, with only 24,000 additional workers, it would also have had the smallest impact on employment. As for the distribution of income, the parties' plans had very different effects.

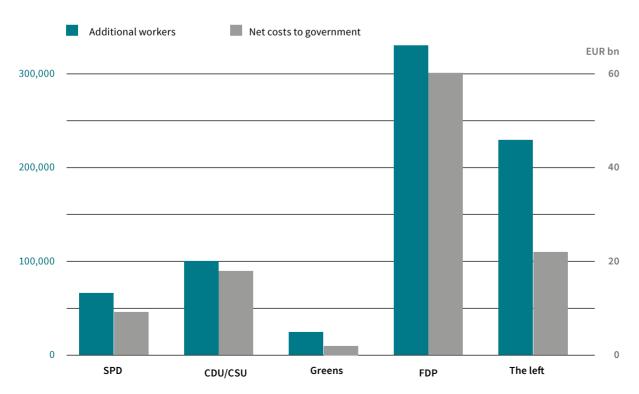
The tax plans of the Greens and the Left would have reduced income inequality, mainly because of the higher tax rates on high earners. This effect was greater under the Left's plans than the Greens' because of the higher tax burden on very high earners and millionaires. The FDP and the CDU/CSU would have achieved the opposite effect by providing relief for high-income earners, which would have increased income inequality (more so under the FDP's plan than that of the CDU/CSU).



www.ifo.de/en/jb21/ reform-est2

Employment Effects and the Costs of the Proposed Reforms

This graph shows the employment effects as well as the budgetary effects of the individual parties' plans for income tax. Included are the number of additional workers as well as the costs to the gov-ernment budget, taking into account the additional tax revenue generated through the additional workers.



Source: Calculation by the ifo Institute.

© ifo Institute

ifo Center for Public Finance and Political Economy

RESEARCH FOCUS

Fiscal Federalism and Local Public Finance

Evaluation of Fiscal and Tax Policy

Public Debt in Germany and Europe

Political Economy

How should we evaluate the fiscal policy instruments used in Germany, the European Union, and internationally? How do policymakers and institutions influence economic policy? These are the topics that the ifo Center for Public Finance and Political Economy addresses.

iscal policy, the development of public budgets at the national or local level, and political economy are interconnected research topics of the ifo Center for Public Finance and Political Economy. The studies encompass theoretical modeling and empirical analyses, and they also incorporate international experiences.

FISCAL FEDERALISM AND LOCAL PUBLIC FINANCE

The Center analyzes fiscal policy decisions at different levels of government in a decentralized system. Fundamental issues concern horizontal and vertical relationships in the field of taxation and fiscal competition, as well as the provision of local public services.

EVALUATION OF FISCAL AND TAX POLICY

The Center evaluates fiscal policy, in particular the relationships within and between the various levels of government in the context of fiscal equalization and the generation and distribution of tax revenue. The ifo Income Tax Simulation Model (ifo-ESM) was developed over the course of the last few years.

PUBLIC DEBT IN GERMANY AND EUROPE

Against the backdrop of demographic change, this area of research examines the causes of high national debt and its effects, and develops possible ways out of the debt crisis. The short-term perspective complements business cycle research, while the long-term analysis provides insights into intergenerational distribution issues and the relationship between growth and social cohesion.



How do government ideology and policymakers' motives for re-election affect individual economic policies? What influence do electoral systems have on turnout at elections and the share of votes that individual parties receive? The Center examines these political economy questions. Another focus is the impact that political institutions have on factors like economic growth, which the Center studies using new empirical methods such as machine learning.





- What are the biggest challenges facing the traffic light coalition?
- Climate protection, digitalization, and the rapid aging of our society. These all cost money. The government doesn't want to raise taxes, which is good, because there won't be any economic recovery if citizens and companies are burdened by higher taxes.

Would suspending the debt brake be a solution?

New debt is not a solution. Of course, it's easy to finance additional spending with debt. But if the plan is to invest in climate protection and digitalization, we should examine which government expenditures and which subsidies can be eliminated. Why is demographic change placing a burden on public finances?

The rapid aging of our society means we have fewer and fewer people in employment who pay taxes and social security contributions. The federal government already subsidizes pension insurance with around EUR 100 billion per year. We need bold reforms to reduce these subsidies.

Prof. Niklas Potrafke, Director of the ifo Center for Public Finance and Political Economy

Clockwise: Luisa Dörr, Sabine Kolbinger, Dr Klaus Gründler (deputy director) and Philipp Heil

STRUCTURALLY WEAK REGIONS

Government Agency Sites as Growth Stimulators

ould relocating and establishing public institutions in rural and structurally weak regions help create equal living conditions there and lead to sustainable regional development? The ifo Center for Public Finance and Political Economy and the ifo Dresden Branch investigated this question on behalf of the German Federal Institute for Research on Building, Urban Affairs, and Spatial Development.

The researchers evaluated the relevant scientific literature and available data on German government agency sites. To supplement this, they conducted interviews with employees of four selected government agencies that were established in structurally weak regions, as well as with representatives from the regional business and political spheres. In addition, they launched online surveys in two of the public agencies.

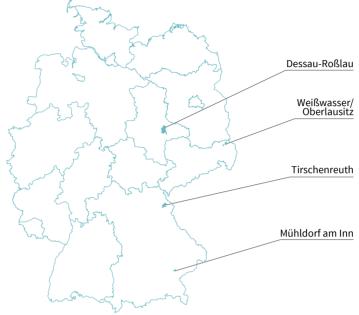
The literature analysis shows partially conflicting results for government agency sites established in the past. While some new sites saw positive effects on employment in the target region, others saw no or even negative effects because private sector employees left their jobs to work in the public sector.

One core finding of the four case studies was that establishing new government agency sites was preferable to relocating existing public institutions. For relocations, it is important to plan in sufficient time in order to avoid the short-term upheavals they cause. This enables employees and managers in administration and politics to restructure staff, pass on knowledge and expertise, and recruit new employees.

In addition, the target region should be able to sufficiently cover the labor requirements of a newly established

Government Agency Sites in the Four Case Studies

The selection of agencies took into account different establishment dates, locations, and local authority levels.



Source: L. Dörr et al., Study on the Settlement of (Federal) Authorities/ Institutions in Regions with Special Funding Requirements, ifo Study, ifo Institute, Munich 2021.

© ifo Institute

agency. It is often difficult to recruit highly qualified professionals in structurally weak areas. Since positions with lower qualification requirements can usually be staffed regionally, agencies with fewer specialized tasks tend to be more suitable for sites in structurally weak regions.

The study shows that establishing agency sites has created new jobs. Demand effects due to increased purchasing power and employees moving to the area are likely. For future (new) sites, negative concomitant effects on the agencies' work, such as staff losses, can be avoided through long-term staff and training planning.

"Relocating agencies often entails the loss of staff, experience, and expertise. Travel costs come into play, for example, but opportunities for remote working can cushion negative effects."

Anina Harter Doctoral student at the ifo Center for Public Finance and Political Economy

FISCAL POLICY

No Tax Increases **Before an Election**

hen is the right time for unpopular measures like tax increases? A study by the ifo Institute shows that tax increases in industrialized countries are often implemented right after elections. To determine this, Clemens Fuest, Klaus Gründler, Niklas Potrafke, and Fabian Ruthardt analyzed 3,200 tax reforms carried out in 22 industrialized and emerging countries from 1962 to 2014. One important innovation of the dataset they used

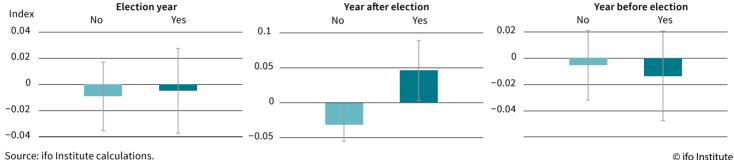
is that it now covers harmonized indices for tax reforms, including indicators of changes in tax rates and tax bases, and detailed sub-indices for six types of taxes. By establishing a connection between the reforms and the time of elections, the ifo researchers were able to study election cycles in tax reforms. They show that tax rate increases are put off until after elections. Politicians know that they have to be careful with tax increases, especially if they want to be re-elected. Unpleasant measures lend themselves to the post-election period. For this reason, governments hold back on tax increases right before elections, and afterwards, primarily sales and income tax were increased. Campaign assurances that there will be no tax increases should be viewed with skepticism.



www.ifo.de/en/jb21/

Changes in Tax Rates around Elections in OECD Countries, 1960-2014

For each country and year, the tax rate reform indices equal -2 for major and -1 for minor tax breaks, 0 for no change, and 1 for minor and 2 for major tax increases.



© ifo Institute

ECONOMIC POLICY

How the 2020 US Presidential Election Influenced Expectations

ow political leaders influence economic policy and real variables such as economic growth has been a subject of political economy research for decades. A study by the ifo Institute shows that the outcome of the 2020 US presidential election influenced the expectations of international experts regarding economic developments in their home countries. Dorine Boumans, Klaus Gründler, Niklas Potrafke, and Fabian Ruthardt analyzed the results of a survey among 843 economic experts from 107 countries. The experts were randomly assigned to one of two comparable groups of equal size. The first group was asked about their economic assessments regarding GDP growth, unemployment, inflation, and trade in their country five days before the US presidential election, while the second group was surveyed immediately following Joe Biden's election victory. The results show that the election outcome in the US influenced their assessments: The group that knew Joe Biden would be the US president estimated that the GDP growth rate in their home country would be 0.98 percentage points higher in 2021. Accordingly, those who had no information about the outcome of the US election gave lower estimates. This positive effect exists only outside the US. For the American experts, knowing the outcome of the election barely influenced their assessment of economic development in the US.



www.ifo.de/en/jb21/usa

Research Group Taxation and Fiscal Policy

RESEARCH FOCUS

International **Taxation**

Taxation, Fiscal **Policy, and Inequality**

Fiscal Policy Governance in the European **Monetary Union**

How can governments manage tax and transfer systems efficiently and fairly? This is one of the questions the research group addresses – against the backdrop of rising budget deficits and growing international tax competition.

ax, public debt, and public spending are key aspects of policy. They play a key role in almost all areas of government activity and influence a number of factors, such as income distribution and the stability of economic development. This explains the research group's focus on the following topics:

INTERNATIONAL TAXATION

As economic activity becomes increasingly globalized, the international corporate taxation system faces major challenges. Time and again, reports of multinational companies reducing their tax burden by shifting profits to low-tax countries have triggered controversial debates. The research group addresses how widespread profit shifting has become, how international tax competition affects countries' shares of the profit tax base, and which reforms make the corporate taxation system fairer and more efficient.

TAXATION, FISCAL POLICY, AND INEQUALITY

The issue of inequality in income and wealth and how it develops receives a lot of attention. The rise in public debt in the wake of the financial and economic crisis and the coronavirus crisis has raised the question of how the costs of economic crises should be distributed. The research group analyzes the development of income and wealth distribution and uncovers the factors that determine this development. Another area of focus investigates which population groups are hit by the consequences of economic crises and to what extent, and how the costs of a crisis can be fairly distributed. In addition, the researchers explore who is affected by various taxes and how, as well as how economic policies affect inequality.

FISCAL POLICY GOVERNANCE IN THE EUROPEAN (ECONOMIC AND MONETARY) UNION

Together with the 2007/2008 financial and economic crisis, the consequences of the coronavirus crisis have placed the public budgets of many EU member states under enormous strain and severely restricted their fiscal leeway. In turn, this development has given rise to controversial debates about the institutional design of the EU and the eurozone. The research group analyzes the evolution of fiscal policy within the EU and beyond, providing input for the debate around EU governance reform. In addition, the group evaluates the development of the EU budget and puts forward proposals for reform.



research-group

€ 5.1 to 6.7 bn

is how much Germany could save annually if a global minimum tax rate of 15% were introduced for multinational companies.



3 QUESTIONS FOR

Dr. Flor<u>ian Neumeier</u>



- Where do you stand on the global minimum effective tax rate?
- The introduction of a global minimum effective tax rate of 15 percent should significantly reduce the incentive to shift profits to low-tax countries and thus, by and large, also lead to greater tax equality.

What role does the carve-out rule play?

It permits certain taxation exceptions: if a company's subsidiary abroad pays less than 15 percent tax, the home country can tax the profits, but only the portion of the profits that cannot be linked to real economic activity.

Do the proposed carve-outs make sense?

The carve-outs reinforce the notion of minimum taxation as an instrument designed to dry up tax havens in which hardly any real economic activity takes place. At the same time, they could fuel international tax competition regarding real investments.

Dr. Florian Neumeier, Head of the Research Group Taxation and Fiscal Policy

Clockwise: Prof. Volker Meier, Elena Herold and David Gstrein

TAX REFORMS

Lower Corporate Taxes for More Growth

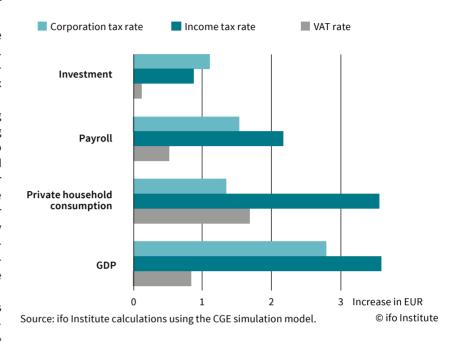
ower taxes for companies lead to higher wages, more employment, and higher growth over the long term. This is the result of a study by the ifo Institute, which examined how various proposed tax reforms would affect tax revenue, investments, wage income, and consumption.

The authors considered the consequences of reducing the corporate tax rate from 30 to 25 percent and shortening the period of tax depreciation for investments from ten to four years. While a combination of the two reforms would reduce tax revenue by EUR 30 billion in the short term, after a period of adjustment, gross domestic product and private household consumption would be around 3 percent higher than without the reforms. Employment would increase by 1.4 percent and wages by around 4 percent. Overall, investment and employment would increase so much that annual tax revenue would rise back up to its initial level in the medium term.

Looking at potential tax increases, the ifo researchers calculated that raising VAT would be less of a burden on employment and growth than raising income tax. If the income tax rate were increased by 3 percentage points on incomes of EUR 100,000 and above, the state would generate EUR 4.9 billion in additional tax revenue in the first year. In the long term, however, the additional tax revenue would fall to EUR 3.4 billion, while economic output would fall by 0.4 percent. Increasing VAT by 1 percentage point, mean-

Tax Reforms: Long-Term Income and Costs

Change in economic variables per EUR 1 reduction in tax revenue: e.g., if corporation tax is reduced, investment increases by EUR 1.10 per EUR 1 of the reduced tax revenue, payroll by EUR 1.53, private consumption by EUR 1.34, and GDP by EUR 2.79.



while, would raise tax revenues by EUR 7.4–7.8 billion, while reducing gross domestic product by only 0.2 percent. Tax revenue would also return to baseline levels over the long term.



www.ifo.de/en/jb21/ steuerentlastung

TAX EVASION

Why a Global Minimum Tax Rate is Good for Germany

ermany would benefit from the introduction of a global minimum tax rate: if such a rate were set at 15 percent, it could provide the German treasury with EUR 5.1–6.7 billion in additional revenue annually. This is the finding of a study conducted by the ifo Institute on behalf of the German Federal Ministry of Finance. The authors drew up various scenarios for calculating the profits that would be subject to taxation.

In October 2021, 136 countries backed the introduction of a global minimum effective tax rate. This would mean that from 2023 onward, a minimum tax rate of 15 percent would apply to the profits of multinational companies that generate at least EUR 750 million in revenue. If a company's subsidiary abroad pays less than 15 percent tax, the company's home country can "top up" the tax the profits. However, profits from real economic activity are to be exempt from the minimum tax rate; only the profits of actual shell companies are to be taxed. This will ensure that low-tax countries remain attractive destinations for real economic investments. At the same time, it could fuel international tax competition regarding those investments. It would also provide multinational companies with a significantly larger incentive to shift real investments to low-tax countries in order to reduce their tax burden.



www.ifo.de/en/jb21/ steuerpolitik **BERLIN REAL ESTATE MARKET**

Rent Cap Means Less Housing

ne year on from the introduction of Berlin's rent cap, the ifo Institute examined the effects on rent and purchase prices as well as on the number of apartments advertised. Using data from the real-estate portal immowelt. de, the ifo researchers compared the development of prices and offers in Berlin with the situation in other major German cities with populations over 500,000. They concluded that the Berlin rent cap has split the city's real estate market into two. In the regulated segment, rent and purchase prices

have seen weaker growth over the past year. Purchase price growth rates in Berlin, for example, have been 5–9 percentage points below those in the comparison cities since the third quarter of 2020. In the unregulated segment, property prices went up more sharply than in other major German cities. Rental advertisements developed in a similar way. In Berlin, fewer apartments were advertised in the regulated segment and more were advertised in the unregulated segment.

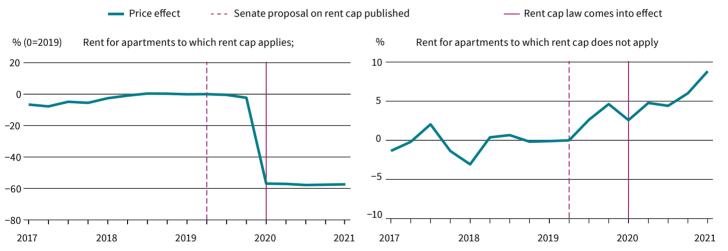
It is clear that the rent cap in the regulated segment not only lowers rents, as intended, but also reduces the supply of rental housing available. The main reason for this is probably that falling rents are encouraging tenants to stay in their apartments longer, while rented apartments that become vacant are sold as owner-occupied apartments or used by the owners themselves.



www.ifo.de/en/jb21/ mietendeckel

Rent Trends in Berlin Compared to Other Cities

Since the rent cap came into force in 2020, rent levels for regulated apartments have increased by almost 60 percentage points less than in other major German cities. In the unregulated segment, rent increases have been much higher in Berlin than in other major German cities since 2020.



The graphs show the difference in growth rates of rent (per square meter) between Berlin and the 13 next largest German cities. Source: Data from immowelt.de; ifo Institute calculations.

© ifo Institute

"The Berlin rent cap appears to be working: rent levels for regulated apartments are increasing more slowly than in other major German cities. However, the supply of rental properties in the regulated segment has declined."

Dr. Florian Neumeier Head of the Research Group Taxation and Fiscal Policy

Dresden Branch

RESEARCH FOCUS

Business Cycles and Growth

Public Economics and Funding Policies

Regional and Sectoral Structural Change

Demography

What is the current state of economic restructuring in eastern Germany – and how is the economy faring in Saxony? Research at ifo Dresden turns the spotlight on the eastern Länder.

he Dresden branch was established in 1993. The idea was to establish a think tank for economic policy in the German federal state of Saxony, which would study specific aspects of economic development in the state and in eastern Germany in general, and provide policymakers with sound scientific recommendations. Like its parent institute, ifo Dresden is a meeting place for scientists, politicians, and entrepreneurs.

BUSINESS CYCLES AND GROWTH

The branch monitors and forecasts economic development in Saxony and the eastern Länder. Staff prepare monthly assessments for ifo Business Surveys, along with half-yearly economic forecasts for Saxony and the eastern Länder. In addition, the branch reviews the effectiveness of policies aimed at promoting economic stability and growth.

PUBLIC ECONOMICS AND FUNDING POLICIES

This field of research focuses on the fiscal policy of the Länder and municipalities in eastern Germany. In addition, it evaluates funding-policy measures and suggests ways in which these might be improved. The Dresden branch also investigates questions from the field of political economy, including an examination of the factors that influence electoral outcomes and political processes.

REGIONAL AND SECTORAL STRUCTURAL CHANGE

This field of research examines change processes at both the regional and sectoral level. Such an investigation no longer differentiates merely between eastern and western Germany. Increasingly, it also draws a functional distinction between, for example, urban and rural regions, with a view to identifying the causes of disparity between the two spheres and highlighting possible ways of harmonizing living standards. This must also include an analysis of the convergence process as structurally weaker regions move toward parity with structurally stronger ones.

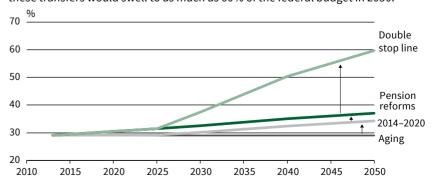
DEMOGRAPHY

Population decline and population aging are impacting almost all areas of society and the economy, a development that poses major challenges for economic policy. This field of research describes demographic trends and examines their implications, in particular for economic development in eastern Germany. It also investigates their consequences for social security systems.



Pension Expenditure in the German Federal Budget

Transfers to pension funds already constitute some 30% of the federal budget. Even without the double stop line, this share would likely rise to almost 40% by 2050. With the double stop line, and in the absence of any other changes, these transfers would swell to as much as 60% of the federal budget in 2050.



Source: J. Ragnitz, F. Rösel, M. Thum, and M. Werding, *Rentenpolitik im Schatten der Babyboomer*, Friedrich Naumann Stiftung, Potsdam 2021. © ifo Institute





3 QUESTIONS FOR

Prof. Marcel Thum



- The baby boomer generation will soon be entering retirement. What will this mean for our pension system?
- We have projected the evolution of expenditure for statutory pension insurance. If the intention is to prevent the pension level from sinking below 48 percent of the wage level, then the contribution rate will have to rise to 25 percent in 2050. Alternatively, the additional expenditure will have to be financed through taxes, meaning that 60 percent of the federal budget would be earmarked for pensions.

What are the reasons for this funding gap?

The first is the decline in the birth rate since the end of the 1960s; the second the steady increase in life expectancy. These two factors are compounded by the additional burdens of the pension packages introduced since 2014, including the maternity pension, the pension at 63, and the basic pension. These reforms have partially nullified efforts to stabilize the pension system.

How can we make our pension system sustainable?

Inevitably, it will mean having to raise the standard retirement age. This should be linked to life expectancy or to years of life in good health. And it must be accompanied by measures to ensure that people with poorer health status, or those in occupations that are especially physically demanding, receive a fair share of pension benefits.

Prof. Marcel Thum, Director of ifo Dresden and his deputy, Prof. Joachim Ragnitz

Clockwise: Carola Boede, Stefanie Knoll, Jannik A. Nauerth and Ulrike Mandalka

GREEN FINANCE

Green Investments Have Little Impact

As more people turn to green finance products, a joint analysis by the ifo Dresden Branch, the Leibniz Institute for Financial Research SAFE, and ESMT Berlin shows that this has far less impact than intended on whether corporate and government investments are themselves based on sustainability considerations. Many banks and investment companies now offer bonds, stocks, and portfolios with a "green" label. Yet the mere purchase of such securities does not ensure that the issuing companies will then operate in a more ecological manner. Nor does it lead to a

change in overall economic production. Since the capital a company raises from the issue of a sustainable bond is not earmarked for a specific purpose, there is nothing to prevent a company from investing that money in activities that negatively impact climate change. The same applies to government bonds with a green label. In Germany, the federal government is allowed to issue bonds in the amount earmarked for green expenditure in the current federal budget. However, these green bonds merely replace conventional ones. In other words, the issue of such bonds does not provide federal government with additional funds for sustainable transformation.

According to the authors, efforts to promote sustainability should therefore focus on the political, regulatory framework rather than the private actions of individual investors. An emissions trading system, for example, offers a much better route to reducing emissions.



"Whether in corporate or federal budgets, there is practically nothing in green financial instruments to mandate a use of the funds for green purposes."

Prof. Marcel Thum Director of ifo Dresden

MUNICIPAL TAXES

Given the Choice, Which Taxes Do Citizens Cut?

o taxes rise or fall when taxpayers themselves are allowed to decide in place of an elected body? In a recent study, Stephan Geschwind, from the University of Passau, and Felix Rösel, professor at the Technische Universität Braunschweig and a former postdoc at ifo Dresden, show that this depends on the type of tax. Property tax, which everyone has to pay, is likely to come down. Companies, by contrast, rarely benefit, as business taxes remain largely unchanged.

The study exploits a provision in the German Basic Law that allows for direct democracy at the municipal level in certain cases. Of the 11,000 or so municipalities in Germany, 30 of them do not elect a municipal council but rather have a municipal assembly, comprising all eligible voters, as their local legislative body. Municipalities in Germany have responsibility for setting the assessment rates for agricultural property tax (A), general property tax (B), and

business tax. An analysis of a large set of panel data documenting tax rates in municipalities over a period of more than 40 years shows that in small municipalities with a municipal assembly instead of an elected municipal council, it is property tax that tends to fall. In the case of business tax, there is no evident difference. In other words, when allowed to decide, citizens do opt for different levels of taxation than those set by an elected body. Direct democracy thus certainly has an influence on tax legislation.



www.ifo.de/en/jb21/ direct

Ву

10-15%

would be the reduction in property tax – to which all residents are subject – in municipalities with direct democracy

STRUCTURAL CHANGE IN EASTERN GERMANY

Sustainable Development of Germany's Lignite Regions

s a measure toward combating global climate change, Germany has pledged to end lignite mining and its use in power generation by 2038 at the latest. This measure could also be brought forward, should federal government decide to do so for political or other reasons. In their coalition agreement, the SPD, Greens, and FDP agreed to phase out coal, ideally by 2030. In addition, lignite's declining competitiveness on price could also lead to an earlier phase-out. The sooner coal-fired power generation comes to an end, the more adjustments the three remaining German coalfields (the Rheinisches Revier in North Rhine-Westphalia, the Mitteldeutsches Revier in Saxony-Anhalt and Saxony, and the Lausitzer Revier in Brandenburg and Saxony) will need to make. Up to EUR 40 billion have been pledged to support the process of structural change. A study by Joachim Ragnitz, managing director of ifo Dresden, assesses the plans so far selected for the two coal regions of eastern Germany.

Its key finding is that funds have not always been used in a way that maximizes their structural impact. For example, the definition of the coal regions that are to benefit from funding is very broad. This includes districts where no coal has been mined for decades and which are so far removed from the actual location of open-pit mining that they are unlikely to be directly impacted by the phase-out of coal. Even Leipzig, Halle, and the surrounding areas have received funding, despite enjoying possibly the brightest prospects of anywhere in eastern Germany.

The report is especially critical of the choice of funding projects in the participating Länder. A substantial portion of funding goes on projects in the area of public welfare. This includes funds for the construction or renovation of kindergartens, cultural centers, museums, cycling paths, and zoos. The Coal Regions Investment Act (InvKG) does indeed allow for the funding of areas such as childcare and youth care, along with healthcare, cultural facilities, and urban regeneration. Such measures undoubtedly improve living conditions in the areas in question. However, they make only a limited contribution toward structural redevelopment.

As such, the task of restructuring the coal regions by 2038 risks failure, with negative impacts for economic and sociopolitical development.



www.ifo.de/en/jb21/



"There is a design flaw in a program of structural aid that allows for consumer-related investment. The federal government should reconsider and tighten the regulations."

Prof. Joachim Ragnitz Managing Director of ifo Dresden

Number of Structural Aid Programs for »Public Welfare«



CORE ACTIVITIES Economics Events Guest Program Publications Policy Debate

CESifo Network

CESifo is one of the world's largest networks for economists, staging conferences, seminars, and workshops for nearly 1,800 members from 44 countries.

ESifo is a global, independent research network operated by the ifo Institute and Ludwig-Maximilians-Universität (LMU), Munich. It receives institutional support from the Bavarian State Ministry of Economic Affairs, Regional Development, and Energy. The network connects academics with shared areas of interest. Its publications and events foster collaboration among network members and economists based in Munich. Members are, in the main, economists who are alumni of the Faculty of Economics at LMU Munich or who have visited the ifo Institute as guest researchers. Founded in 1999, CESifo has grown to become of the world's largest networks for economic research.

ECONOMICS EVENTS

Regular conferences are held in eight areas of research. These bring together leading academics from various fields to discuss the latest economic research. Researchers from North America and Europe ensure a balance of perspectives from both sides of the Atlantic. Other events include the CESifo Summer Institute in Venice, the Norwegian-German Seminar, and the CESifo-Delphi Conference.

GUEST PROGRAM

The Guest Program is an opportunity for economists from around the world – including junior researchers – to come to Munich and discuss their latest work. In 2021, with face-to-face meetings still largely on hold, CESifo put on a series of high-quality events in both hybrid and online formats. The chance to share ideas is often a springboard to further collaboration, thereby creating ties between top researchers from the world's best universities and Munich as a research location. By the same token, return visits are an opportunity to forge valuable contacts, especially for junior researchers.

PUBLICATIONS

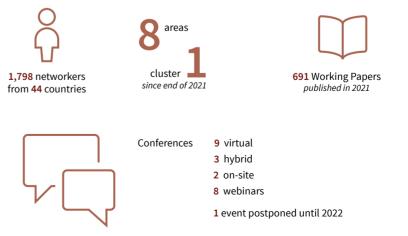
The network publishes its research findings in the CESifo Working Papers series. CESifo Forum is a bimonthly journal focusing on economic issues of political significance. Topics featured in 2021 include climate policy, the fallout from the pandemic, green finance, and WTO reform.



POLICY DEBATE

In partnership with ifo and Süddeutsche Zeitung, CESifo once again hosted the Munich Economic Debates, the third time it has staged this event. The unifying thread of the 2021 series was "Economic Policy Challenges in the Post-Merkel Era." In the future, all CESifo activities aimed at policymakers will be coordinated by the EconPol platform. Funding for the EconPol network expired in 2021. As of 2022, it is affiliated to CESifo.

CESifo 2021 in Figures



© ifo Institute



- The CESifo network has recently set up a research cluster focusing on company data. Why?
- Company data offers an opportunity to do economic research in new and better ways. For a start, this kind of data becomes available more quickly. And it's often more granular than, for example, official figures, which makes it easier to spot any deviation.

What are the key challenges involved when academic research collaborates with business?

The academic community needs to acquire some new skills here, especially in areas such as data protection. It also requires the use of new methods, because often you're dealing with large, unstructured volumes of data. There's also the issue that company interests don't always coincide with those of research. But by addressing this from the outset, it can be resolved to the satisfaction of both parties.

Do ifo and CESifo have the skill sets to cover these activities?

The ifo Institute regularly conducts company surveys, has lots of contacts, and has lots of experience in collecting, processing, and presenting data. CESifo is a global research network. The new research cluster will combine these two things in a productive way.

Prof. Clemens Fuest, President of the ifo Institute and of CESifo

with Katja Gramann and Karin Fournier **CESIFO CLUSTER**

Heading Our New Cluster

ed by Theresa Kuchler and Johannes Stroebel, "Economic Research with Firm Data" is a new CESifo cluster. Its purpose is to connect researchers working with big data and to share best practice regarding research and collaboration with companies.

Theresa Kuchler is an Associate Professor of Finance at New York University's Stern School of Business. She gained a PhD in economics at Stanford University. Her research focuses on how consumers and firms make decisions in financial and related matters, and incorporates insights from behavioral economics. She has extensive experience in the use of company data in economic research, including social media, online marketplace, and credit card data.





Theresa Kuchler, New York University, and Johannes Stroebel, New York University

Johannes Stroebel is the David S. Loeb Professor of Finance and Boxer Faculty Fellow at New York University's Stern School of Business. He gained a PhD in economics at Stanford University. He conducts research in the areas of climate finance, household finance, social media, macroeconomics, and real estate economics, where he frequently employs social media, credit card, investor, and other company data. He sits on the editorial boards of the *Journal of Political Economy*, the *Review of Economic Studies*, *Econometrica*, and the *Journal of Finance*. He is the recipient of numerous awards, including the AQR Asset Management Institute Young Researcher Prize.

"The Young Ambassador Program enabled me to spend a period of study at the University of Cambridge. I was made to feel very welcome in the research group and built valuable contacts to other doctoral students as well as leading

academics."

Jean-Victor Alipour Program participant

CESIFO YOUNG AMBASSADORS

Career Boost for Young Researchers

The CESifo Young Ambassador Program was launched in 2021. Three researchers were given the chance to spend six weeks studying abroad – in this instance, at the University of Cambridge, in the UK, and the Université Paris-Saclay, France. The new program aims to help ifo postdocs and

doctoral students develop an international network and thereby lay the foundations for a future career in academia, business, or politics. At the same time, participants serve as ambassadors for CESifo at their host institution, helping to raise awareness of the network and increase its reach abroad. In so doing, they undertake to boost the network's profile by giving, for example, a presentation during their stay. They are also asked to keep an eye out for promising young economists at the host institution and to recommend which of them might be offered the chance to spend some time as a guest researcher at CESifo.

EEAG REPORT 2021

How Can the EU Best Combat the Effects of the Coronavirus Crisis?

The latest EEAG Report is concerned with the European Union's management of the fallout from the pandemic in member states. The NextGenerationEU (NGEU) program envisions member states sharing the burden of recovery and explicitly aims to strengthen social cohesion within the European Union. The new resources from this program will have to be well invested in order to overcome market shortcomings. This year's report shows how the crisis has

impacted existing structures in various EU member states. In particular, it explores how best to halt the erosion of capital during the crisis. Questions here include the impact of investment in public and social capital as a way to ensure future prosperity and inclusion. The authors argue that the recovery program and the issuance of common debt offer a much-needed signal of EU cohesion and solidarity. In the long run, such measures can strengthen social capital, while in the short term they ensure that the single market and supply chains continue to function properly. Both of these are vital for saving lives. The pandemic has revealed a lack of resilience in certain institutions, with childcare and the school system especially at risk. In addition to recommending future investment in childcare and education, the report examines how government can mitigate climate change as well as strengthen the corporate sector and the economy as a whole.



www.ifo.de/en/jb21/

CESIFO GETS THE CAMERAS ROLLING

Hybrid Conferences

Personal contacts play a vital role within the scientific community. As of September, CESifo therefore shifted to a hybrid format for events including the Area Conference on the Economics of Education, the Area Conference on Behavioral Economics, and the Norwegian-German Seminar on Public Economics. For the team, it meant added logistics, with two events to organize rather than one: face to

face and online. Determined to offer more than just a poorly lit Zoom conference, we invested in extra human and technical resources along with video and audio technology. We devised a hygiene concept that went far beyond the minimum standards in force at the time. A doctor performed rapid Covid-19 tests at our in-house testing station, right outside the conference rooms. All guests were registered, and catering was provided in compliance with hygiene requirements. These measures made it possible for many people to attend a live event for the first time since the start of the pandemic.







CESifo Area Conference on the Economics of Education

September 3-4, 2021

BUSINESS SURVEYS

The ifo Business Surveys



The ifo Institute surveys companies in Germany 12 times a year.



This involves evaluating approx. 9,000 responses every month.



The **economic sectors covered** are manufacturing, construction, trade, and the service sector.



Detailed information is prepared for some **600 industries**.



More than **50 countries** use the survey methods devised by the ifo Institute, underscoring the Institute's recognized position in the field of company surveys.

Up to Date and Comprehensive



www.ifo.de/en/
ifo-business-climate

Since 1949, the ifo Institute has been conducting monthly Business Surveys in which it asks companies from all over Germany about their current business situation and their plans and expectations for the following three to six months. The surveys often include special questions on current economic policy issues. Analyses of the survey results provide information on topics and scenarios that official statistics do not cover. They furnish a snapshot of the economic situation and highlight turning points in economic development. The ifo Business Climate Germany is calculated using the survey results pertaining to companies' assessments of their current business situation and their business expectations for the next six months. This gives an important early indication as to how the German economy is developing. An overview of the Institute's surveys as well as the resulting economic indicators and their use for forecasting macroeconomic indicators is provided in the ifo Manual of Business Surveys.

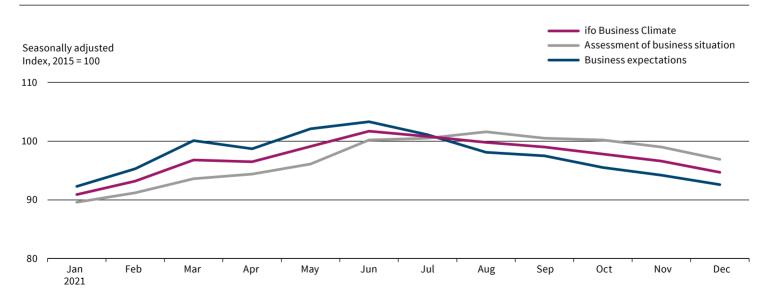


www.ifo.de/en/ survey-results



www.ifo.de/en/jb21/ handbuch-konjunkturumfragen

ifo Business Climate¹, Germany's Leading Business Cycle Indicator



¹Manufacturing, service sector, trade, and construction. Source: ifo Business Survey, December 2021.

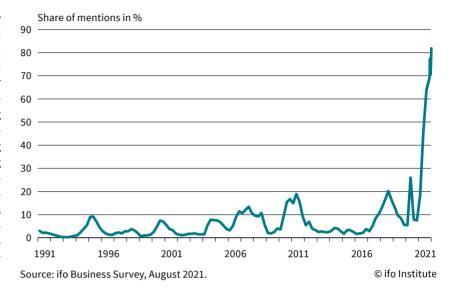
© ifo Institute

Shortage of Materials eaches Record Level

The results of the ifo Business Surveys show that supply bottlenecks and shortages of materials reached a record level in 2021. Two aspects played a key role in this: first, there was a physical shortage of certain goods (chips and semiconductors, for instance); second, purchase prices for intermediate products and raw materials rose considerably. This shortage of materials hit manufacturing during a phase of high order backlogs. Companies responded primarily in three ways: (1) adjusting production; (2) serving demand from finished goods inventories; and (3) raising prices for their own products. This mix suggests that companies tried to at least partially bridge the bottleneck recession with inventories – in the hope that material prices would fall again, but also in the expectation that the intermediate products they ordered would actually be delivered.

ifo Survey on the Shortage of Intermediate Products

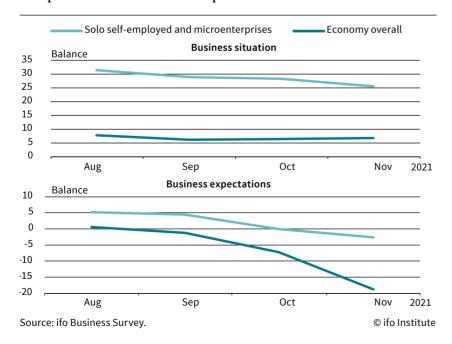
Responses from manufacturing companies since German reunification



"Solo self-employed persons and microenterprises are an important part of the corporate culture in Germany and can be a hotbed of innovation."

Dr. Klaus Wohlrabe Head of Surveys at the ifo Institute

Comparison of Situation and Expectations



Business Climate for Self-Employed Persons and Small Businesses

The ifo Institute has been calculating business indicators for solo self-employed persons and microenterprises since August 2021. It has undertaken extensive efforts to expand the panel of participants in this segment. The results of the first months show that solo self-employed persons and microenterprises are considerably less satisfied with their current situation than all companies taken together. Moreover, a palpable skepticism permeates their expectations for the coming months. The business climate for solo self-employed persons and microenterprises was thus in negative territory in December, unlike that for the overall economy. Overall, the results of numerous surveys indicate that smaller companies were the ones most severely impacted by the coronavirus crisis.

ECONOMIC FORECASTS

Relevant since Day One

Since its foundation in 1949, the ifo Institute has been monitoring current economic developments and providing regular economic forecasts on the basis of expert knowledge in conjunction with economic models. Such models are used to estimate past statistical relationships, such as those between economic indicators and economic growth, and to extrapolate them into the future. Economic forecasters use

several models for a large number of macroeconomic parameters, which means they have to combine the results with their expert knowledge and consolidate them into a forecast that is consistent in terms of its content and how it is calculated. The economic forecasts are relevant for policymakers, as they form the basis for many political decisions, including budget plans. Companies, too, use economic forecasts to support them in their production planning and investment decisions.



www.ifo.de/en/ifoeconomic-forecast

Identifying Economic Prospects

The ifo Institute's Economic Forecasts focus on predicting Germany's overall economic development over a period of up to two years. Due to the German economy's strong interdependence with the world economy and especially the European economy, ifo also forecasts economic development in key sales markets. These projections are based on informed analyses of the current macroeconomic situation. For its forecasts, the ifo Institute uses a variety of cutting-edge methods and takes particularly the findings of its Business Surveys into account.

EXTENSIVE METHODOLOGICAL EXPERTISE

The following ifo publications provide an overview of the forecasting methodology and special characteristics of the ifo Institute's business cycle analyses and forecasts:

- → ifo Business Surveys and Business Cycle Analyses: Selected Essays on Methodology from ifo Schnelldienst, ifo Forschungsbericht Vol. 33, 2007
- → ifo Business Surveys and Business Cycle Analyses, Volume II, ifo Forschungsbericht Vol. 72, 2016
- → ifo Manual of Business Surveys, ifo Beiträge zur Wirtschaftsforschung, Vol. 88, 2020



www.ifo.de/en/jb21/ umfragen1

www.ifo.de/en/jb21/ umfragen2

www.ifo.de/en/jb21/ umfragen2020

Economic Reporting

The ifo Institute's economic reporting focuses on the quarterly ifo Economic Forecast. In summer and winter, ifo publishes a detailed analysis and forecast of overall economic development in Germany and the world. Building on that information, ifo Dresden issues the ifo Economic Forecast for Eastern Germany and Saxony. In spring and fall, economic forecasts in the form of brief analyses are published in preparation for the Joint Economic Forecast.

ADDITIONAL IFO INSTITUTE FORECASTS

Joint Economic Forecast

The ifo Institute issues the Joint Economic Forecast twice a year, in spring and fall, in collaboration with other economic research institutes. This is a joint research project that involves analyzing and forecasting the economic situation in Germany and the world. Findings from the Joint Economic Forecast inform German government projections.

ifoCAST

Twice a month, ifoCAST issues forecasts of German gross domestic product for the current and upcoming quarter using a statistical model. These take numerous economic indicators into account, showing their influence on changes in the forecast. In this way, the ifo Institute links the monthly results of the ifo Business Surveys with a regularly updated assessment of economic developments.

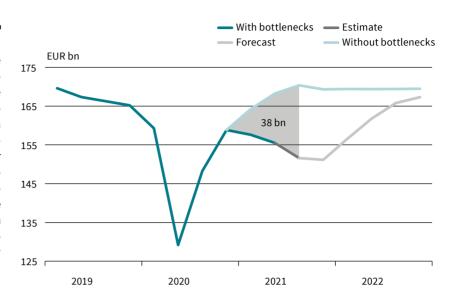
Supply Bottlenecks Dampen Economic Recovery

The German economy increasingly recovered from the coronavirus crisis in 2021. The summer half-year saw substantial gains in economic output, offsetting much of the downturn at the beginning of the year. However, the economy was split. Value added in manufacturing had been in decline since the beginning of the year. Although order intake rose almost continuously and order books were fuller than ever before, supply bottlenecks for key industrial intermediate products stood in the way of a production expansion. According to ifo Institute estimates, the first three quarters of the year saw a loss of around EUR 40 billion in value added. That's slightly more than 1 percent of Germany's total economic output for one year.



vww.ifo.de/en/jb21/lieferengpaesse

Gross Value Addeda in Manufacturing



^aAdjusted for price, seasonal, and calendar effects. Source: German Federal Statistical Office, calculations by the ifo Institute. © ifo Institute

Noticeably Higher Inflation

At more than 5 percent, the inflation rate in Germany in late 2021 was higher than it has been since the early 1990s. One reason for this is that prices in the previous year, which serves as the basis for calculating the inflation rate, were exceptionally low. This was due primarily to the temporary reduction in VAT in the second half of 2020 and the plunge in energy prices during the coronavirus crisis. Another reason is that consumer prices rose rapidly over the course of 2021. Food products and some services,

for instance in hospitality, became much more expensive in the summer months. But the main reason is that the prices of fuels rose significantly after the start of the new year.

The further outlook for inflation is associated with high risks. Ultimately, for the medium-term outlook for inflation, much depends on how wage costs develop. Wage agreements, which have been fairly modest so far, do not yet point to the start of a wage-price spiral.



www.ifo.de/jb21/ Inflation

"Experts largely agree on the causes of the high inflation rates in 2021: Prices in the previous year, which serves as the basis for calculating the inflation rate, were exceptionally low. In addition, the energy and raw materials markets are currently driving prices up."

Prof. Timo Wollmershäuser Head of Business Cycle Analysis and Forecasts

Reinventing the ifo Institute as a Place of Work

ontact restrictions fluctuated considerably in the second year of the pandemic. This presented the ifo Institute with new challenges. In the first year of the pandemic, we tried out and got familiar with new digital technologies. It then became a case of further enhancing and refining these new technologies and processes. It soon became clear that once the pandemic is over, life will not simply return to the way it was before. There were times when the rules governing working alongside other people were changing on a monthly basis. The ifo Institute needed to prepare for a time after the pandemic without knowing what this will look like and when it would happen. Centralized Services and the Institute management provided the backbone of these new, adaptable processes. We explored many questions, including: How can we make the ifo Institute a safe place to work? How should we organize flexible and mobile working? How can we get our employees excited about meeting to collaborate at the ifo Institute once again? Communications, IT, Human Resources and Law, and Finances and Centralized Services provided answers to these basic questions relating to "New Work."



Links to the

departments www.ifo.de/en/ department-it www.ifo.de/en/ department-pur www.ifo.de/en/ department-fi

www.ifo.de/en/

department-kom





The heads of the ifo infrastructure areas on a tour of the library renovation, the newly renovated Ludwig Erhard Room, and the stairwell in the main building

A Healthy Community is Paramount

Ensuring the health and safety of employees and visitors remains the ifo Institute's top priority. Scientific findings indicate that vaccination is the most effective measure in ending the crisis of the pandemic. One of the central topics of 2021 was therefore how Germany's vaccination campaign was progressing. The ifo Institute played an active role in this initiative, deeming it vital to both society and the economy. Using "Shaping the Vaccination Rate" as our motto, we appealed across all channels for people to get vaccinated. We also practiced what we preached: in summer 2021, our Human Resources and Law department organized two opportunities for employees to be vaccinated on the ifo premises. Further vaccination events took place in December 2021 and January 2022. Employees also always have the option of going to the company doctor. In addition to our vaccination efforts, the ifo Institute offers two self-tests a week to all its employees who (have to) work on-site. Since summer 2021, Germany's 2G rule (vac-

Vaccination by the Numbers



people received a coronavirus vaccination at the ifo Institute.

cinated or recovered) has applied to in-person events. In addition, Human Resources and Law came up with a testing concept that also makes it possible to hold in-person events attended by external guests. Since fall 2021, the 3G rule (vaccinated, recovered, tested) has applied to all employees who work on-site.



Making the Most of Digitalization Opportunities

At the ifo Institute, the circulation of paper files will soon be a thing of the past. The digitalization offensive we launched in 2020 maintained momentum throughout 2021. Through digital contract management and the introduction of fully digital HR files, the IT, Human Resources and Law, and Finances and Centralized Services departments have together digitalized central administrative processes. Another milestone was the rollout of new cloud-based platform solutions for applications and databases. This allowed us to

migrate the extensive address data relating to ifo Surveys – a strategically significant data asset for the ifo Institute – to the cloud. These activities paved the way for another of the ifo Institute's key endeavors: big data economics research. The plan is to start with pilot projects in 2022 and continue on a much larger scale from 2023 onward. To meet the corresponding data protection and data security requirements, our IT department also developed a new security concept to guard against attacks from hackers.

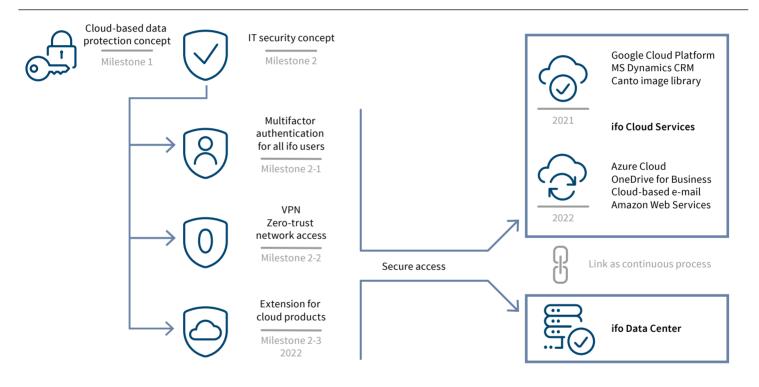
In recognition of their extraordinary dedication and success, the president of the ifo Institute awarded the employees of the IT department a special prize in 2021.

The New Work Evolution: On-Site Obligations – Working from Home – Mobile Working

The coronavirus pandemic forced all companies, practically overnight, to shift their employees from working on-site to working from home. The ifo Institute's IT department played a key role in navigating this transition and maintaining full research operations despite all the restrictions. One aspect was the switch from desktops to laptops, com-

pleted on a priority basis. Another was the tougher data security requirements of remote working. Since the ifo Institute had to protect itself against outside attacks, the IT department created the conditions necessary for employees to use a virtual private network (VPN). A further security measure introduced was multifactor authentication. Similar to banking or shopping online, this requires users to complete multiple authentication steps to gain access. This is also the basis for rolling out more cloud-based services; further advances in this area are scheduled for 2022.

New IT Strategy for Top Data Security When Switching to the ifo Hybrid Cloud



"This new way of working forces us to constantly scrutinize and refine our existing IT solutions. By switching to cloudbased applications and providing a service that is closely aligned to users' needs, we will meet the requirements of this new situation."

Kumar Subramani Head of IT

New Formats for New Target Groups

To reach new target groups in the public debate, ifo's Communications department experimented with new formats. Since podcasts, especially ones that share experts' viewpoints, have established themselves in the market, at the beginning of the year we launched the new ifo Podcast "Economy for All." It features ifo experts talking about the latest economic, scientific, and political events and providing background information on the Institute's latest research findings. Listeners can access the podcast through the ifo Media Center or subscribe to it via the usual platforms. These formats are always linked to publications on our website or to press releases and social media. Featured topics have included economic forecasts, green monetary policy, working from home, and public finances.



In September, the ifo Institute had a booth for the first time at the International Mobility Show (IAA) in Munich. For this event, we organized chats among experts about topics like the future of working from home and the anti-congestion charge for major cities. These chats were also streamed live on the web.



What do our researchers find most fascinating about their work? What new findings can they share? In our "We Explain Economics" videos, we take a look at the current research landscape and present our findings to a broader public.



ifo Podcast "Economy for All"



www.ifo.de/en/podcast

Selected Highlights of Digital Communication

39,800

people subscribe to the ifo Institute's YouTube channel.

>26,000

people follow the ifo president on Twitter.

17,254

is how many times the new ifo Podcast "Economy for All" was played via the ifo Media Center, YouTube, Spotify, and the many other podcast platforms.

22,000

people follow the ifo Twitter account.

Virtual and Hybrid Formats Create New Opportunities

Since only a handful of gatherings – seminars, workshops, conferences, and panels furthering the public debate could be held in person again in 2021, we continued to think about how we could improve our alternative formats. One advantage of holding hybrid events was that they offered us the opportunity to engage (keynote) speakers that we would otherwise not have been able to attract, such as renowned economist Thomas Piketty at the Munich Economic Debates. We expect that even once the pandemic is over, selected events will retain an online component. This is why we invested in our video capabilities: in January, we added a producer to our video team. In addition, we had our conference room refurbished and initiated a project to construct a professional broadcasting studio at the ifo Institute with a view to holding events at the various levels between hybrid and entirely online. We also continued to hold our internal events in either a hybrid or purely online format, with the sole exception of our summer party. The ifo Summertime Bar, inaugurated in 2020, was open again: observing social distancing, hygiene, and 3G rules, small groups of up to 30 people could get together in staggered slots in the ifo garden.

ifo Events in Figures

More than

2,000

people took part online in public events organized by the ifo Institute.

Approx.

9,000

people watched ifo events as a livestream on the website or followed them on Twitter.

More Development of Junior Economists, Education, and Training

Internships

interns were given the opportunity in 2021 to gain insight into the work of the ifo Institute. Many of them will later join the ifo Institute as doctoral students.

Professional development

out of the 258 approved further training offerings were attended.

Despite the contact restrictions, training events were able to take place to a great extent – usually in the form of webinars. Offerings included training for IT tools, PC applications, or personal development.

Further education

junior economists completed an online media training course, organized by the Communications department. This was designed using a format tailored to the needs of the ifo Institute.

Training

new apprentices began their training at the ifo Institute in 2021. Two of them completed their apprenticeships in the Human Resources and Law department, while the third became the first apprentice systems technician in the IT department.

More Funds for the Dresden Branch

For the 2021 financial year, the funding system for our Dresden Branch changed from an uncovered-demand to a fixed-sum model. This has several benefits for ifo, including dispensing with a strict separation between core and third-party budgets. Any surplus of third-party funding no longer has to be paid to the state of Saxony, but instead can be used to help build up a financial reserve for the Dresden Branch.

How Recruiting Developed at the ifo Institute

38



jobs were offered by the ifo Institute to scientists and non-scientific staff, roughly the same number as the previous year. 833



applications were received by ifo, 20% more than in the previous year. A new digital application tool was also launched. Applicants can upload their documents within "their" individual environment and chat directly with the recruiting team.

68



online interviews were conducted in 2021 at the ifo Institute – exactly the same number as in 2020.



The **onboarding process** was further digitalized to enable new employees working from home to have the best possible start – in addition to a detailed welcome e-mail, new members of staff are invited to attend a virtual welcome@ifo meeting.



The ifo Institute's presence on LinkedIn (recruiting strategy) was developed further: updates as well as teasers for job advertisements are being posted.

Candidates can now also contact ifo directly through this platform.

"Any organization looking to attract first-class researchers cannot afford to wait for them to walk through the door, but should instead showcase the career opportunities

on offer. We support our employees throughout their time with us and advise them on options both within and outside the Institute."

Angela Wagner Head of Human Resources and Law

ifo Campaigns Designed to Reach a Wider Audience

In summer and fall, the ifo Institute devoted two special issues of ifo Schnelldienst to the 2021 German federal election. The July issue of ifo Schnelldienst, for instance, featured a total of ten articles in which ifo department heads discussed the most important economic policy challenges facing Germany in the post-Merkel era – from education policy to foreign trade to digitalization – and put forth ideas on how to tackle them. Building on this broad spectrum of future-defining topics, the October issue of ifo Schnelldienst focused on tax policy reform and how Germany can make its tax system growth-friendly and fair. This series was accompanied by extensive press and PR activities coordinated by the Communications department.

Other key topics for 2021 included the coronavirus and economic development. The ifo Institute was quick to pick up on the latest economic policy questions circulating in the

public debate and succeeded in strategically positioning its content. For instance, the monthly results of the ifo Surveys were supplemented by press releases on topics such as supply bottlenecks and material shortages in manufacturing, construction, and retail.

Event Highlights of 2021

- ifo Annual Meeting: "Economic Policy Challenges in the Post-Merkel Era"
- ifo Industry Colloquium: "Sustainability"
- Munich Economic Debates: Umbrella topic:
 "Economic Policy Challenges in the Post-Merkel Era"



"Our new campaigns helped us to bring key electionyear topics to the public via a range of channels over a sustained period."

Dr. Cornelia Geißler Head of Communications

ifo Press and Public Relations 2021 in Figures

252



Press releases

12



Press conferences

300



Interviews

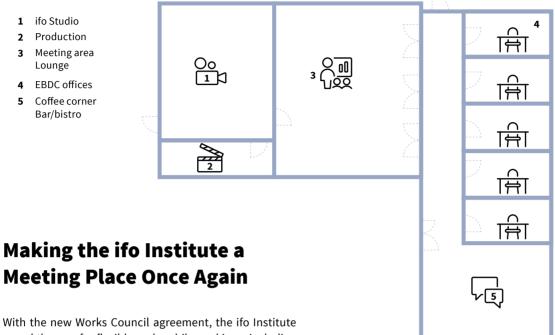
39



Guest articles by ifo economists

Conversion of the Library into a Collaborative Workspace

- ifo Studio
- Production
- Meeting area Lounge
- EBDC offices
- Coffee corner Bar/bistro



Meeting Place Once Again

With the new Works Council agreement, the ifo Institute paved the way for flexible and mobile working - including for the post-pandemic era. At the same time, the Institute is keen to remain a place where its employees enjoy getting together. In 2021, we began extensive alteration and renovation projects. The books from the library in the Adolf-Weber-Haus were given a new home. With the help of the Munich University library, we reduced the store of books to non-digitized editions and moved them to the basement archives. The space this freed up will now be converted into a collaborative workspace. This will include a state-of-theart conference room, additional offices for the LMU-ifo Economics and Business Data Center (EBDC), and a lounge that overlooks a nearby park. The cafeteria is also being given a fresh look as well as a new usage concept that focuses on the ways in which colleagues meet and interact.

Meanwhile, renovation work in the Ludwig Erhard Room is almost complete. The largest of the ifo Institute's conference rooms, it has retained its character while gaining some modern touches: new lighting, new furniture, and new technical equipment. To enable employees working in different places to collaborate as effectively as possible, all ifo conference and meeting rooms have been equipped with the latest conferencing technology.

"Especially within a scientific organization, the exchange of theories and ideas is of vital importance. To ensure that the ifo Institute can continue to generate new, innovative ideas in the age of mobile working, in 2021 we began an extensive modernization program for our premises."

Thomas Walter Head of Finances and Centralized Services

Research Achievements, Committees, Staff 2021

RESEARCH AND TEACHING

Projects

Publications

Presentations and Events

Honors and Awards

Doctorates and Appointments

Courses

Guest Stays

Visiting Researchers

COMMITTEES AND STAFF

ORGANIZATIONAL CHART

CESIFO ACTIVITIES



A comprehensive overview of the ifo Institute's research achievements, committees, and staff as well as CESifo's activities in 2021 can be found at:

www.ifo.de/sites/default/files/2022-06/JB_2021_b.pdf

PUBLISHING DETAILS

Publisher

ifo Institute – Leibniz Institute for Economic Research at the University of Munich Poschingerstr. 5, 81679 Munich Postfach 860460, 81631 Munich Phone: +49 89 9224-0, Fax: +49 89 985369

Executive Board

Prof. Clemens Fuest (President) Dr. Stephanie Dittmer

Member of the Leibniz Association

Leibniz Association

ifo online

www.ifo.de/en E-mail: ifo@ifo.de Presented to the 73rd ifo Annual Meeting on June 9, 2022

Editorial Activities

Dr. Cornelia Geißler, ifo Institute / IAN In A Nutshell GmbH, Munich

Layout ifo Institute **IIIlustrations** Arndt Knieper

Photos

Suez Canal, p. 34: picture alliance / Uncredited Flood in the Ahr Valley, p. 35: picture alliance / Eibner-Pressefoto Swearing in of Olaf Scholz, p. 37: picture alliance / dpa / Kay Nietfeld IAA Munich, p. 38: StMWi / E. Neureuther Staff of the ifo Dresden Branch, p. 38, 77–79: Klaus Gigga All other photos: ifo Institute

Translation Klein Wolf Peters GmbH, Munich **Printer** ifo Institute

ifo Annual Report 2021 ISSN: 2194-928X

© ifo Institute, June 2022

Reprints, including excerpts, are permitted only with the permission of the ifo Institute.