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March / April 2016



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Digital Economy – Competition Policy Enters New Territory

Baden-Württemberg's Minister of Science, Research and the Arts, Theresia Bauer, congratulates Professor Achim Wambach, who took on the position of ZEW President in April 2016.

Photo: ZEW

New ZEW President Achim Wambach Establishes Research Group “Market Design”

Change of leadership at ZEW: Professor Achim Wambach, PhD, took on ZEW presidency in April 2016 – and he plans to establish a new research group with a focus on market design. The group will analyse the conditions required for markets to work efficiently and the roles state and regulation play in the process.

In November 2015, the ZEW Supervisory Board advocated Achim Wambach as Clemens Fuest's successor as ZEW president and granted the board's chairwoman, the Baden-Württemberg Minister of Science Theresia Bauer, the mandate to enter into talks with Professor Achim Wambach, PhD. By signing the contract in March 2016, Wambach's appointment was officially sealed. With Achim Wambach, ZEW has gained a head of science who is considered to be a renowned economist and an experienced consultant in economic policy issues. He has been e.g. a

member of the Monopolies Commission since July 2014, and in March 2016, he was elected the Commission's chairman. The independent five-member committee based in Bonn advises the German government on competition and regulation issues.

Thesis on Asymmetric Information in Insurance Markets

Born in 1968, Achim Wambach initially studied physics and mathematics at the University of Cologne. Afterwards, he earned his PhD from the University of Oxford with a thesis on elementary particle physics. After obtaining a Master of Science in economics from the London School of Economics and Political Science (LSE), he habilitated at the Ludwig-Maximilians-University (LMU) in Munich with a thesis on asymmetric information in insurance markets, e.g. on the effects of genetic testing on the life

assurance market. Between 2001 and 2005, he was Professor of Economics at the University of Erlangen-Nürnberg.

Prior to becoming head of ZEW, Achim Wambach was director of the Institute for Economic Policy as well as professor of economics at the University of Cologne. Since 2006, he has been a member of the academic advisory board of the Federal Ministry for Economic Affairs and Energy. He also served as chairman of

The new research group “**Market Design**” at ZEW analyses how markets must be designed to harmonize behavioural incentives for individual market participants with higher goals. Recently, market design has come to be one of the most important fields of economic research. The goal is to analyse the mechanics of markets in a dynamic environment and, to that effect, gain the ability to regulate them. A key challenge of applied market design is analysing the solidity of market mechanisms, since seemingly negligible details can already determine their success or failure. The ZEW research group puts the focus on auction and matching markets. Further fields of application are energy, telecommunication, insurance, health, and education markets. The outputs from the research can provide options for political action, e.g. with regard to the government’s role in energy transition, or they can help determine how to design markets for emission trading or auctions in the telecommunication sector.

In terms of public procurement, the Research Group “**Market Design**” analyses, inter alia, which rules the public sector should establish for its purchases.

the board between 2012 and 2015. In connection with his presidency at ZEW, he will also assume a professorship at the University of Mannheim.

Achim Wambach is designated chairman of the Management Board of the German Verein für Socialpolitik (“VFS”, German Economic Association). Consisting of about 3,800 members, VFS is considered one of Europe’s most renowned associations of economists. Between 2007 and 2008, he was also president of the European Group of Risk and Insurance Economists (EGRIE), a non-profit economic organisation concerned with risk and insurance issues since 1973.

Focus on Competition and Market Issues

Achim Wambach is ZEW’s fourth head of science. He succeeds Clemens Fuest, who held the office between March 2013 and March 2016. Fuest focussed on international tax policy and state finances as well as corporate taxation. Before Clemens Fuest, the institute was headed by Professor Wolfgang Franz from April 1997 until February 2013 and ZEW founding director Professor Heinz König from 1990/1991 until March 1997. Both put the focus on empirical labour market research. Wambach, on the other hand, is interested in competition and market issues. His primary fields of interest are information problems, e.g. in auction, energy and telecommunication markets as well as insurance and health markets. He thereby makes use of market design methods (see info box).

Click for Achim Wambach’s profile:

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Full house at the press conference for the new ZEW president’s signing of contract: ZEW Director Thomas Kohl, chairwoman of the Supervisory Board Theresia Bauer, Professor Achim Wambach, PhD, and Professor Ernst-Ludwig von Thadden, President of the University of Mannheim, (f.l.t.r. on the podium) answer the questions of the gathered media representatives.



One third of income disparities in the UK, and even just under fifty per cent in the US are contingent on external circumstances.

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Childhood Is a Decisive Factor in Income Disparities in the UK and the US

Income disparities and equal opportunities are closely interconnected: the higher the degree to which income disparities are determined by on one’s own efforts, rather than one’s origin or family background, the more equal is the distribution of opportunities within a society. While individual effort is a deliberate choice, one’s origin and childhood experience are beyond individual control. According to a recent study by the ZEW, the share of income disparity based on external circumstances, such as origin and childhood, amounts to at least 31.8 per cent in the UK and to 45.7 per cent in the US, respectively.

In other words, almost one third of income disparities in the UK, and even just under fifty per cent in the US are contingent on external circumstances. Many studies have estimated the effect of circumstances on income acquisition. Perhaps surprisingly, the fraction of inequality attributable to circumstances is usually quite small – in the advanced democracies, on the order of 20 per cent. One reason for this is the lack of data on circumstance variables in empirical research. The ZEW researchers argue that all behaviours and accomplishments of children should be considered the consequence of circumstances: That is, an individual should not be considered to be responsible for her choices before an age of consent is reached.

The ZEW study is based on representative microdata from the Centre for Longitudinal Studies at University College London and from the United States Department of Labor. Both longitudinal studies consider the socio-economic environment during childhood of the examined samples. The studies also address cognitive and non-cognitive skills, such as school performance, perception and memory as well as motivation, discipline, and interpersonal skills. The ZEW researchers assume that any achievements and behaviour patterns of children up until the age of 16 are attributable to external circumstances.

The public debate about increasing income disparities shows that we are more willing to accept income disparities caused by effort, diligence or laziness than by external circumstances. The study shows, however, that external circumstances are highly relevant for income disparities if childhood experiences are considered. This high proportion of “unfair” inequality should make us reconsider our current educational, tax and transfer policy. Greater account must be taken of family background, and children from vulnerable groups must be given more support, concludes the study.

The study is available for download at: <http://ftp.zew.de/pub/zew-docs/dp/dp15084.pdf>

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Still Room for Improvement as EU Fibre-Optic Networks Expand

With its Digital Agenda for Europe (DAE) the European Commission wants to make ultra-fast internet connections available throughout the continent by 2020. An international study led by the Florence School of Regulation under collaboration with the ZEW on the future of broadband policy in the EU with public targets and private investments in mind examines how the agenda can be implemented in practice.

The internet and the new technologies associated with it are some of the corner stones of the digital economy and the digital society – both main targets of the European Commission. The introduction of New Generation Networks (NGN) to increase internet availability and the diffusion of reliable high-speed connections in European households is one of the main pillars of the Digital Agenda for Europe (DAE). Despite the DAE's broad set of tools at the national and European levels, there continue to be significant differences among EU member states with regard to broadband coverage and diffusion. These differences have contributed significantly to a sense of dissatisfaction with the level of investment in EU broadband networks. In response, the European Commission has decided to assess Europe's internet needs after 2020.

New Technologies Bring Surfing Speeds of at least 100 Mbit/s

The new study focuses on the effect of future targets for high-speed broadband services. It examines the chances and risks related to targets with connection speeds of more than 100 megabits per second (Mbit/s). The study argues that broadband cover-

age and internet connection diffusion might bring substantial external effects that justify the introduction of state policies to foster their realization. However, the effects of broadband technologies on the economy are everything but homogeneous. Even if broadband technologies have noticeable effects on growth and employment for businesses and individuals at certain locations that meet certain criteria, it is quite difficult to extrapolate those effects to businesses or individuals under different market conditions.

Ultra-fast Broadband Expansion Divides European Member States

According to the study, the recent findings are not sufficient to justify a general preference for high-end fibre-optic solutions. For that, it must be shown that current demand levels for ultra-fast broadband services do not take into account important positive external effects or that a sufficient willingness to pay exists, which is not covered by private demand. The study also shows that there is a divide between usage and coverage, especially between the founding members of the EU and the East European member states. The study concludes that a soft approach in favour of an EU-wide expansion of NGNs is an appropriate strategy. How the approach is carried out will require a detailed analysis of the industrial realities and it must pass all the necessary examinations of economic rationality.

The study on the future of broadband policy is available for download at: http://cadmus.eui.eu/bitstream/handle/1814/38884/FSR_CM_Report_2016.pdf?sequence=1

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highspeed

Search

The EU Commission's Digital Agenda for Europe seeks to provide every Member State household with a broadband connection of at least 30 megabits per second (Mbit/s) and to ensure that 50 per cent or more of households subscribe to internet connections above 100 megabits per second (Mbit/s) by 2020.



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Unilateral National Energy Policies Put European Market Integration at Risk

In highly integrated markets, unilateral decisions can lead to substantial additional costs for all market participants. A recent ZEW study has quantified these costs using two recent unilateral energy policy decisions made by Germany: the immediate shut-down of five nuclear power plants after the Fukushima disaster in 2011 and the expansion of fluctuating renewable energy, as subsidized by the Renewable Energy Act (EEG). Overall, the study finds that total market integration can only be successful if national energy policies are coordinated at the European level.

Harmonising and integrating national energy markets for a common market has always been a central feature of the European integration process. It began with the founding of the European Coal and Steel Community in 1951, and continued most recently with the founding of the so-called Energy Union. The Energy Union seeks to reduce dependence on fossil fuel imports, increase energy efficiency and make Europe into a leading global power by expanding renewable energy. A key prerequisite for the Energy Union's success is the creation of a uniform and integrated European electricity market. This integration is to be reached mostly through the expansion of cross-border connections between EU member states, but also through the more efficient use of existing interconnection capacities. These measures will help to balance stochastic fluctuations in demand and in the supply of wind and solar power, leading to a more efficient electricity provision.

The External Effects of Nuclear Energy Phase-out and the EEG

The recent study conducted by the ZEW examined wholesale market prices for electricity to identify German integration with neighbouring countries and the effects of its unilateral national policies. The ZEW researchers considered two major pieces of German energy policy: the phase-out of nuclear power that was announced after the Fukushima disaster – which included the immediate shut-down of five nuclear power plants in Germany – and the expansion of fluctuating renewable energies via EEG subsidies.

The study's authors calculated the effects of German energy policy on electricity prices in neighbouring countries as well as in Germany. The decision to phase out nuclear power raised prices in France by an average of sixteen per cent and created annual additional costs of around three billion euros. The expansion of renewable energy capacities, especially solar farms, from the year before to the year after the 2011 decision to phase out nuclear power led to a reduction of 800 million euros per year. This means that the unilateral German energy policy led to net cost increases of around 2.2 billion euros a year in France, i.e., the costs in France are even higher than the costs in Germany, whose additional annual costs amount to around 1.7 billion euros. The decision to phase out nuclear power in Germany raised costs by 3.34 billion euros per year, but the expansion of renewable energies cut costs by 1.6 billion euros.

Electricity Prices Rise in Germany's Neighbouring States

In the Czech Republic, the German nuclear phase-out led to average increases of 19 per cent. In the Netherlands and in Switzerland it was seven percent. Denmark's eastern and western power grids saw average price increases of 18 per cent and nine per cent, respectively. The study found no change in Poland. The study then compared these findings with the effects that would have occurred had there been total integration. Based on this comparison, the study finds that Germany is already completely or mostly integrated with the Netherlands (99 per cent), with the Czech Republic (89 per cent), and with Switzerland (82 per cent). It is fairly well integrated with France (74 per cent) and with Denmark's eastern and western power grids (76 and 69 per cent, respectively). The big exception is Poland, whose electricity market is almost completely decoupled from that of Germany's (14 per cent). The study concludes that a capacity market on the European level should be considered to compensate for sluggishness in wind and solar power.

The study for download: www.zew.de/de/publikationen/8053

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Settlements Accelerate Antitrust Proceedings in EC Cartel Cases

In June of 2008 the European Commission introduced a settlement procedure meant to improve the efficiency of cartel enforcement in the European Union. According to the findings of a recent ZEW study, the settlement option has significantly shortened the time needed for European Commission decisions – while also reducing the number of subsequent appeals.

Fighting cartels is one of the main aims of EU antitrust policy. The success of this policy can be seen not only in the increased number of cartel cases but also in the substantial rise of fines imposed for detected cartel infringements. In all likelihood, these discernable improvements are the result of various EU reforms and measures introduced during the past two decades. These include the introduction and reform of a leniency programme, new rules on setting monetary fines, and more international cooperation between antitrust agencies.

The most recent EU reform of public cartel enforcement was the establishment of a settlement procedure in June of 2008. This procedure gives the Commission the power to eliminate or shorten steps when adjudicating cartel cases, leading to faster rulings. Ever since, the Commission has been able to extend settlement offers to defendants who admit liability: in return for giving up their right to full discovery, to translations of important documents and to a hearing, defendants receive a ten per cent reduction of their total monetary fine. The Commission introduced the settlement option in the hope that it would help process cartel cases more quickly and efficiently, freeing up resources for handling additional proceedings.

Settlements – the Pros and Cons

From the standpoint of the companies under investigation, settling with the Commission has advantages and disadvantages. On the plus side, no doubt, is the ten per cent reduction of

the imposed fine, in addition to fewer administrative costs, less reputational damage, and the chance to enter direct settlement talks with the Commission. On the down side, a settlement can be costly: by admitting liability, companies greatly reduce their chances of seeing fines reduced or even waived on appeal. Moreover, companies run the risk of exposing themselves earlier to subsequent private damage claims.

The ZEW study looked at 84 cartel decisions of the European Commission between 2000 to 2014. It specifically examined the effect of the settlement option on the duration of the proceedings during two distinct phases: the first extending from the beginning of the investigation to the point the Commission filed charges in a statement of objections, the second starting immediately afterwards and ending with the EC case decision. According to the study's findings, the settlement option did not shorten the duration of the first phase but it did reduce the length of the second phase by on average nine months – a statistically significant figure.

The study also found that of the 12 cartel cases that ended with a settlement, only one of the companies under investigation subsequently decided to file an appeal. Given that most of the cases in 2013 and 2014 involved a settlement, the number of cases followed by appeals has dropped considerably in recent years.

Settlements Save Resources

The empirical results indicate that the settlement option has markedly increased the efficiency of EU cartel enforcement. The substantially reduced duration of EC cartel proceedings has saved substantial resources both at the Commission and for the respective companies. Additionally, the number of appeals against Commission decisions has been reduced substantially in the settlement era, freeing up additional resources at the European appellate courts. All these savings stand to increase the deterrence effect of antitrust enforcement if they are used to process cartel cases more quickly or uncover new ones. Detrimental effects on economic welfare are only expected if the ten per cent reduction in fines significantly reduces the general deterrent effect of fines or if the quality of the Commission rulings declines as a consequence of the reduced likelihood to face a re-investigation of the case by an appellate court. A detailed investigation of the existence and significance of such negative effects of the introduction of the settlement procedure is left for future research.

The study is available for download at: www.zew.de/de/publikationen/8012

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A cartel case settlement is used by the European Commission to speed up the procedure for adoption of a cartel decision.



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Germany Needs a Tax Stimulus for R&D Investment

Since 60 years, Germany relies on direct project funding to encourage investment in new technologies. But researching spending in Germany has declined over the past years, especially in small and mid-sized companies. Isn't it high time that Germany introduces a tax stimulus for research and development (R&D)?

Research and development (R&D) is the most important driver of economic growth, and yet the German government has been investing less and less in new technology. Since 1981, the state's share of total R&D spending has dropped from 41.8 per cent to less than 30 per cent, while spending from private investors has increased. Germany is one of the few countries without R&D tax incentives around the world. According to the targets for EU member states set by the Horizon 2020 Strategy, the share of expenditures for R&D should amount to three per cent of GDP. In 2014, Germany's share was only 2.85 per cent of GDP; the EU average, only 1.91 per cent. By comparison, Japan invested 3.47 per cent of its GDP; Switzerland, 3.0 per cent; South Korea, 4.15 per cent.

Germany Opts for Direct Project Funding, and Fails

For 60 years now Germany has relied on direct project funding, and it is likely to stay that way given the resistance that would doubtless accompany its elimination. But direct project funding has been shown to work selectively and can disincentivise research spending. What is more, direct project funding systematically discriminates against small and mid-sized companies. Researchers and economists agree that if Germany is to pursue a pro-growth policy it should consider R&D tax incentives in addition to direct project funding.

Traditionally, tax subsidies to promote new technology have gone to fund R&D activities directly, i.e. the input side of R&D. But recently it has been more common to channel them into the utilization end, i.e. the output side of R&D. The rationale for direct R&D stimulus is that it leads to positive spillover effects. The R&D activities of one company has potential benefits for many others. For this reason, the tax stimulus should concen-

trate on R&D input, preferably in the form of tax credits. Tax credits for R&D applications are very effective and hence widely accepted. For Germany to raise its total R&D expenditures to the three per cent of GDP targeted by Europe 2020, a redeemable 10 per cent tax credit for R&D applications is needed to supplement direct project funding. According to ZEW calculations, such a tax credit will lower tax revenues by around five billion euros. At the same time, however, the total economic income gain is projected to be around 750 million euros, increasing the rate of GDP growth by 0.1 per cent. In this way, the long-term tax gains could outweigh the short-term tax losses created by tax credits.

IP Boxes are Still Popular, But This Is Not the Way Forward

On the R&D output side, so-called IP boxes are a popular way to subsidize new technology. The primary goal of IP boxes is to encourage patents and the incomes they generate. These tax regimes favour patent revenues – mostly in the form of license income – to extremely low tax rates (between 0 and 15 per cent), frequently yielding negative effective tax burdens. From a policy standpoint, however, IP boxes are hard to justify, since they are tied to R&D output. Nevertheless, around 14 countries in Europe have introduced IP boxes.

Taxes play a prominent role in patent location decisions. By contrast, R&D activity seems quite stationary. To support R&D activity through a targeted tax credit, the programs should be created that have an immediately effect on liquidity, provide a high degree of planning reliability, and are as simple as possible. While IP boxes can contribute to a level tax playing field for multinationals, policymakers would be well advised not to introduce them in Germany. IP boxes distort competition, are selective, undermine the tax law system, and collide with EU State Aid law. Ultimately, their real effect is to transfer profits. If Germany wants to introduce a pro-growth tax policy, it should consider an R&D tax credit. And the tax stimulus programs that work best provide direct tax credits at the input side of R&D.

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Q&A: The Minimum Wage – A Boon or Bane for the German Labour Market?

The Minimum Wage is no Replacement for Necessary Educational Policies

While Germany did not introduce a statutory minimum wage across all industries until the beginning of 2015, the minimum wage was and remains a hotly disputed issue. With the minimum wage set to increase in January 2017, the debate has taken on a new dimension in light of the refugee crisis. The key question for many is: How does the minimum wage impact the German economy? In this Q&A session, ZEW labour market economist Terry Gregory explains that an excessively high minimum wage can be harmful to the economy. He argues that wage growth should be achieved first and foremost by a need-oriented education policy.

While critics abound, defenders of the minimum wage seem few and far between. Is the minimum wage accepted by the labour market as a fair lower bound on pay?

Studies show that the public acceptance is relatively high on the whole. The private sector predominantly accepts the minimum wage as well, as it tends to drive low-cost competitors out of the market. Whether or not this acceptance will persist in the long term will depend on whether the minimum wage improves the income situation for low-wage earners overall, or whether unexpected reactions are triggered in the private sector – e.g. job losses, increased working hours, the abolition of benefits, or similar adjustments. Furthermore, the bureaucratic burden associated with the minimum wage needs to be kept as low as possible, and the minimum wage level should reflect productivity.

A minimum wage increase from 8.50 euros to 8.80 euros is planned for the beginning of next year. Germany's unions, by contrast, are pressing for an increase to 9.00 euros. What impacts will this increase have?

Our experience with industry-specific minimum wages in Germany indicates that job losses are unlikely in the short term. However, if the minimum wage is set too high, this can lead to job losses and poorer working conditions, particularly in an economic downturn. The potential long-term effects of a minimum wage can be demonstrated by a ZEW study of the German roofing industry, where the minimum wage was increased to 12.05 euro since 1997. While the real pay of low-wage earners has improved, cost increases have led to job losses and wage restraints among skilled workers in East German roofing firms. Furthermore, many small businesses have been driven from the market. Against the background of technological change, wage hikes associated with the minimum wage may also lead to further investments in labour saving technologies and/or the outsourcing of work to cheaper companies abroad. A current ZEW study is investigating this very issue.

The minimum wage does not apply to adolescents without a vocational qualification, apprentices or to the long-term un-

employed for the first six months in a new job. That is often viewed as discriminatory.

This rule was introduced because it would otherwise not make economic sense for firms to hire such workers, as wage costs would exceed productivity. Low productivity is related first and foremost to a lack of relevant skills and/or professional experience. The fundamental problem is that rising minimum wages lead to a gap between wage costs and productivity. Expanding the minimum wage exemptions to further groups of workers is no solution, as this would create a minimum wage that doesn't apply for many low wage earners. The focus should lie on a need-oriented education policy to encounter rising demands for qualification. For example, increasing automation is creating more demand for IT skills. The minimum wage is no replacement for necessary educational policies.

Let us remain on the topic of discrimination: In connection with the current wave of immigration to Germany, many have asked whether the minimum wage should apply to refugees.

The minimum wage was introduced to encounter the rapid growth of the low-wage sector. An exemption for refugees would undermine this goal by creating a new low-wage sector for refugees. Furthermore, firms might decide to give preferential treatment to the "cheaper" refugees, making it harder for Germans to find work. Regarding the integration of refugees into the labour market, a priority should anyhow be given to issuing work permits, officially recognizing qualification degrees obtained abroad, and to teaching of German language skills.



Dr. Terry Gregory

has been a member of ZEW's Research Department "Labour Markets, Human Resources and Social Policy" since 2009. As a Senior Researcher in the Research Area "Changing Labour Markets", he conducts research in the field of empirical labour economics and regional economics. His special interest lies on the labour market

consequences of digitization and automation, labour market inequalities, and the impact of minimum wages.

Terry Gregory studied economics at the University of Bonn and at the Charles University in Prague. In January 2015, he received his doctoral degree from the University of Regensburg with his dissertation entitled "Rising Labour Market Inequality: Regional Disparities and Wage-Setting Institutions".

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ZEW Lunch Debate in Brussels – Digitisation Will Change the Workplace

Digitisation is making rapid progress, thereby shaping the way in which people communicate. At the same time, Information and Communication Technologies (ICT) are being increasingly implemented in the workplace. The focus of the ZEW Lunch Debate “Europe’s Digital Future: Prospects and Challenges”, which took place on February 17, 2016, in Brussels, were the challenges posed to society, politics and the economy by the process of digitisation.



ZEW economist Irene Bertschek delivering her presentation at the ZEW Lunch Debate on “Europe’s Digital Future”.

In her introductory lecture, Professor Irene Bertschek, head of the ZEW Research Department “Information and Communication Technologies”, explained that one opportunity opened up by digitisation is the step away from mass production, towards the production of individualised products. The economist demonstrated that in Europe, numerous national and transnational plans for digitisation are being implemented. Digitisation remains, however, “an extremely complex undertaking”. It is therefore necessary to concentrate on several key aims. Of central

importance is the expansion of broadband, data protection, improving the economy’s ability to adapt to digitisation, and providing workers with training.

Lucilla Sioli, PhD, head of Unit “4. European Semester and Knowledge Base” in the Directorate-General for Communication Networks, Content and Technology (DG Connect) at the European Commission, illustrated the progress thus made in terms of implementing such plans. “Digitisation has progressed to varying extents within Europe,” explained Sioli in her presentation, whilst emphasising the importance of an integrated European market to increase the possibility of benefiting from opportunities for growth arising from digitisation. There is, however, still a long way to go.

The subsequent panel discussion was opened by Laurent Zibell, PhD, Policy Advisor for technology, innovation and ICT in the IndustriALL European trade union. “Digitisation will change the workplace,” he explained. According to Zibell, productivity levels will increase. This, however, must not be at the expense of workers. Sioli concurred with Zibell, adding that “despite digitisation, workers must retain the same rights and securities which they currently have”. Irene Bertschek emphasised that it is not yet clear what exactly the consequences of digitisation will be for workers in a number of fields. “Studies carried out by ZEW, for example, indicate that particularly in the case of young people, crowd-working simply adds another string to employees’ bows and does not necessarily threaten the usual working model,” she explained.

Alongside changes in the workplace, the panel discussion also addressed further aspects of the digital transformation. Where will future innovations take place – in Europe or in Silicon Valley? To what extent does the EU need to catch up in terms of expanding its network infrastructure? These questions indicate in just how many fields further research is required.

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Parliamentary Evening of Rhine-Neckar Metropolitan Region and ZEW

Have Germany’s ambitious energy and climate goals started to clog the economy? The Rhine-Neckar Metropolitan Region and ZEW cooperatively hosted the fourth parliamentary evening in Mannheim at the end of February 2016. The event’s main topic was how to balance international competitiveness and environmental protection.

A sustainable energy and climate strategy is consistently demanded from science, economy and politics. Long-term plans are affected by measures such as the German nuclear phase-out as a consequence of the Fukushima Daiichi nuclear disaster in 2011 or by results of international conferences like the latest UN Climate Change Conference in Paris at the end of 2015 (COP21). In his welcome address, Thomas Kohl, Executive Director of ZEW, made clear that those adjustments will have consequences for

companies, politics and citizens. Bernd Kappenstein, head of the Rhine-Neckar Metropolitan Region’s Energy and Environment Department, and ZEW economist Dr Oliver Schenker held their introductory speeches. Their statements were followed by a panel discussion, which took place between MP Gabriele Katzmarek (SPD, Social Democratic Party of Germany), MP Dr Thomas Gebhart (CDU, Christian Democratic Union), Joachim Goldbeck, Executive Director of Goldbeck Solar GmbH, Dr Wolfgang Niopek, deputy chief manager of the Chamber of Industry and Commerce (IHK) Rhine-Neckar, and Adolf Roesch, Managing Director of the Sub-Region Central Europe from General Electric’s (GE) Power Services department. The panel discussion was chaired by SWR (“Southwest Broadcasting”) editor Gerhard Augstein.

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ZEW Strengthens its Research Expertise in Real Estate Markets and Financing



The Research Department “International Finance and Financial Management” of the Mannheim Centre for European Economic Research (ZEW) establishes a new focus which will analyse the financial decisions made by private households. The title of the new focus is “Household Finance and Real Estate”. The emphasis is divided into three core topics: “Real Estate and Housing Markets in Europe”,

“Lending to Households and Private Sector Debt Overhang” and “Financial Advice and Household Decision Making”. Dr. Oliver Lerbs, deputy head of the research department is in charge of the new research focus. The international Leibniz network “ReCapNet - Real Estate Markets and Capital Markets”, for which ZEW hosts, inter alia, an annual conference, has helped the Mannheim institute to build up a scientific reputation in the fields of real estates. This reputation also shows in extensive projects of policy counselling and shall be specifically used to establish new collaborations with internationally renowned scientists from the fields of household finance and real estate.

ZEW Economist Professor Sascha Steffen Awarded the Marjolin Prize



Professor Sascha Steffen, head of the Research Department “International Finance and Financial Management” at the Mannheim Centre for European Economic Research (ZEW), has been awarded the SUERF Marjolin Prize, along with his colleague Dr. Josef Korte from the Goethe University Frankfurt. The award, which is bestowed each year by the European Money and Finance Forum (SUERF) and the Deutsche Bundesbank, is named after the French economist and

former Secretary General of the Organisation for European Economic Co-operation (OEEC), Robert Marjolin.

Sascha Steffen and Josef Korte received the prize for the best submitted paper with the title “Zero Risk Contagion: Banks’ Sovereign Exposure and Sovereign Risk Spillovers”, a publication concerning risk financing of credit institutions. The prize was presented during the 32nd SUERF Colloquium, which took place in Frankfurt am Main. The prize is awarded along with EUR 2,000 and also includes membership to the SUERF Association.

The Marjolin Prize was first awarded in 1995 in Thun, Switzerland, and serves to recognise contributions from the field of economic research, which are of relevance for Europe.

ZEW Workshop on Tax Support for Research and Development in Germany

The German government relies on direct project funding when it comes to creating incentives for investment in innovation. However, innovation expenditure, in particular of small and medium-sized enterprises, has continuously declined in recent years. The question which arises is whether it is high time the government put a greater focus on tax support for research and development (R&D). High-profile experts from science, industry and politics discussed this question during a workshop hosted by ZEW on January 21, 2016, in collaboration with the University of Mannheim and the consulting firm PricewaterhouseCoopers (PwC) AG.

In his lecture, Professor Christoph Spengel, Professor of Taxation at the University of Mannheim and ZEW Research Associate, identified R&D and, to that effect, innovation as the most important driver of economic growth. The German government, however, invests too little in innovation. Based on his practical experience, Dr Frank Schmidt, Tax Partner and head of the In-

dustrial Products Division at PwC, confirmed scientific findings that a company’s innovation activity primarily depends on its internal financing capacity. Whether a tax system is beneficial or detrimental for R&D and innovation depends first and foremost on its effect on the companies’ internal financing capacity. According to Dr Oliver Schacht, CEO of Curetis AG, the predominant project funding in Germany urgently needs to be complemented by an R&D funding system that is open to technology and simple in terms of tax administration to prevent Germany from losing further ground in attracting international investors and from failing to keep up with technological trends compared to its international competitors.

Dr Georg Licht, head of the ZEW Research Department “Industrial Economics and International Management”, pointed out that especially for small and medium-sized enterprises it is increasingly difficult to afford the necessary investments in R&D and innovation.

ZEW Financial Market Test April 2016

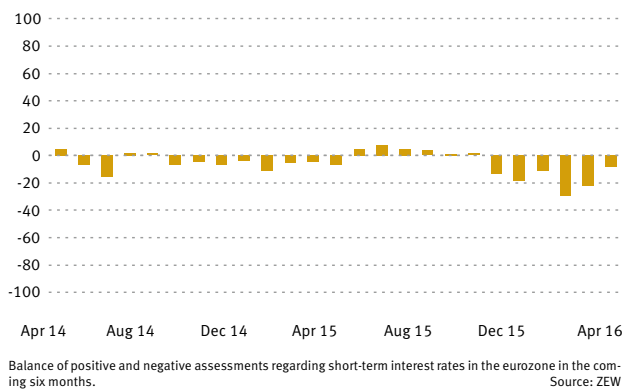


Germany: Economic Outlook Improves Further

The ZEW Indicator of Economic Sentiment has increased for the second consecutive time in April 2016. Compared to the previous month, the indicator has gained 6.9 points and now stands at 11.2 points, reaching the highest reading of this year. Surprisingly positive economic news from China is the most likely driver behind the improved assessment of the surveyed financial market experts.

Nevertheless, the poor growth rate in China and in other important emerging economies remains a burden for Germany's export economy in the near future.

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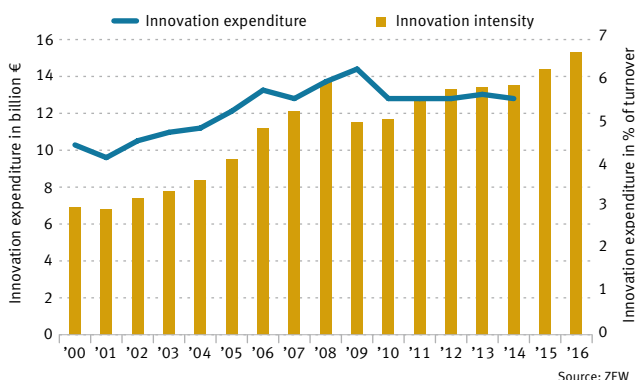
Eurozone: Interest Rate Expectations Increase

In April 2016, expectations regarding short-term interest rates in the Eurozone have risen significantly. The corresponding indicator has grown by 13.8 points to a level of minus 8.6 points. This growth is mainly due to the substantially smaller share of those financial market experts, which expect short-term interest rates to decrease further.

As in the previous month, the share of experts expecting short-term interest rates to remain unchanged in the medium term has increased significantly and constitutes 83.2 per cent of all survey participants in April 2016.

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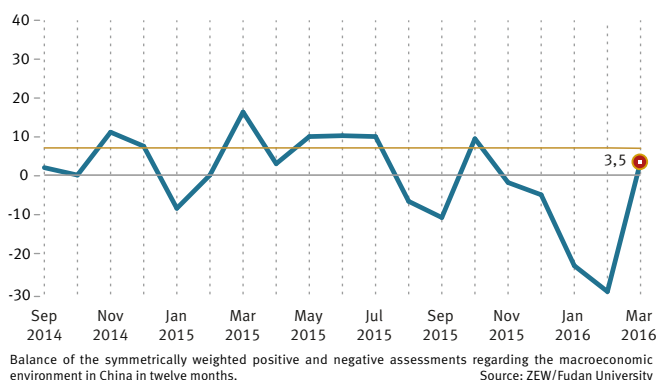
Mechanical Engineering: Industry 4.0 Has Obvious Effects on Innovation Spendings



The German mechanical engineering sector starts to invest significantly more in innovation again. For 2015, the innovation budget in this sector is expected to increase by seven per cent to a total of 14.4 billion euros. In 2016 innovation spendings are expected to further increase by six per cent, reaching a total of 15.3 billion euros. Industry 4.0 solutions shall be a substantial driver of this development.

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China Economic Panel: Expectations for Chinese Economy Rise Sharply



The CEP Indicator, which reflects the expectations of international financial market experts regarding China's macroeconomic development over the coming twelve months, has risen sharply in the current survey period (21/03/2016 – 06/04/2016), climbing from minus 25.7 points to a level of 3.5 points. According to the experts, the new five-year plan will first and foremost lead to a boost in the construction sector.

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Digital Economy – Competition Policy Enters New Territory

Since the beginning of March 2016, the Federal Cartel Office has been investigating one of the giants of the digital economy on suspicion of misuse of market power – Facebook. Indeed,

since the end of 2010, the European Commission has been looking into Google's suspected anti-competitive practices. So will a stop finally be put to the anti-competitive behaviours of large internet corporations? This at least is what some commentators are hoping. Is competition policy even capable of adequately addressing the growing market power of large corporations in the digital economy? In order to answer these and further questions, one must consider the particular characteristics of digital markets.

One important characteristic of the internet economy is its dynamism. Neither Facebook nor Google have celebrated their twentieth anniversary, and yet both are worth more than most German industrial firms. The rate at which new firms are established in the ICT sector is far above average. Inefficient firms find it difficult to assert themselves in the market. Innovation processes proceed more quickly.

A further particularity of the internet economy is the enormous amount of data which accumulates online. The collection and analysis of such data is known under the term Big Data. With a rate of growth of over 50 per cent, Big Data applications constitute one of the overall fastest growing markets. Big Data and the technologies behind it enable products and advertising to be specifically tailored to individual customers. Such tailoring is based on the personal data which internet users provide indirectly, when, for example, they input a search query or access content online. Whilst in many cases, this increase in available information can be helpful, it sometimes brings about new issues. The availability of more and better information increases our ability to estimate risks for example. This, however, can lead to a situation in which persons with higher risk factors must pay higher insurance premiums, or are unable to find insurance at all.

The third characteristic of the digital economy are its double and multi-sided markets and the associated network effects.

Google, for example, is a multi-sided market; alongside users of the search engine, advertisers also make use of the platform. In such multi-sided markets, it is not uncommon for webpages to be provided for free for one side of the market. Profits are made on the other side on the same platform. Network effects come into play in social networks such as Facebook, where the value for the individual increases with the number of participating individuals. Many of these platform markets show a trend toward increasing market concentration, whereby often one dominant market provider develops. In such "winner takes all" environments, concentrated market power is common; identifying its misuse, however, is difficult.

When it comes to investigating internet corporations, competition authorities must take all of the particularities discussed above into account. The high degree of dynamism in the ICT sector necessitates quick reaction times. Market boundaries change, so that in the proceedings the given market cannot necessarily be determined simply on the basis of historic data. Data is increasingly becoming a factor of competition which cannot be overlooked. In the data-based economy, limited access to data may potentially constitute a barrier to market entry. It is also conceivable that market power will be misused with respect to data acquisition. Multi-sided markets pose a challenge to authorities, in that they must adequately determine which pages belong to a given platform. Whilst the large market share held by the Google search engine is relatively easy to determine, for example, determining the market share of the advertising side is much more difficult.

The Federal Cartel Office, as well as the EU Commission, must consider these questions in more detail. Determining the limits of the relevant markets, providing evidence of potential misuses of market power as well as the development of sanctions requires new measures and standards. In this respect, we are entering new territory in terms of competition policy.

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