



Research Findings

Retreat of German Banks from International Business

Politico-Economic Analysis

Obstacles to Reform in Southern Europe

Special Focus

M&A Report

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German Expert Commission: Mixed Bag for the Progress of Energiewende

The expert commission charged with summarising the German federal government's 2012 monitoring report "Energy of the Future" has good and bad news. While renewable energy is on target, the reduction of greenhouse gas emissions and the improvement of energy efficiency have lagged behind.

The Energiewende – a broad-based effort by Germany to create a sustainable energy economy – is shaped by two overarching goals: the reduction of greenhouse gas emissions by 80 per cent by 2050 and the phase-out of nuclear energy by 2022. In a recently published summary statement, the Energiewende expert commission discussed ten key indicators designed to measure energy policy progress and foster decision-making. For one of those indicators, the findings are very discouraging: greenhouse gas emissions have increased over the past two years,

endangering Germany's goal of a 40 per cent reduction by 2020. In its 2012 monitoring report, the federal government now projects only a 35 per cent drop in greenhouse gas emissions. To close this gap, additional energy and climate policy measures would have to be introduced, including efforts to reduce emissions in sectors outside cap and trade and, in particular, active policies to improve the European Union's existing emissions trading system. In the case of another indicator – energy efficiency – gains have only been modest, both overall and in the individual energy consumption sectors.

The goal of increasing the share of renewables in gross final energy consumption to 18 per cent by 2020 can be reached if today's trends continue. As in past years, expansion in the electricity sector remains the driving force. The expansion of renewable energies in the heating sector is also on target.

Environmental friendliness, security of supply, and affordability are three key aims that need to be taken into consideration in the Energiewende. A problem faced by the first objective is the growing space needed for power supply, which already accounts for 10 per cent of Germany's surface area and could lead to conflicts in the future. A decisive indicator for supply security is guaranteed capacity. At present, no general capacity shortfalls are projected, despite the plans of many operators to shut down some plants for good. Yet with the scheduled phase-out of nuclear power plants south of the Main River, local capacity may experience shortfalls, and these may be made worse by delays in the expansion of transmission networks.

Increasing Costs

As for the third objective – affordability – the expert commission notes that while legally mandated electricity fees for regular consumers rose markedly in 2012, total consumer expenditures for electricity did not increase relative to the nominal gross domestic product, with its percentage remaining almost unchanged at 2.5 per cent. Hence, the costs of the Energiewende have not been as dramatic for Germany's economy as portrayed by the media – at least through 2012. But future developments – electricity price trends, projects for renewable energy expansion

On 8 April 2014, the German federal government published its second monitoring report on the Energiewende, titled "Energy of the Future". The report uses indicators to describe the progress of Germany's sustainable energy policy. It was prepared by the Federal Ministry for Economic Affairs and Energy with the help of other divisions and lower level agencies. A commission of independent energy experts, appointed by the federal government, supervises the monitoring process and issues a summary on each year's monitoring report. The expert commission is made up of Professor Andreas Löschel (chair), Centre for European Economic Research (ZEW) and Heidelberg University; Professor Georg Erdmann, TU Berlin; Professor Frithjof Staiß, Centre for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW); and Hans-Joachim Ziesing, Energy Balance Research Group (AGEB).

(especially offshore), the urgent need to tie in grids to offshore wind farms and to expand transmission and distribution networks, funding new backup power plants and storage systems – could drive up costs in coming years. The strong jump in total expenditures for natural gas and fuel in 2012 are mostly the result of international prices, not of the Energiewende.

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Financial Crisis May Cause Partial Retreat of German Banks from International Business

A current survey conducted by ZEW in cooperation with the Halle Institute for Economic Research and the Institute for Applied Economic Research, Tübingen, examines the international activities of German banks during 2002 to 2011.

International activities of German banks have slumped since the outbreak of the financial crisis: from 2008 to 2009 alone, the international assets of large German banks dropped by 20 per cent. From 2002 until 2007, international assets had been growing by eight per cent per year. This development can be put down to political interventions in the German banking sector, a changing international regulatory environment as well as to a shift in the risk perception and risk appetite among banks. In some areas, the retreat of German banks from international operations could be permanent, the study concludes.

Internationalisation Before and During the Crisis

In their study, the participating researchers examined the 92 largest bank holding companies in Germany as well as their foreign subsidiaries and branches with regard to internationalisation activities before and during the crisis. The research data

covers the years 2002 through 2011 and was taken from the "External Position Reports" data set provided by the Deutsche Bundesbank.

To operate on an international scale, German banks have two options to grant loans to foreign entities: either directly from their headquarters in Germany or indirectly through subsidiaries and branches abroad. The retreat of German banks from international operations is in particular reflected by the decrease in directly-held foreign assets. Following a continuous increase from 2002 to 2008, foreign assets fell by 21 per cent between 2008 and 2011. From 2002 to 2011, German banks reduced the number of foreign subsidiaries by more than 55 per cent; 25 per cent of the 92 banks observed completely withdrew from subsidiary-based international business. The number of foreign branches had been growing by an average of two per cent per year between 2002 and 2008, but dropped by seven per cent in just one year and remained unchanged until 2011. Other than foreign-based subsidiaries, the overall number of banks operating through foreign branches remained barely unchanged between 2002 and 2011.

The researchers assume that it is highly probable that German banks have retreated from subsidiary-based foreign oper-

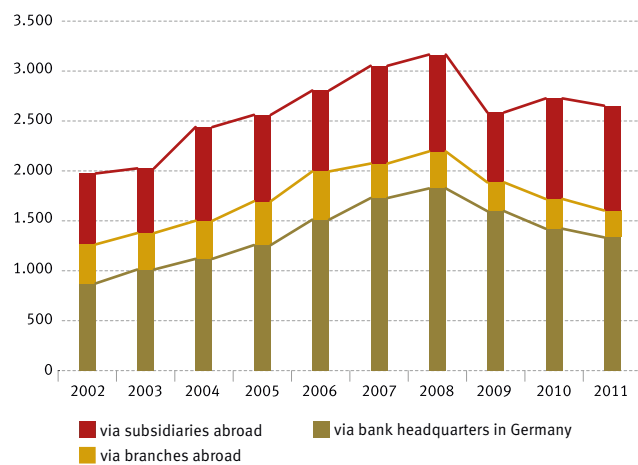


The City of London:
ZEW has analyzed the
international activities of
German banks before and
during the financial crisis.

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ations on a long-term basis. However, the decrease in international activities via branch offices and the slump in direct international banking are seen as rather temporary phenomena. Employing an econometric model, the researchers analysed

INTERNATIONAL ASSETS OF GERMAN BANKS IN BILLION EUROS



Data for 92 largest banks in Germany according to balance sheet totals.
Source: "External Position Reports" by Deutsche Bundesbank, calculations by ZEW

possible reasons for the decline in international banking reflected by the closure of foreign subsidiaries and branches as well as by the reduction of directly-held foreign assets. Three factors are considered the main reasons:

First, political interventions contributed to the reduced international operations of German banks. On average, banks that drew on financial support by federal and state governments during the crisis reduced their international activities to a greater extent than others. Some of them were forced to consolidate their activities abroad or even close down foreign-based subsidiaries. In other countries, where subsidiaries and branch offices of German banks are located, regulatory measures such as limited loan-to-value ratios led to a decline in the international operations of German banks. Unlike foreign-based branches, subsidiaries are subject to the regulations of the respective host country. For this reason, numerous banks have decided to shut down foreign subsidiaries. This increases the likelihood of a permanent retreat from this type of international business.

Second, banks that refinance their operations mainly on the interbank market hold higher foreign assets. Consequently, a long period of difficult refinancing conditions will have a lasting impact on the future internationalisation strategies of German banks. If the current re-regulation of banks creates lasting changes in the market structures, the decrease in foreign operations of German banks will likely be permanent.

Third, changing risk perceptions, a different attitude towards risk-taking, a still evolving regulatory environment as well as an increased sensitivity of banks to frictions on the international financial market, e.g. information costs, contribute to the partial retreat of German banks from international business.


The study (ZEW Discussion Paper No 14-006) can be found at: www.zew.de/publikation7310

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Bavaria relies strongly on the direct political involvement of its voters. This appears to have a positive influence on municipal efficiency.

Photo: © iStockphoto

Municipalities With More Direct Democracy Achieve Greater Economic Efficiency

Reforms in the 1990s granted citizens of Bavaria wide-reaching opportunities to shape municipal policy by means of binding voter initiatives. A ZEW study finds that municipalities with more direct democratic activity provide public goods more efficiently.

Public administration – whether on the national, state, or municipal level – often lacks incentives for efficiently providing public goods and services. One way to improve such incentives is to create more competition between political decision-makers. Another is to give voters direct influence over political process via initiatives and referendums. The scant literature on this topic has found that, generally, public authorities are more efficient when elements of direct democracy supplement institutions of representative democracy, as this enables voters to brake the status quo inducing more accountable governance.

Voter Initiatives Popular in Bavaria

A recent ZEW study examines the link between direct democracy and the provision of public goods in Bavarian municipalities. In 1995, a citizen induced referendum introduced direct democracy at the level of municipalities granting citizens wide opportunities to participate in local affairs through binding initiatives. The reform were meant to complement to the public management reforms of the 1990s with the important element of citizen participation. This innovation was well received quickly become a popular policy tool and an important decision-making institution resulting in more than 2,500 voter initiatives in 1995-2011. The initiatives were held on a wide range of issues, including projects on transportation, economy, education, infrastructure, public utilities, culture, construction, and others.

In the ZEW working paper, the authors quantify public sector efficiency by taking ratios of municipal inputs – such as public spending or population size – and outputs in key municipal services – such as education, public institutions, healthcare, welfare, civil service, sports, and leisure. The measure, thus, shows how cost-effectively a given public good is produced. The analysis, then explains the differences in these efficiency scores by direct democratic activity controlling for some of the observable heterogeneity between the municipalities.

Citizens Play the Role of an Additional Veto Player

The findings of the ZEW study suggest that municipalities with more direct democratic activity – that is with more voter initiatives– provide public goods and services less costly or more efficiently than municipalities with less direct democratic activity. These findings support the hypothesis that through the means of direct democracy citizen play the role of an additional veto player, and thus are able to reject inefficient spending projects and petition for better ones, demand more productive public sector investments, induce competitive bidding on public auctions, lower production costs by fighting public sector unions or other established interest groups, etc. The authors of the paper conclude with a call for further research on the link between direct democracy and government performance, which, for example, could better address the causality of this link and could exploit improved measures of efficiency perhaps also including qualitative ones.

The ZEW study (Discussion Paper No. 14-017) is available for download at: www.zew.de/publikation7363

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Antitrust Infringements – Strengthening the Rights of Injured Parties in Europe

Recent efforts of the European Commission to strengthen the rights of victims of antitrust infringements raise the question after the implications of the new legislation from a law and economics perspective. An interdisciplinary study by ZEW and the University of East Anglia in Norwich (UK) provides some answers.

In many countries competition law is based on two pillars: public enforcement and private enforcement. In the former, the state pursues violators and when needed imposes a punishment; in the latter, the injured parties initiate judicial investigations of alleged competition violations.

For many years, efforts on the European level were focused on public enforcement. But ever since the publication, in 2005, of the European Commission's Green Paper on damages actions for breaches of EC antitrust rules, measures to increase the rights of victims of infringements have proliferated.

In 2013, this development reached its zenith when the European Commission proposed a directive on antitrust damages actions for the infringement of the competition law provisions of the member states and the European Union. This directive was ratified by the EU-Parliament in April 2014 and must be put

into force by the member states within the next two years. This strengthening of private enforcement raises an important question: what is the optimal balance between public and private enforcement? For instance, if private enforcement increases when public law enforcement is already optimal, then deterrence levels for competition violations can become excessive, creating an economically inefficient state known as overdeterrence.

Effectiveness of Legal Enforcement

In view of these issues, the authors of ZEW Discussion Paper No. 13-029 investigated the relationship between public and private enforcement of antitrust law using a differentiated approach. In contrast to previous studies, this analysis takes into account that the costs and benefits of discovery and prosecution – in other words, the effectiveness of public and private enforcement – can vary with the type of competition law infringement. By identifying the central determining factors of the (incremental) costs and benefits – e.g. the quality of competition law decisions and institutions, the amount of information possessed by the involved parties, or the sanction options available – the paper's authors draw some conclusions for European competition policy.

One of the study's proposals is to improve incentives for filing complaints for certain forms of alleged competition violations. Such incentives include changing the fee structure for court proceedings and easing private claimants' access to relevant information.

The study (ZEW Discussion Paper No. 13-29) is available for download at: www.zew.de/publikation6971

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The European Commission plans to strengthen the rights of victims of antitrust infringements. In this regard, a ZEW-study makes some suggestions.

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ZEW Discussion Papers

No 14-005, Frank Pothén: Dynamic Market Power in an Exhaustible Resource Industry. The Case of Rare Earth Elements.

No 14-004, Zareh Asatryan: The Indirect Effects of Direct Democracy: Local Government Size and Non-Budgetary Voter Initiatives.

No 14-003, Zareh Asatryan, Thushyanthan Baskaran, Friedrich Heinemann: The Effect of Direct Democracy on the Level and Structure of Local Taxes.

No 14-002, Erwin Ooghe, Andreas Peichl: Fair and Efficient Taxation Under Partial Control.

No 14-001, Olivier Bargain, Mathias Dolls, Herwig Immervoll, Dirk Neumann, Andreas Peichl, Nico Pestel, Sebastian Sieglöck: Tax Policy and Income Inequality in the U.S., 1979 – 2007.

Q&A: Innovation in Germany?

In Germany, Large Businesses Innovate Most

Each year, the German economy spends more money on innovation than it did in the preceding twelve months. But most of that money stems from large enterprises with more than 500 employees. ZEW economist Christian Rammer explains why this is so and its effects on competitiveness.

From 1995 until today, in Germany large companies have been responsible for 93 per cent of growth in overall expenditures on innovation. Does this mean that small and medium-sized enterprises, so-called SMEs, have missed the boat?

For the hundreds of thousands of SMEs in Germany as a whole, the answer is yes, even though many of them are very innovative and successful. The problem is that the group's average innovation intensity – the share of revenue that goes to innovation expenditure – sank from 2.7 per cent in 1995 to 1.6 per cent today. Large companies, by contrast, increased their innovation intensity in that period from 3 per cent to 4.5 per cent.

What do you think are the causes for the lower innovation level of SMEs in Germany?

First, one must remember that the group of SMEs is not static. Smaller but very dynamic companies that spend a lot on innovation can quickly move into the group of large companies, whereas large companies that spend declining amounts on innovation, or that forgo investment altogether, often shrink into the group of SMEs. Second, SMEs have been increasingly shy when it comes to infrastructure investments in the past decade, partly because loans are hard to come by. Third, competition from abroad has increased in many sectors, driving down prices. This has kept many small and medium-sized companies out of the innovation game, since lower margins mean less money for investment. And in view of the strong price competition, they see little chance of successfully positioning themselves with new products on the market.

How does the disproportionate number of large companies investing in innovation affect the competitiveness of the German economy?

The danger is that less innovation will occur in emerging fields and markets. These markets start out small, indistinct, and unpredictable. This makes them unattractive for large companies, because they are unable to do what they do best: produce in large quantities and provide reliable standardized solutions. But many of the truly new innovations – in biotechnology or in many areas of environmental technology, for instance – started small and were propelled by small companies. The big players



Photo: © iStockphoto

Over the last years many SMEs in Germany have been increasingly shy when it comes to innovation investments.

don't usually enter the game until markets have consolidated and a certain sales volume has been reached. An innovative SME sector is necessary so that new markets continue to develop. And large companies profit from this too. Despite the declining innovation expenditures of small and medium-sized companies, Germany is not doing poorly. In 2012, around 31,500 small and medium-sized companies carried out continuous research and development in search of new markets and solutions. And around a fourth of SMEs in Europe that conduct research can be found in Germany.

Investing more in innovation is one thing. But can companies translate research into marketable products or services, or into improved processes? Are there differences between large companies and small and medium-sized companies on this score?

Companies in Germany are very good at getting returns on their innovation investments. In 2012, innovation expenditures amounted to 137 billion euros, while revenue from new products totalled almost 650 billion. But here, too, large companies come out on top, receiving 77 per cent of new product revenue, and this share has increased markedly in recent years.



Photo: ZEW

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is deputy head of ZEW's research unit Industrial Economics and International Management. His research focuses on innovation in firms and technology transfer. Christian Rammer also directs ZEW's annual innovation survey, the Mannheim Innovation Panel, which is the German contribution to the Community Innovation

Surveys of the EU. He is active in numerous research and consultation projects, both in Germany and abroad.

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Obstacles to Reform in Southern Europe

Euro crisis politics have bought some time, but have hardly eliminated the underlying causes of the Euro crisis. A real solution would require far-reaching, and often extremely unpopular, reforms. A recent ZEW study investigates the reasons for reform opposition in Southern Europe.

It is often assumed that purely rational reasons can explain why voters reject reforms to social systems, labour markets, and government budgets. If reforms bring more costs than benefits to the individual, then it is rational for him or her to resist them. But self-interest alone can hardly explain the strong opposition encountered in places such as Southern Europe, especially when reform blockades are associated with economic decline or serious crisis. To better understand this phenomenon, ZEW researchers examined its different causes within a research network (“WWWforEurope”) supported under the EU’s Seventh Framework Programme. They relied on data from Southern Europe, to better understand reform resistance in the euro crisis countries.

Safeguards for Reform Losers

Starting point of the study was the application of assumptions of rational self-interest. For traditional cost-benefit analysis, voters’ time horizons play an important role because the positive effects of reform are usually felt only after considerable delay. Accordingly, older people, who have a more limited time horizon, should be more critical of sweeping changes than are younger people. It is also rational when a risk-averse voter rejects reforms, as the outcome is uncertain. What is also important is the extent to which the state offers sufficient insurance for people should they end up disadvantaged by reforms. If the

protection is poor, cautious voters should be more resistant. Individuals’ attitudes towards reforms can also be expected to depend on the individual information level. The consequences of reforms – with regard, say, to growth, employment and prosperity – are complex and hard to comprehend without general economic literacy.

Yet the extensive studies of behavioural economists have shown the need to go beyond these traditional ideas of self-interest. When judging reforms, people take into account individual costs and benefits, but they also consider the extent to which the reforms correspond to their own ideas of fairness. And whether or not a policy is perceived as fair crucially depends on the level of trust in political decision-makers. If people lack trust, they will tend to reject even well-justified reforms. The reason is that they suspect that the reforms are intended to serve certain interest groups, not the common good.

Trust Fosters Acceptance

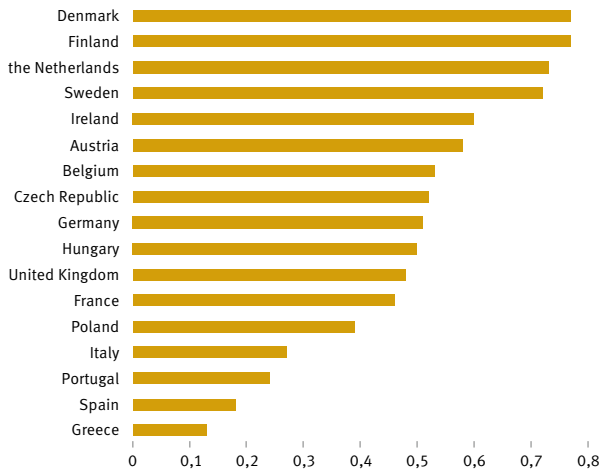
European survey data confirm this theory in part. For instance, researchers have found that individuals who have a high level of trust in their country’s political parties and democratic institutions are more open to economic reforms than those with lower levels of trust. The data also show that self-interest alone is not decisive. For instance, outsiders (the unemployed and young people in training) are inclined to oppose liberalisation even though this group often stands to benefit most in the long run.

Drawing on these insights and data, ZEW researchers analysed reform ability in European countries. For many of the factors discussed above, the researchers were able to find indicators for comparison. For instance, the demographics can be used to identify the average time horizon of voters; poverty rates or

In developing its reform receptivity index, ZEW studied the willingness to accept reforms in various EU countries.



REFORM RECEPTIVITY INDEX



Source: Heinemann and Grigoriadis (2013), standardized between 0 (country with the lowest values for all sub-indicators) and 1 (country with the highest values for all sub-indicators).

distribution indicators can be used to assess how effectively the state protects those disadvantaged by reforms; PISA indicators or economic literacy indicators can be used to identify information levels. And on the issue of political trust, international comparative surveys are available.

All these quantitative indicators can be aggregated to create a reform ability index. In that calculation decisions have to taken on the weighting of different dimensions and any such deci-

sion always contains an arbitrary element. As a result, researchers opted for a pragmatic solution and assigned all indicators the same weight. The graph on the left shows the resulting reform ability index for 17 EU states. As the figure illustrates, Southern European countries fared worst. Greece, the country in which the debt crisis began, lags far behind the others.

The poor performance of Southern Europeans is independent of indicator weights. The most important factors that lower their ability to reform are eroded trust in politicians, an aging population, very ineffective poverty protection, and a relatively low educational background.

Strategies for Improving the Chances of Reform

The analysis does not stop with identifying Southern Europe's strong opposition to reforms. It also suggests strategies for improving the chances of reform. One of those strategies is to assign reform decisions to the European level because trust in European politicians is often greater than trust in national politicians. Another is to give more attention to effective poverty protection when reforming social welfare systems. Only when better safeguards against negative consequences for voters are in place will society be more willing to take risks.

The ZEW-study has been published as WWWforEurope Working Paper No. 20, Heinemann, Friedrich and Grigoriadis, Theodoris (2013), Origins of Reform Resistance and the Southern European Regime.

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INSIDE ZEW

Roundtable Discussion on the 2014 Report of the Commission of Experts for Research and Innovation (EFI)



Dietmar Harhoff presented key findings of the 2014 EFI-Report at ZEW.

In a roundtable discussion on March 10, 2014, Prof. Dietmar Harhoff presented the key findings of the 2014 Report of the Commission of Experts for Research and Innovation (EFI) at ZEW.

Dietmar Harhoff is the director of the Max Planck Institute for Innovation and Competition in Munich and heads the EFI. In his presentation he focused on two of the four main topics of the current report: medical science at German universities and international mobility of researchers and innovators. With regard to medical research, Harhoff argued, among other things, in favour of a compensation for system-related additional burdens for university hospitals as well as for a harmonization of the wages of medical researchers and practitioners. With regard to international mobility, Harhoff criticised the rather poor German migration record concerning researchers and innovators. The EFI is thus demanding that the working conditions for research staff be improved in order to attract foreign scholars and to retain highly qualified staff. Harhoff emphasised that it was in particular significant to attract researchers and innovators in those upcoming areas where German firms are not already highly competitive. Harhoff's presentation was followed by a lively and fruitful discussion between the audience and the speaker.



M & A REPORT

ZEW-ZEPHYR M&A Index Germany: Moderate Increase in Number of M&A Transactions



In the past six months Germany's mergers and acquisitions market (M&A) has experienced a moderate upward trend. In August 2013 the ZEW-ZEPHYR M&A Index sunk to 50 points, its lowest level since October 2011; by January 2014 it exceeded the 100-point barrier, a level it had not reached since January 2010. In the moving 12-month average of the ZEW-ZEPHYR M&A Index, however, this uptick has yet to be felt (see chart). In 2013 it fluctuated between 69 and 72 points. As of January 2014 it totalled 71 points. The five-point increase in the current 12-month moving average places the index slightly above the level witnessed in January of 2013.

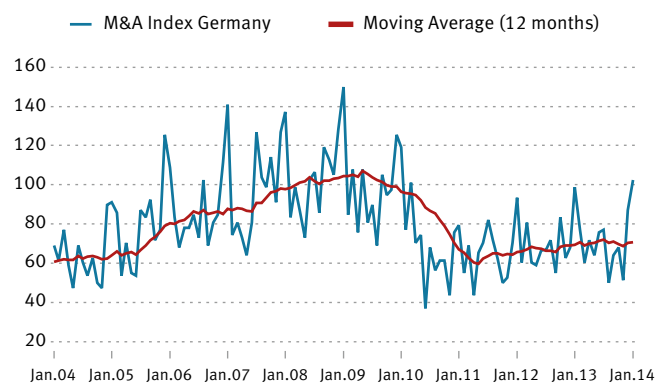
While the number of M&A transactions increased only moderately last year, the aggregate volume of deals with publicized values is considerably higher. At 26.5 billion euros, this figure is now at its highest level since 2009. One mega deal last year stands out in particular. In a transaction worth 8.2 billion euros, the British communications giant Vodafone acquired Kabel Deutschland in October 2013, expanding its presence on the Germany market. The last time a larger transaction volume was reached was in December 2007, when Continental AG paid 11.4 billion euros for the automobile electronics supplier Siemens VDE Automotive AG.

A good indicator for the future development of M&A markets is the number of rumoured transactions together with the estimated transaction values. Based on the data available, the German M&A market is likely to pick up in the near future. The number of rumoured mergers and acquisitions is 23 per cent higher than last

year's. If one includes the estimated transaction values as well, the likelihood of an uptick is even greater. The aggregated estimated transaction value of all rumoured transactions doubled between 2012 and 2013, increasing from 24 to 48 billion euros.

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ZEW-ZEPHYR M&A INDEX GERMANY



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

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 Dijk (BvD). It uses the Zephyr database to report on current topics and developments in global mergers and acquisitions. The Zephyr database, which is updated daily, contains detailed information on over one million M&A, IPO, and private equity transactions across the world.





Influence of the New AIFMD Directive on Company Valuation

The European Union's Alternative Investment Fund Managers Directive (AIFMD) entered into force in 2013. In Germany, the crucial part of the act implementing AIFMD is the German Capital Investment Code (Kapitalanlagegesetzbuch, or KAGB). The new law not only covers funds already regulated by the German Investment Act (Investmentgesetz, or InvG), such as open-ended public funds. It also regulates areas that in the past were almost impossible to regulate, such as closed-end funds (e.g. private equity and venture capital funds).

The KAGB determines certain requirements regarding the valuation of the assets of the investment fund, the selection of evaluators and valuation frequency (sec. 168, 216, and 217), and necessitates a comprehensive valuation process. Closed-end private equity funds in Germany, for instance, may only acquire shares in companies that have been valued by an external evaluator who satisfies the requirements of sec. 216 of the KAGB. For investments over 50 million euros, two independent evaluators must be consulted (sec. 261). In addition, at least once a year assets must be valued, the net asset value per share must be calculated and it must be disclosed to the shareholders (sec. 272).

No Specific Valuation Method Stipulated

However, the new directive is vague when it comes to the valuation method. According to sec. 168, para. 3, "a current market value is to be set that is appropriate based on careful assessment using suitable valuation models given the current market conditions" for shares that are not listed on a stock exchange or on other organized markets. Though sec. 169 of KAGB stipulates that criteria for proper valuation and for the calculation of net asset value must be determined in accordance with the Commission Delegated Regulation (EU) No 231/2013, this directive describes only the process of the calculation, not its method. Even the Capital Investment Fund Accounting and Val-

uation Directive (Kapitalanlage-Rechnungslegungs- und -Bewertungsverordnung, or KARBV, for short) gives no specific information about the valuation method.

Greater Requirements on the Valuation Process

The new directives do not influence the valuation methodology and the calculation of the enterprise value. Rather, they make greater requirements on the valuation process, documen-



tation and validation tests of the models and stipulate more frequent valuations, in particular ones carried out by external evaluators. Though the new regulations have positive effects, they cause additional costs for the AIFMD which can ultimately be offset by adjusting the purchase and sale price of transactions. For instance, a private equity fund that acquires a company is likely to pay the former shareholders a lower price in order to compensate the costs that have already arisen as well as the impending costs for the extensive valuation process.

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Facebook Acquires WhatsApp

On 19 February 2014, Facebook, the operator of the world's largest online social network, announced the acquisition of the instant messaging service WhatsApp. The deal will cost Facebook nearly 14 billion euros – an extraordinary sum for a company thought to employ no more than 50 people. It is by far the largest amount Facebook has paid for a company – and one of the most expensive acquisitions in the tech sector. Since 2007, Facebook has bought a total of 43 companies, but the recent

deal dwarfs them all. By comparison, its 2012 acquisition of Instagram cost the company 500 million euros, though at the time it was considered very high. The purchase of the app developer Onavo, in October 2013, cost even less, with an estimated price of 150 million euros.

Little is known about Facebook's acquisitions; details of such deals and particularly deal values are usually not made public. Concrete numbers exist for only 12 of the company's purchases,



though none of these could have exceeded the double-digit million range. Based on the prices in the Zephyr database, the total volume of Facebook's acquisitions (including Instagram and Onavo) comes to around one billion euros, around seven per cent of what it paid for WhatsApp.

These impressive figures underscore the significance of the acquisition of WhatsApp among Facebook's transactions, and

show that Facebook is ready to pay high purchase prices for companies with many active users. (Instagram and WhatsApp have over 100 million each.) The relatively small amounts it paid in past deals were mostly for companies owning a technology which is of interest to Facebook but having only few users.

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Shakeout in Mobile Phone Market

Ever since EU-wide deregulation in the mid-1990s, the mobile phone industry has been extraordinarily dynamic in terms of innovation and market structure. Yet after a longish period of market expansion, the market has undergone increasing consolidation over the past few years, especially in mergers and acquisitions. The chart below shows past, present and pending M&A transactions involving wireless carriers in the 27 EU member states. As we can clearly see, both transaction volumes and transaction numbers increased markedly between 2003 and 2013.

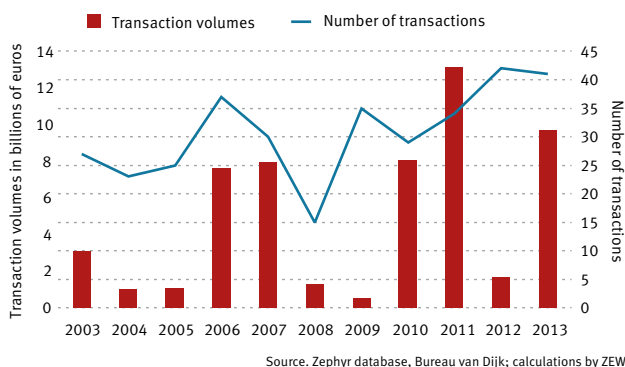
Competing for Traditional Mobile Phone Services

From the beginning of market deregulation through the early 2000s, the margins on the mobile phone market were considerably larger than today. Back then, infrastructure competition accompanying the emergence of new companies, along with sector-specific regulatory obligations on the wholesale level, brought sinking price levels for end consumers.

But as competition and regulation increased, profit margins decreased, and consolidation on mobile phone markets – already burdened by high fixed costs – surged. Making matters worse, traditional mobile phone services such as telephony, SMS



PAST, PRESENT AND PENDING TRANSACTIONS INVOLVING WIRELESS COMPANIES IN EU-27



or mobile internet are confronted today with increased competition inside and outside the market from messaging services such as WhatsApp or Facebook Chat, leading to massive revenue declines for some companies.

Trilateral Oligopoly Feared

Mobile phone markets in Germany are also experiencing consolidation, and the trend is likely to continue. In the summer of 2013 a billion-euro merger was announced between E-Plus (a subsidiary of the Dutch operator KPN) and O2 (the trade name of Telefónica Europe). Given the narrow oligopolistic structure of mobile phone markets already in place today, the planned merger has raised worries. Both Germany's Federal Cartel Office and Monopoly Commission have officially expressed their concerns about the adverse effects on future competition. The Monopoly Commission's 2013 Special Report (66, para. 24) notes that the merger would create a trilateral oligopoly consisting of Deutsche Telekom, Vodafone and O2/E-Plus, each with around the same market share. The EU Commission, which has taken a similar view on the merger, registered its concerns in December of 2013. The results of the review by competition regulators can be expected soon. Judging by the analogous situation in Austria, where the EU Commission recently permitted a three-provider mobile phone market, it is likely that European competition regulators will condition any approval of the E-Plus/O2 merger on specific restrictions.

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Cartel Breakdowns and Merger Activity

Cartel agreements between competitors typically aim to reduce competition and increase company profits. Because such agreements often cause great economic harm by increasing prices or reducing innovation, they represent a serious violation of antitrust laws. But a breakdown of a cartel may motivate former members to seek out multiple mergers and acquisitions in an effort to regain lost market power. Mergers between former cartel members and acquisitions of smaller and mid-size companies are seen as a way to improve a company’s market position in the post-cartel period. The discovery of a cartel, moreover, can act as a kind of exogenous shock, leading to structural upheavals and an increased number of transactions within the affected sector. To test whether cartel breakdowns do indeed affect M&A activity, ZEW researchers used the Zephyr database to investigate transactions in 24 sectors.

Number of Mergers Increases

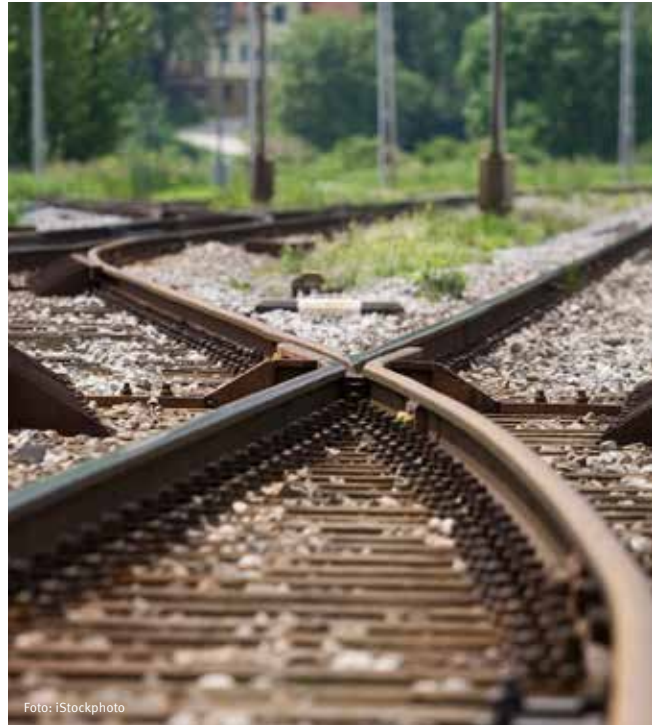
Their findings show that the number of global mergers in a given sector increased by 51 per cent after a cartel breakdown. In the three years before cartel breakdowns occurred, there were 696 company mergers globally in the sectors under investigation. In the three years after the cartel breakdowns, there were 1,052 mergers (see the table below). When one considers only horizontal mergers – that is, mergers between companies at the same production level – the number of mergers increases from 196 to 359.

Researchers also looked at the data for mergers involving one European company and those involving only European companies. Here the increases were also clearly evident, although not as strong as for global mergers.

The results of the ZEW study suggest that competition authorities should take into consideration that the companies involved possibly consider mergers to be a “second-best” alter-

native to the recently collapsed cartel. Former cartel members might try to systematically regain the market power they have lost by increasing merger activities. Accordingly, competition regulators should keep an eye on former cartel members after cartel breakdown to prevent mergers from creating cartel-like market structures in the long run. Furthermore, the ZEW study indicates the need to re-allocate or expand resources in competition authorities, law offices and consulting firms to be able to efficiently deal with the increased number of mergers.

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AVERAGE NUMBER OF MERGER TRANSACTIONS AND PERCENTAGE CHANGES THREE YEARS BEFORE AND AFTER THE CARTEL BREAKDOWNS

Geographic scope	Average number of transactions					
	All mergers			Horizontal mergers		
	3 years before cartel break-down	3 years after cartel break-down	%-change	3 years before cartel break-down	3 years after cartel break-down	%-change
Worldwide	696	1.052	51,2%	196	359	83,2%
At least one merging firm stems from EEA	414	522	25,1%	129	188	45,7%
Both merging firm stem from EEA	275	351	27,6%	76	126	65,8%

ZEW President Fuest Appointed to “High-Level Group” on EU Financing Reform



Photo: © ZEW

On a proposal of the European Council, the President of the Centre for European Economic Research (ZEW), Prof. Clemens Fuest, has been appointed to the newly created EU’s “High-Level Group on Own Resources”. The group’s objective is to develop proposals for the future financing of the European Union and to identify ways to make the present EU own-resources system more accountable, fair, and transparent. The European Commission, the European Council and the European Parliament had agreed on establishing such a group during the negotiations over the EU’s Multiannual Financial Framework for 2014–2020. The Commission, the Council and the Parliament each appoint three members to the working group. Former EU Commissioner and Prime Minister of Italy Mario Monti chairs the group. In a first step, the high-level group evaluates existing proposals to reform EU financing. It will draft a preliminary assessment by the end of 2014. A decision on new own-resource initiatives on the basis of the group’s proposals is scheduled for 2016.

Annual Press Conference of the Leibniz Association – ZEW President Fuest Presents New Leibniz ScienceCampus “MaTax”

ZEW President Prof. Clemens Fuest presented the new Leibniz ScienceCampus “MannheimTaxation” (MaTax) at the annual

press conference of the Leibniz Association in Berlin at the end of March 2014. Leibniz President Prof. Carl Ulrich Mayer had already referred to the newly launched ScienceCampus in his statement on the research association’s successful start into 2014. The ScienceCampuses are considered to be a reference model for the cooperation between non-university research institutions and universities.

According to ZEW President Fuest, MaTax combines the proven expertise of ZEW and the Schools of Business, Law and Economics as well as Social Sciences of the University of Mannheim concerning corporate taxation, public finance and tax law. MaTax receives funding from the Leibniz Association and the State of Baden-Württemberg. Clemens Fuest explained the idea behind the new initiative: “MaTax addresses future tax policies against the backdrop of European and global integration as well as in the light of new economic and societal challenges.”



Photo: ZEW

Carl Ulrich Mayer and Clemens Fuest at the annual press conference of the Leibniz Association in Berlin (from left).

ZEW’s Digital Voyage on Board of MS Wissenschaft

The 2014 Science Year runs under the headline topic “The Digital Society”. The ZEW is again on board of the exhibition ship MS Wissenschaft (MS Science). On May 6, the floating Science Centre set sail from Berlin and present its exhibition “Out and about on the digital way” along German and Austrian waterways. Short messaging services, online banking, uncountable smart phone apps, data glasses, and smart computers in hospitals’ operating room confirm that the digital age has reached all areas of life. The exhibition focuses on the significant role of science and research in this development. The Federal Ministry of Education and Research (BMBF) sent the MS Wissenschaft on her mission. This year, ZEW’s contribution to the MS Wissenschaft is the computer programme “Social Media and Co. – Truly free of charge?” which was developed by the institute’s “Information and Communication Technologies” Research Department. In a

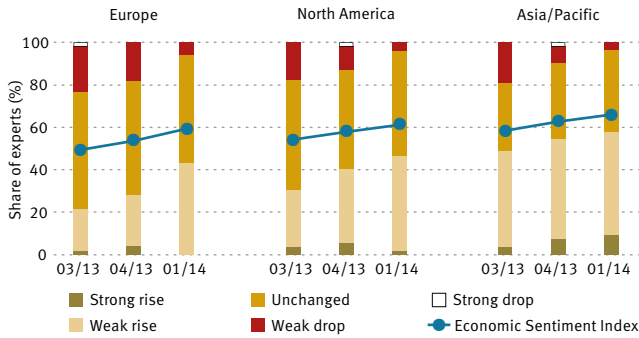
playful way, visitors can learn about the actual costs and the efficiency of sharing news online.



Photo: ZEW

Minister Johanna Wanka (BMBF) and Irene Bertschek (ZEW) attending the press conference on board of the MS Wissenschaft (MS Science) (from right).

Strong Lift in Air Freight Traffic

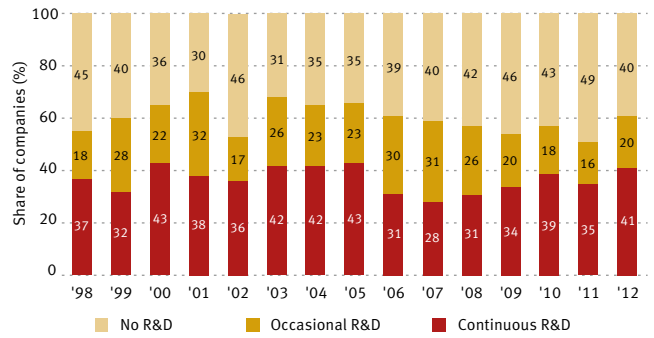


Source: ZEW

According to the experts surveyed by the ProgTrans/ZEW Transport Market Barometer, air freight traffic will receive a big boost over the next six months, especially on Asian-Pacific routes. Over the North Atlantic and within Europe, however, traffic levels are projected to remain for the most part steady. Despite this somewhat reserved forecast, the ZEW economic sentiment index is as high as it has been for the last time in mid 2011. Data from Germany's Federal Statistics Office support the upward trend, showing highest levels of consolidation in the cross-border traffic sector.

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Greater Emphasis on Research in Mechanical Engineering Sector

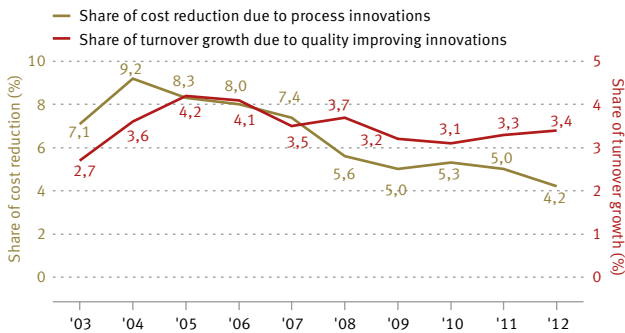


Source: ZEW, Mannheim Innovation Panel

In 2012, Germany's mechanical engineering companies increased their emphasis on in-house research and development (R&D), widely regarded as a crucial factor in sector competitiveness. The share of companies with continuous R&D rose to 41 per cent, just short of the high water mark reached in mid 2000. The share of companies that carried out R&D for specific purposes also showed gains in 2012, increasing to 20 per cent. Only 40 per cent of German mechanical engineering companies carried out no internal R&D. The last time this value was lower was in 2006.

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Electrical Industry Increases its Turnover due to Quality Improvements

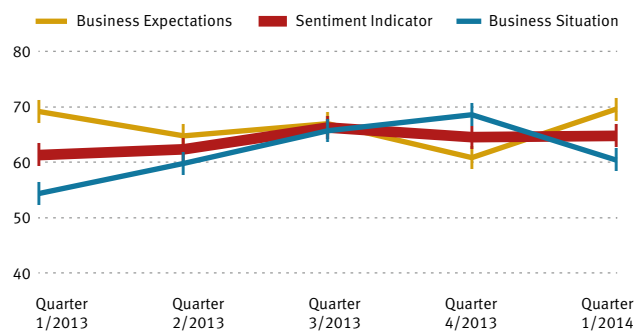


Source: ZEW, Mannheim Innovation Panel

Process innovations leading to better product quality are becoming more important for Germany's electrical industry. In 2012, the German electrical industry increased its turnover by 3.4 per cent due to quality enhancing innovations. Thus, for the ninth consecutive year turnover growth induced by quality improving innovations stayed above the three per cent mark. At the same time, cost efficiency was in decline. In 2012 an average cost-reduction of 4.2 per cent was realized. In 2002 to 2007 this indicator had hovered above the seven per cent mark.

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Positive Economic Sentiment in the Information Economy

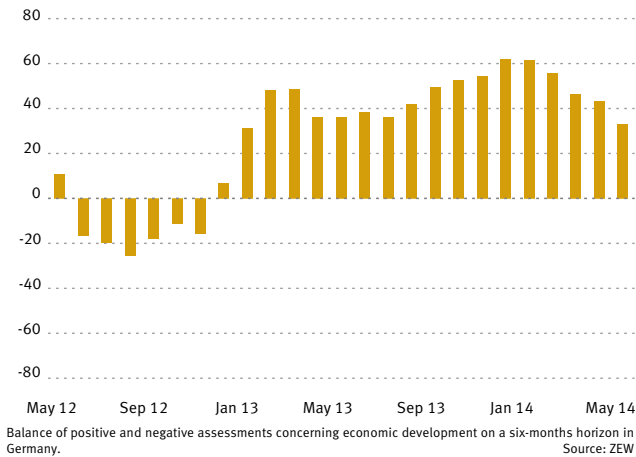


Source: ZEW

The economic sentiment within the information economy sector has remained positive throughout the first quarter of 2014. The ZEW Sentiment Indicator Information Economy has increased slightly by 0.3 points. With a value of 64.8 points, the indicator clearly exceeds the crucial 50-points mark; undercutting this mark is a sign of impending deterioration of economic sentiment. The sentiment indicator for the entire information economy has performed on an almost constant level, which is eclipsing the opposite trends of the sub-indicators to a certain degree.

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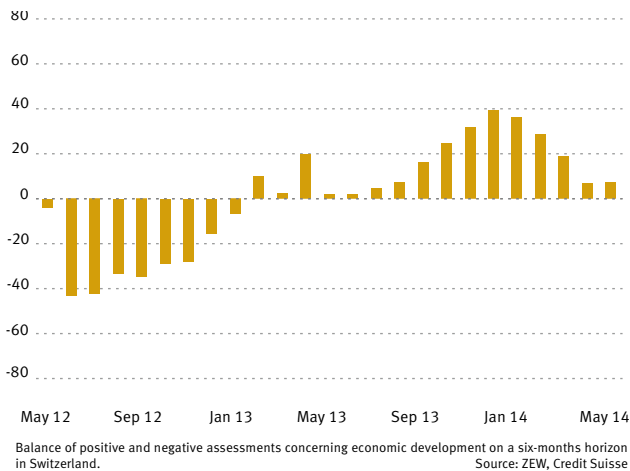
ZEW Financial Market Test May 2014



Germany: Economic Expectations Decline

Economic Expectations for Germany have worsened in May 2014. The ZEW Indicator of Economic Sentiment has decreased by 10.1 points and now stands at a level of 33.1 points (historical average: 24.7 points). The decline of the experts' economic expectations for Germany should be seen against the backdrop of a strong economic development in the first quarter of 2014. Already, there are indications that Germany will not be able to maintain this fast pace of growth. Nevertheless, one can assume a positive underlying trend for the economic development for the year 2014. The indicator reflecting the expert's assessment of the current economic situation for Germany has improved slightly in May 2014. The respective indicator gained 2.6 points, reaching a level of 62.1 points.

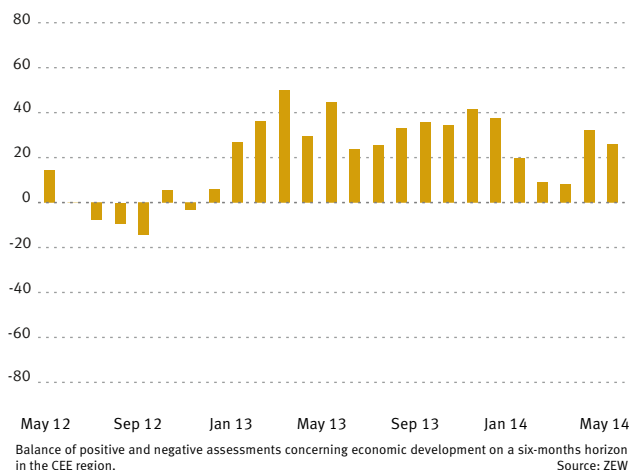
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Switzerland: Economic Outlook Remains Stable

Gaining a modest increase of 0.4 points, economic expectations for Switzerland stay almost unchanged in May 2014. The ZEW-CS Indicator's reading of 7.4 points suggests a stable economic development in Switzerland in the next six months. The ZEW-CS Indicator reflects the expectations of the surveyed financial market experts regarding the economic development in Switzerland on a six-month time horizon. It is calculated monthly by the Centre for European Economic Research (ZEW) in cooperation with Credit Suisse (CS). However, the current economic situation in Switzerland is evaluated more pessimistically compared to the previous survey. The respective indicator has dropped by 10.3 points to 48.8 points in May. The economic situation is gauged to be "normal" or "good" by about half of respondents respectively.

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CEE Region: Economic Expectations Decreased

In May 2014 the economic expectations for Central and Eastern Europe including Turkey (CEE region) have slightly decreased by 6.1 points. The ZEW-Erste Group Bank Economic Sentiment Indicator for the CEE region now stands at a level of 26.0 points. Among the individual countries the highest decrease has been displayed for Croatia. In contrast, the indicator of economic expectations for Turkey has further improved this month. The ZEW-Erste Group Bank Economic Sentiment Indicator for Central and Eastern Europe reflects the financial market experts' expectations for the CEE region on a six-month time horizon. The indicator has been compiled on a monthly basis together with further financial market data by ZEW with the support of Erste Group Bank, Vienna, since 2007.

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It Certainly Could Be a Bit More!

“Bracket creep” is one of those dry topics that might well be of interest only to tax experts and economists. It refers to the increased tax burden that results when tax rates are not adjusted to reflect inflation or GDP growth. In Germany, this issue is hotly debated as of late. Indeed, bracket creep

(or, in German, *kalte Progression*) has become a catchword for broad tax relief proposals that impact every taxpayer. Yet is the call for lower taxes to compensate for bracket creep justified?

When personal income rises, whether this is the result of inflation or real economic growth, and tax rates remain unchanged, then the tax burden on the individual increases. A growing share of income is redirected to the state. This imbalance creates two problems. First, it makes the public sector expand at the expense of the private sector. While a shift of this kind might represent a deliberate policy measure, it should not take place surreptitiously; it needs to be openly discussed and accompanied by transparent tax increases. Second, bracket creep produces changes in the distribution of the tax burden. Of course, all taxpayers end up with a greater burden, but the increased burden is especially painful for low-income earners for whom every euro matters. Once again, such changes should not be the consequence of automatic and non-transparent tax increases.

What is the current situation in Germany? In several aspects of the income tax, the presence of bracket creep is clearly discernable. For example, since the most recent income tax reduction in 2005, the basic tax exemption threshold (*Grundfreibetrag*) has risen from 7,664 to 8,130 euros through 2013, or by only around six per cent. During the same period, however, GDP rose by around 23 per cent. In 2014 the basic tax exemption will rise to 8,354 euros, but this will not alter the fact that it still lags far behind overall economic growth.

At the same time, though, we should remember that there has also been relief from certain tax burdens in recent years, such as an increase in the child benefit and the introduction of de-

ductibility for home contracting needs. These measures counteract the expansion of tax revenues resulting from bracket creep. So has the government truly eaten up a greater share of overall economic power? For a number of decades, total tax revenues for the federal, state, and local governments have ranged between 20 and 23 per cent of GDP. In 2005, the government’s share was unusually low, at 20.3 per cent, because of the tax relief measures that had just been enacted. By 2013, this figure had risen to 22.7 per cent, and thus was at the upper end of its usual variation. One sees a similar pattern in the rise of the income tax. Revenues from taxes on wages and the assessed income tax rose between 2005 and 2013 from 5.8 to 7.3 per cent of GDP. Thus, today’s high tax rates are comparable to those during the 2000s. It was at that time that the last major reduction in the income tax was enacted and implemented by 2005. According to current tax projections, if there is no tax relief, tax revenues will continue to rise more rapidly than economic performance for the next few years.

One must also note that government budgets are currently balanced and that political leaders have responded to the surge in tax revenues by relaxing their discipline on expenditures. Discussion about limiting the role of government and reducing subsidies has virtually ceased, even though this is urgently needed. Instead, vast government spending is on the table for questionable projects, such as the reduction of retirement age to 63 years for certain groups.

Given this backdrop, the situation is clear: The time has come for a major income tax reduction to make up for bracket creep. Federal Minister of Finance Wolfgang Schäuble has proposed a reduction in the amount of three billion euros. To this, I would respond: it certainly could be a bit more!

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