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Research Results · Conferences & Workshops · Publications

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Research Findings
Low Interest Rates Call for More Flexible Business Models in Banks

Supplement M&A Report
M&A Activity Involving Airlines on the Descent

Q&A
What Is the Status of European Financial Market Integration?

ECB Bond Purchase Programme Biased Towards Southern European Countries

Southern European countries benefit disproportionately from the bond-buying programme of the European Central Bank (ECB), with the largest bias towards Spain and Italy. If the ECB continues its bond-buying programme in 2018, this would further increase the preferential treatment shown to Eurozone countries with high levels of debt.

A recent analysis by ZEW examined whether the ECB is in fact at risk of monetising government debt in breach of the ban in Article 123 TFEU (Treaty on the Functioning of the European Union). To this end, the study analysed the distribution of bond purchases across the Eurozone and quantified the ratio of bond holdings to debt level as well as to Eurozone countries' current budget deficit. The findings showed that government bonds purchased within the Public Sector Purchase Programme (PSPP) make up around 14.4 per cent of the Eurozone's gross domestic product (GDP), with the share of Spanish and Italian bonds amounting to 18.3 per cent and 17.7 per cent of their respective GDP. In absolute terms, national central banks and the ECB (Eurosystem) have accumulated Spanish and Italian government bonds to a level which exceeds Spain's and Italy's share in GDP by around 43 billion euros and 51 billion euros, respectively.

Further countries that benefit disproportionately from the ECB's bond purchase programme are Portugal, France and Slovenia. In contrast, Greece, Cyprus and the Baltic States benefit the least. There are three reasons why Spain and Italy are the main beneficiaries. First, countries with a high level of public debt have a large stock of eligible bonds. By contrast, the Eurosystem central banks are facing increasing problems finding sufficient eligible bonds to purchase from Eurozone countries with lower levels of debt. Second, Spain's and Italy's shares of the population of the euro area are greater than their contribution to EU GDP. The allocation of ECB purchases is, however, determined on the basis of a country's GDP as well as its population size. Both ratios are combined to give the ECB capital key which determines the distribution of bond purchases. Third, the ECB capital key is only adjusted with considerable time lags and thus reflects outdated GDP data. This again benefits countries like Italy who have shown very poor growth performance in recent years. The capital key still assigns Italy a larger share than it would justifiably have on the basis of more current GDP data.

The fact that Spain and Italy are particularly favoured by the programme strengthens the suspicions of critics that the main goal of quantitative easing measures is indeed the fiscal stabilisation of Southern Europe. What is particularly problematic is the fact that even those states with the highest deficits have been able to cover their deficits in full since 2015 through ECB's bond purchases. Even though the Eurosystem does not buy government bonds on the primary markets (i.e. when governments newly issue their bonds), the net effect is nevertheless that the central banks supply more capital to the euro area government bond markets than all euro area governments combined demand through their new deficits. The central bank system has been playing this dominant role since 2015.

What is more, the financing effects of the bond-buying programme are even greater than those of the past euro rescue operations. The bonds held by the ECB and the national central banks – the latter assuming liability for 80 per cent of PSPP holdings – have already exceeded the volume of liquidity support measures provided to Portugal, Ireland and Spain via the European Financial Stability Facility (EFSF) and the European Stability Mechanism (ESB).

The phasing out of the bond-buying programme is long overdue

In net terms, no single Eurozone country needs any other lender to finance its deficits apart from the ECB, a fact that once again makes clear that the phasing out of the bond-buying programme is long overdue. The ECB has recently decided to continue its quantitative easing programme into 2018 on a somewhat smaller scale with the monthly asset purchases falling from 60 to 30 billion euros. But even this reduced level of new purchases will still be sufficient to fully finance any new deficits of the Eurozone countries. Since the constraints on eligible bonds will become more binding month by month for countries with lower debts, the bias in new purchases towards highly indebted nations will become even more pronounced.

Overall, the analysis indicates that government finance and bond markets in the Eurozone are highly dependent on the monetary authority. Hence, the apparent stabilisation of the euro bond markets currently depends entirely on a drip-feed from the ECB. If financing from the European central banks stops, the Eurozone will face yet another severe test.

The study is available (in German only) to download at: *http://ftp.zew.de/pub/zew-docs/gutachten/PSPP_Analyse_Heinemann_2017.pdf*

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Catalonia Crisis Casts Shadow over Potential European Fiscal Union

Spanish cohesion is currently facing a severe test in the chaotic conflict surrounding the referendum on Catalan independence. The desire for independence shared by many Catalans has its roots in various historical, cultural and political factors. Of particular importance, however, is the fiscal dimension of the issue – and its implications for the future of a possible European Fiscal Union.

In recent years the independence movement has been spurred by the high financial burden placed on Catalonia, combined with the region's limited budgetary autonomy. Europe should pay close attention to this issue, given the ambitious EU reform proposals currently being discussed, many of which point to greater centralisation. Such a change in course runs the risk of making exiting the European federal system seem like an attractive option – just as it is for many Catalans in Spain today.

There is a considerable gap between the tax revenue collected by the Spanish government in Catalonia and the amount of public funds that flow back. According to the Spanish government's own calculations, the net payments made by the autonomous region amount to the approximate yearly sum of ten billion euros. This corresponds to five per cent of Catalonia's economic output. Calculations carried out by the Catalan government using a different method point to an even higher deficit of 7.5 per cent of Catalonia's GDP.

The dominance of the central government and Catalonia's limited budgetary autonomy are also reflected in the distribution of government debt. In 2017, Spain's public debt across all levels of government reached a level of 1,150 billion euros, almost 100 per cent of the country's GDP. The Spanish central government is to a large extent directly liable for this debt. Catalonia also has its own debts, but these amount to a mere 75 billion euros, a moderate 35 per cent of the region's total economic output. The regions' comparably low direct liability for Spain's public debt is a highly controversial issue. If Catalonia were to se-

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cede, Spain would lose one fifth of its economy, but would see only a slight reduction in central government debt. This would be enough to throw the country, which is already deep in debt, completely off course financially. The need for an independent Catalonia to assume at least some of Spain's debt would therefore be a central bone of contention in any negotiation surrounding the region's independence.

Recent attempts to strengthen Catalonia's fiscal autonomy and to cap the net financial burden on the region have all failed. In 2006, after complex negotiations the Spanish parliament passed a new Statute of Autonomy of Catalonia which would have increased the fiscal independence of the region and set upper limits for the financial burden placed on Catalans. These fiscal protective rights were struck down by the Spanish Constitutional Court in 2010. The effective failure to de-centralise the Spanish federal system in the nation's highest court helped to fuel the Catalan independence movement considerably.

The events in Spain are highly relevant for the current debate surrounding EU reform. Many of the suggested reforms involving the possibility of a European Fiscal Union propose a kind of fiscal centralisation that would lead to new EU budgets, centralised EU taxes and new shared debt and transfer instruments. Supporters of this idea point to existing federal states that are supposedly only as successful as they are thanks to highly developed revenue sharing, big centralised budgets and centralised debt.

The current conflict over Catalonia suggests the opposite. Too much fiscal centralisation can undermine the political unity of a federation to the point of collapse. The danger of this happening is particularly great in federations like Spain where there are strong regional identities with their own languages and sense of nationhood. However, this is exactly what defines the EU. This is why the current threats to Spain's federal system are far more relevant to the EU than the stability of the German Federal Republic with its linguistic and cultural homogeneity. The fact that large-scale transfers of funds from South Germany to North and East Germany have been taking place for decades without triggering any serious secessionist movements has no bearing on how a Europe-wide transfer system might be received.

Last but not least, Brexit proves that European nation states can turn their backs on the EU even when faced with a very low fiscal burden. What's more, the right to exit the union is enshrined in the EU Constitution, and Brexit will set a precedent. While many Spanish politicians and judges are flatly denying regions the right to leave, this strategy is not open to the EU.

Political acceptance of the EU is at risk

The Catalonia crisis provides three key insights. First, ambitious fiscal insurance and transfer systems are risky both in terms of political acceptance and for the survival of the EU. If these plans result in Member States being saddled with long-term, unilateral financial burdens, this could fuel anti-EU movements in those countries. Secondly, a centralisation of government debt in the EU is another risk factor for Member States potentially leaving the union, since collective debt creates unclear liabilities and therefore increases the risk of new debt crises. Thirdly, rulings from centralised constitutional courts do little to compensate for a lack of public acceptance of far-reaching redistribution systems. An EU-friendly ruling from the European Court of Justice would be just as ineffective at lending legitimacy to fiscal redistribution as the ruling of the Spanish Constitutional Court was at de-escalating the situation back in 2010. There can be no future financial solidarity between the European nations unless it is supported by the majority of people living in those states that will bear the financial burden.

This piece initially appeared in the "Süddeutsche Zeitung" on 6 October 2017.

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IN THIS ISSUE

Photo: © bildagentur.panthermedia.net/Ruth R˜der

Why Are So Few International Emissions Trading Markets Currently in Existence?

Although trading CO_2 emission certificates across international borders has many advantages for the countries involved, these same countries are often hesitant when it comes to establishing international emissions trading markets. A recent ZEW study offers a new explanation for why this might be the case.

Emissions certificates can only be traded internationally if two or more countries agree to be involved. The most attractive emissions trading markets are those that bring together countries with high abatement costs per additional tonne of CO_2 and a greater willingness to pay for avoided emissions with countries with low abatement costs per additional tonne and less willingness to pay. The EU and China would therefore be the perfect match – however, there is currently no emissions trading being conducted between these two markets. Apart from the European Emissions Trading Scheme, which Iceland, Liechtenstein and Norway are also part of, the only other international market for CO_2 emission certificates is the one that exists between the US state of California and the Canadian province of Quebec.

Global emissions trading promises efficiency gains

Overall, markets for trading emission certificates lead to efficiency gains for the companies involved since markets of this kind reduce abatement costs per tonne of CO_2. However, the appeal of emissions trading for both sides depends not only on the potential efficiency gains but also on the total number of certificates being distributed. According to the ZEW study, there are two mechanisms which cause countries involved in international emissions trading to issue more certificates than would be the case in, say, two completely separate emissions trading markets.

The first is that countries can make a profit from emissions trading by intentionally issuing more certificates than their domestic companies actually need, and then selling the surplus certificates to companies in the other countries participating in the trading scheme at the current market price. To make this tactic less appealing, other countries can lower the market price of CO_2 per tonne by also making more certificates available on the market. If a large number of the countries involved in an emissions trading market behave in this way, this can lead to countries issuing far too many certificates, a policy which encourages rather than restricts an increase in overall emissions.

The second mechanism is just as important as the number of emission certificates issued, namely the choice of who gets to shape climate policy – often the environment minister – and who decides how many certificates the country will issue. Countries involved in emissions trading markets have an incentive to appoint ministers who will prioritise company profits over environmental concerns. This is because countries can use the strategic appointment of certain individuals as environmental policy-makers to signal to other countries that they are not willing to go to great lengths to reduce their emissions, but rather that these other countries should be more ambitious in their climate policy and issue fewer certificates. Countries thus use their choice of environmental policy-makers to ensure that more of the financial burden associated with ambitious climate policies falls on other countries rather than on themselves.

Since all countries are faced with this same incentive to appoint environmental officials who do not see environmental protection as their top priority, overall CO_2 emissions end up being higher when international emissions trading is introduced than if the countries involved all had their own internal emissions trading schemes that were not connected via an international market. This is why joining an international emissions trading market is not an attractive option for certain countries or blocks of countries like the EU. This also explains why establishing international emissions trading markets is so difficult.

Rather than ultimately bringing about a reduction in emissions, global emissions trading – via the two mechanisms outlined above – can actually lead to higher emissions than if there had been no international trade in CO_2 certificates. This interplay may make the concept of global emissions trading unattractive as an instrument for slowing the rate of climate change.

The study can be downloaded at: *www.zew.de/PU79287-1*

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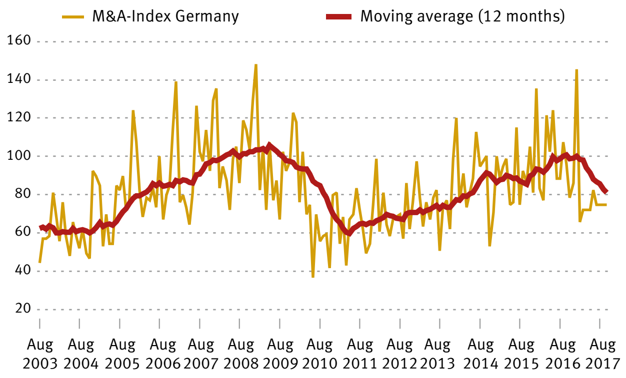
M&A REPORT

German M&A Index Suggests Reversal in Trend Regarding Number of Transactions

After a strong start to the year 2017, the number of mergers and acquisitions (M&A) involving German firms has decreased. This trend is clearly discernible in the ZEW-ZEPHYR M&A Index, which reflects the number of M&A transactions conducted in Germany on a monthly basis. While back in January 2017, the index had reached 145 points – its highest level since January 2009 –, by July it had fallen to just 75 points. This seems to indicate that the continuing upward trend in mergers and acquisitions involving German firms has stalled.

The index's twelve-month moving average also dropped to 87 points, its lowest level since October 2015. Furthermore, the average transaction volume for the current year is considerably lower than the average in previous years.

ZEW-ZEPHYR M&A-INDEX GERMANY



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

The biggest transaction that took place in the first six months of the year was the sale of the energy service provider SAG Group, which was bought off Swedish financial investor EQT by French company SPIE for 850 million euros.

Despite the general cooling of the German M&A market, the wave of consolidations in the chemical sector has continued, with Essen-based Evonik Industries acquiring the Hamburg-based cosmetics manufacturer Dr. Straetmans for just over 100 million euros. Perhaps the most curious acquisition of the first six months was that of Berlin-based pharmaceutical company Pedanios by Canadian cannabis producer Aurora Cannabis for just under 14 million euros. The Canadians are speculating on the European Union legalising the use of cannabis in the near future, and are hoping this purchase will give them a foothold on the European market.

Cooling off in M&A activities could indicate saturation

After a period of strong economic growth in recent years, this cooling-off in M&A activities could be an early indicator that the economy as a whole is entering a saturation phase. As a result of big capital gains on stock markets worldwide, acquisition targets may be over-valued, which could make potential investors more hesitant when it comes to their buying decisions.

Up until early September 2017, it was also not clear how the European Central Bank would decide to proceed regarding the purchase of government bonds. A more restrictive monetary policy by the ECB would lead to capital being withdrawn from the stock markets, lowering the price of potential acquisition targets and ultimately having a dampening effect on M&A activities.

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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 and international buyer companies are considered, provided that the target companies are active in Germany.

BUREAU VAN DIJK

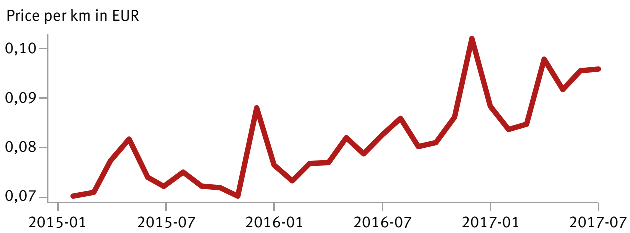
The M&A Report is a biannual publication issued by ZEW and Bureau van Dijk. It uses the Zephyr database to report current topics and developments in global mergers and acquisitions. The Zephyr database, which is updated on a daily basis, contains detailed information on over 1.6 million M&As, IPOs, and private equity transactions around the world.

Prices in the German Interurban Bus Sector Increase Following Wave of Takeovers

Almost five years after the liberalisation of the German interurban bus market in 2013, average prices have increased considerably following a wave of mergers and acquisitions, as well as a number of market exits. In July 2015, the average price per kilometre for routes within Germany when booking seven days in advance was 7.2 cents. By July 2017, the average price per kilometre had risen to 9.6 cents, which represents a 33 per cent increase in merely two years.

Before the amendment of the German Passenger Transportation Act (Personenbeförderungsgesetz, PBefG) on 1 January 2013, regular interurban bus travel was limited to a small number of routes. Since the amendment, bus companies have been allowed to offer regular bus services on all routes of at least 50 kilometres. Soon after the liberalisation of the interurban bus market, a comprehensive network of routes with several providers and a growing number of passengers was established. Early 2015 marked, however, the beginning of a consolidation phase, in which Flixbus established its position as the market leader. Today, more than 95 per cent of all routes are operated by Flixbus.

PRICE PER KILOMETRE OVER TIME (FOR ROUTES WITHIN GERMANY)



The graph shows the monthly average price per kilometre for routes within Germany when booking seven days in advance for the period between February 2015 and July 2017. The calculations are based on all available routes on *www.fernbusse.de.* Source: Zephyr database, Bureau van Dijk, calculations by ZEW

The M&A transactions that allowed Flixbus to gain control of the German interurban bus market were made possible by a legislative provision. Since the company did not reach the turnover threshold set out in paragraph 35 of the Act against Restraints of Competition, Flixbus was not subject to merger control by the German Federal Cartel Office. If Flixbus had surpassed this threshold, antitrust officials would have had to conduct an investigation into whether, for example, the rail transportation market should be considered a part of the same market. One argument against this classification is the vertical differentiation between the fast and expensive railway services and the cheaper but slower bus service providers.

Flixbus: the winner of a predatory competition

A detailed analysis conducted by ZEW shows that, even before market consolidation, routes operated by only one provider were more expensive than routes with more competitors. After the merger, prices for both monopolised and competitive routes increased to almost the same extent and reached a level that cannot be explained by additional costs. Instead, the price increases could indicate that Flixbus has emerged as the winner in a predatory competition and considers it unlikely that other bus service providers will be able to enter the market and compete on the same routes, at least in the short term. This would give Flixbus more leeway to increase prices. Flixbus has stated that it has been turning a profit in Germany since 2016 and expects its international operations to become profitable in 2017.

The market power of Flixbus is in part restricted by the Deutsche Bahn's special fare offers. For many consumers, travelling by car or car-sharing might also constitute an alternative to bus transport. According to Andreas Mundt, President of the German Federal Cartel Office, antitrust officials are keeping a close eye on Flixbus and its position as the only large provider operating on the German interurban bus market. In the event of misconduct on the part of any company with a dominant market position, the German Federal Cartel Office may intervene regardless of whether a merger is currently underway or not.

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Photo: © istockphoto.com/jrkphoto

Photo: © A. Ellinger /Flightlevel80

Mergers and Acquisitions Activity Involving Airlines Is on the Descent

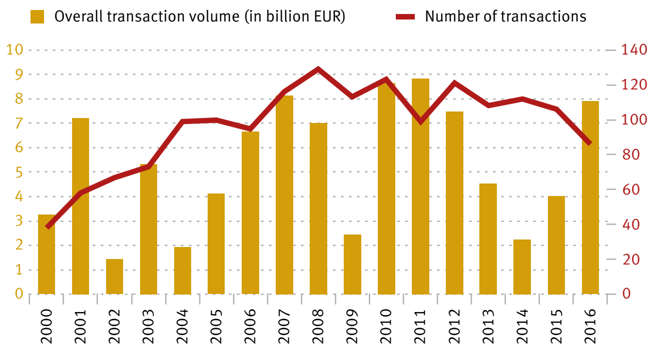
Since the start of the new millennium, there were on average 97 merger and acquisitions (M&A) transactions involving airlines worldwide observed each year. Much like a typical aeroplane flight, the M&A activity in this sector made a slow but steady ascent from the early 2000s onwards, before levelling out between the years of 2007 and 2015 with more than 100 transactions recorded per year. In the past year, however, there have only been 86 such transactions, suggesting a slackening of the positive trend.

Lufthansa, Easyjet and Condor in a bidding war over insolvent airline Air Berlin

In recent years, mergers and acquisitions in the global aviation sector have increasingly been attracting public interest, buoyed in particular by the recent insolvency of German airline Air Berlin. In the ensuing bidding war, Lufthansa, as well as Easyjet and Condor, all expressed an interest in Air Berlin, though they only put in bids for parts of the insolvent airline. Having successfully acquired Air Berlin's subsidiaries Niki and LGW for 210 million euros, Lufthansa is also one of the bidders for insolvent Alitalia – the former Italian state airline –, along with several other airlines.

But it is not only the airlines making the headlines; there have also been important developments involving manufacturers and suppliers in the aviation industry. For instance, United Technologies struck an agreement in September to acquire avionics company Rockwell Collins for 30 billion US dollars. As recently as April 2017, Rockwell Collins itself took over B/E Aerospace, a manufacturer of aircraft cabin interior products, in a six billion-dollar deal. This consolidation among aircraft suppliers is a cause for concern, particularly for aircraft manufacturers Airbus and Boeing. The increasing bargaining power of suppliers will have an impact on airlines, too.

NUMBER AND VOLUME OF GLOBAL M&A TRANSACTIONS IN THE AIRLINE SECTOR



Source: Zephyr database, Bureau van Dijk.

Transaction volumes often kept secret, but can run to more than one billion US dollars

With regard to the volumes of M&A transactions involving airlines, the information available does not provide a consistent picture. Since purchasing prices are in some cases kept secret, not all relevant data on transaction volumes is available. Over the past 17 years, the average value of transactions in the global aviation sector where the volume has been made public was 150 million euros. This number stands in stark contrast to the values of transactions at the upper end of the scale. At least 24 of the over 1,500 M&As recorded since the year 2000 ran to more than one billion US dollars.

The two largest transactions were the takeover of Trans World Airlines by American Airlines for 4.7 billion euros in 2001 and Alaska Air's acquisition of Virgin America for 3.8 billion euros in 2016. The largest M&A transactions involving German airlines were the takeover of Thomas Cook by KarstadtQuelle in 2006 for 800 million euros and Air Berlin's purchase of LTU International Airways in 2007 for 340 million euros.

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Low Interest Rates Call for More Flexible Business Models Among Banks

Low to negative interest rates pose enormous challenges for both private households and financial institutions. While the former find it increasingly difficult to profitably invest their savings, the latter are faced with a decline in income from their traditionally interest-dependent activities. At the same time, low interest rates may also present opportunities. Households can focus their investment portfolios on higher-income investment options, while banks can reassess their business models and exploit other income sources beyond their traditional interest-based operations. A recent ZEW report, commissioned by the ING-DiBa AG, indicates that Denmark's national economy is particularly illuminating in this regard.

In 2012, two years before the European Central Bank (ECB) took the same decision, Denmark's central bank introduced a negative base rate for deposits from the commercial banking sector. Denmark, therefore, now has five years' experience of an extremely low interest rate environment. Commercial banks responded to the rate change in a variety of ways.

To begin with, income structures in the Danish banking sector have changed dramatically. While net interest income (interest income minus interest expenses) as a proportion of total operating income had remained at a long-term average of 60 per cent, it now lies at 54 per cent. Despite the decline in interest income generated through loans, however, the greater emphasis on refinancing Danish banks via the money markets means they now have to accommodate far lower interest expenses. In addition, banks have increased their revenue from fees and commissions. Particular increases have been seen in income from fees for securities trading and portfolio management. Among the five largest Danish banks, income has almost doubled in this area since the introduction of the low interest environment. And since expenses for non-performing loans have fallen dramatically, the Danish banking sector as a whole now enjoys similar levels of profitability to those recorded in the years leading up to the financial crisis.

Danish banks are reluctant to impose negative interest rates on private customers so as not to drive them away.

Private customers in Denmark remain largely unaffected by negative interest rates

A further key conclusion of the ZEW report is that the negative interest rates levied on financial institutions' surplus liquidity by the central bank are not passed on to the banks' different customer groups in the same way. The deposits of large companies and state institutions, for example, are often subject to negative interest rates, while for private demand deposits, zero per cent interest clearly represents an interest rate floor. The banks' reluctance to impose negative rates on private customers can best be explained by concerns over the damage this might cause to their image and the possibility that customers may simply move their money elsewhere. The risk of a rush to cash, however, is considered rather low, since in Denmark payments are almost exclusively processed digitally, and the costs of storing cash reserves, even at extremely low interest rates, are rather unattractive.

In addition, Danish banks have sought to offset the reduction in income received from traditional interest-based activities through increased operating efficiency. Since the introduction of the low interest rate environment, the number of employees in the Danish banking sector has fallen by 20 per cent, while the number of branches has dropped by 45 per cent. The streamlining trend that was already underway before the interest rate change has thus significantly accelerated. Danish banks have achieved further savings in their operating costs and driven forward the digitalisation of the banking sector through the development and implementation of online solutions for transaction processes, financial investments and advisory services.

In sum, the report shows that a decline in the profitability of banks is by no means a necessary consequence of a long-term low interest period. Denmark has been able to avoid such an eventuality thanks to a number of factors, including an emphasis on refinancing banks via the money markets rather than through traditional deposits, a high level of digitalisation, and a comparatively high proportion of equities among households.

Download the report in German at: *www.zew.de/PU79313-1*

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Q&A: What Is the Status of European Financial Market Integration?

"The Capital Markets Union Must Consider Conditions in the Banking Sector"

After passing legislation to create a banking union in 2014, the European Commission is now planning to establish the foundation for a capital markets union by 2019, with the aim of creating a true single market for capital. This effort to increase the integration of Europe's financial markets has the goal of stabilising economic growth while also making Europe more resilient to crises. But what is the current state of play? In this Q&A, Karolin Kirschenmann, a financial economist at ZEW, sees a need for improvement in various areas, including how policymakers deal with insolvent banks, and how to vitalise securitisation markets.

What are the benefits of greater financial market integration?

The European financial and sovereign debt crises have shown that an institutional framework is needed to address the systemic effects of such crises. The banking, fiscal and capital markets unions are three distinct but related policy efforts that have the common goal of stabilising the Eurozone and synchronising the economic growth of individual Member States. The promotion of cross-border diversification is a key aspect of the capital markets union.

It aims to diversify financing opportunities, particularly for SMEs, while also bolstering securitisation markets, thus easing the distribution of risk beyond national boundaries. This should improve the ability of markets to absorb economic shocks that emanate from specific countries or sectors, thus minimising the risk of a systemic crisis. One example of this is the bursting of the dotcom bubble, which did not lead to a major economic crisis since many investors suffered only a comparatively small shock that they were able to cushion.

For the capital markets union to work, don't we first need stricter banking regulations, including more comprehensive measures for recapitalising financial institutions?

The capital markets union cannot work without considering current conditions in the banking sector. While the capitalisation of European banks has considerably improved, the rate of non-performing loans remains extremely high, particularly in Southern Europe. The problem is not a lack of new regulations. Rather, there is an absence of political will in Europe to recapitalise or unwind ailing banks.

Unwinding a financial institution is difficult during an acute crisis, as this can have negative impacts on the economy and savers, and may ultimately trigger a bank run. In the United States, the government systematically recapitalised banks early on, which contributed to a swifter end to the crisis. However, governments should not automatically recapitalise banks during a crisis, for this could increase the risk of moral hazard, encouraging bank executives to take excessive risks.

If policymakers currently lack willpower, and if the government should not automatically bail out troubled banks, what should we do with ailing financial institutions?

One component of the banking union is the single resolution mechanism (SRM), which includes the single resolution fund (SRF). The SRM provides for the orderly restructuring or liquidation of troubled banks. However, in contrast to the general recapitalisation that took place in the United States, the SRM is not an instrument to generally recapitalise weak banks that are burdened with non-performing loans. The credibility of these newly created institutions has already suffered, as Italy recently took advantage of an exceptional rule in order to wind down two regional banks using state aid, without bailing in creditors (and savers) as provided for by the SRM rules.

Can the capital markets union guarantee secure asset classes?

The capital markets union could provide a strong boost to European securitisation markets, making it easier for banks to package and trade debt tranches with varying degrees of risk. This would have numerous benefits. Bank assets would obtain a market price, thus making bank balance sheets more transparent. At the same time, banks could increase the diversification of their assets and it would become easier to unwind insolvent institutions. While a legal framework now exists to revitalise Europe's securitisation market, the trading of asset-backed securities (ABS) remains anaemic.

In a planned project at ZEW, we aim to investigate the incentives that should be implemented to promote more vital securitisation markets. In the process, the risk of securitisation can't be ignored, for unregulated, intransparent securitisation practices were one of the triggers of the financial crisis.

Dr. Karolin Kirschenmann

is deputy head of the ZEW Research Department "International Finance and Financial Management". Her research focuses on the banking sector and global financial intermediation. In her most recent research, she has been analysing the interrelationships between European banks, including their impact on the cross-border spillover of financial shocks and on lending to the real economy. In addition to her research activities, she regularly works as an external consultant to the German development bank KfW.

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ZEW Researchers Discuss Paris Climate Agreement at 2017 Beijing Humboldt Forum

ZEW, the University of International Business and Economics (UIBE), Beijing, and the Alexander von Humboldt Foundation jointly organised this year's Beijing Humboldt Forum (BHF) in the Chinese capital. As part of the forum, ZEW organised a session entitled "Implementing the Paris Agreement – The Role of the European Union and China". During the session, ZEW researcher Dr. Sebastian Voigt and ZEW Research Associate Professor Andreas Löschel engaged in a discussion with international guests regarding the role of China and the European Union in international climate policy, especially with regard to the Paris Climate Agreement. In addition to climate policy, the forum offered a wide range of talks from over 600 speakers from the fields of science, economics and politics on topics ranging from the role of emissions trading to clean energy, global value chains, rare earths, and Chinese language teaching as well cultural aspects of cooperation between China and the Western world. The event was co-organised by BMW China, the Fraunhofer-Gesellschaft, the University of Applied Sciences Upper Austria, the University Halle-Wittenberg and the Institute of Global Low-Carbon Economy of the UIBE.


Foto: UIBE

The participants of this year's Beijing Humboldt Forum

Fourth International Annual MaTax Conference Focuses on Tax System Design

In September 2017, the Leibniz ScienceCampus Mannheim Taxation (MaTax), together with ZEW and the University of Mannheim, hosted the fourth international annual MaTax conference on taxation research. The two-day conference offered the approximately 70 participants a broad and diverse programme of talks, including two keynote lectures and 32 talks on topics ranging from tax avoidance to the identification of behavioural responses to taxation and the main determinants of tax policy. The keynote lectures raised conceptual issues regarding the design of tax systems and potential solutions, which the audience were then invited to debate. The first keynote speaker, Professor Michael Devereux (University of Oxford), discussed why corporate profits should be taxed and what form this taxation should take. In the second keynote lecture, Professor James Hines (University of Michigan) claimed that frequent demands to expand the tax base and lower tax rates cannot be justified by efficiency or equality considerations. The conference participants were eager to engage in lively discussions and exchanged ideas and research findings. There are already numerous events planned within the MaTax ScienceCampus for the coming year.

ZEW Researchers Discuss Energy Savings in Private Households at COP23 in Bonn

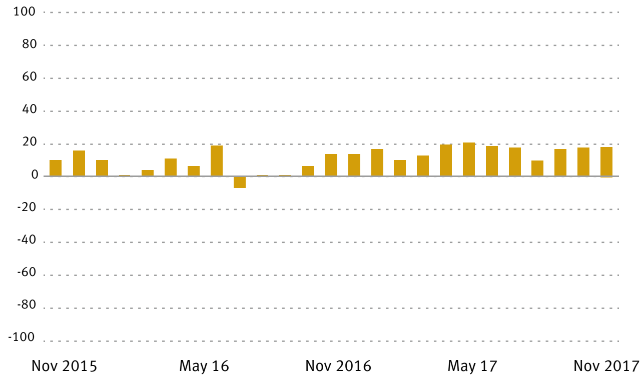
How can we raise awareness among private households about saving energy at home? What is the key to running a successful energy saving campaign? And how can the impact of such a campaign on actual energy usage be scientifically assessed? ZEW environmental economists addressed these questions while presenting their latest research findings at the side event "Energy Savings in Housing", held alongside the official negotiations at the UN Climate Change Conference (COP23) in Bonn. Audience members at the event enjoyed a spirited discussion with a wide variety of contributions ranging from the field of behavioural research, to the private sector and consumer advice centres. Environmental economists from ZEW and the University of Münster were joined on stage by an environmental psychologist from the University of Groningen as well as representatives from the sustainability solutions provider South Pole Group, the software company Microsoft and the North Rhine-Westphalia Consumer Advice Centre. Dr. Martin Kesternich, deputy head of the ZEW Research Department "Environmental and Resource Economics, Environmental Management", and ZEW Research Associate Professor Andreas Löschel highlighted the challenges of impact evaluation studies that aim to assess the causal effects of energy saving campaigns on energy savings.

Photo: ZEW

ZEW economist Martin Kesternich during his lecture

ZEW Financial Market Test November 2017

Germany: Prospects Continue to Improve



Balance of positive and negative assessments concerning economic sentiment on a six-month horizon in Germany. Source: ZEW

The ZEW Indicator of Economic Sentiment for Germany in November 2017 has once again improved on the result from the previous month. The indicator currently stands at 18.7 points, which corresponds to an increase of 1.1 points compared with the October result. The indicator, however, still remains below the long-term average of 23.7 points. The prospects for the German economy remain encouragingly positive. Overall, high levels of growth across Europe in the third quarter of 2017 are supporting further growth in Germany and boosting expectations for the coming six months. The assessment of the current economic situation in Germany has also continued to improve. The indicator currently stands at 88.8 points, corresponding to an increase of 1.8 points compared to the previous month. This favourable economic climate should now be used to create a stronger and more robust basis for future growth.

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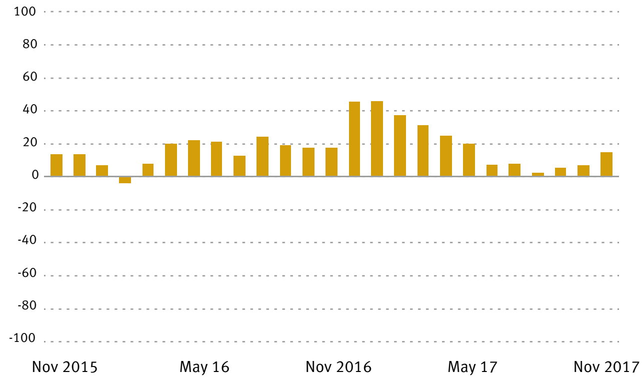
USA: Economic Outlook Improves Significantly



Balance of positive and negative assessments concerning economic sentiment on a six-month horizon in the United States. Source: ZEW

The financial market experts' outlook for the US economy improved considerably compared to the previous month. The corresponding indicator climbed by 8.2 to 14.9 points. The assessment of the current economic situation has also brightened, with the corresponding indicator rising by 4.5 points to 66.6 points. This improved outlook is likely to be the result of several factors. Firstly, the damage caused by hurricanes "Irma" and "Harvey" to the US economy ultimately proved to be quite manageable, and even had positive demand effects, for example in the automotive industry. Secondly, talks on the income and corporate tax reform seem to finally be under way. Also, due to continued weak wage growth, a rising share of experts anticipate that the Federal Reserve may refrain from a rate hike in December. 14.7 per cent of the experts have come to expect short-term interest rates in the US to remain constant.

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2018 MaCCI Annual Conference

The Mannheim Centre for Competition and Innovation (MaCCI), a joint initiative of ZEW and the University of Mannheim, is pleased to announce its 2018 Annual Conference on 8 and 9 March 2018. The aim of the conference is to provide a platform for exchange and discussion on topics in competition- and innovation-related research between academic researchers and practitioners in public authorities, legal counsel and economic consultancies. Theoretical, empirical as well as case-oriented papers are welcome. In particular, we invite legal scholars to submit papers focusing on EU competition and/or comparative competition law. Please submit a full paper or an extended abstract by 18 December 2017 to macciannual2018@zew.de.
For further information please visit: *www.zew.de/VA2438-1*

2018 ZEW Public Finance Conference

ZEW is pleased to announce the 2018 ZEW Public Finance Conference in Mannheim on 23 and 24 April 2018. The conference is held on an annual basis and aims to cover all fields of public finance and public economics. The 2018 conference will focus on fiscal policy coordination in Europe and will feature two keynote lectures on this topic. Submissions of papers addressing this topic, either from an empirical or a theoretical approach, are especially welcome. Please submit a paper by 15 February 2018 via *https://easychair.org/conferences/?conf=zew-pf2018*. Applicants will be notified whether their submission has been accepted by mid-March 2018. The conference fee will be waived for speakers presenting a paper.
For further information please visit: *www.zew.de/VA2433-1*


Photo: ZEW

Digital Catch-Up – Also in the Public Sector

In their campaign manifestos, all the political parties pledged to encourage the digitalisation of Germany's economy and society. This is a good thing. Armed with buzzwords like "Industry 4.0" and "digital hubs" or calls for a faster expansion of the country's broadband networks, politicians from all sides are demanding that the pace of digital transformation pick up rapidly in various economic sectors and private companies. But the government might want to get its own house in order first. The level of digitalisation in the German public sector is well behind that of many other countries.

In terms of "e-government", namely the degree of digitalisation in the public sector, Germany ranks in the middle of the pack internationally, far behind nations like the UK, Australia, Denmark or Estonia, seen as the poster child for e-government. For example, in Estonia it is possible to register a business online in a matter of hours. This is because digital signatures are not only considered legally binding there, but also secure thanks to encryption. In the UK, meanwhile, the entire process for renewing your passport can be completed online. In Germany, many administrative issues still require physical paperwork and appearing at the relevant authority in person.

If Germany is not to fall further behind in terms of e-government, the culture within its public bodies needs to change. To this end, the National Regulatory Control Council is calling for a higher-quality and more binding form of cooperation between the federal government, state governments and local authorities to help overcome some of the obstacles to implementing digital solutions across administrative boundaries.

Digitalisation in the healthcare sector, which is shaped by government policy in a number of ways, also shows plenty of room for improvement. A ZEW study has shown that healthcare is the only sector in Germany in 2017 with still only a low level of digitalisation. That's a bitter pill to swallow, particularly since digitalising certain healthcare processes and applying digital technologies to medical care, e.g. telemedicine, could help to alleviate challenges like cost pressure, skills shortages and demographic changes. Other nations are streets ahead of us when it comes to implementing such technologies. In Nordic countries, as well as the Netherlands and the UK, digital prescriptions have been rolled out pretty much nation-wide, whereas in Germany they are currently only used very occasionally in hospitals. However, online consultations after doctor and patient have already met in person have been a standard benefit covered by German statutory health insurance as of July 2017. In the UK and Switzerland, online consultations have been an option for a number of years now.

When it comes to these structural changes, health insurance providers will have an important role to play. Given that they are in competition with one another, insurers should in fact be trying to seize the opportunity offered by digitalisation to improve their services and make themselves more attractive to their customers. But this is not what we are seeing on the market. As shown by the German Monopolies Commission's latest special report, the competition deficits in the healthcare sector are manifold. Lawmakers will have their hands full rectifying this in the upcoming parliamentary term.

The new government cannot simply satisfy itself with calling for greater digitalisation of German industry and society; it must also promote and implement digital solutions in the sectors of the economy that fall under government remit. There are numerous examples of other countries doing this with great success. Let the digital catch-up begin.

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