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# Large Scale Infrastructure Projects in the Alps – A Mixed Scorecard for Freight Traffic

Two new studies by ZEW examine the proposed construction of a rail tunnel between France and Italy and quantify the costs to truck transport associated with the potential closing of the Mont-Blanc road tunnel.



In the case of regional distances, the projected rail tunnel between Lyon and Turin offers an alternative to road-borne freight traffic.

The difficulties of Alpine crossings have been well known since the time of Hannibal's invasion of Italy. Even today, coping with safety problems remains a significant issue in European transport policy. For some time, this policy has sought to shift freight traffic from roads to railways. Successes in this area have been limited, however, particularly between Italy and France. In the meantime, a number of serious truck accidents in major Alpine tunnels - Mont Blanc (1999), Tauern (1999), Gotthard (2001), Frejus (2005) – have caused a significant loss of life and led to temporary closures of several tunnels.

Plans for the construction of a new rail tunnel through the Alps between Lyon and Turin have been in the works for decades. Construction of the 53-km base tunnel is set to begin in 2013. The costs of completing the planned rail tunnel are estimated at 15 billion euros, to be borne equally by the European Union, Italy, and France. By 2020, the tunnel will open a new route through the Alps, thereby relieving some of the volume currently carried over roadways.

### Individual Decision-Making Model

A new ZEW study (Discussion Paper 10-010) explores to what extent the goal of shifting traffic from road to rail can be achieved. Only limited information is available on route decision-making in freight transport. Consequently, the study's assessment was based on an individual decision-making model. This design minimised data requirements to information on market shares as well as the prices and costs associated with individual transportation routes.

### Benefits of a New Rail Tunnel

ZEW's simulations indicate that the planned rail tunnel offers a competitive alternative to road transport when it comes to regional distances (for example, Lyon to Turin: 315 km). In longer routes on the north-south corridor, however (such as Paris to Milan: 850 km), the competitive advantage of rail over road disappears. Furthermore, the study also concludes that on the west-east route (for example, Madrid to Milan: 1,575 km), construction of the tunnel clearly leads to a shift of freight traffic from road to rail.These mixed results with regard to the effects of the planned rail tunnel show that the con-

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## RESEARCH FINDINGS

struction of highly efficient transportation infrastructure represents only one of several measures for achieving the transfer of freight traffic from roads to railways. The shifting of traffic along the Italo-French Alpine corridor could also be sought with alternative means – for example, by employing Switzerland's heavy-traffic fee, which is used for direct investment in rail carriers.

Another ZEW study (Discussion Paper 10-095) uses comprehensive data on individual route selection (as reported in the 2004 Cross-Alpine Freight Transport Survey) in order to estimate the annual deadweight losses associated with a closure of the Mont-Blanc tunnel. The study employs the latest methods for taking into account heterogenous preferences with respect to cost and time savings. Such heterogenity can stem, for example, from the type and weight of the loads being transported – observable variables that can be easily modelled.

It must be assumed, however, that transport routes also differ as a consequence of special logistic and organisational factors or by virtue of the personal route preferences of individual truck drivers. In general, these sorts of criteria are not observable. As unobservable sources of heterogenity are of central importance in quantifying consumer surplus, the study focused on accounting for them methodologically.

#### Costs of Closing the Mont-Blanc Tunnel

The estimates produced by ZEW show that the annual utility losses directly accruing from the closure of the Mont-Blanc tunnel range between 5.39 and 7.09 million euros. Compared with the construction costs of the rail tunnel aimed at transferring cargo from roadways to railways, this figure is of a relatively small order of magnitude.

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# Experts Expect Strong German Stock Market Performance in 2011

Compared internationally, the German stock market is expected to show above-average growth in 2011. Stocks in the engineering as well as chemical and pharmaceutical industries are expected to perform particularly well. These are the findings of a survey of 231 financial market experts conducted by ZEW in December 2010.

According to over 75 percent of the financial market experts surveyed by ZEW, in 2011 the DAX will perform better than the MSCI World Index (a portfolio of standard stocks from around the globe). Furthermore, over 75 percent of those surveyed are of the opinion that Asian stock markets, with the exception of Japan, will experience above-average growth as well. About 40 percent of the



Financial market experts anticipate a bullish German stock market in 2011.

polled experts assume that the stock markets of Japan, the United Kingdom, and the eurozone (with the exception of Germany) will perform below average. Almost 56 percent of the questioned financial market experts expect the US American stock market to develop comparably to the MSCI World Index.

# Best Performers: engineering, chemical and pharmaceutical industries

With regard to the performance of stock prices in individual sectors, the experts favour certain sectors in the German market. In particular, the stocks of engineering, chemical, and pharmaceutical companies are expected to perform better than the DAX average.

The financial market experts questioned by ZEW are further optimistic about stocks in the automobile and consumer goods sectors. By contrast, stocks in the banking and insurance sector are still viewed with considerable skepticism. About 47 percent of the surveyed financial market experts expect this sector to perform below average over the next twelve months.

# Generational Transition in German SMEs Proceeding More Smoothly Than Anticipated

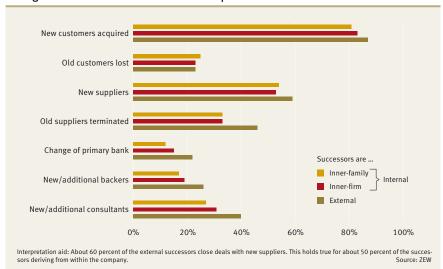
The transfer of family-owned medium-sized enterprises to the owners' children or other new owners is proceeding more smoothly than anticipated in Germany. This is the finding of a study undertaken on behalf of BW Bank by ZEW and the Institute for Mittelstand Research (IfM Bonn) at the University of Mannheim.

From 2002 to 2008, roughly 8,600 family-owned medium-sized firms (i.e. businesses employing between 40 and 5,000 employees) underwent a change of ownership in Germany. This figure represents 23 percent of the 38,000 mediumsized family-owned businesses. For the study, 1,100 owner-operated mediumsized firms that had undergone a transfer of control were randomly selected and their new owners surveyed by phone. This is the first study of this magnitude conducted in Germany relating to generational change in the so-called Mittelstand, Germany's primarily privately-held medium-sized company base.

#### Prior Owners Still Working for the Firm

At least a fifth of the firms examined were taken over by outside owners, almost three fifths remained in family control, and a further fifth were transferred to someone who had previously worked for the firm. Overall, the new owners expressed satisfaction with the preparations made prior to their takeover though external successors rated the quality of preparation somewhat lower than internal successors. In an unexpectedly high proportion of firms (nearly twothirds) the prior owners continued working for the firm and maintained a good working relationship with the new owners. And in half of these cases, the former owners fulfilled an executive or managerial role – although the influence they exercised diminished in relation to the time since transfer of ownership. In most instances, former owners assisted their successors for as long as required and withdrew from the firm's daily operations when no longer needed.

With respect to the qualifications of the owners, the study indicates a clear transition from the engineering degrees



**Changes in External Business Relationships** 



In Germany family-owned businesses are well prepared to pass the torch.

primarily held by the older generation to degrees in business management. However, when comparing owners with an engineering background to those trained in business management, the study found no differences in relation to innovation activities. Following transfer of control, a high percentage of new owners conducted internal reorganisations and made changes in external business relationships. It is noteworthy that external successors were especially active in this regard. More often than internal successors, external successors also sought out new financial backers and consultants and cancelled old supplier contracts. They also frequently changed the firm's principle bank (see figure.)

Profit margins among firms taken over by external successors were markedly smaller at the time of transfer but increased over time at a greater rate than in firms controlled by other types of successors. Generally speaking, external successors assume control of firms that are less profitable than those taken over by familial or inner-firm successors. Yet external successors seem to possess qualities that allow them to activate the growth potential of the firm, such that within a few years, they are able to close the initial gap in profitability.

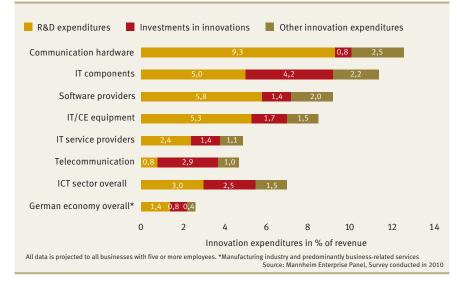
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### RESEARCH FINDINGS

# Information and Communication Technologies Set the Stage for Innovations

A study conducted by ZEW on behalf of the Federal Association for Information Technology, Telecommunications and New Media BITKOM reveals that the economic sector Information and Communication Technologies (ICT) is one of the most innovative sectors in Germany.





According to the study's findings, the ICT sector is among the most innovative economic sectors. On average, ICT companies in Germany allocated seven percent of their revenue to research and development (R&D) in 2010. This is more than twice as much as the average for the economy as a whole, which allocates 2.6 percent. Among ICT sub-sectors, manufacturers of communications technology who allocate 12.6 percent of their revenue are a step ahead of software providers who, by contrast, allocate 9.2 percent.

### Impetus to Economic Sectors

ICT as general purpose technology gives impetus to other economic sectors with regard to innovations. In 2010, some 40 percent of innovative companies used ICT in order to introduce new products or services to the market. Due to new technologies and trends like mobile web, cloud computing and faster internet connections, this percentage will continue to increase in 2011.

Germany is one of the world's key locations for ICT research and innovation. Twelve percent of international patent registrations in the ICT sector originate from German inventors, the third highest percentage behind the United States and Japan. Despite the enormous advancements made by China, Korea, and Taiwan in the area of ICT, when measured in terms of patent registrations, Germany has managed to maintain its competitive edge. However, this edge is under threat: R&D expenditure in the German ICT sector (+4.0 percent per annum), is growing at a slower pace than the global average (+6.8 percent). The relatively low dynamics of R&D expenditure in Germany coupled with an acute lack of skilled personnel and the progressive globalisation of research and production all pose major challenges for Germany as a location for the ICT sector.

A total of 81 percent of software and IT services providers as well as 78 percent of hardware manufacturers launched new products or services in 2010. That is by far the highest share across all sectors in Germany. The range of innovation stretches from smartphones and tablet PCs to cloud computing systems for professional IT users. In terms of sector rankings, the next most innovative branch is electrical engineering, in which 70 percent of all companies launched innovations in 2010, followed by the chemical and pharmaceutical industries, in which 69 percent of companies released innovations. The mechanical engineering industry ranked fourth, with 64 percent of companies launching innovations.

### Greater Tax Breaks for R&D Demanded

Government support for R&D is necessary in order to boost innovation efforts in the ICT sector. The share of R&D expenditures financed by the government has continued to decline in recent years in Germany and is lower than in most industrialised countries. In order to catch up, greater R&D tax incentives should be granted for research activities. They have proven to be a particularly effective means of stimulating innovation in recent years, and they are used in more than two-thirds of all OECD countries.

The new study is based on two separate surveys: a representative survey conducted by ZEW and infas in September 2010 of 1,000 innovative companies in ICT-using sectors, as well as a survey conducted by ZEW and Creditreform in September 2010 of 800 IT-related service providers. Furthermore, for the study an analysis was conducted of the results of the 2010 German Community Innovation Survey. This study was undertaken by ZEW and Fraunhofer ISI in the spring and summer of 2010 and queried, inter alia, some 750 companies in the ICT sector.

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# The Impact of Party Ideology on Economic Growth

The political attitudes of a ruling party have no clear influence on economic growth in OECD nations when one classifies party orientation broadly on a left-to-right spectrum. By contrast, if one examines preferences within specific policy areas, political preferences of parties have a demonstrable impact on economic development.



The overall position of a ruling party within a left-to-right spectrum is too broad a measure to capture the effects of political preferences on economic growth.

The study (Discussion Paper No. 10-92) drew on data from a wide-reaching assessment of political viewpoints known as the Comparative Manifesto Project, under which thousands of party manifesto documents were collected and assessed with regard to political preferences. Using these data, in the current study politicalpreference indexes were developed to measure the left-to-right positioning of a country's legislature overall, as well as in specific policy areas. The study analysed

## INSIDE ZEW

### ZEW Economists Share Knowledge with Students in the United States

In 2010 ZEW took part for the very first time in a campaign to share knowledge in economics with students at a school in a socially disadvantaged area of Chicago. Eighth-

grade students were introduced to key economic ideas in a series of lessons, which were provided in cooperation with the Universities of Washington and Chicago. One of these lessons was developed by ZEW economists Dr. Susanne Neckermann and Jan Hogrefe (photo) and broadcast in the United States in a live internet session. This type of instruction greatly motivates students to become engaged with economic issues, which is a major aim of ZEW.



correlations between political preferences and short-term economic growth. Accordingly, no conclusions could be drawn regarding the long-term economic effects of specific political beliefs (e.g. concerning the importance of education).

In total, the study assessed 23 OECD nations over the period from 1971 to 2004. The study examined whether the basic political orientation of a ruling party influences a country's economic growth. This analysis concluded that, when classified on a broad left-to-right spectrum, the political ideology of a nation's ruling party or coalition has no demonstrable influence on economic development.

The study then used various indicators to examine political preferences in relation to specific areas of policy. The study examined the impact of stances towards: government intervention in market activities; the creation of positive incentives for business; the importance of technology and infrastructure; the welfare state; the perceived quality of state institutions (as reflected by calls to combat corruption, for example); and finally the balance between decentralised and federal structures.

According to the empirical analysis, attitudes in the first four of the abovenamed policy areas exert a significant influence on short-term economic performance. When the legistature has a favourable opinion of government intervention in the economy, this exerts a negative influence on economic growth. Economic performance is also dampened by the attitude that the welfare state should be expanded. By contrast, when the legislature emphasises the importance of technology and infrastructure, this has positive effects on growth. Growth is also stimulated when political parties favour government efforts to support the private sector. Lastly, the study shows that there is no significant connection between economic growth and the political stance of the legislature either towards institutional quality or the balance between decentralised and federal structures.

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## INTERVIEW

# Questions & Answers: Could China's Exchange Rate Manipulations Lead to Crisis? **Strong Revaluation of the Yuan Poses a Threat to the Stability of the Global Economy**

Some countries, including China in particular, have been accused of systematically manipulating the value of their currencies in order to enhance their economic competitiveness. Dr. Marcus Kappler, deputy head of the Growth and Business Cycles research group at ZEW, explains the problems associated with an undervalued yuan.

The United States has accused China of keeping the value of the yuan artificially low in order to promote its exports and domestic growth. Can we expect a revaluation of the yuan in the period ahead?

Global exchange rate fluctuations have been caused in part by the expansionary monetary policy of the United States. The mere announcement by the Federal Reserve that it plans to continue its loose monetary policy has placed the dollar under pressure in foreign exchange markets. Furthermore, the economic situation in China has yet to stabilise; the country's foreign trade deficit is likely to reach its peak in the near future. However, it is true that in June of 2010, the People's Bank of China eased the close peg to the dollar and thereby took an initial step toward making the Chinese exchange rate system more flexible. As a result, there has been a very gradual strengthening of the currency against the dollar. However, further revaluation of the yuan is not an option currently being entertained by the Chinese. The global economy needs to pick up again before China can be expected to contribute to the elimination of global imbalances by adjusting its exchange rate policy. It would be detrimental if the current turbulence being experienced were to lead to protectionist trends in general.

# Which countries are most affected by a weak yuan?

Apart from the yuan, the Korean won, the Brazilian real, and the Argentinean peso are all undervalued. On the other hand, the US dollar and the euro are overvalued, resulting in knock-on adverse effects for the price competitiveness of exporters from the euro and dollar areas. The euro is already bearing the brunt of the devaluation in the dollar, as the central banks in emerging markets peg their exchange rates to the performance of the dollar through currency interventions. The ECB, by contrast, does not intervene in such a systematic way in foreign-exchange markets. Accordingly, the euro has already strengthened significantly against the dollar in past weeks. If this trend continues, it would act as a brake on German export growth and could negatively impact the recovery in Germany.

The United States is threatening to impose punitive tariffs on Chinese imports. Is that a solution?

Penalising tariffs on Chinese imports would certainly be a drastic response to the Chinese government's intervention in the exchange rate system. Nevertheless, the United States will most likely not carry out this threat, as this would trigger a dangerous spiral of reprisal measures. Apart from the legal issues involved in implementing such punitive action within the framework of the General Agreement on Tariffs and Trade, measures should



The yuan's exchange rate is pegged to the US-dollar.

be taken to reduce current account imbalances, thereby getting to the heart of the problem.

What should therefore be done to eliminate global imbalances?

China's current account surplus reflects a surplus of savings over investment. The high outflows of capital from China – primarily to the United States – guarantee the financing of current account deficits in other parts of the world. In order to eliminate these imbalances, one should intervene in capital markets rather than take actions which would disrupt international trade. Daniel Gros' proposal to introduce capital account reciprocity would be a step in the right di-



After studying economics in Tübingen, Maryland (USA), and Berlin, **Dr. Marcus Kappler** completed his doctorate in 2007 at Goethe University in Frankfurt/ Main. He has been at ZEW since 2002 and is the deputy head of the research group "Growth and Business Cycles". His main research is in the field of macroeconomics and macroeconometrics. He primarily researches the accuracy of economic forecasts, structural unemployment, and the factors influencing potential output.

## INTERVIEW

recJtion: Only if China opens its capital markets to foreign investors should China's banks be allowed to make investments abroad – e.g. in foreign government bonds. Consequently, American government bonds would become less attractive for Chinese investors and the United States would become more reliant on the domestic financing of its national debt. This would help to eliminate imbalances. The yuan's exchange rate is pegged to other currencies – primarily to the dollar. What would happen if China were to float the exchange rate?

It remains to be seen whether there will be a complete floating of the yuan. Nevertheless, economists remain divided as to whether this would help to eliminate the imbalances between China and deficit countries. Yet it should be clear that a strong revaluation resulting from a complete floating of the foreign exchange rate would increase the yuandenominated debt burden on Chinese banks and state-owned enterprises, and thereby pose a threat to their stability. In a worst-case scenario, the Chinese financial system could experience a crisis, and this would undoubtedly have a considerable impact on the rest of the world.

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### POLITICO-ECONOMIC ANALYSIS

# The Costs of Adapting to Climate Change

The discussion of climate change often centres on the reduction of greenhouse gases. Yet it is becoming increasingly clear that some form of climate change will be unavoidable. Thus, adapting to new climatic conditions will be a necessity. How high will the costs of this adaptation be in Europe and to what extent will they be paid for by government?



Europe has to prepare for climate change - and it might get pricey.

We have engaged in a first attempt to estimate future government expenditures for adaptive measures to climate change in important sectors of the economy. However, due to the long time frame under consideration as well as unforeseeable climatic and economic developments, it must be noted that our results are marked by a high degree of uncertainty. A systematic review of previous studies dealing with the costs of climate change served as the basis for our estimates on the share of adaptation costs that will be borne by government. In our study, which is based on theory and hard data, we also attempted to appraise government motivations for pro-active behaviour in the area of climate-change adaptation. Alongside the direct effects on public finances, we looked at secondary repercussions, including, for example, fluctuating tax revenues as a result of private-sector adaptation.

Agriculture: We assumed costs in this sector would be privately financed, as climate change will automatically prompt farmers to adapt their seed to new conditions. However, Europe's governments will have to take an active role in providing information - concerning, for example, the mechanisms of climate change - as well as in undertaking fundamental research - concerning, for example, how climatic conditions impact agriculture and animal husbandry. On the basis of various projection scenarios for the year 2030, annual public costs for the countries of Western Europe are estimated at between 25 and 145 million euros.

#### Up to Four Billion Euros Annually

**Coastal Protection:** As dykes and levies are considered a public good, this sector is marked by a relatively high degree of government involvement. In Europe, private-sector financing of coastal protection is only witnessed in exceptional cases. In this area, the costs accruing to government for adaptation to climate change (e.g. for reinforcing dykes and new coastal-protection technologies) must therefore be estimated as relatively high in comparison with other sectors. In

## POLITICO-ECONOMIC ANALYSIS

Western Europe, we expect these costs to run as much as four billion euros annually in the 2060s, although there is a high level of uncertainty connected with this figure due to the difficulties in forecasting sea level rise.

Water: Water utilities must adapt to altered conditions. Although private-sector companies are active in this sector, a certain burden can be assumed for the public purse in Europe – e.g. in order to ensure security of supply. Public costs for Western Europe are estimated to run as high as 665 million euros annually in the 2060s. Healthcare: Government obligations concerning the adaptation of health services lie above all in (1) establishing early warning systems for heat waves; (2) in researching and monitoring climate-related illnesses; as well as (3) in providing information. However, the assessments concerning how climate change will affect the public purse vary considerably. For the period from 2010 to 2050, estimates range from 450 million euros in reduced costs annually (as a result of fewer cold-related illnesses) to additional costs of the same amount stemming from the

### INSIDE ZEW

### Habilitations and Doctoral Graduates at the ZEW

#### Habilitations since January 2010

Friedrich Heinemann, "Papers on Empirical Public Finance", Prof. Lars Feld, Ruprecht-Karls-University Heidelberg.

#### **Doctoral Graduates since January 2010**

**Birgit Aschhoff,** Public Money for Private Research: Empirical Analyses of Policy Instruments to Stimulate R&D Activities in the Business Sector with a Focus on Subsidies and Public Procurement, Prof. Uwe Cantner, Friedrich-Schiller-University Jena.

Katja Coneus, Empirische Untersuchungen zur frühkindlichen Bildung in Deutschland, Prof. Alexander Kemnitz , TU Dresden.

Michael Grünewald, Internationales Steuerinformationssystem, Prof. Christoph Spengel, University of Mannheim.

Alexander Kalb, Public Sector Efficiency – An Application to Local Governments in Germany, Prof. Lars P. Feld, Ruprecht-Karls-University, Heidelberg.

Matthias Köhler, Integration, Regulierung und Corporate Governance im EU Bankensektor, Prof. Reint Gropp, European Business School – International University Schloß Reichartshausen.

Jenny Meyer, ICT, Workforce Age and Firm Performance – Firm-Level Evidence from Germany, Prof. Ulrich Kaiser, University of Zürich. Florian Misch, Fiskalpolitik und Wirtschaftswachstum, Prof. Richard Kneller, University of Nottingham.

Grit Mühler, Essays in Applied Microeconomics and Econometrics, Prof. Bernd Fitzenberger, Albert-Ludwigs-Universität Freiburg.

**Bettina Müller,** Human Capital in New Firms, Prof. Oliver Fabel, University of Konstanz.

Sandra Schmidt, Interest Rate Dynamics, Interest Rate Expectations and the Operational Framework of Central Banks, Prof. Dieter Nautz, Freie Universität Berlin.

Susanne Steffes, Beschäftigungsdynamik und heterogene Arbeitsverhältnisse, Prof. Bernd Fitzenberger, Albert-Ludwigs-Universität Freiburg.

Holger Stichnoth, Essays zur Einwanderung, zum relativen Einkommen und zur Umverteilung, Prof. Claudia Senik, L'Ecole des Hautes Etudes en Sciences Sociales (EHESS).

Hannes Ullrich, Essays in Applied Microeconomics and Econometrics, Prof. Ulrich Kaiser, University of Zürich.

Tobias Veith, Aspekte von Regulierung und Wettbewerb in europäischen Telekommunikationsmärkten, Prof. Jürgen Weigand, Wissenschaftliche Hochschule für Unternehmensführung (WHU) – Otto Beisheim School of Management.

**Qingwei Wang,** Investor Beliefs and Forecast Evaluation, Prof. Ernst Maug, University of Mannheim. detrimental effects of greater heat on the public health.

**Energy:** Energy infrastructure does not only play a key role in the reduction of greenhouse gases. Adapting this infrastructure to changed climatic conditions will be unavoidable. Supply networks will have to be reorganised in order to withstand increasingly frequent extreme weather events. Furthermore, providers will have to invest in the development of new cooling technologies. The public sector will presumably play only a secondary role in this area. Thus, comparatively low public-sector costs can be expected, of up to 50 million euros in the year 2050 for the EU-27 plus Norway and Switzerland.

**Energy Consumption:** Demand for heating and cooling will be altered by climate change. Regions that currently have high heating costs will benefit. Yet, this will be counterbalanced by higher cooling costs in warmer countries. The possible effects on public finances range from additional costs of one billion euros annually (based on a study for the EU-12) to savings of 2.7 to 4.2 billion euros in the year 2050 (in the EU-27 plus Norway and Switzerland).

**Transport:** In the transport sector, only the road network was taken into consideration. As the road network is largely of public responsibility, high public-sector costs are expected for climate change adaptation. These costs could amount to between 2.9 and 5.8 billion euros in the year 2050 (in the EU-27 plus Norway and Switzerland).

#### **Great Relevance for Europe's Finances**

Our analysis makes clear that, in the future, high public-sector costs can be expected for climate-change adaptation, especially in the areas of transport and coastal protection. In agriculture, high costs will also arise. However, these costs will mainly be borne by the private sector. In the health and energy sectors, it is unclear whether the effects will be positive or negative. Overall, the analysis shows that climate-change adaptation is potentially of great relevance in the future planning of Europe's public finances.

# Workshop on Behavioural Microsimulation

At the beginning of December 2010, ZEW organised a two-day workshop on recent developments in behavioural microsimulation. Thirtyfive researchers from Germany and abroad took the opportunity to discuss recent developments in this field.

Prof. Richard Blundell (University College London and Institute for Fiscal Studies), the workshop's keynote speaker, presented the most important findings of the Mirrlees Review, a large-scale project, in which the characteristics of a good fiscal system were identified by numerous international experts. Family Affairs and the German Ministry of Finance. Katharina Wrohlich (DIW Berlin), Alexander Bick (Goethe University Frankfurt) and Egbert L.W. Jongen (CPB Den Haag) dealt from different methodological perspectives with the relation between child care and women's employment. Arthur van Soest (University Tilburg) inves-



Behavioural microsimulation helps to evaluate the effects of certain policy measures on families for example.

Moreover, the workshop also focused on family economics as there is an increasing need for economic policy advising in this field. ZEW is currently conducting an evaluation of 13 marital and family-related benefits in Germany using microsimulation. This evaluation was commissioned by the German Ministry of tigated the tax-transfer system's impact on the allocation of housework. Marco Cosconati (Banca d'Italia) presented a model of the impact of education on human capital formation. Andreas Steinhauer (University Zurich) linked the ex- post evaluation of parental leave regulations to a structural model of job search. Fur-

**Microsimulation** is an important tool in policy advising and is used in various projects at ZEW. These projects are usually commissioned by German Federal Ministries or councils such as the German Council of Economic Experts. Microsimulation combines individual or household data with economic models to predict the impacts of political measures. Behavioural microsimulation take into account that households react to changing conditions, e.g. by expanding or restricting their labour supply after a reform of the tax- transfer system. thermore, some contributions were devoted to general methodological issues. Philippe Liégeois (CEPS/INSTEAD Luxembourg) presented a method for dealing with negative marginal utility in discrete choice models. Andreas Peichl and Sebastian Siegloch (both IZA Bonn) dealt with an analysis of labour supply elasticity and the integration of labour demand in microsimulation models. Jürgen Wiemers (IAB Nürnberg) analysed whether the taking of social benefits has changed after the German Hartz-IV reforms.

#### Life Cycle Approach

Various papers linked microsimulation models with a life cycle approach to analyse the design of the tax-transfer system with regard to demographic change (Peter Haan, Goethe-University Frankfurt), immigrants' net contribution to social security system (Murat G. Kirdar, Technical University Ankara), or private capital formation (Simone Tedeschi, University Modena).

Papers by Daniela Glocker (DIW Berlin), who analysed the impact of tuition fees, and David Philipps (IFS London), who analysed the impact of food prices on household consumption indicated the large scope of microsimulation.

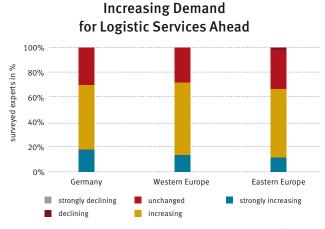
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### INSIDE ZEW

## English Version of ZEW Newsletter Available

Beginning on 15 February 2011, ZEW's electronic newsletter will also appear monthly in English. Like the German version, the English edition of the newsletter will keep our international readers informed about the latest news and developments at ZEW. The newsletter will be free of charge, and sent to readers by e-mail. You can subscribe to the English newsletter by following the link www.zew.eu/newsletter

## FACTS AND FIGURES

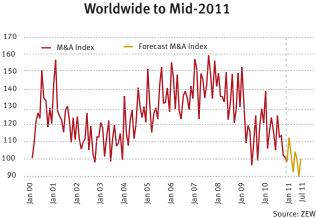


#### Source: ZEW

In recent years logistic services have shown to be robust growth markets. Accordingly, about 70 percent of the surveyed experts expect transport volumes for Germany and West European routes to increase. This figure is just slightly under 70 percent for Eastern European routes. Some 300 transport and logistics companies take part in the guarterly Transport Market Barometer, which surveys expectations for freight volumes and prices in inner-German and cross-border transport. The results presented above are based on data gathered in the fourth quarter of 2010. Dr. Claudia Hermeling, hermeling@zew.de

ros, whereas they are to increase to 4.4 billion euros in 2011.

Source: ZEW, Mannheim Innovationpanel



**Ongoing Weak M&A Activities** 

The ZEW-ZEPHYR M&A Index dropped to 97 points at the end of 2010. This was lower than the reading in January 2000 (100 points) and almost the same as the reading in May 2009, when the index fell to its lowest value of all time. Forecasts for the future development of the indicator suggest that M&A activities will decline in intensity until mid-2011 worldwide. The ZEW-ZEPHYR M&A Index is calculated on a monthly basis by ZEW and Bureau van Dijk (BvD). It provides an indication of the frequency of mergers and acquisitions worldwide.

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**Continuing Positive Outlook Among Service** Providers of the Information Society in Germany

The economic situation among service providers of the information society in Germany continued to improve in the fourth guarter of 2010. The ZEW-IDI Indicator, which measures economic sentiment in this branch, increased by 4.4 points to 66.8 points. The service providers of the information society include the branches software, IT services, ICT trade, telecommunication services, tax consulting and accounting, management consulting, architectural services, technical consulting and planning, research and development as well as advertising.

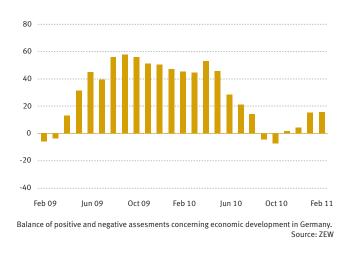
**Innovation Expenditures Remain At Low Level** 3,5 Innovation expenditures in billion euros expenditures 6 3.0 2.6% 5 nnovation at turnovei 4 2.0 3 2 1.0 Percentage 1 0.5 0 0.0 2006 2007 2008 2009 20103 2011 Current innovation expenditures Investment expenditures on innovations Percentage of innovation expenditures at turnover

German Metal Industry:

\* Target figures spring/summer 2010

In 2009, the German metal industry (metal production and metal processing) spent a total of 4.5 billion euros on innovations, thus the innovation expenditures declined by 29 percent. This is due to a huge cut in the investment budget, which also affected investments on process innovations and the production of new products. The percentage of investment expenditures for innovations decreased from 63 percent in 2008 to 51 percent in 2009. In 2010, the expenditures are to decline to 4.3 billion eu-

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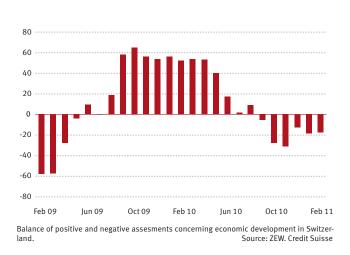


## ZEW Financial Market Test February 2011

#### Germany: Economic Expectations Remain Stable

The ZEW Indicator of Economic Sentiment for Germany has remained almost unchanged in February. The indicator has climbed by 0.3 points and now stands at 15.7 points. This value is below the indicator's historical average of 26.7 points. The almost unaltered level of the indicator suggests that financial market experts have remained confident about the recovery of the German economy. This assessment might be due to the fact that investment is gaining momentum in Germany as well as abroad. This development is backed by current data on incoming orders in the German industry gathered by the German Federal Statistical Office. Moreover, surprisingly positive data from the US economy released at the end of 2010 raise hope that the robust worldwide economic growth will continue.

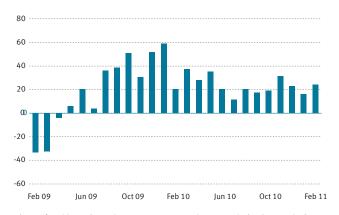
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### Switzerland: Expectations Almost Unchanged

Economic expectations for Switzerland brightened up just marginally in February. The ZEW-CS-Indicator which reflects the expectations of the surveyed financial market experts regarding the economic development in Switzerland on a six month time horizon increased by 1.2 points to the minus 17.2 mark. The ZEW-CS Indicator is calculated monthly by the Centre for Europ ean Economic Research (ZEW) in cooperation with Credit Suisse. Overall, 11.4 percent (up 6.1 percentage points) of the experts surveyed forecast an improvement in economic momentum going forward, while 28.6 percent (up 4.9 percentage points) foresee deterioration of the economy ahead from today's levels. Nevertheless, 60.0 percent of analysts still believe that the economic environment will remain unchanged.

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Balance of positive and negative assessments concerning economic development in the CEE region. Source: ZEW

### **CEE Region: Economic Outlook Brightens Up**

The ZEW-Erste Group Bank CEE Economic Indicator for Central and Eastern Europe including Turkey (CEE region) has increased by 8.3 points to 24.5 points in February. The improvement of the economic sentiment indicator for the CEE region on a six month time horizon can be mainly ascribed to the overall positive expectations for the economies in Hungary and Poland. The CEEindicator and further financial market data have been surveyed monthly since 2007 by the Centre for European Economic Research (ZEW), Mannheim, with the support of Erste Group Bank, Vienna. The CEE region consists of Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Serbia, Slovakia, Slovenia and since October 2010 of Turkey. Financial market data for Austria and the Eurozone are surveyed separately.

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## OPINION



# The Euro in Crisis?

If the euro really were the cause of the current difficulties in the eurozone, then this would indeed augur badly for the success of the monetary union. Yet the euro itself is not at fault, regardless of what self-important pundits would have the public

think with their daily proclamations on talk shows or in ostensibly scientific articles.

Indeed, if the virulent macroeconomic dislocations currently being experienced were attributable to the euro, then this would necessarily mean that the eurozone has particularly large current-account imbalances and public-debt levels when compared with other currency areas. In fact, the opposite is true. The current account of the entire eurozone is nearly balanced and deficit spending in 2010 comprised just under 7 per cent of GDP, far below that of Japan (almost 10 per cent), the United Kingdom (just over 10 per cent), and the United States (about 11 per cent). Admittedly, this comparison relates to the eurozone as a whole. Yet these numbers make clear that it is not the euro that is in crisis. Within the eurozone, of course, things look a bit different, for individual countries are certainly facing problems. This brings us to the actual reasons for the crises being experienced, which vary from country to country.

In the case of Greece, we can cite financial misconduct over many years, the true extent of which the Greek authorities managed to largely conceal through statistical manipulation. In Ireland, the crisis was primarily triggered by excessive credit expansion, particularly during the years of the real estate boom. The Irish budget was balanced as late as 2007, and the term "Celtic Tiger" was still used not so long ago. Ultimately, the financial stabilisation mechanism for Ireland is a bank rescue package. The same applies to aid for Greece in light of the large outstanding claims of German and French banks. At the beginning of 2010, these claims amounted to 44 and 71 billion US dollars, respectively. Together, German and French banks hold 57 per cent of all international claims to Greek debt. In view of crash that followed the Lehman Brothers bankruptcy and the broader financial crisis which has yet to be fully surmounted, it is understandable that politicians deemed the restructuring of Greek government debt to be much riskier than the capital injections which have been provided. Yet the future actions necessary to prevent similar crises should now be clear. First, banks that are essential to the function of the financial system should not be able to hold the government and, by extension, its taxpayers hostage. In this respect, either higher capital reserve requirements or a Pigovian tax to steer market behaviour would be beneficial. Second, a robust crisis mechanism is needed once the current financial stabilisation mechanism is phased out. This new mechanism must provide for the inclusion of private creditors in resolving national financial difficulties, depending on the severity of financial misconduct. Third, the Stability and Growth Pact needs to be considerably strengthened.

The German Council of Economic Experts has made proposals concerning all three of these issues. Germany's departure from the euro is certainly not among the Council's proposals, however. Such a move would be very foolish as it would lead to a massive revaluation of the new Deutsche Mark resulting in very negative consequences for German exports and jobs. A decade ago, a monetary union was highly justified from an economic perspective in order to avoid large fluctuations in nominal exchange rates. As the Mundell-Fleming model tells us, the following three goals can be implemented in pairs, but not altogether at the same time: stable nominal exchange rates; an autonomous monetary policy; and free movement of capital. The monetary union offered a way out. It is obviously much more difficult to convey this fact than to wallow in nostalgia for the Deutsche Mark.

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