ZEW NEWS
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Financial experts are divided over the new strategy of the European Central Bank. Foto: ©EKH-Pictures/stock.adobe.com

Inflation Effect of the ECB's Change of Strategy Disputed Among Financial Experts

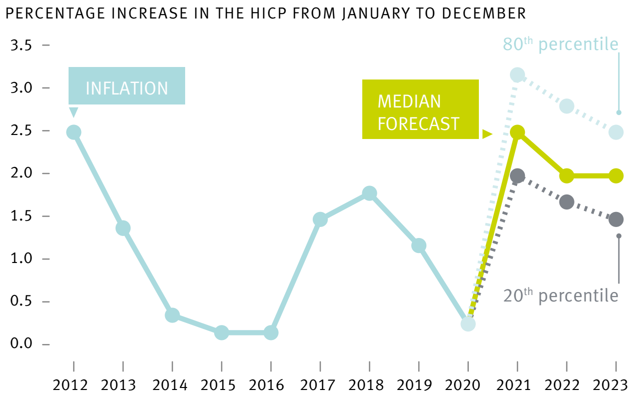
On 8 July 2021, the European Central Bank announced its new monetary policy strategy. It contains three central elements: the adoption of a symmetric inflation target, the inclusion of owner-occupied housing in inflation measurement and the consideration of climate protection in monetary policy. ZEW Mannheim took this opportunity to ask 147 financial market experts about the ECB's new strategy as part of the ZEW Financial Market Survey in August 2021.

The results show that financial experts are divided over the new strategy of the ECB. While 49 per cent of those surveyed by ZEW Mannheim say that the change in strategy has prompted them to adjust their medium-term inflation forecast for the years 2021 to 2023 upwards, about 46 per cent say that the new strategy has no influence on their forecast. Five per cent are even inclined to revise their inflation forecast downwards.

There is greater consensus among the financial experts, however, on the assessment of the climate protection mandate that the ECB has committed itself to with the new strategy. Two-thirds of the respondents doubt that the ECB – contrary to the target formulated in the strategy – will make a successful contribution to EU climate policy by reducing CO_2 emissions. On the other hand, the consideration of climate aspects makes it more difficult to achieve the new symmetric inflation target and to justify ECB decisions to the public.

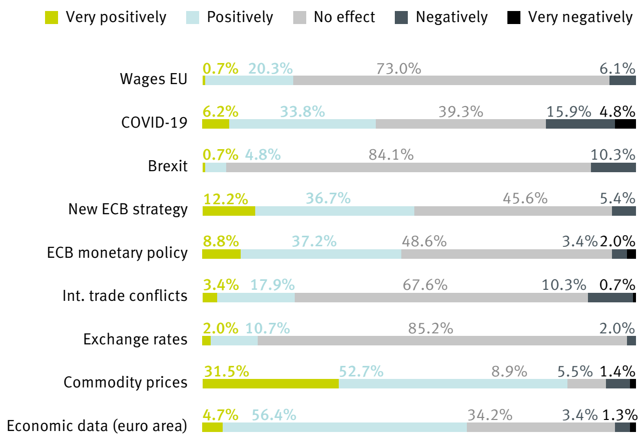
There is still a great deal of uncertainty among financial market experts about how the change to a symmetrical inflation target will affect inflation and key interest rates in the medium term.

FORECAST OF THE INFLATION RATE IN THE EUROZONE 2021 – 2023



Source: ZEW

DEVELOPMENTS CONTRIBUTING TO THE REVISION OF INFLATION FORECASTS (COMPARED TO MAY 2021) IN THE EURO AREA



Source: ZEW

Both upward and downward deviations of the inflation rate from the target value of two per cent are still considered equally unfavourable by the European Central Bank. Only about 55 per cent of the respondents answered the question of how the change to a symmetric inflation target has affected their inflation forecasts. They estimate that the new ECB strategy will lead to an increase in the inflation rate in the euro area for the years 2021-2023 by an average of just under 0.4 percentage points, respectively.

Key interest rate expected to increase only slightly in the euro area

When asked about how the new strategy will influence the key interest rate, around 48 per cent of the financial market experts answered. According to their estimates, over the next six and 24 months the ECB's main refinancing rate will rise by an average of 0.1 percentage points, respectively. The financial market experts hence expect the key interest rate to rise significantly less than the inflation rate due to the new ECB strategy. In sum, respondents expect the switch to a symmetric inflation target of two per cent to have a small, negative effect on real interest rates in the euro area.

Inclusion of home ownership expected to lift measured consumer prices slightly

A clear majority of financial market experts see the inclusion of owner-occupied housing in consumer price measurement as a moderate inflation driver in the future. Around 70 per cent of the respondents assume that the change in the composition of the Harmonised Index of Consumer Prices (HICP) will slightly increase measured inflation. Another 11 per cent of the experts even expect a significant increase in the measure of consumer prices. While about 14 per cent of the respondents estimate that the change will have no influence on the HICP, six per cent forecast a slight or significant decrease.

Consideration of climate protection could jeopardise the achievement of the inflation target

The ECB aims to take greater account of climate protection aspects in its monetary policy in future. About 51 per cent of the respondents think that this will make it more difficult to achieve the inflation target of two per cent. Around 43 per cent do not expect any significant change.

Combining monetary policy with climate protection allows for better risk management and thus responds to the current market situation. But mixing different policy objectives could make it more difficult for the ECB to justify its decisions. Approximately 44 per cent of the financial experts surveyed suspect that the ECB's communication could lose transparency due to climate considerations. However, a slight majority of around 47 per cent believe that the ECB will be able to cope well with this task. A further 9.1 per cent of respondents even expect transparency in communication to increase if the ECB officially takes climate protection into account.

New ECB strategy unlikely to actually reduce carbon emissions

However, the majority of respondents doubt whether the ECB can actually contribute to EU climate protection. Two-thirds of the respondents do not belief that the ECB is able to promote EU climate protection. However, 29 per cent of the financial experts estimate that the ECB will succeed in supporting the EU in its climate policy. Overall, the widely diverging answers in the survey show that uncertainty in the market regarding the effects of the ECB's change in strategy is currently still high.

The September 2021 Financial Market Report can be downloaded (in German only) at: www.zew.de/PU82746

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Counteracting Information Deficits and Disinformation in Times of Fake News

There is still considerable room for improvement in Germany when it comes to knowledge of economic facts: Although Germans are better informed than average in a global comparison, they are only in the middle of the pack compared to other industrialised countries. Interestingly, misjudgements are usually more pessimistic than the reality. Germany's economic performance is often assessed too negatively, for instance, with regard to the country's economic performance, the level of unemployment, the employment rate of women, and inequality. This is the result of a research project conducted by ZEW Mannheim with the support of the Brigitte Strube Stiftung.

How well-informed are people in Germany about economics and how can existing knowledge gaps be closed? Researchers from ZEW Mannheim examined these questions, which are particularly relevant in view of this year's German federal elections. In their analysis, they also shed light on the connection between economic knowledge and a state's ability to reform. They found that states with economically well-informed voters are more likely to have greater economic freedom, i.e. a functioning legal system, a high degree of market openness or efficient state regulation. Economic policy issues are also judged in a more balanced way when more detailed information is made available. For example, openness towards tuition fees increases when information on the income advantage of university graduates is made available. Moreover, a better level of information goes hand in hand with a greater awareness of the negative consequences taxes have on growth and performance.

In order to identify possible causes for poor economic knowledge, the study looks more closely at the role of the general level of education and the use of social media. International country comparisons show that a low level of education and heavy use of social media are associated with poorer knowledge of facts.

In addition to analysing the population's level of economic knowledge, the ZEW researchers have developed a catalogue of new ideas for improving economic education. In Germany, the great economic competence available at the many research institutions is not sufficiently used for knowledge transfer. Young researchers currently have too little incentives to carry their expertise into schools or offer themselves as discussion partners for interested non-experts. This is where 'credit points for transfer', which young researchers obtain for participating in transfer activities during their doctorate, could help. Moreover, the ZEW researchers recommend the introduction of so-called 'electoral programme referees' and 'impact checks'. Via election programme referees who independently examine the election programmes of the various parties, people could see, for example, what the financial consequences of the individual election outcomes would be.

Fact checks should be complemented by impact checks

Aside from that, fact checks, which are already widely used in the media, should be complemented by impact checks. The difference is that impact checks also look at the indirect repercussions of a political measure, which are often not so easily recognisable. One example is the proposal for a rent cap. The impact check would show, on the basis of available scientific studies, what consequences such a market intervention can have for investments in housing and the availability of housing. Only with this knowledge will a truly informed decision on such a regulatory intervention be possible. 'Internet driving licences' could also provide new incentives in schools for acquiring greater competences in dealing with digital information sources. A country's economic policy can only be as good as the economic literacy of its voters, which is why it is so important to take comprehensive efforts in the fight against economic information deficits and rampant disinformation in times of fake news.

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IN THIS ISSUE

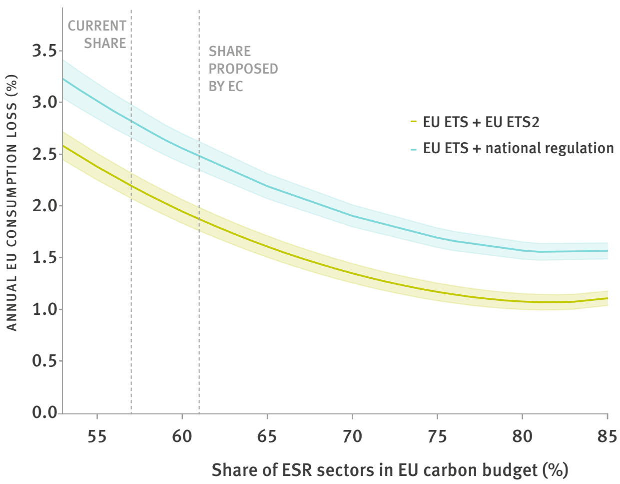
Smart Distribution of Emissions Could Save the EU up to 152 Billion Euros

In its recent climate package, the EU Commission proposes a second emission trading system for emissions caused by transportation and heat. This proposal has the potential to cut the cost of reaching the EU-wide 55 per cent CO_2 reduction target by 50 billion euros. The proposal, however, does not exploit the full cost savings potential. A smarter distribution of the EU-wide CO_2 budget between economic sectors could save an extra 100 billion euros in economic costs. This is the result of a recent calculation by ZEW based on a macroeconomic simulation model.

In 2030, the EU wants to have its greenhouse gas emissions reduced by 55 per cent compared to the reference year 1990. To achieve this goal, EU emissions have so far been regulated with two separate systems: the EU Emissions Trading Scheme (EU ETS) covers emissions from the electricity sector and energy-intensive industries and establishes an EU-wide carbon price. The Effort Sharing Regulation (ESR) regulates the remaining emissions sources, mainly transportation, heat, and agriculture, and defines reduction targets for each EU Member State, which in turn have to take actions to reach these targets. This approach of national targets causes additional economic cost of carbon mitigation as emissions are not abated where it is cheapest.

At the heart of the recent "Fit for 55" package, the European Commission therefore proposes to reform the regulation of emissions of transport and heat. Under the reform, the existing EU ETS is to be supplemented by a second EU-wide emissions trading system for transport and heat.

ECONOMIC COSTS FOR EU-27 TO ACHIEVE THE 55 PER CENT CLIMATE TARGET



Economic costs refer to the projected change in EU-27 annual consumption in 2030. Costs exclude the benefits from avoided climate change. Shaded areas denote standard deviations and solid lines the expected values.
Source: ZEW

According to the authors of the study, the introduction of a second emissions trading system is an important step in the right direction. It would establish an EU-wide uniform carbon price for transportation and heating. As the trading system allows to abate emissions where it is cheapest, the proposal significantly reduces the economic costs of achieving the EU climate target. Under the current legislation, reaching the EU target will cost around 2.8 per cent (or about 250 billion) of EU consumption in 2030 relative to the status quo. These cost savings are due to greater flexibility in reducing CO_2 emissions from transport and heat. Using a macroeconomic simulation model, ZEW researchers estimate that this reduces the cost of meeting the EU emissions reduction target by about 50 billion euros. While introducing the second trading system would be a right step, further significant cost savings are possible through smart policy design.

Climate protection costs can be reduced even further

To meet the climate goals at the lowest economic cost, emissions should be avoided where it is cheapest. Since the level of abatement costs varies widely by sector, the decision to allocate the emissions budget has a direct and significant impact on economic costs. By improving on how the amount of CO_2 emissions between the EU ETS is distributed among sectors and the two emissions trading systems, the overall economic cost to meet the EU climate target could be significantly reduced – from 2.8 per cent of EU-wide consumption (or about 250 billion euro) to up to 1.1 per cent of consumption (or 95 billion euro). To reduce costs over the current EU Commission proposal, the buildings and transport sectors would have to receive a significantly higher emissions budget, and a major part of the ambitious EU climate targets would have to be achieved by avoiding emissions in the electricity sector and energy-intensive industries.

With the second emissions trading system (to be introduced in 2025) and the current distribution of the CO_2 budget, the EU Commission has proposed to make use of a policy instrument which will reduce the climate protection costs. The EU climate target would be met at a 22 per cent lower cost compared to current legislation, the ZEW study finds. However, much higher cost savings are possible: by shifting part of the emissions reduction burden from transportation and heat to the EU ETS, the EU could reduce its costs by as much as 61 per cent.

The ZEW policy brief can be downloaded at: *www.zew.de/PU82677-1*

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Photo: © iStockphoto.com/NicoElNino

Prompt Availability of Information Enables Efficient Government Guidance in Crises

With the oil crisis, the bursting of the dot-com bubble, the financial and banking crisis, and the COVID-19 pandemic, the past fifty years have seen several economic shocks that often had severe consequences for the business landscape. Governments are often only able to provide targeted support and respond appropriately to such unexpected events with a significant time lag, as appropriate data is usually not available at the beginning of a crisis. AI-based analysis of corporate websites can remedy this situation by complementing traditional survey methods and providing reliable early forecasts in a timely manner. This is shown by studies conducted by ZEW in cooperation with JLU Giessen.

In the period immediately following an unexpected economic shock, there is usually a great need for information, which coincides with a significant lack of relevant information. Based on this inadequate data availability, a team of researchers at ZEW, together with the start-up company ISTARI.AI, developed an AI-based methodology for the automated evaluation of corporate websites. With the help of the AI algorithm created by ISTARI.AI, more than one million corporate websites of German companies were scanned and evaluated for references to the coronavirus pandemic every week during the pandemic. The algorithm can reliably distinguish whether companies report problems (closures, cancellation of events, etc.) or announce adaptive measures (adjusted opening hours, delivery service, etc.) in connection with the pandemic. In this way, it can be determined at an early stage which companies and sectors are mainly affected. The analysis carried out from March to May 2020 made it possible to obtain an initial overview of the economic effects resulting from the unexpected economic shock. The advantage of a dynamic data source such as the website analysis is that it allows the impacts of an economic shock to be determined almost in real time.

ZEW researchers recommend set of measures

Particularly in the coronavirus crisis, where politicians had to react quickly but at the same time faced a large information deficit regarding its economic impact, web-based evaluations are a valuable tool for designing targeted, early relief measures for businesses. Traditional forms of data collection and data sources, on the other hand, have the advantage that they can capture the extent of a shock in a more differentiated way and also allow for an analysis of the actual impact – albeit with a considerable time lag.

The ZEW researchers recommend a set of measures that combines various data sources in order to fully capture the economic impact of a crisis. At first, a prompt evaluation of a large number of company websites should be carried out in order to quickly improve the supply of information. This is followed at a later stage by the optimisation and supplementation of this information through surveys among selected companies, whereby the findings from the website analysis should be incorporated into the design of the surveys.

A retrospective look at credit rating data of the observed companies suggests that this approach delivers reliable results that provide a leading indication of later rating movements. In this way, the researchers show that the results of the web analysis can be used as early indicators regarding changes in the creditworthiness of the companies in the later course of the crisis. Information from automatically evaluated mass web data is thus of high value for political and economic decision-makers. Especially in dynamic crisis situations, AI-based web analytics can complement traditional survey methods and provide up-to-date as well as reliable early forecasts.

In the future, the ZEW researchers want to concentrate on the interpretability of their AI models. In recent years, there has been an increasing awareness that artificial intelligence systems should not be a black box in certain contexts. Instead, their results should be interpretable, fair, transparent and comprehensible. Especially against the background that political decisions will increasingly be based on the results of AI models, these results must fulfil all these criteria. For example, it is important to know which words and word combinations have a particularly high weight in the predictions. At the same time, however, there are also advantages to a black box, considering that it is more difficult to manipulate than an open, fully transparent system.

The study can be downloaded at: *www.zew.de/PU82744-1*

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How Does Chinese Innovation Affect German Companies?

"Chinese Import Competition Can Act as Both a Stimulus or a Brake"

As the coronavirus pandemic continues to slow down global markets, China's economy is booming like the crisis never happened. More importantly, China is making massive investments in innovation in a bid to become the global leader in technology. How will the surge of new investment affect Germany, one of China's major trading partners? Dr. Philipp Böing, a senior researcher at ZEW, is studying the question as part of an international project for Germany's Federal Ministry of Education and Research.

Is it only a matter of time before China becomes the world leader in technology and economic power?

While technically speaking the leading industrialised nations could manufacture nearly all Chinese goods themselves, the reverse is not yet the case. So China has decided to focus on innovation and stepped up its investment in research and development. Its state-run enterprises have taken the lead in pursuit of that objective, which puts government control over economic efficiency.

The goal of technological independence could also lead to the replacement of internationally established technologies with cost-intensive new ones, decreasing productivity and gross domestic product growth. It is debatable whether China can become the world's economic and technological leader without cooperating with the global community in reaching its full potential.

What is the project studying specifically?

We want to figure out how efficient China's R&D policies are in promoting innovation and competitiveness. We put particular attention on the question of whether China's innovation policy succeeds in generating stronger productivity effects through mission-oriented innovation incentives than market-oriented innovations. Moreover, we want to know the extent to which German companies are adapting to increasingly competitive Chinese imports. China has been a leader in German imports since 2014. The important issue for business leaders and policymakers to understand is whether product market competition with Chinese companies and the supply of increasingly sophisticated intermediate inputs from China will stimulate or slow down innovation in Germany.

Why study research and innovation now?

In many European countries, the aim of research and innovation policy is to supply proper incentives and address urgent future questions such as digitalisation, climate change and demographic transition.

By contrast, Chinese policy takes a rather dirigiste approach, defining not only the "what" but also the "how". The public often regards China's industrial policy and economic growth as causally linked. But there are clear indications that the privatisation of state-owned companies and the elimination of economic planning are what have been behind China's growth.

We are trying to understand to what extent China's research and innovation strategy offers economic benefits or whether it contributes to the misallocation of resources. Both the US and the EU have criticised China's subsidies for distorting competition. However, additional evidence is needed to assess their overall impact.

Have subsidies for research and innovation increased productivity?

A previous study of ours, looking at the period from 2001 to 2011, paints a different picture. Although we found that subsidised companies increase their total spending on research and innovation, they increase their productivity no more than other companies. In addition, we found clear weaknesses in policy implementation. Nearly 50 per cent of subsidised companies used their subsidies for unintended purposes. But even with companies that did not, we found no connection between subsidies and productivity.

Are Chinese imports impeding German innovation?

In theory, Chinese imports can act as both an incentive and a brake on German innovation. A comprehensive empirical study has not yet been conducted for Germany, so we are looking forward to our first results.

For the US, previous studies have found that Chinese competition has had a negative effect; for other industrialised nations, the findings have been varied. We ultimately expect a multi-layered picture for German companies, because they are not only affected by Chinese imports but also benefit from exporting to China.

Foto: ZEW

Dr. Philipp Boeing
is a senior researcher in ZEW's Research Department "Economics of Innovation and Industrial Dynamics". He is interested in the economics of innovation, in particular policy evaluation, patent indicators, and import competition. His work is characterised by the combination of micro data, econometric analysis, and methodological advancements. For almost 20 years he has regularly visited China and East Asia. Most recently, he worked at Peking University as an assistant professor. His current research is concerned with China's development towards an innovation-driven economy and the impact of this on Europe.
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The Basilica Notre-Dame de la Paix in Yamoussoukro, the birthplace of the then president of Côte d'Ivoire, is just one example of favouritism.

Photo: ©Roman Yanushevsky/stock.adobe.com

Regional Favouritism: Economies Estimated to Lose 0.5 Per Cent of Total Output Per Year

Around the world, political leaders are shown to help companies grow significantly in their home regions. The commonly held view is that this regional favouritism is a negative phenomenon fuelled by corruption and other forms of rent-seeking. But the contrary could also be true: If leaders manage to subsidise highly productive firms, net benefits could arise. However, in a recent study, ZEW Mannheim concludes that favouritism does indeed lead to misallocation of resources and aggregate losses, with economies losing on average 0.5 per cent of their total output per year.

With construction costs estimated at over half a billion dollars, the Basilica Notre-Dame de la Paix first opened its doors to up to 18,000 worshippers in 1989. The construction followed President Houphouët-Boigny's declaration to nominate Yamoussoukro, a small town where he was born, as the new capital of Côte d'Ivoire and replace Abidjan, the economic and cultural centre of the country. Similarly, the Pancho Arena was built in Felcsút, just a few metres from the Hungarian prime minister Viktor Orbán's childhood home. It would take more than twice the little town's population to fill the stadium. These are just two examples of a phenomenon termed regional favouritism, which describes the geographical redistribution of resources within countries based on preferential political treatment.

The ZEW study compares the performance of firms located in close proximity to the national leader's birthplace during and outside their term of office. These are compared with geographically more distant companies as a control group. The results of the study show that companies within 50 kilometres of the head of state's birthplace have a 22 per cent higher sales volume. Compared to the control firms, they also have 13 per cent more employees, which translates into 1.5 million dollars in sales and ten additional employees for the average firm in the sample. Further results show that firms located in favoured regions are not only larger in size, but also appear to produce more output per worker, pay higher wages, and have higher total factor productivity compared to other firms.

At first sight, this evidence is consistent with the interpretation that regional favouritism may be an efficient policy. However, the ZEW researchers also find evidence that favouritism does not directly lead to general productivity increases. The baseline effects found in the study come mainly from the non-tradable goods sector. This unbalanced growth in the sectors is not a plausible pattern for general productivity improvements, for example through the provision of better infrastructure. The research team also shows that the expansion of firms in the study is partly driven by direct government transfers through the award of more public procurement contracts.

Lastly, the positive effects on firm performance were found to last only temporarily. Taking this additional evidence together, the results point towards a misallocation of resources rather than general productivity improvements.

Favouritism creates a demand shock

To quantify the aggregate effect, the team built a stylised model of misallocation. Calibrating the model to match the empirical estimates reveals that economies facing this type of misallocation across sectors lose an estimated 0.5 per cent of their total output per year. The intuition behind the result is that favouritism creates a demand shock in the favoured region, which leads to a redistribution of production factors to the non-tradable sector of the favoured region and to the tradable sector of the other regions. Due to diminishing returns, a higher concentration of labour in the respective sectors in favoured and non-favoured regions results in aggregate losses.

According to the study, a reallocation of resources in favour of certain firms can substantially improve their outcomes. In general, such policies are harmful to the economy as a whole and should be considered with caution. Countries can become better off if they manage to restrict the regional redistributive policies of their leaders. However, it is less clear how this can be achieved. For example, the role of democratic institutions as a potential mitigating factor needs to be studied further.

The study can be downloaded at: *www.zew.de/PU82503-1*

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Germany Moderately Attractive for Companies Using Artificial Intelligence

A more powerful IT infrastructure and government funding options would encourage more companies to use artificial intelligence (AI) applications. The main obstacles preventing companies from making greater use of this technology are the high development and implementation costs and the lack of skilled workers. The companies surveyed still see significant room for improvement for Germany in terms of AI in comparison to other countries. These are the results of a survey conducted by ZEW Mannheim on behalf of the Federal Ministry for Economic Affairs and Energy among more than 950 companies actively using AI or with a potential to use AI.

According to the survey, 46 per cent of companies are more likely to introduce AI applications if a more powerful IT infrastructure is in place. In addition, 44 per cent of companies rate government support for AI solutions as a significant factor in mitigating the risks and uncertainties associated with their introduction. The availability of data from public sources, the level of public awareness, further training opportunities for employees and adjustments to data protection, on the other hand, are not among the factors that inhibit the adoption of AI.

Costs and skills shortages slow down greater use of artificial intelligence

A key challenge for companies that actively use artificial intelligence are the high costs associated with developing and implementing this technology. 46 per cent of respondents see this as a major obstacle to greater use of AI technology within an organisation. This is especially true for young and small companies and those using less mature AI applications. At the same time, business partners often lack investment budgets to jointly implement AI solutions. 47 per cent of the companies surveyed see this as a major obstacle and wish for better financing conditions. In an international comparison, the respondents perceived this as one of Germany's main deficits with regard to AI. 73 per cent of the companies rate the financing conditions in other countries as significantly better. For companies that use AI, the shortage of skilled workers also inhibits a greater use of AI, with 84 per cent of companies citing this as a limiting factor. Companies assess the supply of skilled workers with AI skills to be less good than in other industrialised countries. 57 per cent gave Germany a poor rating in this regard. In addition, a powerful IT infrastructure is also important for companies that are actively using AI solutions in order to make Germany more attractive in this respect.

Germany has room for improvement in terms of AI

In an international comparison, Germany scores well in terms of security and data protection: 57 per cent of companies using AI say that data security is better than in other industrialised countries. 45 per cent of the companies rate the regulations in data protection as particularly positive and 29 per cent as comparable to other industrialised countries.

When it comes to data availability and the use of external data, however, the study paints a different picture: 62 per cent say that Germany compares less favourably with other countries in this regard. Generating more trust in AI solutions as well as increasing public awareness about the benefits of AI applications are seen as important measures by 58 per cent of the companies surveyed. This is also where Germany performs worst internationally. The study shows that there is indeed potential for companies that have not yet actively used AI to get started with AI applications. Both companies that use AI and those that do not would like to see more government funding and an improved IT infrastructure. This would significantly increase the attractiveness of Germany for businesses using AI.

The study can be downloaded (in German only) at: *www.de.digital/DIGITAL/Redaktion/DE/Digitalisierungsindex/Publikationen/publikation-download-ki-herausforderungen.pdf*

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#ZEWBookTalk with Michael Keen and Joel Slemrod on Taxes in the Past and Now

Bizarre and weird, but fascinating. These are the words Michael Keen uses to describe the history of taxation, which he wrote down in cooperation with Professor Joel Slemrod in their book "Rebellion, Rascals, and Revenue: Tax Follies and Wisdom Through the Ages". On 28 July, ZEW President Professor Achim Wambach welcomed the two authors Keen, deputy director of the Fiscal Affairs Department of the International Monetary Fund (IMF), and Slemrod, professor of business economics and public policy at the University of Michigan, to the virtual #ZEWBookTalk. In addition, they addressed current developments

At the beginning of the #ZEWBookTalk Michael Keen said that taxes have rarely sparked a war. However, after Chilean companies had started mining valuable nitrates at the Bolivian Atacama Desert, Bolivia continuously raised export taxes. This led to a conflict which lasted for years and eventually triggered the so-called War of the Pacific. As a result, Bolivia became landlocked.

"Taxes sometimes change the map of the world," said the IMF's deputy director. The latest book by the US economists contains many historical anecdotes like the one about the War of the Pacific. It takes the reader on an entertaining journey through 4,000 years of tax history. Governments around the world have generated income by taxing of all sorts of things and circumstances: from wallpaper to wigs, candles and childlessness, the right to a coat of arms, and bachelorhood.

Taxation is a matter of fairness

Both in the past and in the present, taxation is a matter of fairness. In the past, some governments developed bizarre methods to achieve fairness through taxation. Economist Joel Slemrod cited the window tax that existed in England and France in the 18th and 19th centuries as an example of this. More windows meant higher taxes. The idea behind it was the following: The number of windows in a house correlated strongly with its size and the wealth of its owners. However, the window tax led to the number of windows being reduced and rooms being bricked up, Slemrod said. Another important aspect of taxation is that it elicits a behavioural response.

"Economists know surprisingly little about the incidence of individual taxes"

In the following debate, ZEW President Achim Wambach focused on recent developments and how taxation effects individual households. Too little is known about the economic consequences of tax changes. In the US, for example, it is still unclear whether workers or the companies themselves will benefit from the reduction in corporate taxes under Trump. Keen and Slemrod also see a so-called incidence problem. The Trump administration's tax reform is not the only example of obscure effects of taxes. The often-discussed financial transaction tax, which some call the "Robin Hood tax", is another case of unclear tax incidence. Taxation can be instrumentalised to win votes.

ZEW President Achim Wambach (top) in conversation with US economists Michael Keen (left) and Joel Slemrod (right).

"Politicians and lobbyists have an incentive to conceal incidence issues," Keen said. Therefore, researchers need to learn more about tax incidence and the specific impact of taxes.

Minimum tax is a conceptual breakthrough

Keen emphasised at the end of the discussion that there have been "conceptually radical innovations" in recent years. As an example, the US economist mentioned the destination-based cash flow tax proposed by the Republicans in 2016 and the minimum taxation promoted by the Organization for Economic Co-operation and Development (OECD).

His colleague Slemrod, on the other hand, is critical of the minimum tax. "I'm just not sure that so many countries are really willing to give up their tax sovereignty." Nevertheless, he concedes that the minimum tax is a conceptual breakthrough. ZEW President Wambach also viewed the minimum tax with scepticism: "Currently, the effective tax rate in Europe is not much lower than it would be after the introduction of a minimum tax."

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ZEW Economist Barbara Stage Appointed to WHU – Otto Beisheim School of Management

ZEW economist Dr. Barbara Stage has been appointed assistant professor at WHU – Otto Beisheim School of Management.

Dr. Barbara Stage has been appointed assistant professor of financial accounting and business taxation at WHU – Otto Beisheim School of Management as of 1 August 2021. Previously, she was a researcher in the "Corporate Taxation and Public Finance" Research Department at ZEW Mannheim and completed her PhD under the supervision of Professor Christoph Spengel at the University of Mannheim. As an assistant professor for financial accounting and business taxation at WHU – Otto Beisheim School of Management, Barbara Stage investigates the impact of taxes on firms. Her research focuses on the effectiveness of transparency regimes to combat tax avoidance and aggressive tax planning. She also investigates the effectiveness of automatic exchange of information agreements in tax matters as well as the impact of digitalisation on corporate taxation and tax planning, and tax research incentive regimes.

ZEW Economist Simon Reif Named Thought Leader of the Year

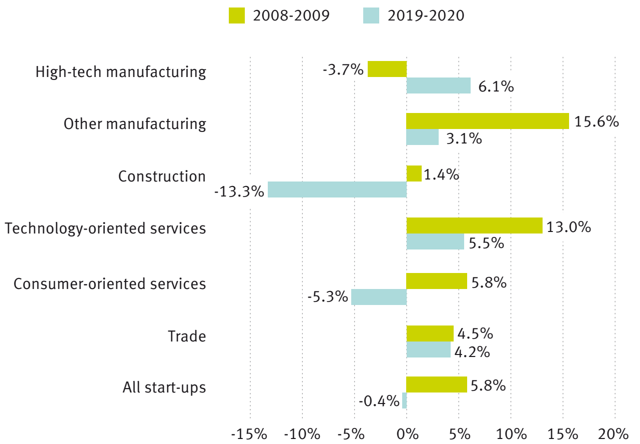
Dr. Simon Reif, health economist and head of the ZEW Project Group "Health Care Markets and Health Policy", has been named thought leader of the year 2021 by Handelsblatt and the Boston Consulting Group. He is thus one of the people who, despite the COVID-19 crisis, have been using their ideas to actively drive transformation. In his research, Simon Reif investigates behavioural economic and institutional factors influencing the provision of medical services as well as determinants of individual health. He currently focuses on strategies for the evaluation of digital health apps and the design of hospital payment systems. This is very much in line with the motto of this year's initiative, "The crisis as an opportunity. Active drivers of transformation in the pandemic". An independent jury of leading minds from the German business world honoured people who have used their ideas to spur on transformation despite the COVID-19 crisis.

ZEW health economist Dr. Simon Reif was honoured for his commitment to actively driving transformation with his ideas.

ZEW Awarded for Its Commitment to Diversity and Equal Opportunities

ZEW has received the TOTAL E-QUALITY award for the third time, this year with an additional award for diversity. The institute was honoured by the jury for its successful gender equality policy, its well-established structures for implementing gender equality and its ongoing commitment to promoting equal opportunities. "We are very pleased that our commitment has once again been recognised by the TOTAL E-QUALITY award," explains ZEW Managing Director Thomas Kohl. According to the jury, the new mission statements on equality, diversity and recruitment as well as the code of conduct regarding family friendliness have been impressively developed further, and ZEW also performs well in terms of staffing, staff development and work-life balance. Newly implemented measures such as the introduction of a gender-sensitive job application management system or the increased recruitment of women for management positions are evidence of the ZEW's unwavering commitment to strengthening equal opportunities. The jury considers the planned pilot project on blind recruitment to be particularly innovative. The goal is to detach the selection process as much as possible from subjective influences and to test whether equal opportunities can be increased through anonymised applications. The association TOTAL E-QUALITY Deutschland e. V. pursues the goal of establishing and sustainably ensuring equal opportunities and honours active commitment to equal opportunities in organisations. ZEW was awarded the title for the first time in 2015. This year, 60 organisations received the award, 36 of them with the add-on award for diversity.

Founders Are Not Discouraged by the Pandemic



Source: Mannheim Enterprise Panel (MUP), 2020, calculations by ZEW

The pandemic has only slightly slowed down the start-up activity in Germany in 2020. According to a joint study by Creditreform and ZEW, almost 165,000 new companies were founded last year, with the number of companies growing slightly to nearly 3.3 million. Once again, more companies were founded than closed. Many founders have stuck to their start-up plans despite the pandemic thanks to the quick intervention of politics. Even if the overall impact of the pandemic on start-up activity is small, there were considerable fluctuations within individual sectors. A significant slump (by 5.3 per cent) was recorded in consumer-oriented services, including the hotel and restaurant industry, hairdressers, and cinemas, among others. By contrast, start-up activity was particularly strong in the mail-order and internet trade (up 24 per cent), among manufacturers and service providers of information and communication equipment (up 5.2 per cent), and in the chemical and pharmaceutical sector (up 15.7 per cent).

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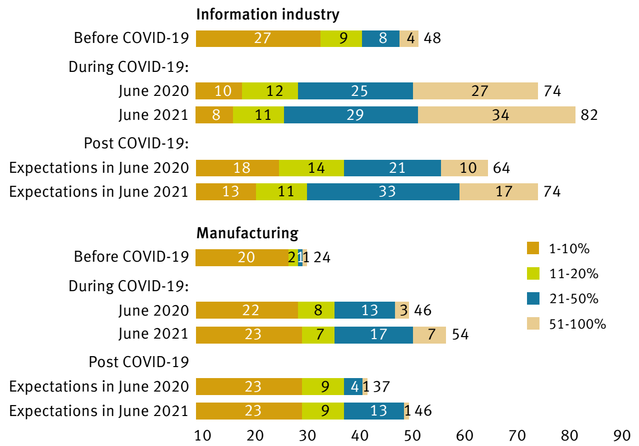
Companies Expect More Working From Home Post COVID-19



Share of employees working from home before, during and after COVID-19.
Source: ZEW Business Survey in the Information Economy, 2021

A ZEW survey conducted in June 2021 has confirmed the companies' early forecasts that working from home arrangements will be expanded in the long term. Prior to COVID-19, around half of the companies in the information economy allowed some of their employees to work from home at least once a week. In June 2020, as the pandemic entered its fourth month, 64 per cent of companies were planning to use working from home after the pandemic has ended. One year later, that number has risen to 74 per cent. Moreover, about one in two companies in the information economy now expects more than 20 per cent of their employees to work from home at least once a week after the pandemic has ended. By contrast, in June 2020, only one in three companies expected such an intensive use of working from home. Comparing the information economy with the manufacturing industry, working from home is less common in manufacturing as job tasks often require physical presence at the production site.

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Anniversary: 30 Years of ZEW

ZEW Mannheim celebrates its 30th anniversary this year. We will take this opportunity to organise a festive event on 8 November 2021 at the institute in Mannheim. The event will include a panel discussion on the economic policy course to be set after the federal elections and the role that economic research institutes play in this context. An international panel with Professor Beatrice Weder di Mauro from the Centre for Economic Policy Research (CEPR) in London, Dr. Guntram Wolff from the Brussels-based think tank Bruegel, and ZEW President Professor Achim Wambach promises a stimulating exchange.

13th ReCapNet Conference

The ZEW Network on Real Estate Markets and Capital Markets (ReCapNet) is pleased to announce its 13th ReCapNet conference on 11 and 12 November 2021. The focus of this year's event will be on "Digitalisation and Real Estate". The conference provides a forum for researchers working in the areas of real estate finance, investment, economics, development, housing, urban planning, and public policy to present their working papers. The event is organised by the KTH Institute of Technology, Stockholm, and will be held as a hybrid format.
More information: *www.zew.de/VA3597-1*


Photo: Anna Logue

Ensuring Secure Energy Supply

Germany's power supply is currently one of the most reliable in the world. In 2018, the average annual interruption was only 14 minutes per customer, one of the lowest levels in Europe. Achieving such reliability requires occasional regulating interventions, though they largely go unnoticed. On a Saturday evening this past August, demand was so high that it could not be met by the domestic power plant reserve or by imports from neighbouring countries. In response, several industrial customers shut off their power, as agreed in advance, to avoid power outages.

The disastrous consequences of power outages were on full display in Texas earlier this year. During four unusually cold February days, the Texas power system was unable to supply several regions with adequate electricity. More than one hundred and fifty people died, most freezing to death after their heating failed. The property damage totalled in the billions of dollars.

By 2030, renewable energy is expected to make up around two-thirds of Germany's electricity supply. There is reason for concern that power outages will increase after the phase-out of coal and nuclear power and the expansion of wind and solar, as the latter can only be controlled to a limited extent. What happens on overcast, wind-calm days? Meeting demand when intermittent renewables are not available will likely play a prominent role in energy policy, alongside the expansion of wind and solar generation capacities and grid expansion.

German political parties mostly agree that a major increase in electricity demand can be expected in the future, e.g. due to the expanded adoption of electric vehicles. Their campaign platforms promise to meet future demand by expanding renewables and improving power grids, and by using hydrogen and other forms of storage to ensure a secure supply of energy. These technologies are limited or far from market-ready, however. The design of electricity markets will thus play an important role in preserving supply security. A suitable market design can incentivise the expansion of capacity for secure generation and for the choice of technologies that kick in when the grid is stressed.

While many countries, including France and England, have introduced a capacity market in addition to the electricity market to guarantee sufficient and reliable generation capacity, the German government has opted for a so-called energy-only market: generators sell their electricity on the nation-wide market, and the price rises when electricity is scarce. The expectation of price peaks will incentivise companies to invest in new capacity of reliable power generation, the logic goes. For the time being, Germany will keep some coal-fired power plants, which are, however, excluded from participation in the electricity markets, in reserve to maintain security of supply.

Some have disputed whether an energy-only market is sufficient to ensure the adequacy of resources for security of supply. Instead of introducing a capacity market, the introduction of mandated, standardised long-term forward contracts has been suggested as an instrument to guarantee security of supply. With these forward contracts, generators would commit years in advance of the time of delivery to provide the energy. The total volume of the contracts would cover the majority of electricity demand at the time of delivery. Volume adjustments and make-or-buy decisions to meet the obligation are then made in short-term markets. The long-term contracts give producers greater quantity and revenue security, two prerequisites for investments in security of supply. The decisions about the necessary generation capacities and the appropriate mix of generation technologies would rest more with the market participants than is the case with capacity markets, where regulators specify the capacities and, in some cases, also the technologies to be remunerated.

The three-fold objective of German energy policy is a sustainable, affordable, and secure energy provision. To meet the third goal, the German government should consider using mandated long-term contracts and their integration in the energy-only market.

President of ZEW, Prof. Achim Wambach, PhD

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