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November/December 2016



Equal Opportunities: Political Participation Is Limited for US Citizens

While from a legal perspective, US citizens do have several ways to get involved in politics, the opportunity to exercise these rights largely depends on factors which are beyond their control. Individuals who are less privileged in terms of family background and early development are practically excluded from certain forms of political participation, particularly when it comes to membership of political organisations, participation in rallies and marches, and direct contact with officials. This is the conclusion of a recent study carried out by ZEW, which for the first time analysed the equality of opportunity in political participation in the United States.

Equal opportunities in political participation can only be said to exist if the propensity to engage in political processes is undetermined by any factors which lie beyond the individual's control. Examples of such factors include gender, ethnic background and the parents' socio-economic status. To examine the extent to which the ideal of equal opportunities is achieved in the democratic process in the USA was the aim of a recent research project of a team of ZEW researchers.

Researchers Considered Different Forms of Political Participation

In order to analyse this question, the researchers considered a number of different forms of political participation: the registration for the 2000 US Presidential election as well as actual vote casting in that election, which was ultimately won by the Republican candidate George W. Bush. Further forms of participation the researchers focused on were personal contact with officials, participation in rallies or marches, membership of po-



litical organisations, volunteering in civic organisations, and finally, the vote frequency in statewide and local elections.

For their analysis, the researchers used representative panel data from US educational institutions. These data not only provided information on external circumstances, such as cognitive skills, educational achievements, and religion, but also allowed researchers to trace the psychological development of US citizens from childhood to adulthood.

Unequal Opportunities Tend to Persist Over Time

The research team shows that a lack of political opportunity is particularly pronounced for comparatively resource-intensive forms of political participation, such as contact with officials, participation in rallies and marches, and membership of political organisations. It is worth noting that disadvantages in opportunity are not offset by different forms of political participation. For example, one could have suspected that groups lacking

trust in elected institutions would prefer to voice their opinion through rallies and protest marches instead of drafting a petition to a government representative.

There is a positive correlation, however, between disadvantages in any activity and opportunity disadvantages in other forms of political participation. Furthermore, the results of the study suggest that unequal opportunities tend to persist over time. The strongest contributors to unequal political opportunities in the United States are family background and psychological disposition as a child; together, these two factors exert the strongest influence on unequal opportunities across all forms of political participation.

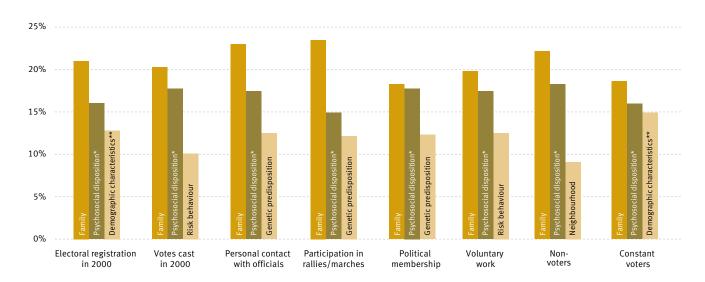
"When it comes to political participation, the United States is a land of limited opportunities," summarises Andreas Peichl, head of the ZEW Research Group "International Distribution and Redistribution" and co-author of the study. "Our results show that the opportunity for political involvement in the US is up to 50 per cent determined by a person's social environment and childhood background, depending on the form of participation. According to Andreas Peichl, "Political participation is almost like a natural lottery."

Naturally, this poses a challenge to the political process in the US. After all, the preferences of many citizens are not reflected in democratic outcomes. This, however, cannot be attributed to their political inertia. Instead, their lack of engagement results to a large extent from factors which are predetermined before they even reach the legal voting age.

The study is available for download at: www.zew.de/PU78445

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FAMILY BACKGROUND AS THE MAIN FACTOR IN PREVENTING EQUAL OPPORTUNITIES FOR POLITICAL PARTICIPATION IN THE USA





Minimum Wage in Germany – Burden on Young Companies Greater than Expected

The statutory minimum wage, which became binding in Germany on a national level in 2015, has proved to be a greater burden on young companies than previously expected. Besides the necessary wage adjustments, start-ups have also been struggling with additional bureaucratic requirements, such as time sheets and less flexible compensation schemes. As a result, young companies may suffer from negative effects. These are the findings of a survey among start-ups conducted by ZEW as part of the Mannheim Start-up Panel.

As part of the survey, around 5,000 young companies founded between 2011 and 2014 were interviewed on the phone. The responses were then extrapolated to all of the approximately 313,700 businesses which were founded in the sectors covered by the Mannheim Start-up Panel during the survey period. With the aim of assessing the positive and negative effects of the statutory minimum wage, ZEW collected data on how the minimum wage has affected start-ups with employees in two survey waves: the first survey was performed six months before and the second survey six months after the minimum wage was introduced on 1 January 2015.

Before the minimum wage became binding, around 11 per cent of the surveyed companies expected the regulation to have a negative effect on the company. After the minimum wage was introduced, however, the share of companies which claimed to have suffered from negative effects rose to 28 per cent. Around 20 per cent had to do wage adjustments, while 10 per cent have been subject to additional burdens associated with bureaucra-

tic requirements, such as reporting obligations and time sheets. A considerable number of companies stated that they had encountered difficulties in recruiting interns, student assistants or temporary workers after the introduction of the minimum wage. The difference in the findings of the two survey waves shows that many start-ups had not been sufficiently informed about the implications of the minimum wage. It also indicates that many businesses had underestimated its impact on the flexibility of compensation schemes for temporary workers.

Start-ups More Cautious in Expanding

It is likely that the additional bureaucratic requirements and the statutory minimum wage will come to play a more significant role in the development of young companies. Many start-ups are yet to establish a specialised HR department experienced in implementing specific requirements associated with the minimum wage, such as reporting obligations. To finance such departments, start-ups will have to invest resources which otherwise would have been spent on the development of the company. In addition, flexible and performance-based compensation schemes are particularly important for young businesses, since their turnovers often vary considerably. The limited flexibility associated with the minimum wage could cause new businesses to take a more cautious approach in implementing expansion plans. This development is alarming, since start-ups are expected to provide a special impetus for the economic development.

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State Aid for Expanding Broadband Access **Slows Rural Depopulation**

The European Union attaches crucial importance to the expansion of broadband infrastructure for promoting economic growth and prosperity in Europe. To push expansion, the EU has set aside public funding for adding broadband to rural communities. A recent ZEW study is the first of its kind to evaluate the effectivity of state aid and whether broadband access reduces economic disparities between regions.

In order to spread broadband networks, the EU has created incentives for private service providers to invest in broadband infrastructure expansion throughout Europe – especially in rural regions where connectivity is poor. Since 2003, part of the EU strategy has been to grant state aid for expansion projects in rural communities that have failed to see private initiatives. From 2003 to 2014, the European Commission approved a total of 136 requests for state aid.



The EU promotes the expansion of broadband infrastructure in rural areas.

A recent study conducted by a team of ZEW researchers has examined whether the state aid programme is appropriate to reach its goals - namely adding broadband and reducing economic disparities – for Bavaria's 2,056 municipalities. The recent ZEW study is the first of its kind to investigate this phenomenon using extensive microdata on the municipality level in the state of Bavaria.

In 2007, Bavaria launched the initiative "Broadband for Bavaria" with the goal of advancing broadband expansions in its rural regions so as to provide equal connectivity for all residents regardless whether they live in big cities or small villages.

The initiative was motivated by the fact that broadband deployment is slower in Bavaria than in other German states, for reasons such as a lower population density, a high share of rural areas with numerous far-flung municipalities, and difficult topographical conditions with medium- and high-range mountains.

Around 1,300 Municipalities Received State Aid

From 2007 to the end of 2011, a total of around 1,300, or 63 per cent, of Bavarian municipalities received state aid as part of the initiative. The state aid totalled 107.6 million euros, with individual aid packages averaging around 83,000 euros. The money went into viability studies of planned projects as well as towards reducing profitability gaps in infrastructure expansion. The study's sample consists of 1,885 municipalities, of which 1,129 received state aid in 2010 or 2011. The study conducted by ZEW relates a variety of sociostructural, geostructural, economic, and political indicators to the broadband expansion in Bavaria's municipalities in the period from 2010 to 2014.

State Aid Improves Access to Broadband Internet

The study finds that state aid was a very effective means for expanding broadband network connectivity. Between 16.8 and 23.2 per cent more households in municipalities that received aid now have access to broadband internet compared to communities that did not. The findings further indicate that state aid was more likely to bring faster broadband connectivity (16 Mbit/s) rather than low-end transmission rates (2-6 Mbit/s), with speed increasing in the years after the aid was received.

Complementary to these important results on the effectiveness of state aid, the study also allows conclusions on the efficiency of state aid. In particular, the study finds that communities that added broadband connectivity with the help of state aid saw on average seven additional employed persons contributing to social security and living in funded municipalities. This means that more persons settled in these rural regions than moved away – a sign of their increased appeal. The study, however, did not find evidence that increased broadband connectivity created new jobs in the affected municipalities, whether at existing employers or in the freelance sector.

The study is available for download at: www.zew.de/PU78336

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Post-Brexit EU: Franco-German Consensus on Defence and Immigration Policy

French and German members of parliament (MPs) are both open to granting more competencies to the EU in the fields of defence and immigration policy. There is, however, considerable disagreement on certain reform proposals for the eurozone. While French politicians tend to support the adoption of a joint liability scheme in form of Eurobonds and a common European Monetary Union unemployment insurance (EMU-UI), German representatives are opposing these proposals. These are the findings of a survey among members of the Assemblée Nationale, the Sénat and the German Bundestag, conducted by ZEW, in collaboration with the École Polytechnique in Paris and the University of Mannheim.

A total of 232 MPs from both countries participated in the survey conducted between April and July 2016. The French and German questionnaires were both sent out to the MPs in late April. The survey was the first of its kind to offer a detailed, transnational comparison regarding integration preferences of European national parliaments. Gaining insight into the attitudes of French and German MPs is an important first step towards recognising reform potentials for the future of the European Union.

According to the survey, French MPs are in general more open towards shifting competencies to Brussels than their German colleagues. In particular in the fields of taxation, wage policy and labour market regulation, German MPs are more reluctant to granting more competencies to the EU than their French counterparts. Franco-German consensus, however, was established with respect to defence and immigration policy. By contrast, MPs of both countries are undecided as to whether they support the integration of energy policy.

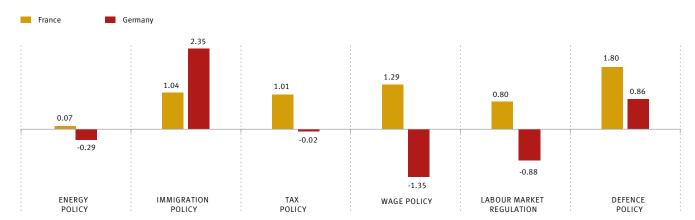
When asked about reform proposals for the eurozone, French and German members of parliament adopted different positions. There is, for instance, disagreement between MPs from both countries regarding policy proposals, which are intended to increase fiscal integration such as Eurobonds or a common EMU-UI, with the majority of French MPs advocating such a policy and German MPs opposing it. The researchers from ZEW, the University of Mannheim, and the École Polytechnique suggest that - given the unfavourable conditions in the French labour market as well as France's fragile fiscal situation - French MPs may perceive a possible net benefit for their country of adopting solidarity measures.

Franco-German Divide Within Party Families

When it comes to the assessment of the European Central Bank's (ECB) current monetary policy, views are polarised between Paris and Berlin: Whilst the ECB's asset purchase programmes (quantitative easing) enjoy strong backing from French MPs, many members from the Bundestag voiced scepticism about these transactions. The survey revealed a Franco-German divide even within party families, particularly when asked about controversial issues. For instance, members of the German conservative party are strictly against the introduction of Eurobonds. Among the French conservative party members, by contrast, the result is less unanimous.

German social democrats and the French socialists, on the other hand, are both open towards this proposal. There has been a similar result with regard to the concept of a common Europe-





Note: The graph displays the country-specific averages of individual responses of German and French MPs, which are weighted by the inverse probability of age, gender, fraction in parliament, and membership to ruling party in the respective country to gain representativeness of answers to overall population of MPs. The answers to the related questions are based on a scale ranging from -4 ("Disagree") via 0 ("Undecided") to -4 ("Agree"), respectively.

Source: own calculations.

an unemployment insurance scheme. However, further Franco-German consensus was established as MPs from both countries agreed on the potential of higher national investments as a remedy for low growth. In this way, the MPs support the expansion of real economic investment, which is already being incentivised through the European Fund for Strategic Investments (EFSI) by the European Commission. Socialdemocrats/ socialists and conservatives from both countries agree on the expansion of European competencies in defence policy.

The French socialists are the only ones, however, to support the granting of further national competencies when it comes to immigration policy. Both German conservatives and social democrats agree with the accordance of more competencies to the EU

in the field of immigration. All in all, the conducted survey provides a clear indication of both the potentials and limits of new Franco-German reform initiatives in a post-Brexit EU. The results of the survey suggest that new integration options in the fields of defence and immigration may count on a Franco-German backing. Due to the lack of a basic consensus among the two largest countries in the eurozone, the implementation of groundbreaking reforms for the institutional set-up of the euro, along with the selected policy proposals, is unlikely to happen.

The detailed results of the survey are available at: http://ftp.zew.de/pub/zew-docs/policybrief/pb05-16.pdf

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Patents and Trade Secrets Help Companies **Achieve Higher Revenues for New Products**

To protect innovations from being copied by competitors, firms commonly use patents or trade secrets, or both. A recent ZEW study analysed the factors that go into choosing a strategy and its effect on innovation success and company profits. The results show that firms combining both protection methods yield higher sales with new-to-market innovations. Using only secrecy has slightly stronger positive impacts on firm profitability.

Firms have various ways of protecting their innovations. Two popular strategies are patents and trade secrets. Patents give their holders exclusive rights to use certain technological inventions, but registering them requires the disclosure of important information. Trade secrets circumvent this. But keeping the technology behind innovations confidential can be labour intensive, and prosecuting trade secret violations is often difficult. In practice, many companies pursue both strategies, protecting explicit (public) knowledge with patents and implicit (concealed) knowledge with trade secrets. A recent empirical study by ZEW examined the factors companies consider when choosing a strategy and its connection (if any) with innovation success and profits. A key feature of the study is that it restricts its sample to companies that introduced only one innovation a new product or process - during a three-year period. In this way, the study could better isolate the causes and effects of protection strategies.

The study drew its data from the Mannheim Innovation Panel (MIP), a yearly effort by ZEW to collect information about the innovation behaviour of companies in the German economy. The study selected surveys from 2011 and 2013 because they explicitly asked companies about the methods they used to protect their innovations. Based on the data, the study found that protection using patents and trade secrets is more widespread than strategies that rely on only one of those methods. Of the companies with a single innovation in the 2010-2012 period, 38.8 per cent employed both patents and trade secrets. 6.3 per cent used only patents, and 23.7 per cent only trade secrets. 31.2 per cent protected their innovation with other methods - trademarks, registered designs, copyrights, or lead-time advantages.

The study also found that innovations that are protected both by patents and trade secrets show a higher level of novelty and investment. A combined strategy was more frequently used as well when the innovations were developed jointly with research institutions or when uncertainty about future technological development was high. The study also found that younger companies that had introduced just one new product or process were more likely to deploy both methods. The same is true of companies in branches where patent protection is very effective. By contrast, financing restrictions played a subordinate role when selecting mechanisms that protect innovations.

Combined Approach Boosts Innovation Revenues

The ZEW study found that companies achieved more revenues from new products on the market when their innovations were protected by both patents and trade secrets. For companies that used only patents, revenues increased merely in the short term, while a combined strategy promised higher revenues further down the road as well.

According to the study's authors, however, the combination of patents and trade secrets has no noticeable effect on a company's profitability. Trade secrets led to a slight bump in profits, but the technological monopoly secured by patents did not offset the damage caused by the disclosure of technological details in the registration process.

The study is available for download at: www.zew.de/PU78308

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Mergers and Acquisitions in Germany: **M&A Index Hits Record Highs**

According to the moving 12-month average of the ZEW-ZEPH-YR M&A Index, mergers and acquisitions of German companies remain on course to reach the highest levels ever recorded. The moving 12-month average, which is based on the number of M&As of German companies, began its current trajectory with a merger wave at the beginning of 2011 and - apart from a relatively small decline in 2015 – has risen continuously ever since, reaching 96 points in August of 2016. This is the highest value observed since 2009. The high levels today cannot, however, be attributed to outliers. Though the January score - 132 points - was higher than for any single month since 2008, the M&A Index exceeded the 100 point-mark for two other months between February and August. Again, the last time this occurred was in the year 2009.

Number of Transactions Inside Germany Has Risen

What is striking is how attractive German companies have become for other German firms. Though the number of efforts to acquire German companies has generally increased, they have been strongest from other German companies. Almost 60 per cent of all current transactions have taken place inside Germa-

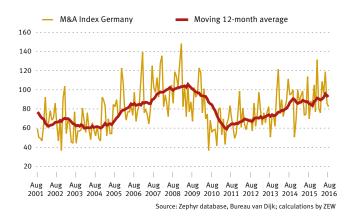
The ZEW-ZEPHYR M&A Index measures the number of M&A transactions completed in Germany each month. It considers only mergers and acquisitions by and with German companies. It does not differentiate between the country of origin of the buyer or partner. This means that both domestic as well as international buyer companies are considered, provided the target companies are active in Germany.

The M&A Report is a biyearly publication issued by the Centre for European Economic Research (ZEW) and Bureau van

vate equity transactions across the world.

Dijk (BvD). It uses the Zephyr database to report on current topics and develop-BUREAU VAN DIJK ments in global mergers and acquisitions. The Zephyr database, which is updated daily, contains detailed information on over one million M&A, IPOs, and priat 14 per cent, 4 per cent higher than in 2012. Buyers from out-

ZEW-ZEPHYR M&A-INDEX GERMANY



ny. In 2012, it was just under 50 per cent. The number of buyers

from outside Germany in the eurozone has been increasing as

well in the past three years, with their shares in M&A deals now

side the eurozone are currently responsible for only 26 per cent of all transactions, their weakest showing in the German M&A market for more than five years.

Record Acquisitions in the Third Quarter

The largest deal of the previous quarter occurred between ATM manufacturers. As the importance of cash has continued to wane in many countries, restructuring in the sector has been necessary. The Paderborn-based automatic teller manufacturer Wincor Nixdorf purchased the US-based competitor Diebold for around 1.8 billion euros.

What was probably the most spectacular and largest attempt to acquire a German company fell through. In March 2016, the agricultural chemicals corporation Monsanto from the United States tried and failed to purchase the agricultural chemicals division of Leverkusen-based Bayer AG. Monsanto was willing to pay around 30 billion euros. Had Monsanto succeeded, it would have been by far the largest acquisition of a German company ever recorded. In September 2016, the tables turned drastically: Bayer absorbed Monsanto for the record sum of 59 billion euros. In doing so, Bayer outrivaled BASF, which was also vying for Monsanto.

The quick finalization of the transaction may have been helped by the similar stakeholder structure of both companies.

The financial investor BlackRock is the largest shareholder at Bayer – during purchase negotiations it increased its share from six per cent to seven per cent – and the second-largest shareholder of Monsanto, owning six per cent of its stock. Only Vanguard, another US financial investor, holds a greater stake in Monsanto. Vanguard also has sizeable stock in Bayer.

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M&A Transactions Decline in the IT Sector

Globally, M&A activities in the IT branch have declined significantly in the past few years. This trend is particularly striking in the US, the most important market for established IT giants as well as for Internet start-ups. Since 2011, the number of transactions fell continuously from year to year and by 2015 sank to 521, a decline of 61 per cent. Transaction volumes have also been falling, with exception of 2012 and 2014. In 2015, they totalled only 20.48 billion euros, as low as they were in the crisis-riddled year of 2009.

Buyers Mostly Sceptical of Young Internet Companies

The high transaction volumes in 2012 and 2014 were on account of large individual deals, such as the acquisition of the instant message provider Whatsapp by the US Internet giant Facebook, whose value alone was estimated to be 15 billion euros. If these large-scale transactions were omitted, these two years would clearly reflect the downward trend. The data for 2016 has been recorded through June.

This negative trend could be linked to the burgeoning scepticism towards young IT start-ups. Many young companies face

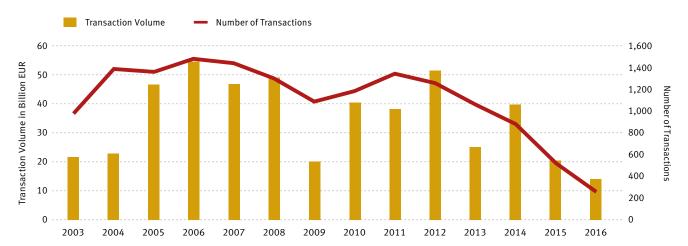
strong competition and are often unable to fulfil the hopes placed in them. As a result, many start-ups have difficulty turning a profit. With no other alternatives on offer, more and more start-ups are probably wondering whether to go public for an injection of fresh capital. One company that is reportedly preparing to take this risky step is the online data storage service Dropbox from San Francicso. Experts think the company might go public in the first quarter of 2017.

Concerns of a New IT-Bubble

Several Silicon Valley firms are valued very highly yet still face big challenges. The best example is the online transportation network company Uber, which recently had to retreat from the Chinese market regardless of its 70 billion dollar valuation. In view of such sobering reports, investors are worried that companies in the IT sector are overvalued, and, with growing fears of a bubble, they have become skittish about new purchases. Their reluctance is reflected in the economic data from the past few years (see graph below).

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VOLUME AND NUMBER OF TRANSACTIONS IN THE US IT-SECTOR FROM 2003 TO JUNE 2016



Source: Zephyr database, Bureau van Dijk, calculations by ZEW



Capital Gains Taxes Slow M&A Activities

In 2002, Germany and the United Kingdom eliminated corporate capital gains taxes for M&A transactions. Similar reforms have followed in other European countries such as France, Italy, and Scandinavia (see graph below). This development has been of momentous importance for acquisition activities.

In general, capital gains taxes are levied whenever a company earns a profit from the sale of its shareholdings. From the perspective of the seller, these taxes increase the transaction costs of the acquisition. To pass on some of these costs, sellers can be expected to demand higher prices while negotiating with potential buyers. If the buyer is not ready to pay more, the deal won't go through. Hence, capital gains taxes have a negative effect on the number of successful transactions. This mechanism is known as the "lock-in-effect."

Company Shareholders Especially Hard Hit

A recent ZEW study has tried to measure the extent of the lock-in-effect by looking at these reforms to capital gains taxes. The study estimates the elasticity in the number of M&A transactions with respect to the corporate capital gains tax rate and use it to compute the annual loss for shareholders resulting from the taxation of capital gains. These losses are caused when the lock-in-effect eliminates the synergistic gains from corporation acquisitions and mergers. The study primarily looked at M&A transactions to which the capital gains tax applies (i.e. inter-corporate share deals). The data on M&A was gathered from the

Bureau van Dijk Zephyr database for 2002 to 2013. Since the Zephyr is linked to other enterprise databases, it is possible to identify the seller's location and whether the seller is a corporation or a private individual. This information is necessary to determine the capital gains tax liability for M&A transactions.

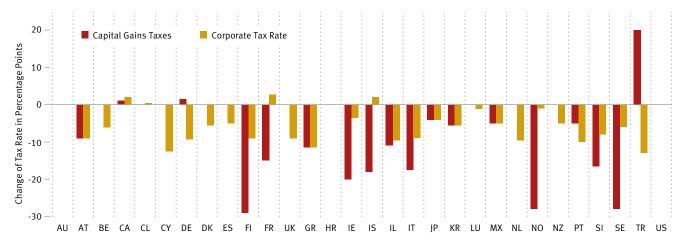
Number and Volume of M&A Transactions Negatively Affected

The results of the study show that the capital gains tax has a pronounced negative effect on the number and volume of M&A transactions. It finds that lowering the tax rate on the sale of shareholdings by 1 percentage point leads to a 1.1 per cent increase in the number of M&A transactions. The study then uses this finding to determine the shareholder losses caused by the capital gains tax. The study's authors approximate the value of the projected synergistic gains based on the acquisition premiums available in the Zephyr database by country and industry. They combine this data with the effect of capital gains taxes on acquisitions to simulate the influence of the tax reforms. On this basis, the study projected that exempting US companies from capital gains tax on M&A transactions would lead to a shareholder gain of 3.06 billion US dollars. In 2013, America's capital gains tax on companies for M&A transactions was 39.28 per cent, which includes applicable state taxes as well.

The study is available for download at: www.zew.de/PU77087

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CUMULATIVE CHANGE OF CORPORATE CAPITAL GAINS TAXES FOR M&A FROM 2002 TO 2013



Source: ZEW

Few Large-Scale Acquisitions in the US Telecommunications Market

As in Europe, the telecommunication market in the United States has experienced massive consolidation in the past few years. This trend has raised the aggregate transaction volume while considerably lowering the number of M&A deals.

In the US, the number of M&A deals remains depressed after hitting a record low in 2015. At the same time, the aggregate transaction volume was very high at the end of August, exceeding the past decade's peaks. Not least among the big deals were large-scale acquisitions on the cable provider and broadband markets. In May of this year, Charter Communications announced the second-largest publicly known acquisition on the US telecommunication market. Its purchase of Time Warner Cable for 69.6 billion euros and Bright House Networks for 9.2 billion euros makes Charter (now operating under the brand name Spectrum) the second-largest broadband provider and the third-largest pay-TV provider in the US. Not long after, the Dutch telecommunications group Altice acquired Cablevision for 15.6 billion euros. Together with the purchase of Suddenlink in 2015, this deal turned the US division of the Dutch corporation into the fourth-largest cable network provider in America. Also in 2015, AT&T purchased the satellite television provider DirecTV for 61.1 billion euros, making it the country's largest pay-TV provider.

What these large-volume acquisitions have in common is the aim not only to cut costs via synergistic effects (as with previous deals) but also to strategically expand portfolios beyond the classical areas of telecommunication and Internet services. These portfolio expansions can be seen as a response to increasing customer demand for integrated product bundles encompassing as many services as possible. Moreover, the media rights included in the acquisitions have assumed an increasing-

ly large significance. For instance, AT&T's purchase of DirecTV gave it highly sought-after broadcast rights for the NFL.

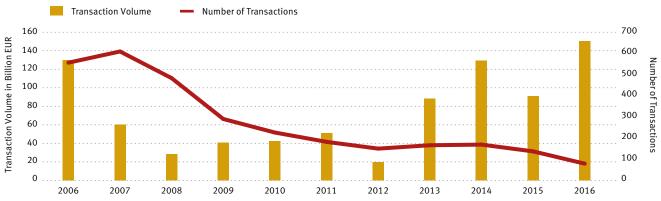
What this suggests is that traditional telecommunication network operators are responding not only to traditional challenges such as demands for ever larger capacities but also to new competitors from the Internet economy such as the online streaming providers Netflix and Amazon Prime Video.

Competition Law Lags Behind M&A Activities

Mergers carried out for the sake of diversification, with a special focus on Internet services and platforms have raised new challenges for regulators, especially when it comes to competition law. Consider the disproportion that often exists between the revenues an Internet start-up generates and its valuation on external capital markets. Successful start-ups are characterized by quickly acquiring users, whose data they mine and store, creating proprietary storehouses of personal information. This incentivizes dominant companies to acquire smaller start-ups and thus take possession of this very lucrative data. However, current regulations provide only for intervention thresholds based on company revenues but not on the value of the company or the monetary valuation of its data stores. It has thus been proposed by authorities such as the German Monopolies Commission to redefine thresholds in Europe and Germany to better reflect these realities. Given the ineffective regulatory instruments currently available, the Federal Cartel Office has also demanded more effective decision criteria to counter the monopolization tendencies in the Internet economy.

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NUMBER AND AGGREGATED VOLUME OF COMPLETED M&A TRANSACTIONS WITHIN THE NAFTA TELECOMMUNICATIONS SECTOR FROM 2006 TO AUGUST 2016



Source: Zephyr database, Bureau van Dijk, calculations by ZEW



Supplier Conflicts Bring VW Production to Halt

A dispute between Volkswagen and two suppliers from the Prevent Group disrupted the schedules of 27,700 workers at the car manufacturer's factories, forcing VW to apply for short-time working. Even though the parties have since come to an agreement, the dispute has raised some unpleasant questions: Is the allowance paid by the German Federal Employment Agency an appropriate instrument in such conflicts? And how can a conflict with a supplier bring a large manufacturer like VW to a standstill?

The conflict between VW and Prevent has received much public attention, not least because of the car company's decision to reduce working hours for thousands of employees. This implies that some of the costs caused by the conflict are passed onto employees and taxpayers, partially unburdening the disputants and making prolonged escalation more likely.

Existing Contracts Violated

Legally, it is controversial whether workers will have to bear the costs of shorter shifts by receiving short-time working allowances instead of their usual wages. Prevent violated existing contracts with VW to escalate their row with the car manufacturer. And since contractual compliance is an asset worthy of protection, the German Federal Employment Agency may accept claims to pay short-time allowances. It would still be desirable, however, if the effects on the conflict's duration were considered when formulating short-time allowance criteria.

Long-term Cooperation Required

In the automobile sector, around 70 per cent of automotive parts are produced by suppliers. Carmakers entrust suppliers with developing specific components for each vehicle model. The purchase of highly customised parts from external sources requires long-term cooperation. This is due to the long product cycles for new models, which can take three to four years to develop. The long lead times and the technical complexity of modern vehicles make it difficult to design suitable agreements between car manufacturers and supplier companies. Every eventuality not discussed and every unevenly distributed risk can lead to major tensions.

The fact that a single supplier was able to bring VW's production to a halt by cutting off supplies was the result of a combination of factors: The highly individualized parts from Prevent could not be replaced with products from other suppliers at short notice. Many car manufacturers nowadays receive parts from a single supplier, especially with more complex componentry. This strategy, known as single sourcing, brings with it some advantages: it increases competition between suppliers, strengthens the ex-ante bargaining power of purchasers, and reduces costs as a result. On the other hand, single sourcing increases the risk of non-delivery and gives suppliers strong ex-post bargaining power. And, ultimately, it increases the likelihood of a production halt when delays to just-in-time deliveries occur, leaving the manufacturer with low inventory levels.

Tensions Between Competition and Cooperation

The VW case shows that forging optimal relationships with suppliers is complicated. If the relationship between carmakers and its suppliers is shaped by competition and not by cooperation, then many factors ultimately determine whether a carmaker can maximise profits in the long term. If the services are clearly specified and can be met by multiple suppliers, then competition is well suited for obtaining a low purchase price. In situations where cooperation promises efficiency gains, it may be more advantageous to adopt a purchasing strategy focusing on increasing efficiency and to decide about the distribution of efficiency gains later on.

Problems arise when bargaining power and competition are applied in structures that rely on cooperation. The described tension between competition and cooperation makes purchasing a complicated matter but also an interesting field for research – filled with important, unanswered questions and potential applications.

A longer, earlier version of this article is available (German language only) at: http://archiv.wirtschaftsdienst.eu/jahr/2016/9/beschaffungskonflikte-volkswagen-und-seinezulieferer/

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Q&A: How Will We Work in the Digitised World of the Future?

"Willingness for Lifelong Learning is Key"

The digitisation of work has become one of the watchwords of the 21st century. As companies and markets keep up with rapid advances in the digital economy to stay competitive, sceptics fear that the automatization of labour will lead to massive job cuts. The ZEW labour market economist Melanie Arntz discusses what this means for workers and businesses in Germany and in Europe in general.

How is today's labour market prepared for the changes that digitisation will bring?

The digital transition is already in full swing in many German companies, and has been accompanied by increased requirements for computer skills, process knowhow, communicative ability, and interdisciplinary knowledge. In the digital world of tomorrow, demand rises for those whose productivity is expected to climb as new digital technologies are deployed. The German job market is relatively well prepared for these changes, and many workers are already well trained. Moreover, German companies mostly judge the training system to be sufficiently flexible in adjusting training contents to the needs of a digitised economy.

What does this mean for generations that have grown up in this environment and want to work?

First, workers whose tasks have a certain routine character and can be performed by algorithms will be less in demand in the future. By contrast, a communicative all-rounder who is able to apply his professional skills creatively to newly arising challenges is likely to do better. Second, the changes to the work environment will also change modes of working. Though crowdworking — labour that is offered digitally to companies around the globe— has so far remained a niche phenomenon; the ability to plan a career without any interruptions or ruptures is likely to decline. Third, the willingness for lifelong learning is key for being productive and successful in a constantly changing job market. And while the labour market of tomorrow offers more opportunities for self-fulfilment, it also has the potential to increasingly overwhelm individuals.

What can the government do to foster this process?

The Government can introduce policies that prepare the German economy for the future while mitigating possible negative side-effects. On the one hand, this means investing in the digital infrastructure, in developing digital standards that foster digital interconnectivity, and in creating a clear legal framework

for data protection. At the same time, government can encourage the dialogue between the private sector and educational institutions in order to spur the necessary curriculum changes. In addition to that, the state must identify individuals who are in danger of falling behind and equip them with the skills they need to master the digital transition. This mainly concerns low-skilled workers who take part in company training programmes far less frequently than more qualified co-workers even though the former are more likely to perform tasks that can more easily be automated.

As far as workforce training goes – what challenges does digital work pose for companies?

The problem that many companies frequently have is recognizing the arising chances of digitisation. Technical knowledge alone does not suffice as businesses must leave behind old ways of thinking. Once a company has successfully started the digital transition, it is important to train employees for meeting new requirements. However, digitisation is not always accompanied by greater requirements for workers. Notably, low-skilled workers sometimes find themselves faced with less demanding work. The challenge for companies lies not only in training employees but in helping them to avoid the psychological stress that arises from demanding too much or demanding too little. Digitisation thus poses a multitude of challenges for companies to navigate.





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is acting head of ZEW's Research Department "Labour Markets, Human Resources and Social Policy" and assistant professor at the University of Heidelberg. Her research focuses on the question how changing labour market conditions such as an increasing digitalization of work tasks and the proceeding international

division of production processes affects labour markets and individuals. She is also interested in the dynamics of individual labour market careers in response to these phenomena and the impact of regional labour market conditions on these dynamics.

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ZEW – A Mission with a Focus on Europe

ZEW is celebrating its 25th anniversary this year with a ceremony on 8 December 2016 in Mannheim. For this reason, the ZEWnews English Edition is honouring all the incredible work of ZEW in the run-up to the ceremony. The following text concerns the research institute's international activities.

With the use of the term "European", the very name with which the research institute was christened at its inception makes it clear that a strong international and, above all, European focus would always be a fundamental part of ZEW's mission. In the current political climate, the importance of this focus is becoming ever more clear. To this end, ZEW has been engaging with a number of issues, including the Euro crisis, migration, Brexit and the rapidly changing relationship between Europe and the USA, as well as environment issues and climate change. ZEW also plays an important role in analysing international tax competition and is also involved in evaluating the innovation performance of businesses within the scope of the European Commission's Community Innovation Surveys.

The research and advisory work carried out by ZEW is not only widely recognized on a national level but also, in particular on a European level, as confirmed by the German Research Foundation's (DFG) "Funding Atlas 2015". The Atlas reveals that the institute was able to attract more EU funds during the 7th EU Framework Programme between 2007 and 2013 than any other economic research institution in Germany. ZEW is now continuing its extraordinarily successful involvement in the 7th Framework Programme by taking part in the follow-on programme "Horizon 2020" (2014–2020). In this programme, researchers at ZEW will not only be working on projects commissioned by the EU, but will also offer their services to European institutions as experts and consultants during the policy-making process. The research institute has also had a regular presence in Brussels itself since 2014 through the ZEW Lunch Debates lecture series. The idea behind the series, namely to discuss the important current issues affecting European economic policy with the decision-makers on their home turf, has been met with an overwhelmingly positive response.

The continual internationalisation of ZEW is largely the result of the hard work of the deeply committed team of researchers at the institute. They are extremely well-connected with the international scientific community and every year they participate in a large number of conferences and workshops both in Germany and abroad. In the last year alone they have given around 400 lectures presenting the findings of ZEW research at these events. At the same time the institute has also made a name for itself as an organizer of first-class conferences. One such event was the "Transatlantic Public Economics Seminar" (TAPES), one of the most prestigious conferences in the world of financial economics, which took place at ZEW in 2016.

Sustainable International Cooperation

A driving force behind ZEW's international connections is the contribution from guest researchers working at ZEW, as well as collaboration with researchers working in research centres at renowned universities, research institutions and organisations all across Europe, North America and China. Our list of international partner institutions includes the International Monetary Fund (IMF), as well as the Universities of Harvard, Berkeley and Stanford and the Fudan University in China – to name but a few.

One considerable source of support for ZEW's international aims is the research programme "Strengthening Efficiency and Competitiveness in the European Knowledge Economies" (SEEK) financed by the State of Baden-Württemberg. Since the start of the programme in 2010, over 40 practical research projects, for which the participation of foreign researchers is a requirement for funding, have been financed under SEEK.

This route towards sustainable international co-operation is something ZEW is interested in continuing to pursue in the future. This is the only way it will be possible to analyse the complex problems arising in both European and global contexts on the basis of rigorous research and to then use this analysis to make policy recommendations to those in power, all while still continuing to compete at an international level.

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The Dramaturgy of the Euro Crisis

Since 2009, Europe has been suffering from the euro crisis and its aftermath. In order to find a way out of the crisis, Professor Markus K. Brunnermeier from Princeton University proposes to introduce so-called European Safe Bonds (ESBies). In his speech, which he delivered as part of the lecture series "First-Hand Information on Economic Policy" at ZEW on October 2016, Brunnmeier outlined his approach.

The core problem of the euro crisis lies in the fundamentally different economic viewpoints taken by Germany and France. There is considerable disagreement when it comes to choosing a course of action in crisis management. While French decision-makers advocate a high level of self-regulation as well as strict guidelines regarding flexibility, German politicians prefer security measures such as debt cuts. Furthermore, French politicians promote the principle of solidarity, along with a fiscal union, liquidity, and reforms in periods of economic growth. German policy makers advocate the principle of liability in terms of a "no bailout" clause, along with solvency, and reforms in times of crisis in order to build up political pressure. All of these dimensions have already existed during the Maastricht negotiations. "But at that time, policy makers were not yet aware of the great importance of financial stability," says Brunnermeier. "If a state has euro-denominated debt, it is no longer in control of the currency and is therefore unable to devalue the currency itself. This leads to a high risk of default," concludes Brunnermeier, "This is the dramaturgy of the euro crisis." Since euro-de-



nominated debt should be assessed according to same criteria as debt denominated in foreign currencies, the euro area needs a safe asset: ESBies. According to Brunnermeier's proposal, ES-Bies guarantee safety by pooling and tranching sovereign bonds according to their risk class, namely in risky junior bonds and safe senior bonds. "As a result, the flight of capital would no longer be across borders. It would be a flight across different financial instruments, namely in junior and senior tranches," adds Brunnermeier.

European Unemployment Benefit Scheme Offers Chances and Risks for the Eurozone

The euro crisis has reignited the debate about deeper fiscal integration in the European Economic and Monetary Union (EMU). In this context, the idea of a common unemployment insurance system (EMU-UI) is the subject of discussion. Such an automatic stabiliser could help euro countries to absorb asymmetric economic shocks in the euro area. In what way, however, is the implementation of a common unemployment benefit scheme feasible for euro countries? And what pre-conditions need to be met in order to avoid permanent transfers across Member States? These and further questions were discussed at the Lunch Debate "Chances and Risks of a European Unemployment Benefit Scheme", organised by ZEW in Brussels on 20 October 2016. The event opened with an introductory note by Dr. Nicole Hoffmeister-Kraut, Minister of Economic Affairs, Labour and Housing of the State of Baden-Württemberg.

From a scientific perspective, Dr. Mathias Dolls, deputy head of ZEW's Research Group "International Distribution and Redistribution", explained that the aim of EMU-UI is to improve the Monetary Union's economic stability and to strengthen the institutional architecture in the long term. Instead of replacing national UI systems altogether, the EMU-UI would guarantee certain minimum standards. The system would only cover short-term

unemployment. Using results of his research, Mathias Dolls explained that a common UI shows altogether countercyclical effects. In the period covered by a ZEW-study, from 2000 to 2013, the average budget would have amounted to roughly 47 billion euros per year in the eurozone. The study revealed that the majority of Member States changed their status from net contributors to net recipient, and vice versa, throughout this period. His speech was followed by a lively and controversial debate.



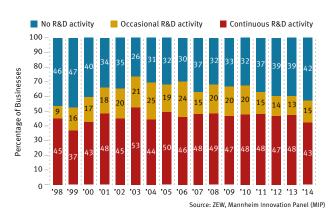
KfW/ZEW-CO2-Barometer 2016 - Prices for **Emissions Certificates Expected to Increase**



German companies participating in the European Emissions Trading Scheme have low expectations regarding the effectiveness of the agreement adopted at the Paris climate conference in 2015. Around 60 per cent do not expect a sustainable reduction of global greenhouse gas emissions. Most companies, however, predict prices for emissions certificates to rise again after the past months had seen a sharp decline in prices. In the long term the companies expect prices to remain stable of around 25 \in /t. However, the minimum price for CO₂ needs to be at least 26 €/t in order to serve as an incentive to avoid emissions.

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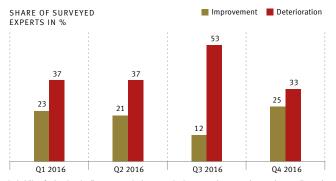
Electrical Industry -Less R&D Activity



In 2014, the share of businesses in the German electrical industry which are engaged in R&D reached the lowest level recorded in the past 15 years. In total, 43 per cent of businesses continuously carried out internal R&D, while 15 per cent carried out R&D occasionally. In the previous years, almost 50 per cent of businesses carried out R&D on a regular basis. Between 2008 and 2010, the share of businesses with occasional R&D activity was substantially higher, reaching a level of 20 per cent. Small and medium-sized enterprises currently appear to be struggling to maintain R&D activity at a high level.

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Sentiment Amongst German Business Managers in China Improves



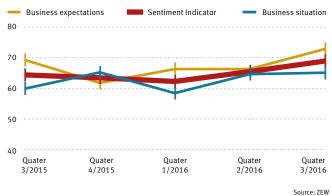
Probability of a deterioration/improvement in the economic picture over the next twelve months according to the experts surveyed at quarter one to four.

Source: ZEW and PwC

German managers in China are more optimistic again regarding the current economic situation in the world's second largest economy. Nevertheless, according to the surveyed managers, the likelihood of an economic slowdown to occur within the coming twelve months remains relatively high. With 33 per cent, however, it is significantly lower than in the previous survey. This is the outcome of the latest ZEW-PwC China Economic Barometer by the Centre for European Economic Research (ZEW) and PricewaterhouseCoopers (PwC), which surveyed 47 executives and managers from German companies in China.

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Growing Optimism in the German Information Economy



In the third quarter of 2016, the economic sentiment among companies in the German information economy remains positive. The corresponding ZEW Economic Sentiment Indicator, which had already closed at a high level in the previous quarter, continued its growth by climbing an extra 3.4 points, reaching a total of 68.9 points. This suggests that a vast majority of the companies evaluates the economic situation of the information economy positively. This is the result of a survey among companies in the German information economy, conducted by the Centre for European Economic Research (ZEW) in September 2016.

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In the Wake of Trump's Victory, Uncertainty

On 8 November 2016, 59 million US voters - just 30% of the electorate - selected Donald Trump as 45th President of the United States. Trump is a quintessential outsider, a real-es-

tate magnate and reality television star whose appeal is based largely on his promise to upend the political establishment. During his campaign, Trump decried the election process as "rigged" and also waged various attacks against the existing political and economic system. Trump has denounced the Federal Reserve's interest rate policy, and has also personally maligned Fed Chair Janet Yellen. The consequences of Trump's victory for monetary policy are difficult to predict. Yellen may feel obliged to step down. However, it is an important moment for the Fed to demonstrate its independence.

Trump's economic policy platform is not entirely consistent. On the one hand, he is strongly pro-business: He has promised to extend spending on infrastructure projects and he also wants to lower taxes on the rich in order to boost economic growth. On the other hand, however, he courts market scepticism. His plans to restrict immigration and free trade would impair economic growth. Protectionist policies would not only harm the US, but Europe as well. The signing of the Transatlantic Trade and Investment Partnership (TTIP) now seems increasingly unlikely.

Budget experts have calculated that Trump's plans would increase the national debt, which already reached 107% of GDP in 2016, up from 64% in 2007. The current federal debt is considerable. However, the US has managed several times in the past to pay down this debt, thanks to strong economic growth.

Prior to the election, numerous prominent US economists spoke out against Donald Trump. They criticized his campaign rhetoric for undermining faith in public institutions. They also refuted many of his arguments empirically, including the claim that international trade destroys jobs while depressing wages, or that trade is a zero-sum game.

Trump's election marks the start of a new phase of uncertainty in American politics. Which election promises will he implement? Which of them can he implement? The progress achieved by Barack Obama in fighting climate change is likely to be undone, as Trump denies the existence of man-made global warming. Trump is likely to find many areas of common ground with the Republican dominated Congress, and not just for rolling back environmental regulations. The House and Senate are sure to support his plans for aggressive tax cuts. He will also find easy allies when it comes to scrapping the Affordable Care Act, otherwise known as "Obamacare".

The election battle in the US did not showcase the merits of democracy. Trump's often irresponsible claims were damaging to America's social and political institutions. However, America's system of "checks and balances" – the tripartite power division between Congress, the President, and the Supreme Court – is a stable mechanism, which is able to deal with a President such as Donald Trump.



Dear reader of the ZEWnews,

ZEW is currently in the process of further developing and improving the ZEWnews and we need your help! We would much appreciate it if you were able to take five to ten minutes of your time to answer the following questions. You can complete the survey at http://limesurvey.zew.de/limesurvey/index.php/484539?lang=en Your participation is much appreciated and we express our sincere thanks in advance! Your ZEWnews team

Zentrum für Europäische Wirtschaftsforschung GmbH Centre for European Economic Research

ZEWnews English edition - published bimonthly

Publisher: Mannheim Centre for European Economic Research (ZEW), L 7, 1 · 68161 Mannheim · P.O.Box 10 34 43, 68034 Mannheim · Germany · Internet: www.zew.de, www.zew.eu

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