

Annual Report

2010



ZEW

Zentrum für Europäische
Wirtschaftsforschung GmbH

Centre for European
Economic Research

Shareholder

Federal State of Baden-Württemberg

Scientific Advisory Council

Chairman: Prof. Dr. Friedrich Buttler
Vice-Chairman: Prof. Dr. Dres. h.c. Arnold Picot

Executive

Prof. Dr. Dr. h.c. mult.
Wolfgang Franz
President
Director Science and Research

R E S E A R C H

Research Department International Finance and Financial Management

Prof. Dr. Michael Schröder

- Financial Intermediation
- Expectation and Price Formation on Financial Markets
- Asset Markets

Research Department Human Resources

Dr. Holger

- Employment and Wages
- Social Welfare Institutions
- Personnel Economics
- Education Economics

Research Department Industrial Economics and International Management

Dr. Georg Licht

- Innovation Research and Innovation Policy
- Firm and Industry Dynamics
- Competition and Regulation
- Firm-Level Data

Research Department and Public

PD Dr. Friedrich

- Corporate Taxation and Tax Law
- Empirical Effects of Corporate Tax
- Decision Making in Tax and Financial Markets
- Fiscal Competition and Federalism

Research Department Environmental and Resource Economics, Environmental Management

Prof. Dr. Andreas Löschel

- International Environmental and Resource Policies
- Innovation and Sustainable Development
- Energy Economics
- Transport and Mobility
- Macroeconomic Analysis of Environmentally Relevant Policies

Research Group Information and Communication Technologies

Prof. Dr. Irene Bertschek

- ICT Sector and Diffusion of ICT
- ICT and the Labour Market
- ICT, Firm Strategies and Competition

Research Group Business

Prof. Dr. Dr. h.c. mult.

- Analysis of Long-Term Macroeconomic Growth
- Analysis of Short-Term Macroeconomic Fluctuations
- Development of Analytical Tools

Research Programme Strengthening Efficiency and Competitiveness in the European Knowledge

Prof. Dr. Dr. h.c. mult. Wolfgang Franz · Thomas Kohl

Supervisory Board

Chairman: Minister ret. Gerhard Stratthaus MdL
Vice-Chairman: Dr. h.c. Eggert Voscherau

Directors

Thomas Kohl
Director Business and
Administration

ZEW Sponsors' Association for Science and Practice

Chairman: Dr. Dr. Peter Bettermann
Vice-Chairman: Dr. Kurt W. Bock

Labour Markets, and Social Policy

Prof. Dr. Gert Bonin

Corporate Taxation Finance

Prof. Dr. Gert Bonin

International Taxation
Taxation
Fiscal Policy
Economic Policy

Economic Growth and Cycles

Prof. Dr. Gert Bonin

Economic Relationships
Economic Relationships
and Methods

Emerging Economies (SEEK)

S E R V I C E

Information and Communication

Gunter Grittmann

- Public Relations
- Editing
- Events
- New Media
- Special Library
- International Coordination

Knowledge Transfer and Qualification Programmes

Thomas Kohl

- Expert Seminars
- Specific Training Programmes for
Enterprises and Institutions

General Services

Thomas Kohl

- Human Resources
- Finance and Accounting/Controlling
- IT
- Purchase and Organisation
- Media Design and Distribution
- Event Management

Imprint

ZEW Annual Report 2010
June 2011

Publisher:

Centre for European Economic
Research (ZEW)
L 7, 1 · 68161 Mannheim · Germany

Address:

P.O. Box 10 34 43 · 68034 Mannheim
Germany

Phone +49/(0)621/1235-01
Fax +49/(0)621/1235-224
E-mail info@zew.de
Internet www.zew.de, www.zew.eu

Executive Directors:

Prof. Dr. Dr. h.c. mult. Wolfgang Franz,
President

Thomas Kohl,
Director of Business
and Administration

Public Relations:

Gunter Grittmann,
Phone +49/(0)621/1235-132,
E-mail grittmann@zew.de

Kathrin Böhmer,
Phone +49/(0)621/1235-103,
E-mail boehmer@zew.de

Editor:

Beatrix Immig

Layout:

Media Design, ZEW

Photos: ©ag visuell – Fotolia.com (1)
ARTIS – Uli Deck (6)
BASF SE/Detlef. W. Schmalow (1)
digitalstock (4)
Erich Dichiser (35)
Ilja Hendel/WiD (2)
Barbara Hey (1)
istockphoto (4)
Uwe Klein (2)
Yvonne Lupp (3)
Frank Rimmler (19)
Michael Weiland (2)
private (31)

Print: NINO Druck GmbH,
Neustadt/Weinstraße

Annual Report

2010



EDITORIAL








Letter from the European Research Commissioner, Máire Geoghegan-Quinn	22
Letter from the Executive Directors of ZEW, Prof. Dr. Dr. h.c. mult. Wolfgang Franz and Thomas Kohl	24

ABOUT US

THE INSTITUTE	30
---------------	----

ZEW in Brief · Qualification of Staff · Economic Policy Advising · Knowledge Transfer · Staff Report and Financial Statement · SEEK · MaCCI

THE RESEARCH UNITS

	International Finance and Financial Management	54
	Labour Markets, Human Resources and Social Policy	62
	Industrial Economics and International Management	70
	Corporate Taxation and Public Finance	80
	Environmental and Resource Economics, Environmental Management	90
	Information and Communication Technologies	100
	Growth and Business Cycles	108

SCIENTIFIC OUTPUT, COMMITTEES AND EXTERNAL RELATIONS

SCIENTIFIC OUTPUT 117

Publications in Refereed Journals · ZEW Book Series · ZEW Discussion Papers ·
Conferences and Workshops

COMMITTEES AND EXTERNAL RELATIONS 125

Supervisory Board · Scientific Advisory Council · Research Associates und Research Fellows ·
Visiting Researchers · ZEW Sponsors' Association for Science and Practice · ZEW Alumni

STAFF CONTACT 132



Prof. Dr. Axel A. Weber, President of the Deutsche Bundesbank, spoke at ZEW.

April 2010

LIVELY DISCUSSIONS ABOUT MONETARY POLICY AT A TALK BY THE PRESIDENT OF THE BUNDESBANK

The financial and economic crisis brought the world economy to the edge of the abyss. Among the legacies of the crisis is intense controversy surrounding the lessons that should be drawn. Thus, it should come as little surprise that a talk given by the President of the Bundesbank, Prof. Dr. Axel A. Weber, stimulated a great deal of interest, attracting some 260 attendees as well as numerous representatives of the media and international news agencies to ZEW. As part of the lecture series Mannheim Economics and Currency Dialogues, Prof. Weber analysed the "Challenges of the Financial Crisis for Monetary Policy". By hosting the "Mannheim Economics and Currency Dialogues", ZEW provides decision-makers from the worlds of business, politics, and academia with a forum for debating controversial issues in financial and economic policy.



Talks preceding the lecture by Prof. Dr. Axel A. Weber, President of the Deutsche Bundesbank: (left to right) Prof. Dr. Andreas Dulger, President and CEO of ProMinent Dosiertechnik GmbH; Gerhard Stratthaus MdL, Minister of Finance, State of Baden-Württemberg, ret., Federal Agency for Financial Market Stabilisation; Thomas Kohl, Director of Business and Administration, ZEW



Prof. Dr. Andreas Löschel, head of the ZEW environmental research department, explained the ZEW computer game to interested students on board of MS Wissenschaft.

May 2010

CLIMATE CHANGE COMPUTER GAME ON BOARD THE EXHIBITION SHIP "MS WISSENSCHAFT"

During the summer of 2010 the cry of "cast off" once again rang out from the exhibition ship MS Wissenschaft ("MS Science"). This year the ship featured a computer game created by ZEW's environmental research department that explored a key dilemma in climate protection. The head of ZEW's environmental research department, Prof. Dr. Andreas Löschel, came to Berlin for the launch of the research vessel's grand tour through Germany and Austria. His expertise was in great demand, particularly amongst younger visitors. In the computer game, participants take on the role of a national government, and must decide between the following two options: Should my country spend money for climate protection that would benefit other countries – even those that are making little or no contribution to climate protection? Or would I be better off just keeping the money for myself? Hardly a simple decision-making process.

The MS Wissenschaft, exhibition ship of the initiative Wissenschaft im Dialog ("Science in Dialogue"), which is supported by the Federal Ministry for Education and Research, started its tour on May 18 in Berlin-Spandau. This year, the converted cargo ship hosted an interactive exhibition on energy-related topics. By the beginning of October 2010, the MS Wissenschaft had visited 34 cities, including, for the first time, three cities in Austria.



June 2010

XUGUANG SHENG AWARDED THE HEINZ KÖNIG YOUNG SCHOLAR AWARD

Xuguang Sheng of American University in Washington, D.C. has a good reason to smile. At the conclusion of the ZEW Summer Workshop, he had the honour of becoming the seventh recipient of the Heinz König Young Scholar Award. The much-coveted research prize for young academics, which carries a 5,000 euro award, was sponsored in 2010 by Deutsche Telekom. Recipients of the prize are also offered a multi-month research residency at ZEW.

Named after the founding director of ZEW, the prize is granted annually at the conclusion of the ZEW Summer Workshop. It honours the most outstanding scientific paper presented during the event. After a rigorous selection process, 14 young researchers from South America, North America, and Europe were invited to participate in the 2010 ZEW Summer Workshop, which was devoted to the subject of "Expectations and Expectation Formation in Financial Markets". The participants were given an opportunity to present their work and to engage in dialogue with other young researchers as well as renowned scholars who were specially invited to the event.



The winner of the Heinz König Young Scholar Award: Xuguang Sheng, American University in Washington, D.C.



Participants of the ZEW Summer Workshop "Expectations and Expectation Formation in Financial Markets"



Left to right: Thomas Kohl (Director of Business and Administration, ZEW), former German Chancellor Gerhard Schröder, and Prof. Dr. h.c. mult. Wolfgang Franz (President of ZEW) at the ZEW Economic Forum

June 2010

THE ZEW ECONOMIC FORUM DRAWS LEADING REPRESENTATIVES FROM THE WORLDS OF ACADEMIA AND POLITICS TO MANNHEIM

"Agenda 2010: Conclusions and Perspectives" was the topic of the 2010 ZEW Economic Forum. The event was a resounding success, and not only in terms of attendance. Nearly 400 participants came to the all-day conference in Mannheim to discuss "Agenda 2010", the most extensive post-war reform of the German social welfare system which was implemented between 2003 and 2005. An eagerly awaited highlight was a talk given by former Chancellor Gerhard Schröder, who was responsible for initiating the Agenda 2010 reforms. With his customary aplomb, the former Chancellor presented his views concerning Germany's ability to reform, and from time to time, launched barbs against his critics.

As is customary at every Economic Forum, there was also a lively podium discussion, which included both high praise and sharp criticism of the Agenda 2010 reforms. In addition, three young ZEW researchers had a chance to present summaries of their recent interesting research. Many participants especially enjoy the extensive opportunities for stimulating conversation and networking during coffee breaks and the event's luncheon.



The ZEW Economic Forum 2010 was very well attended with nearly 400 participants.



The panelists (left to right): Dr. Holger Bonin, ZEW; Prof. Axel Börsch-Supan, PhD, Mannheim Research Institute for the Economics of Aging; Prof. Dr. Dr. h.c. mult. Wolfgang Franz, ZEW; Dr. Andreas Wörgötter, OECD; Prof. Dr. Wolfgang Wiegard, University of Regensburg

June 2010

ANALYSING AND UNDERSTANDING MACRO-ECONOMIC CHALLENGES

The scholars invited to Mannheim by ZEW and the University of Mannheim for a conference on "Recent Developments in Macroeconomics" certainly had no difficulty finding highly topical issues for discussion. The effects of the financial crisis on the real economy, public finances, and sovereign debt, as well as changes in the labour market and macroeconomic aspects of climate change provided plenty of material for stimulating and sometimes contentious debate. One of the principal speakers at the conference, Prof. Dr. Fabrizio Zilibotti of the University of Zurich, presented an analysis of the increasing importance of newer, rising actors such as China in the context of economic internationalisation.

Prof. Dr. Fabrizio Zilibotti (University of Zurich) spoke at a ZEW conference on "Recent Developments in Macroeconomics".





Participants of the Mannheim Corporate Tax Day (Mannheimer Unternehmenssteuertag) 2010

June 2010

A HIGHLIGHT FOR TAX EXPERTS – THE MANNHEIM CORPORATE TAX DAY

The Mannheim Corporate Tax Day has become a "must go" event for business executives and tax experts alike. In 2010 around 100 participants explored the topic of "Tax-Oriented Valuation". At the event, which was organised by ZEW together with the University of Mannheim, it was clear that the economic crisis together with significant changes in tax regulations have created particular challenges for tax-related valuation. The 2011 Corporate Tax Day on June 21 will address the topic of "National and International Tax Planning for Partnerships".



Managers and experts from China and Vietnam taking part in an advanced training programme at ZEW

September 2010

KNOWLEDGE TRANSFER TO CHINA AND VIETNAM

A core mission of ZEW is knowledge transfer – not just domestically, but also internationally. Thus, in 2010 professionals from China and Vietnam once again came to Mannheim to participate in an advanced training programme. For ten weeks, the participants intensively studied fiscal and monetary policy, labour and financial markets, and trade policy. They also discussed development strategies for their home countries. As is customary at ZEW, the seminar lectures featured colleagues from ZEW, outside researchers, as well as practitioners from business and government. The course at ZEW is part of the training programme "Strengthening Macroeconomic Policies", organised by Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) – formerly Internationale Weiterbildung und Entwicklung gGmbH (InWEnt) – under contract from the Federal Ministry for Economic Cooperation and Development.



Participants of the ZEW training programme "Strengthening Macroeconomic Policies"



German Federal Minister of Finance Dr. Wolfgang Schäuble presented at ZEW.

September 2010

PRESENTATION BY FEDERAL MINISTER OF FINANCE WOLFGANG SCHÄUBLE ATTRACTS GREAT INTEREST AT ZEW

The European sovereign debt crisis; Germany's national debt and how it should be reduced; the sustainability of economic recovery and growth; and the development of a new regulatory architecture for financial markets – these are all issues and problems that truly concern citizens. It is not surprising, therefore, that the talk given by Federal Minister of Finance Dr. Wolfgang Schäuble as part of the ZEW lecture series "First-Hand Information on Current Economic Policy" stimulated a tremendous amount of interest. His presentation on "Fiscal and Financial Market Policy After the Crisis" attracted around 400 attendees to ZEW. Dr. Schäuble's call for a growth-friendly austerity plan found broad consensus amongst the audience.

Prior to his presentation, Dr. Schäuble came to ZEW to meet with Mannheim's Lord Mayor, Dr. Peter Kurz. As part of their meeting in ZEW's Board Room, the Federal Minister of Finance signed the City of Mannheim's Golden Book (a register of distinguished guests) in the presence of the Lord Mayor, the First Mayor, and a number of town councils.

Left to right: Dr. Peter Kurz (Lord Mayor of Mannheim), Wolfgang Raufelder (City Council), German Federal Minister of Finance Dr. Wolfgang Schäuble, Claudius Kranz (City Council), Christian Specht (First Mayor of Mannheim), Volker Beisel (City Council)



November 2010

NEW IMPETUS FOR SCHOLARLY DEBATE ABOUT GREEN IT

Researchers from Europe, the US, and Asia met at ZEW in 2010 with the goal of providing new impetus to scholarly debate about green IT in economics and related disciplines. As keynote speaker, the renowned Harvard economist Prof. Philippe Aghion, PhD, communicated the optimistic message that environmental policies for climate protection were entirely feasible and that subsidies for environmental innovation, not least in the area of green IT, could make a significant contribution to climate protection efforts.



Harvard economist Prof. Philippe Aghion, PhD, presented on Green IT in economics at ZEW.



Prof. Dr. Dr. h.c. mult. Wolfgang Franz, President of ZEW, presented the recent annual assessment of the German Council of Economic Experts in Karlsruhe.

November/December 2010

ZEW PRESIDENT WOLFGANG FRANZ ASSESSES THE STATE OF THE GERMAN ECONOMY

At the close of each year, ZEW President Prof. Dr. Dr. h.c. mult. Wolfgang Franz embarks upon a major lecture tour. As part of the lecture series "First-Hand Information on Current Economic Policy", he presents the most recent annual assessment of the economy prepared by the German Council of Economic Experts. His five presentations in 2010 met with an enthusiastic response. As chairman of the German Council of Economic Experts, Prof. Franz is not only one of Germany's leading economists. He is also a speaker who knows how to inspire his audience with clear language, vivid examples, and apt metaphors. His lectures have thus become a required entry in the annual calendars of many political and business leaders. In 2010 the presentations took place at the representative offices of the state of Baden-Württemberg in Berlin and in Brussels, at BW Bank in Stuttgart, at the headquarters of EnBW in Karlsruhe, and (with the support of the Southern Upper Rhine Chamber of Industry and Commerce) at the Freiburg Concert Hall.

ECONOMICS FOR PUPILS...

Encouraging pupils to become interested in economic issues is a major aim of ZEW. The Institute is happy to open its doors when school classes come knocking, for this presents an excellent opportunity to acquaint children with the mission and activities of the Institute as well as inform them about current issues in economic policy.

...IN MANNHEIM...

During a visit last year by upper-secondary school students from the Elisabeth and Mannheim Kurpfalz Gymnasiums, the pupils were particularly interested in explanations for the economic and financial market crisis as well as issues related to business cycles and the labour market. During a visit just before Christmas, a tenth-grade class from the Werner Heisenberg Gymnasium in Weinheim had the unusual opportunity to speak with the Chairman of the German Council of Economic Experts and ZEW President, Prof. Dr. Dr. h.c. mult. Wolfgang Franz.

...AND IN CHICAGO, TOO

Together with the Universities of Washington and Chicago, ZEW participated in a 2010 programme for imparting knowledge in core macroeconomic topics to selected eight-grade pupils from a junior high in Chicago Heights. One of the learning units was designed by the ZEW researchers Dr. Susanne Neckermann and Jan Hogrefe, and transmitted to Washington-McKinley School as part of a live internet session.



Jan Hogrefe and Dr. Susanne Neckermann impart economic knowledge to students in the United States.

LETTER FROM THE EUROPEAN RESEARCH COMMISSIONER, MÁIRE GEORGHEGAN-QUINN



“Growth”, “Knowledge” and especially “Innovation” are high on the agenda of the European Union. In June 2010, the European Heads of State and Government endorsed the Europe 2020 Strategy with the conviction that innovation is essential in bringing Europe out of the current economic crisis and integral to building long-term sustainable growth. To highlight this objective, in February 2011, European Union leaders for the

first time dedicated one of their summit meetings specifically to Research and Innovation, with particular reference to the European Commission’s October 2010 Communication on the Innovation Union Flagship. This communication contains a mix of policy proposals and actions to be undertaken at European level, in the Member States and regions, by governments, administrations, and universities and companies, all aimed at making the European Union an Innovation Union.

Three main points of the Innovation Union are to be highlighted:

Firstly, the EU requires an integrated and strategic approach on research and innovation as a motor for growth. This type of approach has to shape our policies in all relevant areas and must be incorporated at the highest political level.

Secondly, we have to focus on the key conditions for making Europe more attractive for investors and entrepreneurs. We now have the backing of the Member States for key issues such as completing the European Research Area, establishing a European patent, improved standard setting, public procurement of innovative products and services, improving access to capital, in particular for SMEs, and the creation of a digital single market.

Thirdly, while deficit reduction is both necessary and inevitable, it is critical to safeguard investments in areas on which our future growth will depend – such as education and skills, research and innovation, and research infrastructures. We need to maintain an excellent research base today that will fuel the innovations of tomorrow. Reforms are necessary at all levels – at regional, Member State and EU level – in order to invest wisely and effectively.

One of the most important challenges is the completion of the European Research Area (ERA) by 2014. By achieving this, we could create major opportunities for closer cross-border co-operation and cross-fertilisation of ideas and knowledge between researchers, universities, research centres, and industry; opportunities which are currently being lost due to the obstacles blocking the movement of ideas and people.

The Centre for European Economic Research (ZEW) is already participating in twelve research projects financed under the 7th Framework Programme. Seven of these are within the Socio-Economic Sciences and Humanities theme, and it is currently negotiating four further projects. It is hugely satisfying to see the excellent economists involved in such important research on smart growth and innovation at European level, through projects ranging from entrepreneurship and internationalisation of R&D to financing and venture capital.

The Centre for European Economic Research is an actor within the ERA which has become increasingly important and acquired a considerable reputation within the scientific community in recent years. It has succeeded in doing so by implementing such research programmes as “Strengthening Efficiency and Competitiveness in the European Knowledge Economies” (SEEK), a programme which is financed by the state government of Baden-Württemberg. I applaud the programme's aims, which help to develop a deeper understanding of both policy rationales and the design of appropriate policy instruments, as well as their effectiveness and efficiency via-à-vis the Europe 2020 strategy.

I encourage ZEW to continue expanding its important collaborative relationships both within and beyond the European Union, while at the same time pursuing excellence in economic research. I look forward to continued contributions from ZEW to achieve the goals of the Innovation Union.



Máire Geoghegan-Quinn
European Research Commissioner

LETTER FROM THE EXECUTIVE DIRECTORS OF ZEW



Thomas Kohl
Director of Business
and Administration

Prof. Dr. Dr. h.c. mult. Wolfgang Franz
President and Director
of Science and Research

The 2010 business year was marked by two great achievements for ZEW. The first was the initiation of the research programme “Strengthening Efficiency and Competitiveness in the European Knowledge Economies” (SEEK), which is being sponsored for five years by the state of Baden-Württemberg. The programme will help to further internationalise ZEW’s research and advising activities. The second achievement was the publication of the results of an evaluation conducted by the Leibniz Association Senate in September 2009.

In its evaluation, the Leibniz Association praised ZEW as “an extraordinarily successful and seminal establishment for applied empirical economic research” and certified that the Institute has an excellent national and international reputation as one of the leading economic research institutes in Europe. The evaluation underscored that ZEW has set scientific standards for economic policy advising in Germany. It also noted that the excellent quality of ZEW’s advising services was primarily attributable to the extremely high quality of the Institute’s research activities as well as its comprehensive and important databases.

The Institute's service and research units continued to develop positively during the 2010 business year, achieving notable successes despite the economic crisis and increasing competition from other research establishments. The successful work of the Institute in 2010 once again attracted great media interest.

Around 30 scientific conferences and workshops were held at ZEW in 2010, further solidifying the Institute's reputation as a forum for scientific exchange. Promoting dialogue with other researchers is a key element of ZEW's mission, a goal that is pursued through collaboration with other research establishments, frequent participation in national and international conferences, the hosting of guest researchers at ZEW, and through research residencies by ZEW staff at other institutions.

Altogether, ZEW's research units undertook work on 238 projects for national and international clients and sponsors, of which 110 projects were successfully concluded. The results of this research led to the publication of a large number of papers in peer-reviewed journals. ZEW's excellent reputation was also demonstrated by the large number of staff members attending conferences both in Germany and abroad. They presented their research findings in more than 500 lectures given at internal and external scientific conferences and workshops.

The annual ZEW Summer Workshop focused on the subject of "Expectations and Expectation Formation in Financial Markets". The 2010 Heinz König Young Scholar Award, which carries a 5,000 euro prize, was awarded to Xuguang Sheng of American University in Washington, D.C. This year's award was sponsored by Deutsche Telekom.

The intensive training seminar for Chinese and Vietnamese financial experts, held again in 2010, deserves of special mention. This seminar is part of the "Strengthening Macroeconomic Policies" programme organised by Internationale Weiterbildung und Entwicklung gGmbH – now Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) – under a contract from the Federal Ministry for Economic Cooperation and Development.

As of December 31, 2010, there were 172 persons employed at ZEW, of whom 122 were engaged as researchers. The share of women across the Institute was 45 per cent, and in the research units 36 per cent of staff were female. ZEW is highly committed to the continuing scientific qualification of its employees. In 2010 15 doctoral degrees and one habilitation were completed. A number of dissertations were awarded the highest possible grade of "summa cum laude".

Once again, the high volume of third-party funding received by the Institute – 6.28 million euros in 2010 – demonstrated the excellent reputation enjoyed by ZEW among its national and international clients and funding institutions. It is of particular note that

ZEW's extraordinary reputation extends far beyond Germany's borders. This is demonstrated by the participation of ZEW in international research projects and contracts from Switzerland, Austria, Sweden, and Belgium. Collaborative activities were expanded and intensified in Australia, New Zealand, South Africa, South America, and Asia, especially India and China.

One of ZEW's aims is to engage in dialogue with important figures from the realms of business and politics. In 2010 the annual ZEW Economic Forum provided an opportunity for such exchange. Entitled "Agenda 2010: Conclusions and Perspectives", the forum explored reforms undertaken to the German social system in recent years in numerous lectures and discussion groups. In addition to renowned representatives from the academic world, including Dr. Andreas Wörgötter (OECD), Prof. Dr. Wolfgang Wiegard (University of Regensburg; a former member of the German Council of Economic Experts), and Prof. Axel Börsch-Supan, PhD (Mannheim Research Institute for the Economics of Aging), ZEW was extremely proud to welcome the former Federal Chancellor Gerhard Schröder as a speaker to the forum in Mannheim.

In 2010 the lecture series "First-Hand Information on the Current Economic Policy" (Wirtschaftspolitik aus erster Hand) once again featured a high-profile speaker from the world of government: Federal Minister of Finance Dr. Wolfgang Schäuble, who spoke on the subject of fiscal and financial market policy in the wake of the economic crisis. As part of the lecture series entitled "Mannheim Economics and Currency Dialogues" (Mannheimer Wirtschafts- und Währungsgespräche), sponsored by the Rhine-Neckar-Mannheim Banking Association, ZEW hosted yet another highly respected speaker: Prof. Dr. Axel A. Weber, President of the Deutsche Bundesbank.

In 2010 the "ZEW Sponsors' Association for Science and Practice" again provided generous support for research projects and presentations at the Institute, such as the annual ZEW Economic Forum and the lecture series "First-Hand Information on the Current Economic Policy" (Wirtschaftspolitik aus erster Hand).

The staff members of ZEW deserve very special thanks. ZEW's success would not be possible without their dedication. We would also like to express our gratitude for the financial support received from the state of Baden-Württemberg, the federal government, and from the ZEW Sponsors' Association. In addition, we owe a great debt of thanks to the members of the Supervisory Board, the Scientific Advisory Council, and our research associates. They all have made a significant contribution to the outstanding reputation achieved by our research institute. Not least, we would also express our thanks to our clients for the large numbers of research projects they have entrusted to us.

Mannheim, June 2011



Prof. Dr. Dr. h.c. mult. Wolfgang Franz,
President and Director of Science and Research



Thomas Kohl,
Director of Business and Administration

Compete in Eco

ABOUT US

- ▶ THE INSTITUTE
- ▶ THE RESEARCH UNITS

nce
nomics



ZEW IN BRIEF

The Centre for European Economic Research (ZEW) in Mannheim is an economic research institute and a member of the Leibniz Association (WGL). Under the leadership of Prof. Dr. Dr. h.c. mult. Wolfgang Franz, President of the Institute, and Thomas Kohl, Director of Business and Administration, ZEW employs a staff of 172 in five research departments, two research groups, and three service departments. ZEW is one of Germany's leading economic research institutes and enjoys a strong reputation throughout Europe.

Mission and Research Objectives

ZEW pursues four key objectives:

- To conduct research of the highest quality
- To provide exceptional economic policy advising
- To train young economists
- To inform the professional and lay public

These objectives are interconnected and can only be accomplished as a whole. The quality of the Institute's policy advising is founded on academic excellence. First-class research depends on the ongoing development of our staff. Staying in close contact with the professional and lay public enables us to constantly keep our research and advice up to date. This ensures that our work is highly relevant for the economic challenges of our time.

ZEW's guiding mission is to study the "optimal performance of markets and institutions in Europe". Our research helps to elucidate how the political and institutional environment for market activities should be best organised in order to promote the sustainable and efficient development of Europe's knowledge-based national economies.

This mission directs the research activities pursued at ZEW, e.g.:

- The integration of the European domestic financial market
- Sustainable and efficient strategies for international climate policy
- Goal-directed national and European tax policy in the face of increased factor mobility
- Employment and income security in the face of higher demand for skilled labour
- Economic development via business start-ups and innovation against the backdrop of global competition
- The efficient use of new information technology
- Institutions and functional income distribution

From a methodological perspective, the Institute's research profile is shaped by theory-based approaches to empirical economic research. Our expertise lies particularly in the area of applied microeconometrics and in computable general equilibrium models.

A key feature of research conducted by ZEW is its combination of macro- and microeconomic methods. When required by the problem at hand, we adopt an interdisciplinary approach.

Funding

ZEW's total budget in 2010 was 12 million euros. The Institute's most important financial source with 53 per cent was the basic funding received from a partnership between the state and federal governments. These funds are used predominantly for economic research which is not tied to an order and for infrastructure.

Another financial source for ZEW is the third-party funding. More than 40 per cent of the Institute's financial resources are obtained from research projects for third parties, including the European Commission, ministries and institutions of the federal and state governments, as well as companies, associations, and local authorities.

Organisation

ZEW is subdivided into the areas "Research" and "Service". Five research departments and two research groups are responsible for research, advice, and qualification at ZEW. Research groups are smaller units with a strong cross-sectional character.

The research units are supported by three service departments. The service department "Information and Communication" is responsible for public relations. The unit "Knowledge Transfer and Qualification Programmes" carries out an extensive seminar programme. The service department "General Services" takes over cross-departmental tasks in the fields of human resources, finance and accounting, IT, purchase, media design, sales, and event management.

There are several committees which influence ZEW's strategic development. The Supervisory Board consists of eleven members from the worlds of politics, business, and academia, and has a monitoring as well as advising function. The Scientific Advisory Council, consisting of representatives from the worlds of academia and business, actively follows and evaluates ZEW's work. The ZEW Sponsors' Association for Science and Practice (Registered Society) is conceptually and financially supporting ZEW's work. The firms belonging to this association facilitate a constant exchange between the domains of research and practice.

Human Resources

ZEW relies on a flexible staffing concept. Nine out of ten researchers are employed on a temporary basis. The Institute places a strong emphasis on promoting young researchers. The average researcher's age is 32.

In order to ensure a high standard of excellence in research and economic policy advising, ZEW promotes the ongoing development of its staff by granting periods of paid release from normal project work. These sabbaticals can be used for postgraduate doctorates, postdoctoral theses, or fellowships at renowned universities and research institutions. Typically, graduates work at ZEW for a period of five years, earn their doctoral degree, and then pursue a career mostly in the private sector or at government institutions. This turnover facilitates the direct transfer of knowledge to the private sector and economic-policy institutions. At the same time, this encourages the continuous flow of new knowledge from universities to ZEW, which prevents stagnation.

On the other hand, ZEW is also highly reliant on the knowledge and experience of its long-term staff. Senior researchers are responsible for supervising their younger counterparts, and

are also in charge of research and advising projects in collaboration with the heads of the Institute's research units.

The Institute's research associates support ZEW's work with a great deal of dedication and function as academic advisors to young researchers. Numerous visiting scholars also play a vital role at ZEW.

Networking with University Partners

Networking in the areas of research and advising between ZEW and universities rests on three pillars: permanent structures, collaborative projects, and individuals.

Permanent structures are the centrepiece of ZEW's university network. The Institute closely collaborates with universities in the region. Contracts with the universities of Mannheim and Heidelberg facilitate the common use of resources and collaboration in the area of doctoral programmes. The joint appointment of junior professors will also soon take place. We have already implemented first junior professorships with WHU – Otto Beisheim School of Management and Heidelberg University. The University of Mannheim is actively involved in the staffing of research units heads at ZEW; the University sends faculty members to serve on ZEW's search committee.

ZEW has also developed the ZEW Doctoral Studies Network, which provides professional development opportunities for doctoral students. This programme integrates young researchers into a variety of domestic and international doctoral programmes.

ZEW actively seeks the support of its university partners for advising projects as the need arises. These partners are integrated into projects under contractual agreements. ZEW frequently collaborates with universities within the scope of projects funded by research foundations and institutions. The Institute is involved in two collaborative research centres titled "Governance and the Efficiency of Economic Systems" and "Political Economy of Reforms", one research group, and two priority programmes of the German Research Foundation (DFG).

Furthermore, ZEW is highly networked to universities through individuals. The Institute is currently collaborating with more than 40 research associates. These associates, who are for the most part professors at German and international universities, play a regular part in the work of the research units. Conversely, many ZEW researchers are engaged as lecturers at universities. The ZEW Visiting Researchers Programme and the ZEW Short-Term Exchange Programme promote scholarly exchange by bringing academics to the Institute for short-term or extended research residencies.

Outstanding Characteristics of the Institute

Although ZEW is closely networked with universities and applies university level standards in its research activities, our work is clearly differentiated from economics research conducted at universities.

- ZEW sets broader goals than economics faculties. Policy advising and knowledge transfer have considerably higher significance for us.
- The size of ZEW and the broad spectrum of topics studied by our research units permit us to take on comprehensive and complex economic advising projects – including, for example,

an evaluation of the effects of recent reforms to Germany's unemployment benefit system (the so-called Hartz IV reforms).

- ZEW's infrastructure and resources make it possible to develop, maintain, and offer complex analytical models, such as the European Tax Analyzer or the PACE computable general equilibrium model. By the same token, we are able to undertake long-term surveys which university faculties would not be in a position to sustain, such as the ZEW Financial Market Test and the Mannheim Innovation Panel.

On account of the Institute's close integration of policy advising and economic research as well as its highly flexible staff model, ZEW has set a unique precedent among German economic research institutes. ZEW has also attained a special status thanks to its fields of study and research objectives.

No other economic research institute engages in the study of the following research subjects with the same degree of comprehensiveness:

- International financial markets
- European research and innovation policy
- International comparisons of corporate taxation
- Economic outcomes of non-cognitive abilities
- Business start-ups
- Use of information and communication technology by employees and companies

No other economic research institute in Germany:

- Systematically integrates macro- and microeconomic perspectives in all of its research units
- Offers a comprehensive seminar programme for the advanced education of specialised and managerial staff, as well as the general public, in order to promote knowledge transfer

QUALIFICATION OF STAFF

Encouraging the development of young academics is a core aim of ZEW. The Institute supports the professional growth of its staff at all levels with a broad range of educational measures.

Professional development is firmly anchored in our goal system as well as in our organisational processes. The ZEW qualification programme is based on both internal and external educational offerings.

Essential instruments for qualifying our young scientific staff are:

- Participation in doctoral programmes and courses provided by universities
- ZEW qualification programme "Econometrics"
- Periods of paid release – "Sabbaticals"
- Seminars on scientific working methods and project management
- Mentoring by head of unit, senior researchers, and research associates

Doctoral Education

Graduate education is the key area in which young academics are encouraged and supported at ZEW. Two-thirds of ZEW's scientific employees are working on their doctoral dissertations. We currently employ more than 70 doctoral candidates. In order to accommodate a wide range of research topics and personalities, doctoral education is carried out in an open framework.

University graduates who begin their research career at ZEW can attain their doctoral degree by following one of two pathways:

- By working as a full-time staff member in a ZEW research unit within the framework of ZEW's in-house PhD programme
- By participating in the ZEW Doctoral Studies Network (ZEW DocNet)

Regardless of the path chosen, clear milestones help to insure that our doctoral candidates make steady and rapid progress. Successful completion of a doctoral degree does not take longer at ZEW than at most German universities. Our doctoral candidates require on average less than five years to obtain a PhD.

ZEW's in-house PhD programme involves the writing of a doctoral dissertation based on collaborative projects. In tandem with experienced economists and the heads of the research units, young researchers develop a topic for their doctoral dissertation based on ongoing project work.

Once doctoral students are matched with a research topic, a dissertation mentor is sought out at a German or foreign university. The ongoing development of the dissertation is based on the regulations for doctoral studies at the university in question. The candidate also has the opportunity to enrol in doctoral courses at the university.

In 2006 the Institute launched a second pathway for PhD students: ZEW DocNet. This international network links ZEW with graduate programmes that are ambitious in their content and scope. Collaboration with outstanding doctoral programmes also helps the Institute to attract promising academic talents. Those who choose the ZEW DocNet pathway have to apply first for admission to the graduate school of a participating university. Depending on the structure of the respective doctoral programme, doctoral students are invited to apply as early as possible for a research position in one of ZEW's research units. In the majority of doctoral programmes the time most fitting seems to be, at the latest, the end of the first or the beginning of the second year. PhD students may then pursue their project work either in part or entirely at ZEW.

ZEW DocNet is still being developed, but already accounts for eight internal and five external doctoral candidates. Over the next few years, it will take on even greater importance in ZEW's doctoral education programme.

Qualification Programme

ZEW helps to advance careers of its staff with a qualification programme. This programme, which is financed through a special qualification fund, supports superior scientific work in a number of ways. The research sabbaticals funded under the programme, for example, free up time for researchers to pursue work independent of their project responsibilities at ZEW.

Activities supported by the qualification fund include:

- Release from project responsibilities at ZEW to complete one's own research
- Longer residencies at German and foreign research institutions
- Participation in seminars, doctoral colloquia, and summer schools

All research staff have access to ZEW's internal professional development programmes. There are courses in econometrics, computing, foreign languages and communications, as well as leadership skills.

ZEW familiarises students with empirical research methods. It employs a large number of interns and research assistants from nearby universities. The Institute offers assistants and interns a first opportunity to apply theoretical and methodological knowledge acquired in school to actual research practice. Often, bachelor and master thesis projects emerge from such work, which may be supervised by ZEW research staff members.

Professional Development for Non-Scientific Employees

ZEW takes the professional development of its non-scientific employees just as seriously as the training of its young researchers. We offer numerous opportunities for continuing education, primarily in the form of educational programmes related to an employee's current area of work.

Popular training programmes involve the fields of law, accounting, bookkeeping, management, and computer skills. There is also an ongoing continuing education programme in English language skills.

As an employer, ZEW always maintains up to five trainee positions in the areas of administration and service. Personal advisors guide trainees during their professional training period.

ECONOMIC POLICY ADVISING

One of ZEW's guiding objectives is to provide economic policy advising based on rigorous economic research. We advise actors from the worlds of politics and administration at the European level as well as in Germany at federal and state level. We also advise associations and international organisations, as well as companies and foundations.

Channels for Policy Advising

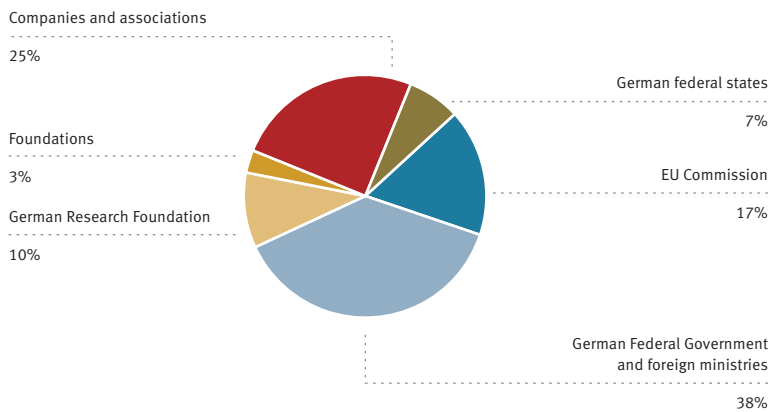
We are using different channels for economic policy advising:

- Scientific studies and reports on behalf of public authorities
- Participation of our researchers in parliamentary hearings, formal consultations with parliaments, ministries, and the European Commission, as well as memberships in political advisory boards
- Informal consultations with representatives of the European Commission, ministers and staff of various administrations, as well as parliamentarians
- Participation in public debates on economic policy issues in the media

Clients

Over the past few years, ZEW managed to extend its importance in the field of economic policy advising. The German government and international ministries are ZEW’s most important clients for advising services, followed by companies and associations, and the European Commission (see figure).

THIRD-PARTY FUNDING, 2010 – CLIENTS AND FUNDING INSTITUTIONS



Quality Management

Our integrative personnel policy guarantees the scientific rigor and quality of our advising services. At ZEW, policy advising is not the purview of a specialised team of “advisors”, but is instead the responsibility of every researcher.

The same individuals at the Institute are responsible for the implementation of studies for policy advising and the drafting of papers for publication in refereed scientific journals. The reciprocal ties between policy advising and economic research are guaranteed by our staff organisation. The success of this approach at ZEW is amply demonstrated by the high percentage of researchers who publish in refereed journals. This approach also ensures the high scientific quality of studies and assessments undertaken for economic actors.

Most research projects financed by third-parties are acquired through competitive bidding. From the very beginning, this facilitates the external assessment of the quality of the research questions, methodological approach, and the expected results. In many cases, there is a rigorous acceptance process at the end of a project. Frequently, project findings are presented at scientific workshops.

Experienced and recognised researchers direct and support ZEW's project teams. ZEW's senior researchers often take on this role. Those responsible for leading a project are actively involved in practical research work and can thus ensure the quality of research being performed. Young researchers receive competent mentoring while conducting their work.

The research director and research unit heads are directly involved in project work. They are available to researchers and project directors for consultation. Often, research associates and other external researchers participate in projects. In this way, our own research work is continuously evaluated and challenged from outside the Institute.

KNOWLEDGE TRANSFER

At ZEW, we view knowledge transfer as a reciprocal process of communication at the national and European level. On the one hand, we contribute to the discussion of economic issues and policy. On the other hand, the research, advising, and educational activities at ZEW are enriched by our engagement in the worlds of academia, business, and politics. In our view, knowledge transfer is not a one-way street.

Excellence in economics has a number of dimensions at ZEW, including: the publication of research findings in leading scientific journals; national and international networking with cutting-edge research establishments; ongoing knowledge exchange through conferences and workshops, as well as the creation and maintenance of unique databases.

The knowledge provided by ZEW is informative, timely, and geared for specific target groups. Our primary target groups are economists and researchers at universities and research institutes worldwide, the media, specialised employees and managers in the private sector, government agencies and associations, as well as citizens with an interest in economics and social sciences.

ZEW Publications

The publication of research findings in recognised international journals, which have an external referee process, remains the core indicator of the scientific output of a research institution. For this reason, success in publication is a fixed component of ZEW's goal system.

In terms of publications, ZEW is a leading economic research institute in Germany:

- Between 2008 and 2010, a total of 250 papers written by ZEW researchers were accepted for publication in refereed journals.
- In recent years, ZEW has secured an average of 0.78 acceptances per full-time researcher per year.

ZEW has significantly increased its publication output in recent years. According to quality-weighted independent assessments, the number of refereed articles published by ZEW researchers rose by 73 per cent between 1997/1999 and 2003/2005. Since 2000, the Institute has doubled its annual publication output per researcher.

Our publication success is the result of the work of many researchers, not just a few leaders in the field. In 2006, for example, one of every three ZEW researchers published a paper in an

SSCI journal. The Institute thereby achieved a second place rank among the economic research institutions affiliated with the Leibniz Association.

Every year ZEW publishes more than 100 ZEW Discussion Papers, which represent the central medium for the dissemination of our research findings. Our discussion papers undergo a thorough review process prior to publication. They are published on our homepage and on leading scientific data bases. ZEW Discussion Papers attract wide attention in the economics community, as demonstrated by high download numbers at RePEc, a leading international database of economic publications.

To make ZEW Discussion Papers understandable to the general public, non-technical summaries in German and English are a standard part of the publication process. These summaries often serve as the basis for press releases and news items published by ZEW and in external media channels.

ZEW maintains two book series for the publication of its research work: ZEW Economic Studies (publisher: Physica/Springer) appears in English, while ZEW Wirtschaftsanalysen – Schriftenreihe des ZEW (publisher: Nomos) is published in German.

The Institute's periodic publications and research reports have a wide readership, including academics and students from many disciplines, specialists, and managers in a variety of economic sectors, as well as citizens with a general interest in economic policy. The publications and research reports contain selected findings from our research and policy advising activities, discuss survey results and our database analyses, and provide information concerning conferences, meetings, and ZEW seminars.

Databases

In most cases, individual level data form the basis for empirically oriented research work at ZEW. The Institute improves opportunities for empirical research in three ways:

- with data collected in-house;
- with data gathered in conjunction with other research institutions;
- through the exploitation of existing data sets for economics research.

ZEW maintains the necessary infrastructure for the collection, processing, and in-house assessment of data according to recognised scientific standards. After processing data sets to be user-friendly, we make them available to the professional public whenever possible.

An example of data collection at ZEW is the KfW/ZEW Start-Up Panel. This recurrent survey is the basis for a unique database in Germany regarding start-up activities and business dynamics. Initiated in 2008, the panel is configured to continue through 2013.

Another example of data collection is the TransportmarktBarometer. Over 300 selected experts in the freight shipment and transportation industries in Germany participate in this panel survey. It gathers expert opinion on a quarterly basis regarding transportation cost trends as well as specialised topics with relevance for research at the Institute.

ZEW is also participating in the ongoing development of large data sets which are assembled in collaboration with other research institutions. A few examples:

- We are collaborating with the Socio-Economic Panel Study (SOEP) in Berlin in order to measure the development of cognitive and non-cognitive skills over an individual's life.

- We are developing questionnaire items for the National Educational Panel Study (NEPS) for research in the areas of secondary and tertiary education.

Existing microdata sets are also used for the Institute's research. In close collaboration with the Research Data Centre (FDZ) at the Institute for Employment Research (IAB) in Nuremberg, ZEW has undertaken pioneering work that investigates linked business and employee data. In the course of research conducted by ZEW to evaluate the effects of recent reforms to Germany's unemployment benefit system (the so-called Hartz reforms), administrative data maintained by the German Federal Employment Agency were systematically utilised for research purposes for the very first time.

ZEW provides researchers at academic and non-academic research institutions with access to some databases maintained by its research units. The data are only provided for research purposes and, to ensure the protection of privacy, are encoded and anonymised. A data-sharing fee is charged to cover ZEW's expenses. Access to the following databases is offered:

Mannheim Innovation Panel (MIP)

The Mannheim Innovation Panel is a database with information on the innovative activities of companies in Germany, collected on the basis of an annual company survey.

Contact: Dr. Sandra Gottschalk (gottschalk@zew.de)

Mannheim Enterprise Panel (MUP)

The Mannheim Enterprise Panel covers firm-level data for analysing business start-ups, growth, and insolvencies, including data from some 5.9 million West German and 1.4 million East German enterprises.

Contact: Daniel Höwer (hoeuer@zew.de)

Business Survey in the ICT-Related Services Sector

The Business Survey in the ICT-Related Services Sector is a quarterly survey of ICT-intensive and knowledge-intensive service providers on their current and expected economic situation.

Contact: Miruna Sarbu (sarbu@zew.de)

ZEW Financial Market Survey

The ZEW Financial Market Survey is a monthly survey of experts on expectations regarding economic as well as international and national financial market trends. The survey is conducted in Germany, Switzerland, Austria, as well as Central and Eastern Europe.

Contact: Prof. Dr. Michael Schröder (schroeder@zew.de)

KfW/ZEW CO₂-Panel

The KfW/ZEW CO₂-Panel is a survey of companies, experts, and researchers regarding the current situation and expected developments in the EU emissions trading market. The survey is conducted in cooperation with the KfW Banking Group.

Contact: Prof. Dr. Andreas Löschel (loeschel@zew.de)

Cooperation Partners

Intense cooperation with research institutions in Germany and abroad is a decisive factor in the success of our economic research. Network relations are often a prerequisite for the successful completion of advising projects for international clients.

We cultivate our ties with universities, research institutes, and organisations both nationally and internationally. We place great value upon the interdisciplinary nature of our network as well as its international scope. ZEW has distinguished international collaborative partners, primarily in Western Europe, but increasingly in Eastern Europe as well as overseas. One example is the collaboration between ZEW and the University of Chicago. Economics Nobel Prize winner Prof. James J. Heckman, PhD, provides young researchers at ZEW with the opportunity to work on his research team in the field of education economics. In Asia, we are in the process of establishing partnerships with different universities.

ZEW engages in particularly close cooperation with universities in the region. We have a collaborative agreement with the University of Mannheim for the shared use of resources, as well as with the universities of Heidelberg and Mannheim for the joint appointment of professors. Furthermore, we have jointly appointed a research unit head together with Heidelberg University.

Our collaborative network is decentralised in its organisation. It is guided by the specific needs of our researchers. International collaboration frequently arises in the case of research questions that involve international comparisons. Additional cooperative arrangements serve the purpose of professional development and scholarly exchange. The ZEW Visiting Researchers Programme and the ZEW Short-Term Exchange Programme are especially significant in this regard.

Participation in Scientific Conferences

Another important means of establishing cooperative ties is scientific exchange through conferences and workshops. In order to effectively communicate its specific expertise, ZEW organises numerous internationally recognised events. Our researchers regularly present their work for discussion to the professional public at national and international conferences.

ZEW's high level of prominence at national and international conferences is equalled by hardly any other German economic research institute. Currently, our researchers make more than 425 presentations every year at scientific conferences. Participation in international conferences rose significantly in recent years. The Institute promotes the success of its staff at conferences by subsidising costs and freeing up time for attendance. In addition, ZEW holds specialised seminars for its staff to teach effective presentation techniques and rules of conduct for participating in international events.

International conferences also present an opportunity for ZEW to make itself better known as an institution. For this reason, we maintain an information booth at important national and international meetings. At the ASSA meetings in the US, for example, we actively recruit young research talents.

Events at ZEW

ZEW promotes dialogue with research institutions, businesses, government agencies, organisations, and the general public through the organisation of numerous events. ZEW's research units stage about 30 scientific conferences and workshops every year. These events, alongside the participation of ZEW researchers in conferences around the world, are important instruments for promoting exchange and collaboration between ZEW's professional staff and researchers throughout Germany and the world.

Beside scientific events, ZEW is regularly organising events for the interested public. This includes particularly:

- First-Hand Information on the Current Economic Policy (Wirtschaftspolitik aus erster Hand)
- Mannheim Economics and Currency Dialogues (Mannheimer Wirtschafts- und Währungsgespräche)
- ZEW Economic Forum (ZEW Wirtschaftsforum)

Speakers at "First-Hand Information on the Current Economic Policy" 2007–2010:

- Dr. Wolfgang Schäuble, German Minister of Finance
- Dr. Angela Merkel, German Chancellor
- Dr. Jürgen Hambrecht, Chairman of the Management Board, BASF SE
- René Obermann, CEO, Deutsche Telekom AG
- Dr. Bernhard Heitzer, President, Federal Cartel Office
- Peer Steinbrück, German Minister of Finance
- Hartmut Mehdorn, Chairman of the Management Board, Deutsche Bahn AG
- Prof. Dr. Dr. h.c. Hans-Jürgen Papier, President, Federal Constitutional Court of Germany
- Prof. James J. Heckman, PhD, University of Chicago, Nobel Prize winner

Public Relations

ZEW caters to the media and general public with a comprehensive range of regularly updated online resources. Visitors can read current news items and download a large number of research papers at the Institute's website. Our electronic newsletters are sent to 5,000 subscribers each month. They provide a concise report of new research findings, projects, publications, events, and staff news in German and English.

Our special web platforms are a particularly useful service. They are arranged by topic and organise projects, publications, reports, press releases, and contact information concerning current issues in one place. This makes researching information on a specific topic much easier. Separate web platforms exist for ZEW's core research topics, e.g. climate policy, education, innovation, and business taxation.

We respond promptly to the numerous inquiries addressed to the Institute every day. Similarly, we approach a number of actors – particularly in the media – in order to obtain a multiplier effect for the Institute's expertise. In addition, we release some 105 press releases and hold twelve press conferences every year in order to keep the media abreast of the Institute's latest research findings and to participate in the ongoing economic policy debate.

In the area of knowledge transfer, ZEW caters to the interests of particular target groups. Well-maintained contact lists facilitate targeted communications. Professionally designed documents based on ZEW's corporate design promote the recognition value of ZEW's informational media. A reader-friendly layout, attractive illustrations, and informative graphics strengthen the acceptance of ZEW's media by our target groups.

High Quality Seminars for External Participants

The "Knowledge Transfer and Qualification Programmes" service department develops and organises high-quality seminars. It is a unique entity in the German research landscape. Every year our seminars attract over 700 participants. ZEW seminars provide practical and scientifically rigorous professional development. ZEW researchers and experts from organisations and businesses collaborate closely in order to insure that the seminars fulfil the highest quality standards. Our range of seminars clearly sets itself apart from that of other German providers of continuing education.

The department offers programmes in four different formats:

- Annually, some 40 expert seminars are offered to participants from the worlds of academia, business, and politics. Alongside the strong demand for seminars on macro- and microeconomic topics (e.g. financial markets), ZEW's methodological expertise (e.g. in econometrics) is also highly sought after.
- Some 30 seminars are directed each year at businesses and public institutions who wish to offer their employees individualised professional development training.
- The symposia for practitioners serve to promote dialogue between economists and professionals in the worlds of business and politics. One example is the annual Mannheim Corporate Tax Day, where tax experts meet with business representatives.
- Seminars for in-house professional development are provided to ZEW researchers. These seminars teach techniques for scientific work, such as how to write for the press and make effective presentations.

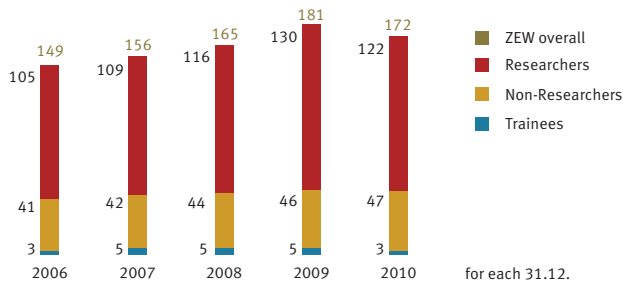
STAFF REPORT AND FINANCIAL STATEMENT

Staff Report

At the end of 2010, ZEW had a staff of 172 employees (2009: 181). Of this number, 122 were engaged in research (2009: 130). In the period covered by this report, 18 members of the research staff departed from ZEW after successfully completing their activities and/or degrees. Nearly 70 per cent of these departing staff members went on to work for universities, research establishments, or public institutions and approximately one quarter for companies or associations. Figure 1 displays ZEW's staff development over time. ZEW's research units have traditionally been dominated by staff members with degrees in economics. The average age of ZEW researchers is 32, reflecting ZEW's wealth of young talent and ambition. Across all units, the average staff age is 35 (see Figure 2). In accordance with ZEW policy, the vast majority (85 per cent) of research staff have fixed-term contracts. A similar situation prevails in the service units. The overall share of fixed-term labour arrangements is more than 65 per cent.

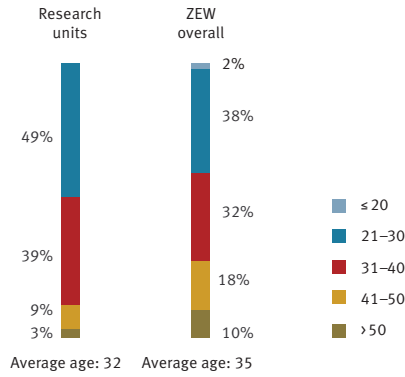
At the end of 2010, three service-unit trainees were employed by the Institute; these trainees were pursuing degrees in the following fields: Office Administration; Office Administration with Additional Qualifications in English and Multimedia; Informatics. ZEW makes additional contri-

1] STAFF DEVELOPMENT



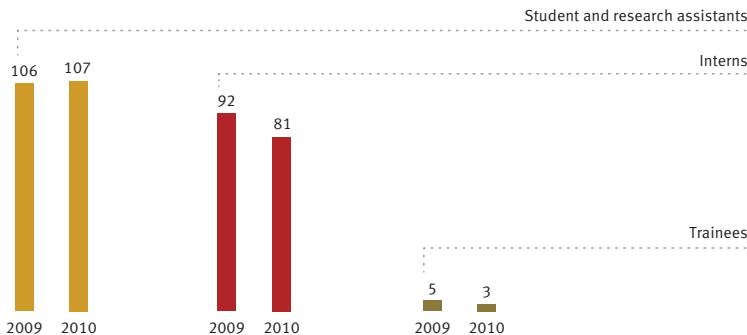
butions to education through the hiring of interns as well as student and research assistants. Interns receive significant support and mentorship prior to embarking on a career. Over the past year, 81 interns were engaged at ZEW (see Figure 3). Student and research assistants primarily come from the universities of Mannheim and Heidelberg as well as other universities in the Rhine-Neckar metropolitan region. At ZEW, they have an opportunity to obtain their first professional experience by working in the research or service units. In this way, ZEW also makes early first contact with promising young academics. In 2010, 107 students were engaged as assistants at

2] AGE STRUCTURE



ZEW. Some 11 per cent were of foreign nationality (2009: 14 per cent). Because of past positive experiences, the Institute has intensified the involvement of independent collaborators in project work. A large number of research associates from a wide range of domestic and foreign universities support ZEW's research with a great deal of commitment. These research associates play a key role in the education and mentorship of research staff; the development and maintenance of ZEW's research areas; the establishment of contact with national and international partners; as well as the procurement of third-party funding. Over the period covered by this report, a number of visiting researchers, both from Germany and abroad, were engaged for varying lengths of time in ZEW research. The goal of these research and work residencies is collaboration on projects, as well as the exchange of knowledge and experience. The ZEW Visiting Researchers Programme and the ZEW Short-Term Exchange Programme were established to strengthen and expand international networking. Similarly, the ZEW Doctoral Studies Network supports joint ac-

3] STAFF IN TRAINING

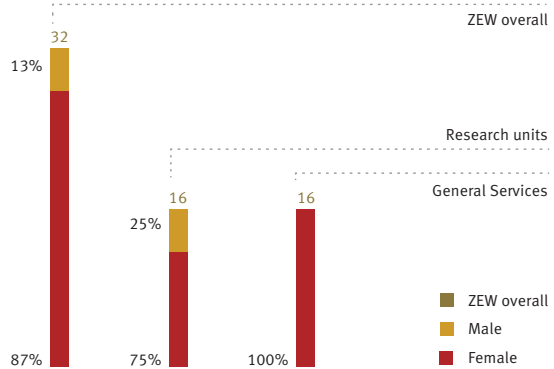


tivities with university doctoral programmes. It offers young doctoral candidates a chance to obtain rigorous training in applied empirical economics, as well as to collaborate with ZEW's experienced research staff on international projects with national and international partners. An additional form of international collaboration is the participation of external partners in cooperative activities and research projects. Within the scope of such activities, ZEW has expanded its international ties to include new contacts in China, North Africa, Australia, and New Zealand, among other places.

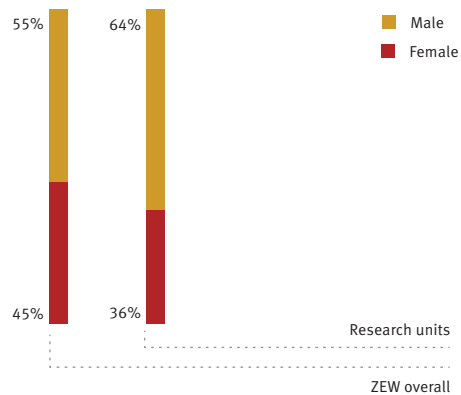
In order to ensure that the Institute's scientific work and economic policy advising fulfils the highest international standards, ZEW actively supports the ongoing professional development of its staff by means of its own qualification programme. Under this programme, staff may be temporarily released from their commitments to project work. Staff members use sabbaticals to complete their doctoral or habilitation dissertations, or to take part in research residencies at renowned foreign institutions. In 2010 15 researchers completed their doctoral dissertations, some of them summa cum laude. One habilitation was also successfully completed. At this time, there are 67 doctoral and nine habilitation dissertations in progress.

An advantage of working at ZEW that especially attracts younger researchers is the flexible scheduling of working hours. A total of 32 staff members at year's end were taking advantage of a personalised part-time schedule (see Figure 4). This represents 19 per cent of the Institute's overall staff. These flexible working hours help to promote a healthy balance between professional and family life. The working-hours policy has contributed to a rise in the share of female researchers to 36 per cent. Across all of ZEW, 45 per cent of staff are female (see Figure 5).

4] PART-TIME STAFF AT ZEW



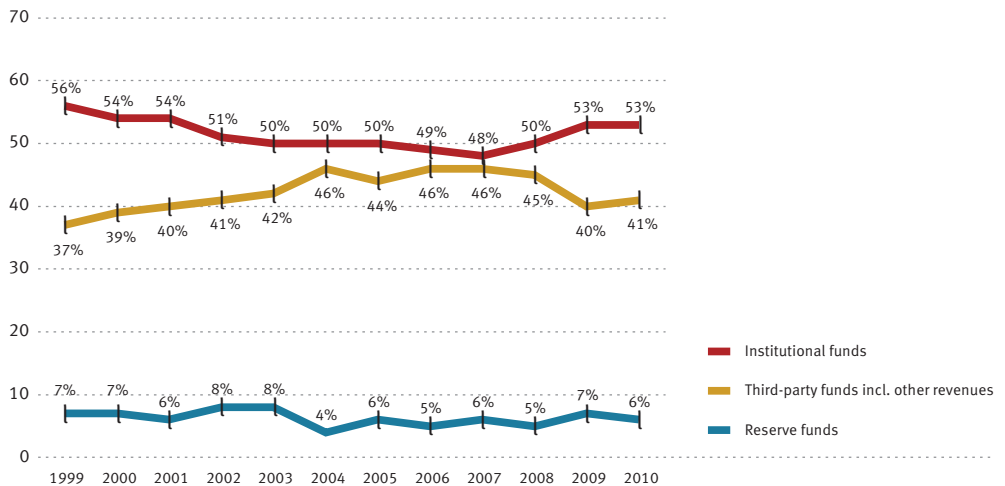
5] STAFF BY GENDER



Financial Statement

The balance sheet for ZEW’s endowment, finances, and revenues shows an overall positive picture for the fiscal year of 2010. This is particularly notable, as conditions were much more difficult in 2010 than in years prior due to the economic crisis in conjunction with increased national and international competition for third-party research funding. The share of funding that came from third parties (including other revenues) was 41 per cent in 2010 (see Figure 6). ZEW’s financial charter, which foresees the receipt of general funding for the Institute in fixed amounts, enables the designation of surplus revenues from increases in third-party funding and cost savings as “appropriated reserves”. These funds are annually budgeted and expended to develop new fields of study (e. g. the research group of Growth and Business Cycles); to examine current research topics (e. g. competition and energy policy); and to carry out in-house scientific training programmes and international conferences. The net income arises from the surplus in the profit-and-loss statement, corrected by withdrawals from “appropriated reserves” and write-offs for self-financed assets, which are shown under the entry “withdrawals from other retained earnings”. For the fiscal year of 2010, the Institute thus registered an annual deficit of 0.28 million euros and a net income of 0.69 million euros (see Figure 7). The executive management will recommend to the Supervisory Board that this net income be placed into “appropriated reserves” to be predominantly used for internationalisation and the further qualification of staff members. As shown in Figure 8, the total capital is currently 12.48 million euros. The cash and equivalents balance demonstrates good liquidity.

6] SOURCES OF ZEW FUNDING, 1999–2010



To summarise, the following developments in ZEW's financial position were of significance in the fiscal year of 2010: Total revenues were higher in 2010 (15.60 million euros) than in the year prior (15.09 million euros). This is primarily attributable to higher gross turnover. Net turnover (gross turnover minus third-party services) was 5.03 million euros, higher than in the previous year (4.73 million euros). Total expenses were 15.88 million euros, higher than last year's figure of 15.65 million euros. This increase is primarily attributable to higher staff expenditures, which rose from 9.75 million euros in 2009, up to 10.01 million euros in 2010. In 2010 ZEW's third-party funding amounted to 6.3 million euros (see Figure 9).

7] ZEW PROFIT-AND-LOSS STATEMENT*

(in K euros)	2007	2008	2009	2010*
Institutional funds	7,120	7,430	7,600	7,766
Joint Initiative for Research and Innovation Funding	261	566	848	794
Third-party funds (turnover, inventory changes, subsidies)	6,366	6,422	5,819	6,281
Other business revenues, financial profit	629	761	528	440
Income from the reversal of the special item for contributions to fixed assets	347	303	295	320
Total revenues	14,723	15,482	15,090	15,601
Staff expenditures	8,795	8,695	9,753	10,010
Third-party services	1,585	1,573	1,069	990
Other operating expenditures	4,004	4,202	4,287	4,081
Asset write-offs	351	303	295	320
Allocations to special items for contributions to fixed assets	355	198	240	468
Other taxes	2	3	5	11
Total expenses	15,092	14,974	15,649	15,880
Profit/loss for the financial year	-369	508	-559	-279
Withdrawals from appropriated reserves	889	806	1,161	967
Withdrawals from other retained earnings	4	-	-	-
Net income	524	1,314	602	688

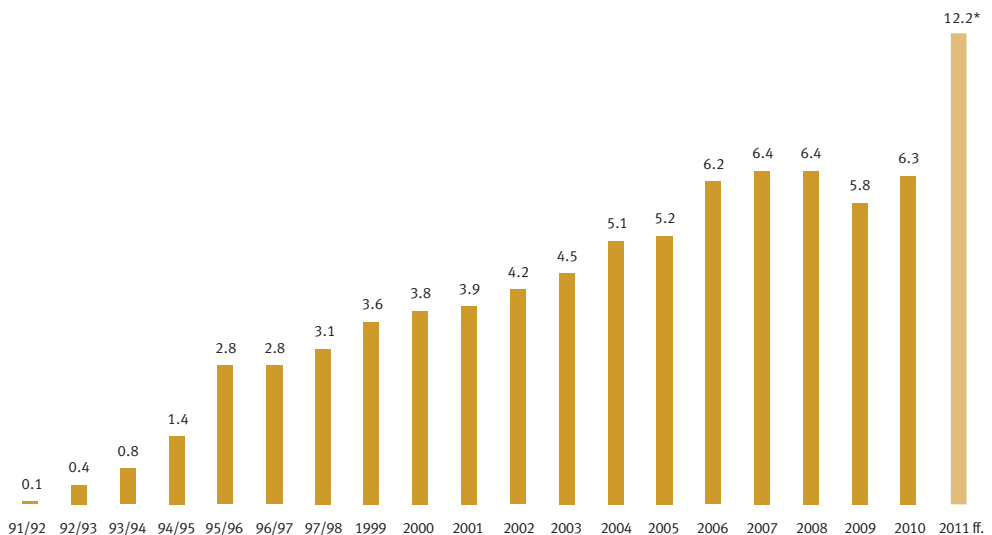
* Tentative figures

8] ZEW BALANCE SHEET AS OF 31.12.2010*

	31.12.2009 in K euros	31.12.2010 in K euros		31.12.2009 in K euros	31.12.2010 in K euros
ASSETS			LIABILITIES AND EQUITY		
Intangible assets	43	40	Share capital	26	26
Real estate	2,240	2,313	Appropriated reserves	2,435	2,071
Equipment	539	616	Other reserves	2,170	2,169
			Net income	602	688
Fixed assets	2,822	2,969	Shareholder's equity	5,233	4,951
			Untaxed reserves	627	774
Stocks	2,193	2,902	Reserves	2,451	2,652
Receivables	1,146	2,253	Advances	2,147	2,983
Investments/ cash at banks	5,000	4,256	Liabilities	792	1,118
Current assets	8,339	9,411			
Prepaid expenses	89	101	Outside capital	5,390	6,753
Total	11,250	12,481	Total	11,250	12,481

* Tentative figures

9] DEVELOPMENT OF ZEW THIRD-PARTY FUNDING (BRUTTO IN MIO. EURO)



* Based on current assignments

RESEARCH PROGRAMME
STRENGTHENING EFFICIENCY AND COMPETITIVENESS
IN THE EUROPEAN KNOWLEDGE ECONOMIES (SEEK)



The state government of Baden-Württemberg is financing a landmark project at the Centre for European Economic Research (ZEW) in Mannheim to strengthen the economic top level research. The five-year research programme “Strengthening Efficiency and Competitiveness in the European Knowledge Economies” aims to expand ZEW’s position in the international research landscape, even beyond the termination of the programme. This aim is to be reached through international cooperation in research projects and conferences, economic policy advising, and accompanying measures of scientific administration. The economies in the European Union will face great challenges during the coming years. Apart from implementing an exit strategy which solves the problems created by the financial crisis, the growing internationalisation of markets, especially the increasing fragmentation of the value-added chain, the demographic development, and global climate change present key problems. An essential prerequisite for meeting these challenges is the resource knowledge. Knowledge is a central strategic factor for the efficiency and competitiveness of European economies. It is essential for the successful use of all other resources, such as labour, capital, energy, and natural resources as well as for innovation as driver of growth and productivity. These facts were taken into account when devising the (revised) Lisbon Strategy and also influenced new principles following the strategy, laid down, for example, in the Commission Working Document of November 24, 2009 on the “future EU 2020 Strategy”. However, the European Union still has a long way to go to reach its aim of making the European Union “the world’s most dynamic and competitive economy”. The research projects of the SEEK programme are designed to suggest ways to reach the aims of the Lisbon Strategy and to accelerate this development in the European Countries. Within the framework of the programme, empirical research work is conducted in the field of efficiency and competitiveness of the European knowledge-based economies. Researchers investigate how the formation of human capital, IT adoption, incentives for research and development, as well as the responsible stewardship of natural resources should be best conceived to guarantee the capacity for innovation and productivity of businesses and industries with the ultimate goal of securing employment and income. Furthermore, the competitiveness of a knowledge-based economy strongly depends on well-functioning financial institutions and capital markets as well as an efficient public sector and its successful interaction with the private sector. Finally, the SEEK programme aims at achieving an improved understanding of the mechanisms that support economic stability in an increasingly connected global economy. The programme includes processes of knowledge generation, the diffusion and adoption of knowledge, the efficient use of knowledge and their effects on economic key factors such as framework conditions necessary to strengthen the efficiency and competitiveness of knowledge-based economies.

Work on the research programme SEEK started in the beginning of August 2010. As part of a competitive procedure, more than 3,000 international researchers were asked to take part in the first call for proposals for SEEK research projects in close cooperation with ZEW researchers. The research projects are awarded via a competitive procedure, which guarantees highest scientific

quality of research proposals. A Scientific Board consisting of leading international researchers evaluated 23 international cooperation projects. After a thorough review process, nine projects were approved by the Scientific Board.

1. Product Innovation Under Uncertainty – The Effect of Dynamic Resource Allocation

Research Team:

- Dr. Christian Rammer, Centre for European Economic Research (ZEW), Department of Industrial Economics and International Management
- Ronald Klingebiel, PhD, Warwick Business School, The University of Warwick
- Associate Prof. Ron Adner, PhD, Tuck School of Business at Dartmouth (Tuck)

2. The Research Use Exemption from Patent Infringement – Boon or Bane?

Research Team:

- Dr. Diana Heger, Centre for European Economic Research (ZEW), Department of Industrial Economics and International Management
- Associate Prof. Paul Jensen, PhD, The University of Melbourne, Melbourne Institute of Applied Economic and Social Research and Intellectual Property Research Institute of Australia (IPRIA)
- Prof. Elizabeth Webster, PhD, The University of Melbourne, Melbourne Institute of Applied Economic and Social Research and Intellectual Property Research Institute of Australia
- Dr. Alexandra Zaby, University of Tübingen, Department of Applied Economic Theory

3. Interaction Between Innovation and Firm Dynamics and Its Impact on Industry Structure and Economic Growth

Research Team:

- Dr. Bettina Peters, Centre for European Economic Research (ZEW), Department of Industrial Economics and International Management
- Prof. Eric J. Bartelsman, PhD, VU University Amsterdam, Faculty of Economics and Business Administration
- Assistant Prof. Dr. Sabien Dobbelaere, VU University Amsterdam, Faculty of Economics and Business Administration

4. Patent Litigation in Europe

Research Team:

- Dr. Katrin Cremers, Centre for European Economic Research (ZEW), Department of Industrial Economics and International Management
- Dr. Georg Licht, Centre for European Economic Research (ZEW), Department of Industrial Economics and International Management
- Prof. Dietmar Harhoff, PhD, INNO-tec – Institute for Innovation Research, Technology Management and Entrepreneurship, Ludwig Maximilian University Munich

- Prof. Georg von Graevenitz, PhD, INNO-tec – Institute for Innovation Research, Technology Management and Entrepreneurship, Ludwig Maximilian University Munich
- Christian Helmers, PhD, Centre of Economic Performance, London School of Economics and Political Science and Assistant Professor, Department of Economics, Carlos III University of Madrid
- Dr. Robert Pitkethly, Oxford Intellectual Property Research Centre
- Tony Clayton, Intellectual Property Office
- Assistant Prof. Cedric Schneider, PhD, Copenhagen Business School
- Nicolas van Zeebroeck, PhD, Centre Emile Bernheim, Solvay Brussels School of Economics and Management

5. How Do Banks Screen Innovative Firms?

Research Team:

- Daniel Höwer, Centre for European Economic Research (ZEW), Department of Industrial Economics and International Management
- Prof. Dr. Hans Degryse, Tilburg University, European Banking Center
- Associate Prof. Dr. Martin Brown, Tilburg University, European Banking Center
- Assistant Prof. María Fabiana Penas, PhD, Tilburg University, European Banking Center

6. Taxation and Corporate Innovation

Research Team:

- PD Dr. Friedrich Heinemann, Centre for European Economic Research (ZEW), Department of Corporate Taxation and Public Finance
- Christof Ernst, Centre for European Economic Research (ZEW), Department of Corporate Taxation and Public Finance
- Dr. Alexander Kalb, Centre for European Economic Research (ZEW), Department of Corporate Taxation and Public Finance
- Florian Misch, PhD, Centre for European Economic Research (ZEW), Department of Corporate Taxation and Public Finance
- Prof. Dr. Clemens Fuest, University of Oxford, Saïd Business School
- Associate Prof. Richard Kneller, PhD, University of Nottingham, School of Economics
- Nadine Riedel, PhD, University of Oxford, Saïd Business School
- Prof. Dr. Christoph Spengel, University of Mannheim, Department of Business Administration and International Taxation

7. Firm Behaviour Over the Product Life Cycle. Entry, Exit and Pricing Strategies on Online Price-Comparison Sites

Research Team:

- Michael Kummer, Centre for European Economic Research (ZEW), Research Group of Information and Communication Technologies
- Associate Prof. Dr. Franz Hackl, University of Linz, Department of Economics

- Prof. Dr. Rudolf Winter-Ebmer, University of Linz, Department of Economics
- Prof. DI Dr. Christine Zulehner, University of Linz, Department of Economics

8. Anticipated Technology Shocks in the European Economies

Research Team:

- Dr. Atılım Seymen, Centre for European Economic Research (ZEW), Research Group of Growth and Business Cycle
- Prof. Paul Beaudry, PhD, University of British Columbia, Department of Economics
- Prof. Franck Portier, PhD, University Toulouse I, Toulouse School of Economics

9. Induced Climate-Related Innovations, Crowding out, and Their Impacts on Competitiveness

Research Team:

- Prof. Reinhilde Veugelers, PhD, Catholic University Leuven (KU Leuven), Faculty of Business and Economics, Department of Managerial Economics, Strategy and Innovation
- Annelies Wastyn, Catholic University Leuven (KU Leuven), Steunpunt O&O Statistieken
- Hanna Hottenrott, PhD, Centre for R&D Monitoring, Catholic University Leuven (KU Leuven), Centre for R&D Monitoring, and Centre for European Economic Research (ZEW), Department of Industrial Economics and International Management
- Prof. Dr. Andreas Löschel, Centre for European Economic Research (ZEW), Department of Environmental and Resource Economics, Environmental Management
- Dr. Georg Licht, Centre for European Economic Research (ZEW), Department of Industrial Economics and International Management
- Sascha Rexhäuser, Centre for European Economic Research (ZEW), Department of Environmental and Resource Economics, Environmental Management

For further information on SEEK, please check the website: <http://seek.zew.eu>.

LEIBNIZ SCIENCECAMPUS

MANNHEIM CENTRE FOR COMPETITION AND INNOVATION (MACCI)

In collaboration with the Leibniz Association and the Faculty of Law and Economics of the University of Mannheim, ZEW is currently working to establish the Mannheim Centre for Competition and Innovation (MaCCI).

As a “Leibniz ScienceCampus”, the project is a joint initiative of a Leibniz institution (in this case, ZEW) and at least one university together with the federal government. Ultimately, Leibniz ScienceCampus aims to promote scientific excellence in Leibniz institutions and universities by creating mutually beneficial regional partnerships which other private and public third-parties may potentially join. The mandated term for a Leibniz ScienceCampus is generally seven years. The MaCCI ScienceCampus is scheduled to begin its work in early 2012.

The MaCCI ScienceCampus will aim to initiate research projects at the intersection of law and economics in the areas of competition policy, regulation, and innovation. The focus of interest is on basic, applied-theoretical, and empirical research as well as on research in comparative law and the economic analysis of law. In this way, the MaCCI ScienceCampus will serve to strengthen both the position of legal research in Germany and Europe as well as the relevance of economics for legal practice. It will offer young researchers enhanced opportunities for career advancement, and, over the long term, improve the position of participating institutions in the international marketplace for young scientific talent.

The three main research areas of the MaCCI ScienceCampus, competition policy, regulation, and innovation, have undergone significant changes during recent years, both in Germany and at the European level. At the same time, there is increasing demand for evidence-based policies. This, in turn, calls for analyses that are tailored to each individual policy activity. Such analyses should no longer be conducted in isolated individual policy areas, but also with a view to direct and indirect policy impacts as well as reciprocal effects between policy areas. As a result, an economic assessment of policy measures becomes more difficult, as complex institutional frameworks must also be considered in theoretical and empirical analyses. This is precisely where legal analysis becomes relevant: It is crucial to comparatively assess the effects of previously implemented regulations upon competition and innovation as well as to identify problems and develop yardsticks based upon economic insights which are not only consistent with a view to regulatory policy, but which also guarantee legal certainty and are viable for practical implementation.





RESEARCH DEPARTMENT INTERNATIONAL FINANCE AND FINANCIAL MANAGEMENT



Prof. Dr. Michael Schröder
Head of Department



Dr. Peter Westerheide
Deputy

RESEARCH AREAS

- **Financial Intermediation**
Contact: Dr. Tereza Tykvová
- **Expectation and Price Formation on Financial Markets**
Contact: Prof. Dr. Michael Schröder
- **Asset Markets**
Contact: Dr. Peter Westerheide

MISSION STATEMENT

This research department is devoted to the scientific analysis of international financial markets. It is the largest economic research department of its kind within Germany. The department is a key provider of analysis and policy advising services in the area of financial markets. The optimal performance of international and, in particular, European financial markets is a guiding concern in the department's research.



RESEARCH AREA “FINANCIAL INTERMEDIATION”

- Banks
- Venture capital and private equity
- Mutual funds

The most recent financial market crisis has brought about significant changes in international financial markets. Far-reaching questions for both economic research and policy have emerged concerning the risk behaviour of financial institutions in international capital markets, the associated systemic risks, as well as the regulation of financial market actors. This research area focuses on the analysis of banks, venture capital and private equity firms, as well as investment funds.

At the forefront of research conducted in 2010 concerning the causes and consequences of the financial market crisis, researchers in this research area examined the connections between regulation and corporate governance on risk behaviour in the banking sector. Research findings indicate that it was bank owners rather than bank managers who were responsible for assuming such high risks prior to the outbreak of the crisis. In September 2010, the research area presented the “3rd Conference on Banking Regulation and Integration: Systemic Risk and Incentives” in cooperation with the University of Mannheim and the European Business School. The event attracted the participation of a large number of renowned researchers from Germany and abroad.

A new project being undertaken by the “Banks” subarea will study the differences between the business models of Germany’s commercial banks, savings banks, and cooperative banking institutions, as well as the effects these differences may have on risk behaviour. Moreover, researchers plan to analyse the role of international banks’ internal capital markets in transmitting financial shocks, as well as to evaluate the impact of such shocks on the real economy. Addi-

tional projects currently being planned will explore the regulation of capital markets as well as the implications of regulation for systemic stability.

The “Venture capital and private equity” research subarea examines various aspects of corporate financing and investment strategy. This research provides a better understanding of the influence exerted by venture capital (VC) and private equity (PE) investors over their portfolio companies. The analysis of national and international venture capital and private equity activities has great relevance, not only from a scientific perspective but also for economic policy makers, as the activities of these investors have been attracting the increased attention of regulators.

A recently completed project examining the “buy-and-build” strategies of PE firms, financed by the DFG (German Research Foundation), will provide an important foundation for future studies. The project looked primarily at the determinants of decisions to employ buy-and-build strategies (BBS). Among the project’s key findings is the insight that BBS are implemented for the purpose of industry consolidation. In addition, it was shown that private equity investors contribute to improved resource allocation between platform and add-on enterprises. In this way, investors use BBS in seeking to achieve efficiency gains. In our studies, we found evidence that private equity investors make good choices, yet at least during the time period examined, they did not necessarily strengthen the operational performance of their portfolio companies.

An ongoing EU project that is being funded under the 7th Framework Programme for Research is directed at achieving a better understanding of the influence that VC and PE investors have on the performance of young, innovative companies in Europe. The key indicators of performance in the study include innovation performance, employment, growth, and competitiveness. In addition, researchers have been examining the internationalisation strategies employed by VC and PE investors, as well as the role such investors play in closing existing gaps in available human and physical capital.

Investment funds constitute another important group of financial intermediaries. In their role as shareholders, investment companies can exert considerable influence over the business policies of the companies in their fund portfolios. This subarea focuses on analysing the decision-making behaviour of investment companies and fund managers as well as the repercussions of this behaviour for corporate governance. One topic of research is concerned with examining how investment fund companies decide where to be domiciled, as well as in determining the impacts of this decision upon their cost structures. In addition, as part of an ongoing research project in collaboration with Harvard University, the group is examining how social networks that interlink fund managers affect their investment behaviour.

As part of a project entitled “The Social Significance of Investment Funds”, researchers in the subarea identified the investment fund assets held by German private investors and analysed their investment structure, estimating the share of both direct and indirect investments. Life insurance companies and institutions for employer pension programmes are the principle holders of the indirect investments of German private investors. The study also explored structural differences in the investment behaviour of different groups within the population. For this purpose, households were classified according to characteristics such as income, state of domicile, age, gender, and marital status (see Figure 1).

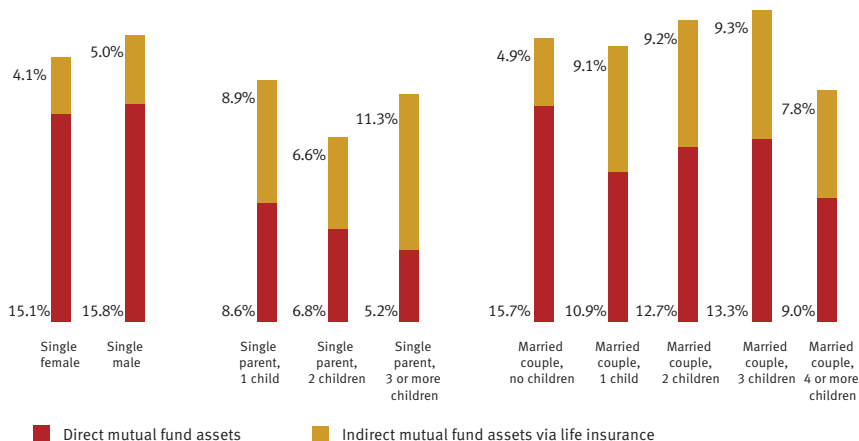
All three of the subareas in this research area are involved in studying questions affected by “hidden information” and “hidden action”. In this regard, principal agent theory provides a common theoretical foundation. Thus, the subareas share commonalities not only with regard to their theoretical perspectives, but also in terms of their empirical approaches (e. g. all of the subareas use micro datasets as well as micro and panel econometric estimation models).

RESEARCH AREA “EXPECTATION AND PRICE FORMATION ON FINANCIAL MARKETS”

- Expectation formation and behavioural finance
- Expectations and the real economy
- Expectations and asset prices

The research area “Expectation and Price Formation on Financial Markets” concentrates on selected questions from the field of price formation for securities. Of the analyses conducted, a particular emphasis is placed on three distinct topics which, taken together, enable a comprehensive examination of expectations and expectation formation processes.

1] DIRECT AND INDIRECT MUTUAL FUND ASSETS OF HOUSEHOLDS AS SHARES OF HOUSEHOLDS’ TOTAL ASSETS



Reading aid: Households invest between 5.2 % and 15.8 % of their total assets directly in mutual funds. The share of direct investments differs slightly between singles and married couples. Single parents, on the other hand, invest less in mutual funds directly. However, they invest in funds indirectly through their comparably large investment in life insurance assets.
Source: Income and Expenditure Survey (EVS) 2008, ZEW calculations.

The first research focus is on the forms and dynamics of financial market expectations. Here, consideration is given to exogenous factors, such as the availability of new macroeconomic data, as well as factors discussed in the context of behavioural finance.

The second focus is on the information content of expectations in relation to future changes in the macroeconomy and financial markets. In this regard, researchers investigate the predictive reliability of individual expectations as well as examine the reasons for especially good or bad forecasts.

Finally, the third focus is on the reciprocal effects between security prices and expectations. Here, the stochastic processes governing security prices are considered from the specific perspective of expectations.

The database of information obtained by the “ZEW Financial Market Test”, a monthly survey conducted since the end of 1991, is a key foundation for empirical research. The more than 300 financial experts who participate in the survey provide primary expectation data on the future course of the stock market, interest rates, currency prices, as well as important macroeconomic factors such as changes in economic growth and inflation. The survey database is very comprehensive both with regard to time and the number of participants. Consequently, it is an excellent basis for empirical research on expectation formation, and it has attracted increasing acknowledgement in the professional world in recent years.

Since many of the financial experts have been participating in the survey for a long time, it is possible to examine specific differences between their individual expectations. In an ongoing project, researchers are seeking to account for the heterogeneity observed in relation to the reliability of exchange rate forecasts. There are also plans for an additional project that will explore whether a focus on different categories of information might help to explain the heterogeneity of individual expectations. Furthermore, researchers are planning to evaluate expectation data gathered in the ZEW Financial Market Test for Central and Eastern Europe.

Aggregated expectation data are also being used in other research projects. A current study focuses on monetary policy, and is investigating whether and to what degree the current Taylor rule, which is used by surveyed experts for predicting future interest decisions, deviates from the guidelines used by the European Central Bank (ECB) for its interest rate decisions. By using the Taylor rule, for example, experts place more emphasis on inflation in future interest rate decisions than does the ECB. As an extension to this study, it would make sense to use a similar approach with survey data from the US and to quantify the sources of forecasting error.

Another current study is examining the risk premium offered by the German stock market (DAX) – that is, the yield difference between a risk-free investment and one pegged to the DAX. This study incorporates point and interval forecasts for the DAX that have been collected as part of the ZEW Financial Market survey since the beginning of 2003. The aim of the study is to analyse the predictability of realised and expected risk premiums from investing in the DAX as well as investigate the forecast reliability of aggregated and individual DAX expectations.

Expectation data analysis was the subject of a “Summer Workshop for Young Economists” held in June 2010. At the workshop, 14 young researchers from Germany and abroad presented their latest research on expectation formation. Lectures were given by internationally renowned

researchers, including Prof. Christian Gollier, PhD (Toulouse), Prof. Kaja Lahiri, PhD (New York), and Prof. Peter Sørensen, PhD (Copenhagen).

A project concerned with stochastic processes related to CO₂ emissions trading produced findings about interrelationships between certificate and electricity prices that are of interest to economic policy makers. The project, titled “Market Power in Electricity Markets: Empirical Evidence”, is being conducted jointly with the research department “Environmental and Resource Economics, Environmental Management”. Research findings show that electricity prices respond symmetrically to changes in CO₂ certificate prices. While the study has also demonstrated the existence of an asymmetrical reaction in electricity prices, as described in the literature, this was only true for a short time over the period examined. Thus, these findings fail to substantiate the assertion that price increases on the European CO₂ certificate market result in more rapid changes on the German electricity market than equivalent price reductions.

RESEARCH AREA “ASSET MARKETS”

- Wealth formation and old-age provisions
- Linkages between real estate and capital markets
- Analysis of real estate markets

The “Asset Markets” research area explores questions related to asset investment and wealth formation. A special feature of this research area is the comprehensive integration of the real estate market in its research perspective. Thanks to this approach, the research area is able to take into account the close reciprocal relationship between real estate and financial investments in both private and institutional asset management. The research area is divided into a number of closely related research subareas.

In the subarea “Linkages between real estate and capital markets”, the relationships between real estate and capital markets are explored. This subarea collaborates closely with external researchers within the scope of the Leibniz Network “Real Estate and Capital Markets” (ReCapNet), which is coordinated by ZEW. Selected areas of study include the dynamic interaction between these two market segments, the impact of new types of institutional investors (e. g. REITs) on market structures, and the analysis of the characteristics of real estate investment forms as an investment class.

During 2010, collaborative activities were intensified in Germany and abroad through joint research projects and research stays. In addition to the network’s regular spring workshop, the second ReCapNet conference was held in autumn 2010; a number of renowned international researchers attended. A series of research papers were finished within the network, and several discussion papers are near completion.

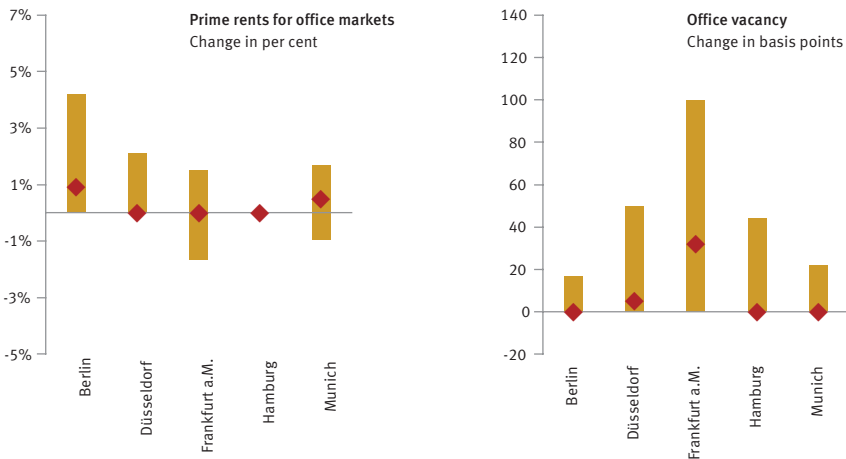
Additional projects focus on the issue of real estate financing: One completed project looked into national differences in systems for financing home construction. Another project carried out in 2010 examined building societies in Baden-Württemberg. An ongoing project is analysing the

financing strategies employed by actors in the housing industry under changing conditions in financial markets. In keeping with the research area’s integrative approach, researchers perform fundamental analyses of real estate markets and examine prospects for future market growth. This integrative approach is based on the conviction that a deeper understanding of the particularities of the real estate market is necessary in order to assess the characteristics of real estate as an investment instrument. In this regard, the group completed a study in 2010 that analysed the determinants for long-term wealth creation through real estate investment.

A second key research topic is how private households make investment decisions and plan for retirement, specifically in regard to private pension plans invested in financial and real estate assets as well as associated institutional conditions. In this area, the group conducted a research project for the German Federal Ministry of Finance that was completed by mid-2010. The project, which was carried out in cooperation with the Institute for Applied Social Sciences (infas) and the Institute for Financial Services (iff), addressed the transparency of private Riester and “basic” pension products. The project yielded specific recommendations for improving transparency by providing more standardised and concise information regarding the costs, returns, and risk profiles of retirement products.

A project funded by the EU Commission and carried out in cooperation with the Institute for Financial Services concerned legal caps on interest rates in the consumer credit market. Interest

2] FORECAST OF THE DEVELOPMENT OF THE FIVE LARGEST GERMAN OFFICE MARKETS



Reading aid: The forecast is based on a survey of the most important market actors on the German real estate office market. The survey was carried out in collaboration with Gesellschaft für Immobilienwirtschaftliche Forschung (gif). The median and range of the forecast (2nd and 3rd quartile) are depicted.

rate ceilings have been a subject of controversy among economists for centuries. Today as well, there are differing regulations in various countries that cap interest rates and credit costs. The usual goal of such regulations is to prevent “usurious” interest rates and prevent overindebtedness among households. The study presented a comparative summary of the current state of regulations in EU Member States and discussed to what extent differences in the structure of the consumer credit market could be explained on the basis of interest rate ceilings.

The research projects in the Leibniz Network on “Real Estate and Capital Markets” (ReCapNet) are being continued. The third international ReCapNet conference will be held in autumn 2011. As part of a new project for the European Commission, ZEW researchers are studying changing patterns in European housing markets as well as associated macroeconomic imbalances with a view toward formulating policy recommendations. Under the sponsorship of L-Bank Karlsruhe and in collaboration with the University of Mannheim, the research area has launched a housing market monitor for the state of Baden-Württemberg. As of 2010 the research area has also been conducting biannual surveys concerning commercial real estate trends in various German cities (see Figure 2).

OUTLOOK

The presented research programme has not yet been fully finalised. On February 22, 2011, a scientific workshop took place to discuss and evaluate the research programme with external experts. In addition, in the summer of 2011, the ZEW Scientific Advisory Council will provide an evaluation of the research programme presented at that time.

Over the mid-term, research projects will focus primarily on the following topics, in accordance with the department’s three research areas:

- Analysis of decision-making and risk behaviour on the part of financial institutions, and studies concerning financial market regulation and systemic risk
- Studies about expectation formation in financial markets, specifically in relation to the heterogeneity of expectations by financial market actors as well as forecast quality
- Further implementation of the research programme on “Real Estate and Capital Markets”, with a special emphasis on Europe



RESEARCH DEPARTMENT LABOUR MARKETS, HUMAN RESOURCES AND SOCIAL POLICY



Dr. Holger Bonin
Head of Department



Ass. Prof. Dr. Melanie Arntz
Deputy



PD Dr. Friedhelm Pfeiffer
Deputy

RESEARCH AREAS

- **Employment and Wages**
Contact: PD Dr. Nicole Gürtzgen
- **Social Welfare Institutions**
Contact: Dr. Christian Göbel
- **Personnel Economics**
Contact: Dr. Susanne Neckermann
- **Education Economics**
Contact: PD Dr. Friedhelm Pfeiffer

MISSION STATEMENT

The “Labour Markets, Human Resources and Social Policy” research department investigates how to best organise institutions in the labour market and manage working conditions in firms so as to achieve high levels of employment and satisfying distribution of income in Europe’s knowledge-based economies. Our studies provide economic policy makers with an informational basis for devising strategies to combat skill shortages and promote the efficiency of labour markets in the face of demographic change and innovation processes.



The department is one of Germany's large centres for labour market economics. Around 25 research economists work on project-specific teams in four research areas. We approach labour market questions from a microeconomic perspective. Issues in economics and business management are examined using the toolbox of modern econometrics. In addition to survey data, we primarily rely upon register-based and company-based individual-level data. For the ex-ante evaluation of government interventions in the labour market, we have at our disposal a linked micro-macro simulation model.

The department features a high proportion of basic research projects, for which we collaborate with renowned research institutions in Germany and abroad. In 2010 we completed a number of projects as part of an expiring priority programme of the German Research Foundation concerned with analysing changes in income and employment in heterogeneous labour markets. Another project that was completed in 2010 was a multidisciplinary Leibniz Network project on "Non-Cognitive Skills". This project used economic methods to study the formation of cognitive and non-cognitive skills in early childhood as well as their long-term economic consequences.

Expertise acquired in academic projects directly strengthens the second pillar of the research department's activities: research-based economic policy advising. The spectrum of activities in this area has been recently expanded. Alongside the department's long-standing work evaluating labour market reforms and labour market policies, during the past year, we intensified our analysis of educational and family policy instruments.

For example, a feasibility study explored the question of how to best evaluate the effectiveness of various public services directed at facilitating the transition from school to work. Evaluation projects looked at the effects of a vocational training bonus and several school programmes for occupational orientation in Germany. In the field of family policy, the department studied the consequences of benefits related to marriage and families (such as the child allowance and tax

advantages for married couples) upon the economic well-being of families and their capacity to reconcile of family life and work.

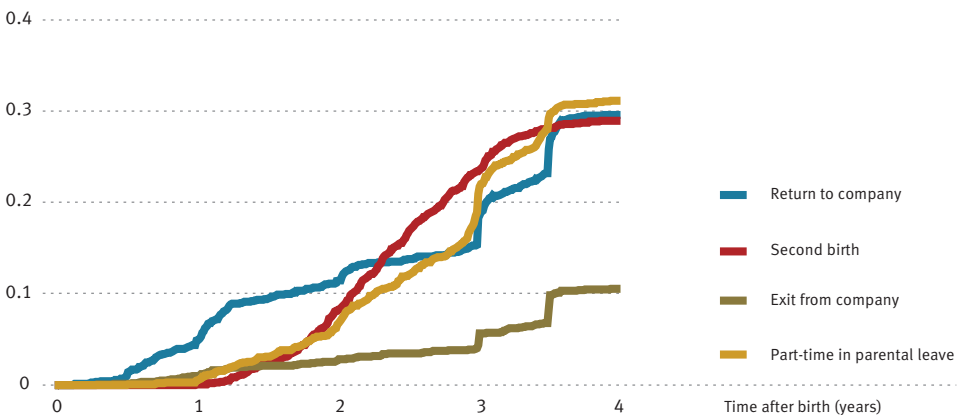
RESEARCH AREA “EMPLOYMENT AND WAGES”

- Wage formation and income inequality
- Employment dynamics

By analysing imperfections in the labour market caused by institutions, structural rigidities, and adjustment frictions, the economists in the “Employment and Wages” research area help to identify options for political action that would promote a better functioning labour market. This area concentrates on the dynamics of individual employment histories, especially the transitions between employment, unemployment, and departure from the labour market, along with questions of wage formation and income distribution. Of particular interest are the specific income and employment outcomes in sectoral, regional, occupational, and enterprise-specific labour markets.

An example of the work undertaken in 2010 regarding the dynamics of individual work histories is an analysis of the career paths of young mothers. Using human resource management data from a large financial services corporation, the study examined the effects of a previous career in the firm upon the employment behaviour of young mothers. The study showed that up to shortly before the birth of their first child, women were significantly more likely to belong to a higher income group than their childless female colleagues. In addition, women who established careers prior to the birth of their first child were likelier to return to their previous place of work.

1] EXIT RATES FROM PARENTAL LEAVE



Considered overall, however, only one out of two women returned to the firm after the birth of their first child.

Figure 1 illustrates the rate at which mothers arrive at one of various possible target states after their parental leave. Eleven per cent of the mothers left the firm directly following their parental leave. An additional 30 per cent had another child during their parental leave, leading to a longer interruption of employment. This behaviour is associated with a significant loss of “expertise” not only for employers, but also for the mothers themselves.

Questions of wage formation and income distribution are an additional important subject for the “Employment and Wages” research area. A key focus is placed on wage setting institutions and their impact at the company level as well as the determinants of wage inequality between groups of employees. A study conducted in 2010 looked at the significance of employer characteristics in connection with wage mobility in the low-wage sector. The study paid special attention to the effects of industrial relations upon the prospects for promotion as well as to the significance of internal labour markets as measured by company size.

The results of the study, which was based upon German linked employer-employee data, suggest a gender-dependent pattern. Men in larger companies have significantly greater chances for promotion, but they do not benefit from works councils or collective bargaining agreements. Conversely, women in particular benefit from the existence of a works council, but not from the size of the company. Internal labour markets thus appear to have an important role primarily in the chances of promotion for male low-wage earners. For women, uncertainty about real productivity, which may be especially marked in large companies, may represent a larger obstacle to promotion than it does for men.

RESEARCH AREA “SOCIAL WELFARE INSTITUTIONS”

- Evaluation of labour market policies
- Behavioural microsimulation

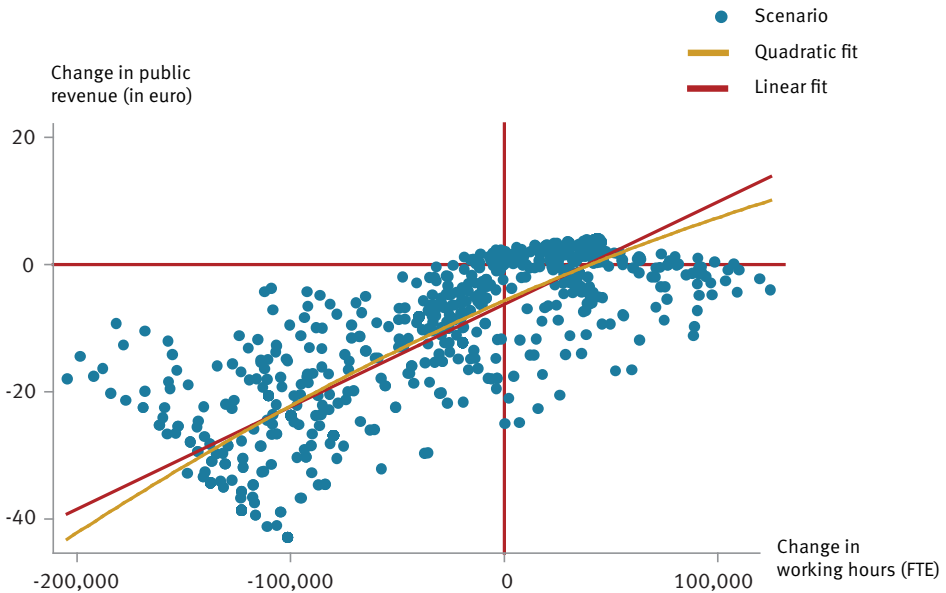
This research area analyses how social security institutions affect the labour market, and specifically employment, labour supply, and wages. It is strongly engaged in economic policy advising, and provides political decision-makers with empirical findings that aid the effective and efficient management of social welfare institutions. Against the background of demographic change, the research area also devotes increasing attention to educational and family policy measures that may strengthen the supply of skilled labour. To study these questions, researchers employ a broad spectrum of methods for ex-ante and ex-post evaluation.

In the field of ex-ante evaluation, the research area applied its behavioural simulation model in 2010 to examine possible ways to reform the social welfare benefits for the long-term unemployed (Arbeitslosengeld II) in Germany. The focus was on supplemental income rules for employed recipients of assistance – known as “top-up” benefits. By systematically varying the key parameters in the supplemental income rules, researchers produced a multi-dimensional analy-

sis comprising almost one thousand different scenarios. This new methodology made it possible to determine that for most of the reforms one could imagine, costs increase for the government in parallel with diminished employment (lower left field in Figure 2). By contrast, there are only relatively few options that achieve both increased employment and a reduction in public expenditures (upper right field in Figure 2). In all of the positive scenarios, long-term unemployment aid is cut more significantly at low levels of earned income than is currently the case.

Based on a control group approach, in 2010 the research area began an evaluation of Germany's "training bonus", which aims to facilitate access to apprenticeship training for individuals who were unable to find a training position during the year of their graduation (so-called "old applicants"). Under the programme, the employer receives a wage subsidy of between 4,000 and 6,000 euros for each eligible trainee from the Federal Employment Agency. Analyses performed to date show that linking financial support to "old applicant" status frequently fails to target the disadvantaged young people who actually require support. Moreover, it was shown that a large portion of the firms would have created the subsidized training positions even without the training bonus.

2] CHANGES IN HOURS WORKED AND PUBLIC BUDGET IN RESPONSE TO SYSTEMATIC VARIATION OF IN-WORK SOCIAL BENEFITS



RESEARCH AREA “PERSONNEL ECONOMICS”

- Insider econometrics
- Firms and demographic change

Firms and their employees are the key focus of study in the “Personnel Economics” research area. The projects conducted in this area focus on the question of how human resource management can contribute to the achievement of company goals, especially with regard to productivity and employee retention. The conducted empirical analyses are based upon representative linked employer-employee data, as well as personnel records from individual firms. Researchers use these data to analyse the impact of human resource management measures upon the behaviour of employees in an organisation. In addition, researchers are increasingly undertaking behaviour-based research, on the basis of data obtained through field experiments.

The work in this research area is distinguished by its coupling of business management expertise with sound economic methods. Research findings provide firms with helpful information for optimising their human resource policies. These findings are also relevant for creating targeted economic and labour market policy measures. In 2010 researchers specifically looked at the mode of action of human resource policy packages, at material and immaterial incentive mechanisms, and at programmes for safeguarding the employment for older workers.

In a study about the effects of personnel policy programmes upon employee retention, researchers used representative company data, which link information on a variety of individual measures to employee records. In a first step, researchers extracted factors from the information about company measures that reflect different areas of human resource policy such as personnel development, flexible work hours, and diversity management. In a second step, the researchers assessed the relationship between these factors and voluntary quits while taking into account other company characteristics such as firm size and sector. The findings show that companies behave quite differently with respect to their use and combination of human resource management strategies. Furthermore, the study showed that the effectiveness of human resource policies for worker retention depends quite heavily upon the other firm characteristics.

RESEARCH AREA “EDUCATION ECONOMICS”

- Formal education
- Informal education

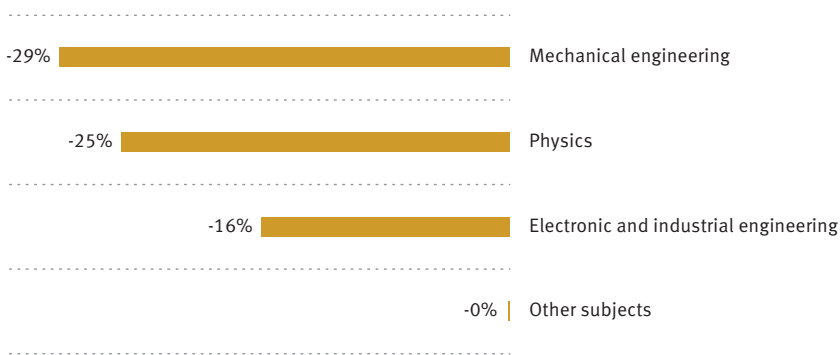
The “Education Economics” research area examines the acquisition of skills and their returns over the course of the life cycle. Both cognitive and non-cognitive skills are included in the research. The studies conducted aim to make a contribution toward improving worker productivity and the efficiency of human capital investment in the knowledge-based economies. On the one hand, the research area analyses the acquisition of skills in institutional settings, such as kin-

dergartens, schools, and universities. On the other hand, it explores the educational process in non-institutional settings, such as the family. With funding from the Leibniz Foundation's Pact for Research and Innovation, the research area provided coordination for the multidisciplinary research network "Non-Cognitive Skills: Acquisition and Economic Consequences" through the end of 2010.

During the past year, as part of a collaboration with the Mannheim Study of Children at Risk (MARS) at the Central Institute of Mental Health in Mannheim, the research area examined the predictive power of the quality of mother-child interactions during infancy upon cognitive and non-cognitive skills through school age. According to the results of an econometric model, which controls for psychosocial and organic risk burdens present at the time of birth, the socio-economic family environment, as well as household income, the patterns of interaction between mother and child, as can be obtained through behavioural observation, make a significant contribution to the forecast of the intelligence quotient and of behavioural persistence.

In a project from the field of university research, researchers examined how the introduction of the Bachelor's degree in Germany has affected the numbers of students beginning and interrupting their studies. For this project, researchers evaluated administrative data that included information about all students through 2006. Estimations at the faculty level led to the finding that for the majority of subjects, the reform of the study programmes had no observable short-term impact neither on the number of students beginning their studies nor on the number of dropouts. Exceptions were found in the fields of electronics, industrial engineering, mechanical engineering, and physics. In these fields, the number of students beginning their studies in the Bachelor programmes were significantly lower (see Figure 3).

3] IMPACT OF DEGREE PROGRAMME REFORM ON NUMBER OF FIRST-YEAR STUDENTS (FIXED EFFECTS ESTIMATION AT DEPARTMENT LEVEL)



OUTLOOK

The exploitation of new data sources is critical for furthering the development of the research area. These sources include: the German National Education Panel (NEPS), for which the research area “Education Economics” plays a significant part in setting up; administrative records from the public pension system for empirical analyses with a life cycle perspective; and personnel data from individual firms for analysing questions regarding human resource management. In addition, the research area is making increasing use of field experiments as an analytic tool. In response to policy advising requirements, the research area will continue to broaden the spectrum in the realm of programme evaluation to include the assessment of family and education policy measures. For this purpose, the linked micro-macro simulation model will be systematically expanded to include decision-making processes related to the family, such as care-giving and fertility choices. In light of demographic change and technological change, the research area is strengthening its involvement in the question of how the economy can be assured a sufficient supply of skilled labour.



RESEARCH DEPARTMENT INDUSTRIAL ECONOMICS AND INTERNATIONAL MANAGEMENT



Dr. Georg Licht
Head of Department



Jürgen Egel
Deputy



Dr. Christian Rammer
Deputy

RESEARCH AREAS

- **Innovation Research and Innovation Policy**
Contact: Dr. Bettina Peters, Dr. Christian Rammer
- **Firm and Industry Dynamics**
Contact: Jürgen Egel, Dr. Helmut Fryges
- **Competition and Regulation**
Contact: Juniorprof. Dr. Kai Hüschelrath, Dr. Nina Leheyda
- **Firm-Level Data**
Contact: Dr. Sandra Gottschalk, Dr. Diana Heger

MISSION STATEMENT

The department “Industrial Economics and International Management” analyses the dynamic aspects of competition between firms at the markets for goods, knowledge, and technology. A key question of interest is whether and how government interventions can improve welfare. The department’s research focuses on the innovation behaviour of firms, market entry and exit, the growth dynamics of young firms, mergers, and the competition in network industries. The department is considered one of the leading institutions in Europe for empirical studies of innovation and business start-ups.



RESEARCH AREA “INNOVATION RESEARCH AND INNOVATION POLICY”

- Determinants of innovative behaviour
- Innovation indicators
- Internationalisation of R&D and innovation
- Intellectual property rights and incentives to innovate
- Public R&D infrastructure and technology transfer
- Evaluation of R&D and innovation policy
- International trends of R&D and innovation policy

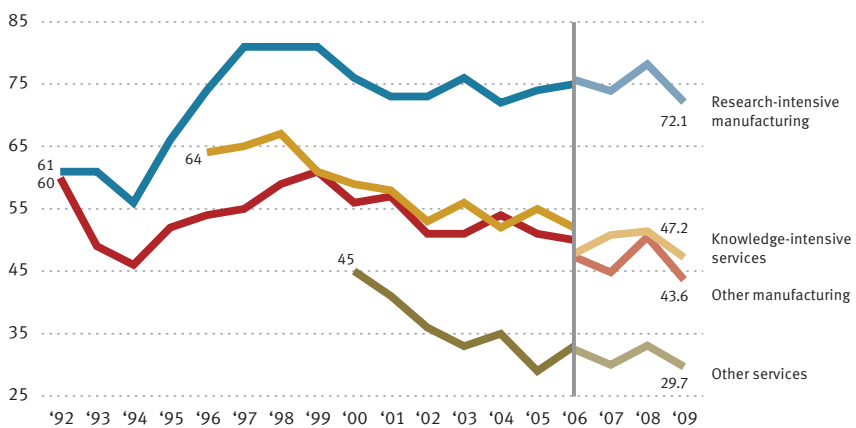
The innovation processes and strategies of firms is one key subject of study in this research area. Specific topics include: the determinants of innovation behaviour; strategies for internationalising innovation activities; the role of patents in securing innovation returns; and intellectual property rights as a strategic tool in innovation competition. A further subject of study concerns government policy, and is driven by the following question: How should research, technology, and innovation policies be designed in order to respond to the challenges of globalisation, changing research and innovation strategies of firms, as well as emerging new fields of technology? In this regard, the evaluation of existing government subsidy programmes for R&D and innovation policies is a primary focus of examination. In close connection with the work performed by the “Competition and Regulation” research area, the effects of competition and regulation on innovation and investment activities in specific sectors and across production chains are an additional research topic. There are also ties between this research area and the “Firm and Industry Dynamics” research area – for example, in work concerning the financing of innovation activities and in the evaluation of related public policy measures.

Since 1993, a major activity of this research area has been the Mannheim Innovation Panel (MIP), an annual panel survey of the innovation behaviour of German firms. The results of the MIP flow directly into ZEW's innovation policy analyses, and they additionally help to inform other organisations, including the German government's Expert Commission on Research and Innovation. Innovation activity trends and their impacts are laid out in an annual indicator report (see Figure 1). The panel survey is conducted on behalf of the Federal Ministry of Education and Research and in cooperation with infas and Fraunhofer ISI. The MIP represents Germany's contribution to the Community Innovation Surveys (CIS) of the European Commission. In 2010 the 18th MIP survey wave was completed. Particular attention was devoted in this wave to the reactions of firms to the economic crisis as well as to the effects of the crisis upon R&D and innovation activities.

In the project "Innovative Performance of the Telecommunications Sector and Its Innovative Inputs for Other Sectors", researchers are studying the relative importance of the telecommunications sector in the German innovation system. Using data from several ZEW surveys, researchers are analysing the contribution made by telecommunications firms to innovation in Germany as well as the role such firms play in enabling innovation in other sectors. Results of this research were presented at the 5th Information Technology Summit of the German Federal Government in Dresden on December 7, 2010.

In collaboration with the Centre for Strategic Studies at the University of Warwick and the Tuck School of Business at Dartmouth, researchers are examining the question of resource allocation in innovation projects as part of the SEEK project "Product Innovation Under Uncertainty". The

1] Mannheim Innovation Panel – Innovating Companies in the German Economy, 1992–2009



Reading aid: In 2009 72.1 per cent of all research-intensive manufacturing companies with more than 5 employees had introduced new or considerably improved products or production methods over the previous two years. A company is "research-intensive" if it invests more than 3.5 per cent of turnover in R&D. Note regarding the figure: There are breaks in the time series due to the reclassification of economic sectors and changes in the method of calculation, which is now reliant on the company register. The data for 2006 are thus shown according to the old and new calculatory methods.

core issue in this research undertaking is whether a strategy of incremental resource allocation followed by the sequential reduction of funding for innovation projects leads to more successful innovation. Should this prove to be the case, this finding would challenge traditional government funding for R&D projects, which typically does not permit a sequenced approach to funding.

In 2010 the department participated in four studies conducted for Germany's Commission of Experts for Research and Innovation (EFI). As part of a cross-institutional project on indicators of Germany's technological performance, researchers once again examined corporate innovation behaviour and start-up activities in the knowledge economy. Together with Fraunhofer ISI, a study was released concerning the significance of innovation in firms which do not undertake their own R&D investment as well as the specific characteristics of firms that develop new products and processes in the absence of in-house R&D. Furthermore, in a brief study the European dimension of research and development policy was illuminated. Together with NIW and Fraunhofer ISI, the department contributed to an updated list of research- and knowledge-intensive economic branches and product groups, based upon the EU's new classification of economic activities (NACE rev. 2.0).

In a project supported by the Fritz Thyssen Foundation, researchers are examining the efficiency and reliability of the German patent system based on an empirical analysis of all patent violation cases in Germany. To assure a theoretically sound basis for this project, researchers and legal scholars are working together in an interdisciplinary collaboration. A project in the SEEK research programme building upon this theoretical basis is engaged in a comparative examination of the patent implementation systems in the most important European nations. In a study funded by the Fritz Thyssen Foundation, a detailed analysis of the legal implementation of patent rights in Germany is being conducted. In a project titled "Intellectual Property Rights, the Appropriation of Innovation Returns, and Innovation Competition" – which is part of the German Research Foundation's Transregional Collaborative Research Centre TR 15 – researchers are investigating the function of patents for the protection of the intellectual property rights of the firm.

In the SEEK project "Research-Use Exemption from Patent Infringement – Boon or Bane?" researchers are examining the effects of rules which create research-related exemptions from patent violations. The study is investigating the effects of research exemptions on the patent propensity of pioneer inventors as well as the incentives for investment in downstream research and development activities. A comparison between Germany (which has wide-ranging exemption rules) and Australia (which does not have explicit and legally grounded exemption rules) should reveal the impact of each system on innovation activity.

The research area contributed two basic research studies to the 2010 European Competitiveness Report. The first study used patent indicators to examine European competitiveness in selected key technologies. The second study analysed R&D and innovation activities on the part of foreign firms in the EU. Based upon CIS and MIP data, the study cast light on the contribution of non-European firms to the innovation performance of the European economy and compared the innovation behaviour of foreign companies to that of European firms.

In addition, the research area participated in two European Commission initiatives for monitoring and evaluating the research and development activities of Member States. The research area has taken part in the "Trendchart on Innovation Policy in Europe" project since it was launched in

1996. The project, which tracks current developments in innovation policy, was merged in 2010 with the ERAWATCH project. The goal of the ERAWATCH project is to compile information in a harmonised format concerning the R&D systems, research and innovation policies, and R&D subsidy programmes of EU Member States. ZEW is responsible for assembling all information for Germany.

In addition to R&D, investments in intangible capital (e. g. human capital, through continuing education and occupational training) play an important role in competitiveness and growth in a knowledge-based national economy. In 2010 the research area concluded the two-year “Coinvest” project, which quantitatively studied the significance of investments in intangible capital using a growth accounting approach at the macroeconomic level coupled with a sectoral analysis. In addition, an econometric approach was used to estimate the effects on firm productivity growth.

Currently, the research area is participating in two related research projects in collaboration with the “Information and Communication Technologies” research group. The projects are being financed under the EU’s 7th Framework Programme for Research. The INDICSER project is developing indicators for measuring the performance of service sectors in the EU. The aim of the SERVICEGAP project is to examine the influence of the market service sector upon macroeconomic growth in Europe.

The research department is actively involved in the network project “Science and Technology Research in Knowledge-Based Economies” (STRIKE). This EU-wide network is seeking to develop a deeper understanding of innovation-driven growth processes in firms, sectors, and national economies. Researchers are analysing innovation policy options that stimulate these processes. The study focuses on comparative analyses based primarily on microdata. In 2010 more than 50 doctoral candidates from over 15 nations took part in a week-long summer school programme that the research area organised together with the Catholic University Leuven, Belgium. The aim of the project – titled “Analyses of Direct Project Funding to Small and Medium-Sized Enterprises” – was the identification and structural analysis of small to medium-sized enterprises that have received direct project support from the German Federal Ministry of Education and Research (BMBF). In order to provide the funding administrators with greater transparency about this group of funding beneficiaries, funding data from the BMBF was reconciled with ZEW firm data.

“KMU-innovativ” is an initiative of the German Federal Ministry of Education and Research that seeks to improve SME access to federal subsidy programmes. ZEW was commissioned to assess this initiative within the scope of a formative evaluation that accompanied the programme launch at the end of 2007. Embedded in this evaluation is an ex-post assessment of the “BioChance” and “BioChancePlus” green subsidy programmes, which are viewed as precursors to the “KMU-innovativ” initiative.

In a two-year pilot project, the state of Baden-Württemberg is providing innovation vouchers to small enterprises that may be redeemed for a total of 7,500 euros to fund collaborations with research institutions in specific innovation projects. In a supplementary project concerned with monitoring the innovation vouchers for small firms that is being undertaken on behalf of the state of Baden-Württemberg, the research area is evaluating the pilot project and its organisation from the perspectives of need, practicability, acceptance, and marketing, as well as analysing the project’s effects upon the innovation activities of participating firms.

RESEARCH AREA “FIRM AND INDUSTRY DYNAMICS”

- High-tech start-ups
- Firm survival and insolvencies
- Determinants of firm growth
- Evaluation of public support for young firms
- Financing of young firms

Researchers in this research area study business start-ups and closures as well as the growth of new businesses. Alongside the investigation of economic factors such as the availability of financing for business start-ups and costs related to market entry and exit, this research area also examines issues of internal change and strategy choice for business development. In addition, researchers study the consequences of firm dynamics at the market level and dynamics in individual economic branches.

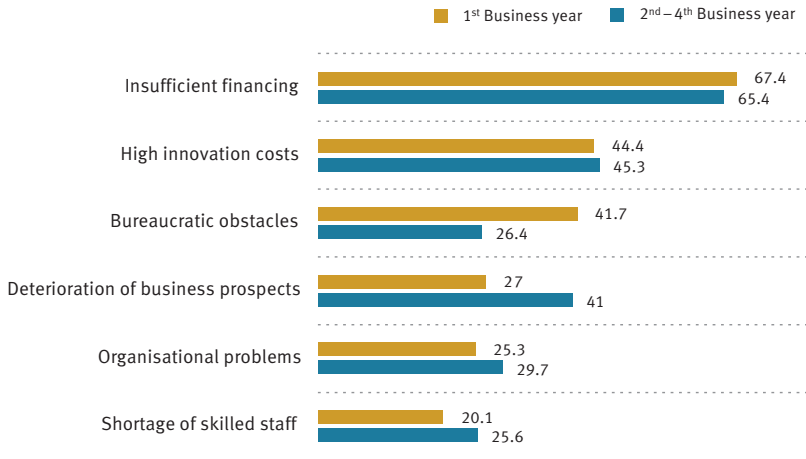
The Mannheim Enterprise Panel (MUP) is a key data infrastructure project in this research area. ZEW compiles and continuously updates a firm-level panel database. With data about more than three million active firms, the MUP provides a sound foundation for the analysis of market entries and exits as well as the determinants of business growth. Furthermore, MUP firm data are the basis for numerous business surveys, including the Mannheim Innovation Panel, the ZEW ICT survey, a quarterly business survey of service companies, and the KfW/ZEW Start-Up Panel.

The KfW/ZEW Start-Up Panel is an annual survey of start-up companies that aims to improve the infrastructure for empirical research on start-up activities. A broad range of issues are addressed in the survey, including questions related to start-up financing, innovation strategies in start-up companies, and the labour demand of new firms. In addition to annually recurring core questions, each year the survey includes supplementary questions on varying topics. The 2010 survey was devoted to the effects of the economic crisis on new firms. It analysed why firms did not implement innovation plans during the crisis year 2009 (see Figure 2). A further focal topic was corporate spin-offs. In this regard, the role played by the business ideas developed by the founders of private enterprises in the decision to launch a spin-off was examined.

In the project “Employment in High-Tech Start-Ups: Analyses Based upon a New Linked Employer-Employee Data Set”, the 2007 ZEW High-Tech Start-Up Panel was enriched with employment data from integrated work histories. This enhancement, which was undertaken in collaboration with the Institute for Employment Research (IAB), has made it possible to conduct differentiated analyses in the field of start-up research concerning the nature, structure, and dynamics of employment behaviour in high-tech start-up companies.

The project “High-Tech Start-Ups in Germany 2010” examined the growth of start-up activity in the high-tech sector with a focus on regional start-up activity. It explored whether a convergence in start-up activity has taken place between regions, and analysed which role the available infrastructure facilities played in shaping the regional start-up environment. The project has been performed in collaboration with Microsoft Germany.

2] REASONS WHY YOUNG FIRMS DID NOT REALISE INNOVATION PLANS IN 2009



Reading aid: Frequency shares (multiple responses possible) of all young firms, which did not put there innovation plans in action in 2009. Source: KfW/ZEW Start-Up Panel.

Since 2002, there has been a significant decline in the number of start-ups by scientists in the biotechnology sector. “Competing Orientations? Economic and Scientific References and Orientations in Biotechnology: Stocktaking, Evaluations, and Consequences for the Public Funding of Young Biotechnology Firms” is a BMBF-sponsored project that is seeking to identify factors of particular significance to biotechnology researchers that could lead to conflicts between scientific and business activities. The study is evaluating to what extent these factors can be influenced by government policy and how start-up activities by biotechnology researchers can be stimulated.

In the project “Causes for Business Failure Within Five Years After Start-Up”, which was sponsored by the German Federal Ministry of Economics and Technology, reasons for the closure of start-up companies were analysed. The study confirmed that the most prevalent reason for closure is systematic undercapitalisation during the early stages of market activities. Frequently, this can be attributed to a highly risk-averse and collateral-oriented credit policy by banks. Strategic mistakes and insufficient business know-how also contribute to the failure of young firms.

Using the MUP database, the research area is undertaking a detailed documentation with a high number of observations of the characteristics and histories of firms that make use of the insolvency plan option. The study is being conducted with basic research funding in the project “Insolvency Plan Procedure – Why Is this new Instrument only Hardly Used up to now?”

In the project “Development of M&A Markets During and After the Crisis”, researchers conducted a comprehensive analysis of various aspects of M&A activities in the context of the global economic and financial crisis. The goal was to achieve a better understanding of patterns and changes of the M&A market, and to forecast scenarios for the future development of this market.

In this project it was shown that, despite the crisis, China has assumed the vanguard role in M&A activities among developing nations and has become more heavily invested in foreign raw material and technology suppliers.

In the project “Generation Change in Medium-Sized Businesses”, researchers examined generational transition in German small to medium-sized enterprises from the perspective of the new company management. The number of management successions occurring between 2000 and 2008 was determined using MUP data. Researchers also surveyed 1,102 SMEs that had experienced a management succession during the defined time frame. In addition, 22 case studies were carried out regarding company succession, and interviews were conducted with bank representatives and SME consultants.

The project “How Do Banks Screen Innovative Firms?” is studying how banks make financing decisions during the start-up phase of new business ventures. Of particular interest are the availability and assessment of external rating information in assuring access to bank financing for innovative firms.

In the project titled “Support Schemes for Venture Capital and Innovation Finance in the Context of Capital Markets – An International Overview”, researchers are comparing programmes to supporting equity and innovation financing (in this regard, the study differentiates between supply-side and demand-side programmes), and capital market conditions in Germany, the US, UK, France, Switzerland, Sweden, and Japan.

RESEARCH AREA “COMPETITION AND REGULATION”

- Cartels and M&A market trends
- Regulating network industries
- Public and private enforcement of competition policies
- Mannheim Centre for Competition and Innovation (MaCCI)
- Measuring competition

Researchers in this area study questions related to regulation and competition policy in markets such as telecommunications, energy, and transportation. A further research focus is structures of corporate conglomerates in general and the welfare effects of such cross-ownership structures in particular; a study object with high relevance for economic policy in light of the recently observed increase in corporate mergers and acquisitions.

In its biennial report, the German Monopolies Commission regularly publishes a branch by branch overview and statistics regarding ownership concentration. According to the German Federal Ministry of Economics and Technology (BMWi), the currently applied procedure to prepare this concentration report should be reconsidered due to altered general conditions. In the BMWi-funded project “Modernisation of Concentration Reporting”, ZEW researchers are thus undertaking research to develop empirical analyses for the German Monopolies Commission based on modern econometric methods and with a high relevance for competition policy.

In a project entitled “Recommended Retail Prices and Collusion in Pharma Markets: The Case of ED Drugs”, researchers are examining under what conditions non-binding price recommendations may be implicitly employed as retail price-fixing agreements, thereby facilitating collusion. For this study, a specific market niche is being examined: the Swiss market for erectile dysfunction medications.

Two separate projects are being conducted to determine how the amount of damages resulting from cartel activity should be determined. Different empirical methods and models are being compared in order to ascertain the advantages and disadvantages of their application with respect to available data while also considering the issue of data quality. The application of such methods and models requires adequate data preparation. The economic and statistical testing and verification of the database data prepared for calculating cartel damages was undertaken as part of another project.

In the project “Effects of Vertical Relationships on Retail Competition at Airports”, researchers are investigating vertical contractual relationships between airports and retailers. The revenue share of retailers in the non-aviation sector has increased substantially in recent years. The aim of this project is to identify the effects of various retail trade agreements upon retail sales, airport costs, and retail competition at US airports between 2004 and 2008.

Two additional projects focus on network industries. The European Commission’s third regulatory packet for the telecommunications industry came into effect in 2009. This packet is helping to accelerate further integration of national telecommunications markets into a single European market. In the “Regulation of the Telecommunications Sector” project, researchers are examining how previous regulatory approaches can be reconciled with new regulatory approaches and how businesses are responding to these new challenges. In the project “Vertical Integration and Competition in the German Household Electricity Market”, researchers examined first and foremost to what extent ownership ties between local network operators and large local energy providers create incentives for anti-competitive behaviour. The findings of this study show that prices are significantly higher in markets with vertical integration than in those with totally separate companies. This suggests the existence of non-price related discrimination against competitors for network access.

CROSS-SECTION “FIRM-LEVEL DATA”

- Mannheim Innovation Panel (MIP)
- Mannheim Enterprise Panel (MUP)
- KfW/ZEW Start-Up Panel
- Indicators for start-up activity in Germany

Research activities on innovation and firm dynamics heavily rely on firm-level databases compiled by ZEW researchers over the past few years. The continuous expansion and improvement of existing databases represents an essential work which is carried out by the department’s staff

within the scope of project activities. Thanks to the Mannheim Enterprise Panel (MUP) and Mannheim Innovation Panel (MIP), ZEW possesses an inventory of firm-level survey data unique in Germany. The MUP is likely the most comprehensive database on business activity in Germany aside from government statistics, which are difficult to obtain for analyses at the firm level. In addition, the KfW/ZEW Start-Up Panel, a collaborative project conducted with KfW Bankengruppe and Creditreform, is a business panel survey undertaken since 2007 that primarily targets new business start-ups and business in their first years of operation. Thanks to its partnership with Bureau van Dijk Electronic Publishing (BvDEP), ZEW also has exclusive access to the world's largest M&A database.

Data collected by the department are made available to other research units at ZEW as well as to external researchers both within Germany and abroad – provided, of course, that such sharing is compatible with data protection regulations and confidentiality agreements. More than 100 external researchers make use of the MIP. In addition, ZEW makes data available to outside researchers by offering visiting researcher positions. More than ten guest researchers took advantage of this offer during the past year. Visiting researchers spent anywhere from a few days to several months at ZEW, or made regular working visits to the centre. In addition, at the request of data users, an “education use file” was created for the MIP. This file can be used in university courses on econometrics and innovation economics in order to enrich educational content through practical examples.

OUTLOOK

In the field of innovation research, increasing emphasis is being placed upon studies about the functionality of Europe's patent systems. Researchers intend to study the economic effects resulting from the fragmented legal implementation of patent rights in Europe. They also plan to examine how exemptions to the patent system provide economic incentives for the use of patent-protected inventions in further basic research. In the realm of business activities, the research area will study various forms of market exit. In this regard, particular attention will be devoted to assessing recent reforms to German bankruptcy law.

The close relationship between the research area “Competition and Regulation” and the Faculty of Law and Economics at the University of Mannheim will be further strengthened by the expansion of the Mannheim Centre for Competition and Innovation (MaCCI). This collaborative academic relationship contributes to basic, applied theoretical, and empirical research as well as to comparative legal studies, thus helping to expanding the range of practice-oriented research approaches. Within the scope of this collaboration, researchers plan to estimate the amount of damage caused by cartels and to undertake an ex-post evaluation of decisions made by competition authorities.



RESEARCH DEPARTMENT CORPORATE TAXATION AND PUBLIC FINANCE



PD Dr. Friedrich Heinemann
Head of Department

RESEARCH AREAS

- **Corporate Taxation and Tax Location Analysis**
Contact: Prof. Dr. Christoph Spengel, Christof Ernst
- **Empirical Effects of Corporate Taxation**
Contact: Prof. Dr. Christoph Spengel, Jost Henrich Heckemeyer
- **Decision Making in Tax and Financial Policy**
Contact: PD Dr. Friedrich Heinemann
- **Fiscal Competition and Federalism**
Contact: Dr. Alexander Kalb

MISSION STATEMENT

This research department investigates questions related to corporate taxation and empirical public economics within the context of economic integration. The department's key line of research concerns the consequences of increased international mobility of tax and financial policy as well as the scope, structure, and responsibilities of the public sector. The department is leading in the field of international comparisons of tax burdens in Europe due to its tax analysis models, such as the European Tax Analyzer. Moreover, special attention is devoted to the analysis of EU tax harmonisation and the EU fiscal constitution.



RESEARCH AREA “CORPORATE TAXATION AND TAX LOCATION ANALYSIS”

- International comparisons of effective tax burdens
- Harmonisation of company taxation in Europe
- Tax databases

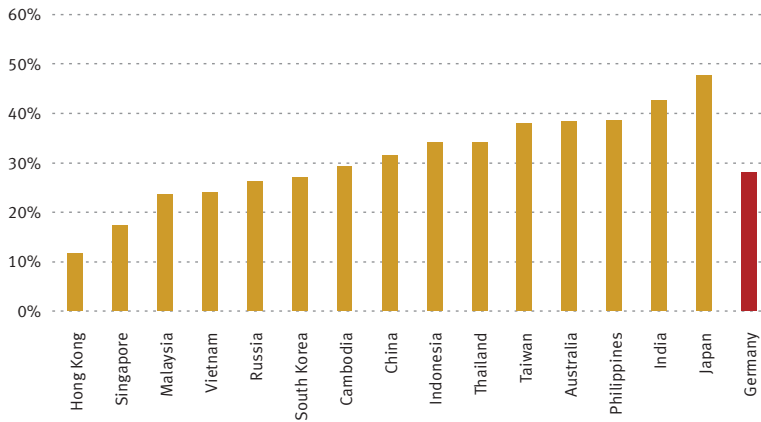
Researchers in this research area are concerned first and foremost with analysing corporate taxation in Europe as well as national and pan-European reform proposals. In terms of methods, the maintenance and extension of a toolbox of models used to compare international tax burdens is also a key activity. A primary tool of analysis is the European Tax Analyzer, a computer-based model that enables the evaluation of national and international policy proposals in the area of tax reform and harmonisation.

In 2010 the research area conducted a major expansion of its regional tax burden analysis coverage, with specific attention to Asian nations. Tax burdens for direct US and German investments in the Asian-Pacific region, India, and Russia were the focus of a study conducted on behalf of PricewaterhouseCoopers (PwC) and in a collaboration between ZEW, the University of Mannheim, and Oxford University. The study quantified the effective tax burden in these regions' nations based upon an approach developed by the economists Devereux and Griffith. Hong Kong and Singapore are particularly attractive locations from a tax perspective, with effective tax burdens on foreign direct investment from Germany of 12 to 17 % (see Figure 1). On average, however, the effective tax burden of 31 % on German direct investment in the nations under consideration still exceeds the burden for a domestic investment in Germany (28 %). Only in six of the fifteen locations that were examined did the effective tax burden fall below that levied on German domestic investment. However, the majority of locations considered in the Asian-Pacific re-

gion, India, and Russia provide a number of tax incentives for investments in specific sectors and regions. As shown by further studies, the effective tax burden may be substantially reduced once these tax breaks are taken into account.

On behalf of the Swiss economic research institute BAK Basel Economics, in 2010 the research area once again calculated the effective tax burdens for companies and highly qualified workers in 17 Swiss cantons. In this update, the canton of Glarus was also included to the analysis for

1] THE EFFECTIVE TAX BURDEN ON A GERMAN DIRECT INVESTMENT INTO SELECTED COUNTRIES



the very first time. The findings show that the tax burden tended to decrease further in 2010 in comparison to previous years. Particularly in the cantons of Schwyz and Glarus, tax attractiveness increased for both businesses and highly qualified professionals. In addition, the tax burden on individuals decreased in a number of cantons, including St. Gallen and Schaffhausen. Among the cantons examined in the study, Appenzell had the lowest effective tax burden on businesses at 11 %. In low-tax cantons, highly qualified professionals had an effective tax burden of 25 to 27 %.

Apart from the research area’s ongoing analyses and continuous work to expand its tax burden assessments, in 2010 researchers once again entered the arena of tax policy debate – with a report about possible ways to simplify the German tax system. In comparison to other economic policy measures that are targeted at promoting sustained long-term growth, tax simplifications have the distinct advantage of not inevitably shrinking the financial leeway for public spending. In this vein, the current budgetary situation provides strong motivation for undertaking efforts to simplify the tax code. In a study conducted in 2010 on behalf of the German Federal Ministry for Economics and Technology titled “The Effects of Tax Simplifications”, ZEW researchers aimed

to identify tax simplification measures that could be implemented in the short run and estimated their effects on macroeconomic growth. In collaboration with the University of Wuppertal and the accounting and tax consultancy Ebner Stolz Mönning Bachem, ZEW researchers developed a catalogue of 18 measures for tax simplification that have a significant potential to decrease bureaucratic expense for businesses, private households, and fiscal authorities.

RESEARCH AREA “EMPIRICAL EFFECTS OF CORPORATE TAXATION”

- Taxation and decision behaviour of multinational enterprises
- Taxation and R&D activity
- Microsimulation

This research area investigates the effects of taxation on the behaviour of taxpayers in general and firms in particular. There are many points of interconnection between this and the first research area. On the one hand, researchers in this area undertake studies that build upon the indicators of tax burden developed in the “Corporate Taxation and Tax Location Analysis” research area. On the other hand, the results of the studies of this area are used by the first research area to incorporate empirically founded behavioural responses into tax-burden modelling.

In this research area, the ZEW Corporate Tax Microsimulation Model (TaxCoMM) was used for the first time to address research questions. The model is based upon a large sample of firms, and simulates the consequences of potential corporate tax reforms on tax revenues as well as the distribution of the tax burden between heterogeneous firms and economic sectors. The model is thus an important supplement to existing quantitative approaches regarding tax changes. In 2010 the model was brought to full functionality as part of a project financed by the German Research Foundation (DFG). The first usage of the ZEW TaxCoMM involved an ex-post analysis of the 2008 German corporate tax reform. The results of the study showed that more than 95 % of corporations in Germany have benefited from the 2008 reform. However, the amount of benefit is quite heterogeneous between firms, and smaller firms have generally enjoyed much lower benefit. The simulation additionally made clear that corporations with lower profitability, higher indebtedness, and higher capital intensity were particularly affected by various provisions enacted to offset revenue losses from the reform. Looking at the tax revenue effects of the reform, the ZEW TaxCoMM calculated a reform-related decrease in tax revenues of 9.8 billion euros. These findings refer to the first-round effects of the reform. In order to take second-round reform effects into account as well, researchers in this area have begun to adapt the model in such a way that it incorporates changing behaviour on the part of businesses in response to tax-code modifications. This effort to refine and expand the model is being funded by the Fritz Thyssen Foundation.

As part of the microeconomic analyses that are conducted using the direct investment database of the German Bundesbank, researchers investigated to what extent corporations take international divergence in loss allocation regulations into account in their investment behaviour. Two dimensions were distinguished: First, researchers studied the basic effect of loss allocation

regulations with regard to the investments made by all firms. Second, they assessed the impact of investment activities by firms that made use of loss carry-forward provisions. The empirical findings regarding the first dimension indicate that the existence of group taxation provisions had a particularly positive impact on investment behaviour. With regard to the second dimension, it was shown that the tax rate elasticity of investments fell significantly if a company was able to offset its profits with losses carried forward from previous years.

In addition to these empirical studies, researchers performed meta-analyses concerning tax effects. In one of these studies, the focus was on the choice of capital structures in corporations. The point of departure for the study was the fact that interests on outside capital lowers taxable profits, while dividends must be paid out of taxed profits. The anticipated tax-driven adaptation of corporate capital structures resulting from this fact reflects a significant expectable behavioural response following a tax burden change. The meta-analysis documented and enhanced existing evidence concerning the tax elasticity of corporate debt-to-equity ratios. It was shown that the magnitude of the measured tax effect on the level of a company's indebtedness is significantly dependent upon the degree of precision with which the primary assessment is undertaken concerning a company's actual tax burden – and, by extension, on actual tax incentives. The study indicates that it is reasonable to expect that a tax rate increase of 1 percentage point will lead to an approximate 0.3 percentage point increase in company debt ratios.

Further analyses of tax effects are directed at the wide range of tax incentives for research and development. In this regard, proposals to introduce support in the form of a tax credit are issues which are often discussed. Against this backdrop, the research area quantified the costs of alternative R&D subsidy models with respect to their impact on reducing tax revenues. A refund option for the tax credit that would reduce business and corporate tax liabilities was shown to be important, because otherwise a third of corporations would only partially benefit from the subsidy. A finding of relevance for financing this kind of reform is that differential subsidy rates for small and medium enterprises (SME) and large corporations could effectively limit the loss in tax revenues. The knowledge gained in these preliminary studies will flow into a SEEK project initiated at the end of 2010. In this project researchers of ZEW investigate – in cooperation with researchers from the universities of Oxford and Nottingham – the effect of corporate taxation upon innovation behaviour.

RESEARCH AREA “DECISION MAKING IN TAX AND FINANCIAL POLICY”

- Positive analysis of tax policy
- Determinants of structural ability to undertake reforms
- Determinants of public debt

This research area tries to investigate why there are often sharp discrepancies between the normative insights of public economics and real tax and fiscal policies. In the effort to explain existing taxation, spending, and deficit policies, ZEW researchers test the empirical validity of

explanatory models based on phenomena such as a rational resistance to reform, informational deficits among political officials and voters, and bounded rationality.

In an advising project conducted on behalf of the German Federal Ministry of Finance, ZEW researchers conducted a study of voter tax policy preferences in cooperation with psychologists and economists from the universities of Salzburg and Munich. More specifically, they examined which factors influenced the support for a progressive taxation system. The analysis was based on experiments and an econometric analysis of representative survey data. For Germany, data were acquired from the German General Social Survey (ALBUS). Contrary to the predictions of classical political-economic models, the study shows that individual opinions regarding progressive taxation are not driven solely by economic self-interest. While the study did confirm the expectation that support for a progressive tax system decreases with rising income, considerations of fairness and opinions regarding the connection between performance and income play a significant role. Those who explain income differences primarily on the basis of differences in performance are inclined to be critical of progressive tax rates.

Studies in this research area have repeatedly made clear that the acceptance and perception of reform projects is strongly influenced by how the media presents reform considerations. This realisation was the motivation for undertaking a project about the influence of media use on opinion formation with regard to economic policy. Empirical analyses of German survey data from 2008 revealed the following relationships: Frequent television viewing, especially of private broadcasters, is associated with strong preferences for government intervention and redistribution, whereas newspaper readers and individuals who watch news programmes on public television networks are more likely to be supporters of laissez-faire policies. In fact, the findings are quite robust when one includes relevant control variables (such as age, gender, and education). Nevertheless, there is probably an element of self-selection with regard to individual choice of media. Thus, in order to identify a causal relationship between media consumption and policy preferences, a natural experiment was used. The experiment made use of exogenous variations in the availability of West German television stations within the former East Germany. Initial analyses have shown that individuals who lived in the “Valley of the Clueless” (areas of East Germany not in the reception range of West German television) were more critical of the political and economic system in East Germany than individuals who also had access to West German broadcasts. The next step of the experiment will use data from the Socio-Economic Panel to determine to what extent these differences in media consumption are reflected in economic convictions and preferences following reunification.

Voter preferences were at the heart of analyses about the acceptance of pension reform. Far-reaching reforms of the contribution-based government pension system are inevitable as a result of demographic change in Germany. However, changes such as raising the retirement age are almost always unpopular. Explanations that point to self-interest and to socio-economic characteristics such as income, gender, and age may certainly be helpful in explaining some individual differences in the acceptance of pension reforms, but they are insufficient. Against this backdrop, researchers investigated the possible role of individuals’ intrinsic motivation to work. Although economists are becoming increasingly aware of motivations that have nothing to do with mon-

etary incentives, such motives have largely been ignored by scholars seeking to explain political preferences. Empirical analyses based upon representative survey data have clearly shown that an important connection does exist. Individual choice of different options for pension reforms (higher contributions, reduced pensions, or increased retirement age) is discernibly influenced by the intrinsic motivation to work. These results show that job satisfaction and motivation may not only be of significance for work productivity at the company level but also for the ability to implement reforms at the political level.

RESEARCH AREA “FISCAL COMPETITION AND FEDERALISM”

- Fiscal policy in regional competition
- EU fiscal constitution
- Nonprofit sector

This area of research is dedicated to investigating government structures – particularly federal systems – under the conditions of rising factor mobility and intensifying competition among regions to attract investment. Apart from Germany’s federal system, the division of competencies between the EU and its Member States is a key focus of research. Questions related to the division of competencies between the public and nonprofit sectors are also investigated in this research area.

A project supported by the ZEW Sponsor’s Association for Science and Practice provided new insights about questions concerning tax competition. This interdisciplinary study was conducted together with political scientists at the Mannheim Centre for European Social Research. It investigated how political ideologies affect corporate tax levels in Europe. This empirical analysis used novel data for determining the ideological position of a party, whereas the ideological position was derived from a content analysis of party programmes. Based on this innovative measure of ideology, it was possible to find a robust effect of party positions on corporate taxation. This effect is particularly driven by opinions regarding the welfare state. Additional political factors were also identified, such as the relative fragmentation of the government and the educational background of the head of state.

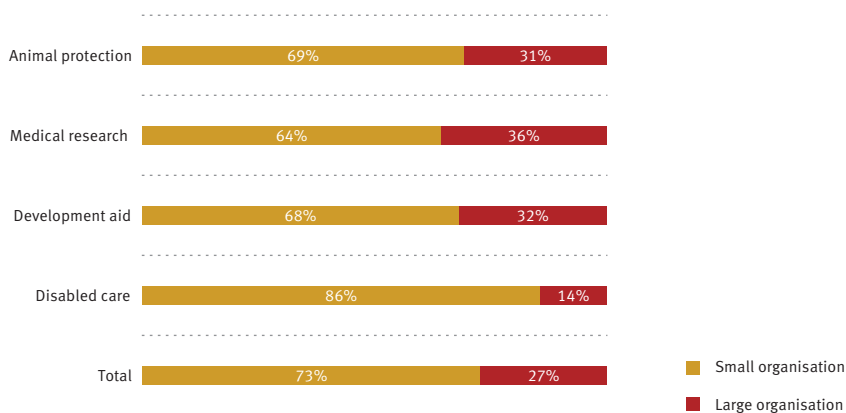
In 2010 questions regarding the political and economic effects of EU structural policy were the central focus of interest in analyses of the EU budget. Researchers examined to what extent monetary transfers between EU regions influence attitudes toward the EU held by citizens who are net beneficiaries. Data on the distribution of funding between regions was linked with results from comprehensive surveys. The study provided evidence that citizens living in highly favoured nations and regions showed a positive attitude towards the EU. Detailed examinations showed that this effect was driven by the fact that citizens were more likely to perceive an advantage from a cohesion policy if the level of transfer to their region was higher. However, this effect was shown to be heterogeneous, and was especially marked amongst citizens with a higher educational level.

A hitherto neglected aspect of federalism research links data about the fiscal activities in regional and local jurisdictions with company data from the respective geographical units. In 2010 researchers from ZEW filled this gap by investigating the effects of public expenditures on business productivity – using data from South Africa. The study used the specific institutional characteristics of South Africa to estimate the effects of public expenditures in the areas of health, education, and infrastructure on the productivity of companies. The results show that public expenditures affect business productivity, but the degree of this effect depends upon the characteristics of each individual firm. In contrast to the micro studies usually employed, the analysis took the government's budget constraints into account.

In a study commissioned by the German Federal Ministry of Finance, the research area collaborated with ZEW labour market researchers to identify the life cycle phases during which government incentives have the greatest positive educational effects. In addition, the study sought to determine which instruments of tax support or direct payments should be given priority at which stages of life. The study's findings suggest that educational financing structures in Germany – as measured against an ideal – are to some extent upside down. During childhood, there seems to be a government investment gap, whereas in tertiary education, a private investment gap emerges. The financial policy recommendation of the study is that public funds should be reallocated to achieve an increase of public funding during early childhood and a stronger mobilisation of private investment at college and university level.

Together with ZEW environmental and labour markets researchers, the research area started to apply experimental research methods in the field of the nonprofit sector. A project about charitable spending behaviour investigated how potential donors respond to information on the size

2] SELECTION OF ORGANISATION SIZE (IN % OF DONORS)



of charitable organisations (see Figure 2). The findings show that among those subjects in the study who decided to make a contribution, 73 % preferred small organisations. Participants explained their preference by citing lower administrative costs in smaller organisations as well as the greater relative impact of their personal contribution.

OUTLOOK

The department plans to expand its leading position in the comparison of tax burdens by further developing its toolbox of microsimulation models. To date, analysis has only taken into account the first-round effects of a reform. The department plans to extend the spectrum of analysis by also including second-round effects. In response to the increasing divergence between methods of profit determination for tax purposes and for reporting under international accounting standards that has resulted from the passage of the German Accounting Law Modernisation Act (BilMoG), the research department will be intensifying its studies about the connections between these two accounting domains. Apart from its analyses of tax systems, the research department will be devoting increased attention to the positive analysis of actual tax policy decisions. In this regard, researchers are interested in several layers of tax preference formation and will thus take voters as well as political decision makers into account. With regard to research on the nonprofit sector, a focus will be placed on the relationship between tax incentives and charitable giving behaviour.



RESEARCH DEPARTMENT ENVIRONMENTAL AND RESOURCE ECONOMICS, ENVIRONMENTAL MANAGEMENT



Prof. Dr. Andreas Löschel
Head of Department



Dr. Klaus Rennings
Deputy

RESEARCH AREAS

- **International Environmental and Resource Policies**
Contact: Prof. Dr. Andreas Löschel, Astrid Dannenberg
- **Innovation and Sustainable Development**
Contact: Dr. Klaus Rennings
- **Energy Economics**
Contact: Dr. Tim Mennel
- **Transport and Mobility**
Contact: Dr. Claudia Hermeling, Martin Achtnicht
- **Macroeconomic Analysis of Environmentally Relevant Policies**
Contact: Prof. Dr. Andreas Löschel, Victoria Alexeeva-Talebi

MISSION STATEMENT

This research department performs economic analyses of environmental policy instruments. A guiding topic in the department's research is the cost efficiency of environmental regulation. The department plays a prominent role in environmental economic policy advising in Europe, in part due to its modular system of computable general equilibrium (CGE) models. ZEW is also one of the leading institutions in the economic research of EU emissions trading.



In 2010 the head of the research department, Prof. Dr. Andreas Löschel, accepted an appointment at Ruprecht Karl University of Heidelberg as a W3 professor of economics with a specialisation in environmental and resource economics. He was also named a Lead Author of the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). Furthermore, in 2010 Prof. Dr. Löschel hosted two Humboldt Foundation scholarship recipients from Iran and China who had received a Georg Forster research stipend and an international climate protection stipend. Staff members of the research department completed longer research stays at the Chinese Academy of Social Sciences (CASS) in Beijing, Fudan University in Shanghai, Australian National University in Canberra, and the University of California in Irvine.

The research department undertakes diverse media outreach activities. In 2010, for example, researchers developed a computer game about the public good dilemma in climate protection that was presented on board the exhibition ship “MS Wissenschaft” on its tour through Germany and Austria.

RESEARCH AREA “INTERNATIONAL ENVIRONMENTAL AND RESOURCE POLICIES”

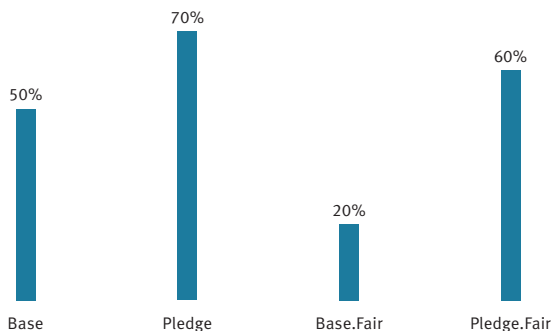
- Analysis of institutions for international environmental and resource policies
- Analysis of trade-offs between international trade and environmental policies
- International climate and resource policy

Researchers in this research area study international environmental problems, particularly issues related to international climate policy. A central focus is placed on international climate agreements and associated climate policy instruments. In the basic research conducted in this

research area, researchers seek first and foremost to identify the determinants of voluntary cooperation between sovereign nations and how this cooperation might be promoted. Of special interest are questions surrounding how varying notions of equitability and institutional factors affect the chances of reaching international agreements. An example of research in this field is a project supported by the Leibniz Association called “Economics of an Integrated and Long-Term Climate and Energy Policy”. In this project, researchers are investigating – among other things – the implications of catastrophic climate change for the effective coordination of climate protection activities. Particular attention is being paid in this study to the heterogeneity of the actors involved and the effects of non-binding target agreements (see Figure 1). To analyse such issues, game theory models, laboratory experiments, and surveys are being used.

Also of great importance in this research area is the analysis of options for the configuration of climate policy instruments, including European and international emissions trading systems

1] COORDINATING TO AVOID A COLLECTIVE RISK



Reading aid: In an experimental setting, we distribute endowments unequally among a group of six people who can reach a fixed target sum through successive money contributions, knowing that if they fail they will lose all their remaining money with 50 % probability. In some treatments we give players the option to communicate intended contributions. We find that inequality reduces the prospects of reaching the target, but that communication increases success dramatically. In the control treatments (“Base”) without inequality and communication, 50 % of the groups successfully reached the target. The success rate increased to 70 % if the players had the possibility to communicate (“Pledge”). Inequality between players reduced the success rate to 20 % (“Base.Fair”) but communication was again an effective tool to increase efficiency (“Pledge.Fair”).

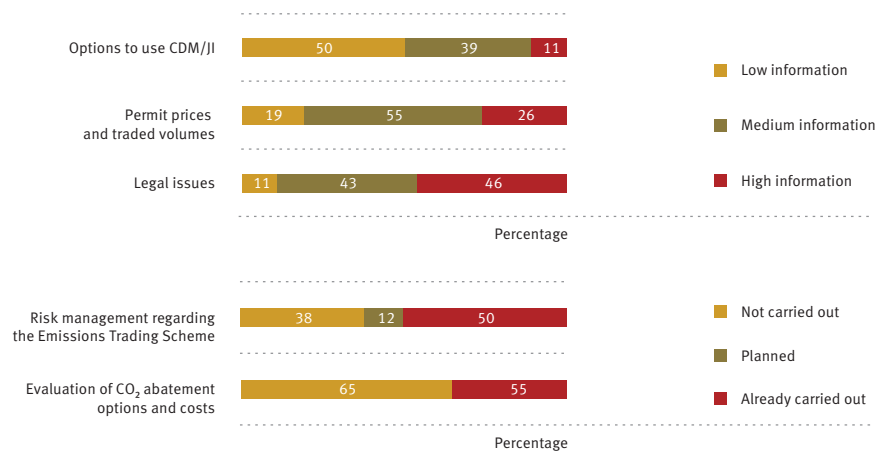
and the project-based mechanisms of the Kyoto protocol. Against the backdrop of the failed Copenhagen climate summit, the future configuration of international instruments for the reduction of greenhouse gasses is a central concern. The instruments that are chosen must be both economically efficient and ecologically effective. At the same time, their implementation must be politically viable, and they must facilitate a gradual movement towards an effective international climate protection regime. In a collaborative project with the Australian National University that is being sponsored by the German Academic Exchange Service (DAAD), researchers are ex-

aming the linkage of national emissions trading systems with the European emissions trading regime. Reciprocal research stays have taken place under the project.

Within the scope of the KfW/ZEW CO₂ Barometer, in 2010 ZEW researchers once again analysed the activities of German firms with regard to climate protection. The survey results show that existing potentials for improving efficiency have not been fully exploited. Thus, while the majority of the surveyed firms are already pursuing CO₂ reduction measures, their knowledge concerning the economic efficiency of these measures is quite poor. For example, 65 % of those surveyed have yet to conduct an analysis of existing CO₂ reduction potentials and associated costs and benefits (see Figure 2).

Researchers in this research area have also been studying the steps that might be taken nationally and internationally to adapt to climate change. Alongside efforts to minimise greenhouse gas emissions, the formulation of measures to adapt to the damage that is expected to result from climate change is a necessary and rational strategy. In an EU project titled “Prospects for the Mediterranean Region”, researchers are analysing and evaluating the economic efficiency of possible adaptation measures in southern and eastern Mediterranean nations. In the project, a particular emphasis is placed on the supportive role of the EU.

2] INFORMATION AMONGST FIRMS REGULATED UNDER THE EU EMISSIONS TRADING SCHEME IN GERMANY



Reading aid: The graphs show results from the KfW/ZEW CO₂ Barometer 2010, a survey amongst German companies regulated under the European Emissions Trading Scheme, which aims to reduce greenhouse gas emissions in the German industry. While the information amongst regulated companies is sufficiently high with regard to legal issues and options for trading of emissions permits, there is still a lack of information with regard to internal management issues related to the CO₂ trading scheme. 50 per cent of respondents do not conduct internal risk management related to the Emissions Trading Scheme. Most importantly, 65 per cent of companies have not yet evaluated options and costs for CO₂ abatement, implying a serious lack of important information inside German companies.

RESEARCH AREA “INNOVATION AND SUSTAINABLE DEVELOPMENT”

- Specification of rules, indicators, and strategies for sustainable economic activities
- Determinants and economic impacts of environmental innovations
- Environmental innovation systems

Innovations in areas such as climate protection technology and energy efficiency are of increasing ecological and economic importance for Germany. For the past fifteen years, the research area “Innovation and Sustainable Development” has been conducting analyses of the environmental aspects of innovation behaviour based upon its annual innovation survey of German industry. Alongside analyses based on this survey, studies are also being conducted with increasing frequency using other methods, including equilibrium models and household surveys.

The analysis of the Mannheim Innovation Panel (MIP) was a key activity in 2010. Questions concerning environmental innovations were first incorporated into the MIP survey in 2009, and this has provided multiple opportunities for analysis. For example, one question of interest was whether environmental innovations have a positive or negative effect on competitiveness. A related question concerns the effects of socially and ecologically responsible commerce on innovation and competition at the firm level. The term “corporate social responsibility” (CSR) is used to describe the voluntary assumption of social obligations by firms. Yet how does CSR actually affect business, society, and the environment? The relationship between CSR and innovation activities, particularly at the European level, is the focus of empirical studies in a number of different projects.

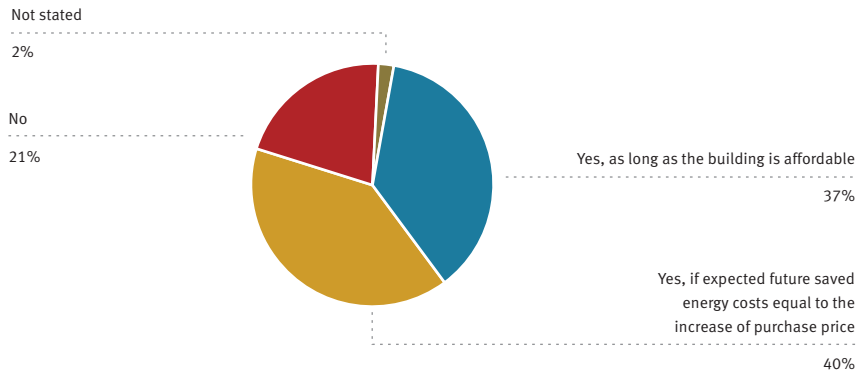
Another important area of emphasis in 2010 was the analysis of sustainable energy consumption by households. In this regard, the SECO@home project was concluded for the German Federal Ministry of Education and Research. Household surveys about energy consumption were a key component of this project (see Figure 3).

The research department also investigates the diffusion of environmental innovations in order to – among other things – identify lead markets for particular technologies. Research on lead markets is undertaken with a special focus on strategy alternatives (e. g. should a country act as a “first mover” or “second follower”?). In this connection, special attention is devoted to lead-market strategies pursued by developing countries such as China (electric vehicles), India (wind energy), and Brazil (bioenergy), as developing countries are increasingly becoming serious competitors in specific sectors.

At the European level, ZEW researchers support the goal of sustainable growth with ex-ante assessments of policy measures in order to estimate their economic, social, and ecological effectiveness. This support is being provided in part within the scope of a Network of Excellence that seeks to provide policymakers in Brussels with improved information about which methods are best suited for achieving specific qualitative and quantitative policy outcomes. These activities are also being pursued in a working group of the Leibniz Association.

Finally, as part of an EU project, the research area investigated the role of innovation within the scope of computable general equilibrium models. In the project, researchers enhanced mod-

3] SECO@HOME: WILLINGNESS TO PAY A PREMIUM FOR HIGHER ENERGY EFFICIENCY



Reading aid: The figure shows how the answers on the question about individuals' willingness to pay a premium for an energy efficient apartment/house (and resulting lower heating energy costs) are distributed. Note that only people who explicitly consider the possibility of buying an apartment or house for owner occupation within the next five years answered this question.

elling techniques in order to take into account endogenous technological progress. To this end, knowledge capital was modelled as an additional form of capital alongside physical capital. This has made it possible to investigate how climate change can be counteracted through investment in research and development and how such investment affects the cost of climate protection. These activities represent a point of intersection in the department between this research area and the “Macroeconomic Analysis of Environmentally Relevant Policies” research area.

RESEARCH AREA “ENERGY ECONOMICS”

- National and European regulatory framework for energy markets
- Regulation of grid-bound energy industries
- Renewable energy and external costs of energy

Researchers in this research area study the goals and instruments of energy policy in Germany and Europe. A guiding principle in this connection is the “energy policy triangle”, the three sides of which are formed by cost-effectiveness, environmental sustainability, and security of supply. A key focus of research activities is placed on environmental regulation, including the European Emissions Trading System, funding instruments for renewable energies, and energy efficiency standards. Additional topics of study include market analysis and competition regulation in the energy sector.

Energy efficiency and its regulation are the subjects of an interdisciplinary project funded by the German Federal Ministry of Education and Research (BMBF) entitled “REBOUND – The Social Dimension of the Rebound Effect”, which was initiated in 2010. A wide range of regulations have been passed by legislators in an effort to achieve energy and climate policy goals through compulsory increases in energy efficiency. However, the energy savings actually achieved by such policies often fall short of the expectations promised by technical forecasts. The behavioural changes stemming from the so-called rebound effect are one explanation for this discrepancy. The rebound effect occurs when the users of an energy service increase their demand due to higher efficiency. Forecasts concerning the conservation gains of energy efficiency measures are distorted if one fails to take the rebound effect into consideration. In the project, changes in behaviour are being empirically investigated and quantified.

In 2010 work on a new international energy markets model was also carried forward. This model, which simulates trade in primary energy sources and in the transformation sector, is being developed in cooperation with Ruprecht Karl University of Heidelberg. The model will be used to analyse interrelationships in the international energy sector. The Center for Energy Economics and Strategy Studies at Fudan University in Shanghai is also taking part in the development of the model within the scope of a cooperation project funded by the German Federal Ministry of Education and Research. Reciprocal research stays by German and Chinese researchers have taken place in the project.

In autumn 2010, the German government presented an energy policy proposal which unleashed vigorous debate regarding the future of energy policy in Germany. This research area is participating in the debate through its media outreach work as well as through presentations and conferences. The research area’s position on energy policy was set forth in its “Energy Forecast 2009”, which was published in July 2010. This document, which was commissioned by the Federal Ministry of Economics, was drafted by ZEW in collaboration with the Institute of Energy Economics and Rational Use of Energy (IER) at the University of Stuttgart and the economic research institute RWI Essen.

Work on the ZEW Energy Market Barometer, a regular survey of some 200 experts in the energy industry, was also continued in 2010, the survey’s ninth year. Subjects addressed by the survey in 2010 included proceeds resulting from the legal extension of the operational life of German nuclear power plants, problems in energy efficiency regulation, and the climate goals of the German federal government.

RESEARCH AREA “TRANSPORT AND MOBILITY”

- Ecological and socio-economic effects of transport systems
- Concepts for sustainable development in transport sectors
- Traffic volume and transportation means used in freight traffic

Today's globalised world is marked by high transport volumes and demanding personal requirements for mobility. The environmental externalities of transport – especially the emission of greenhouse gases – are the subject of analysis in the “Transport and Mobility” research area. The EU hopes to promote greater conservation and reduced environmental and climate impacts in the entire transport sector. This is to be achieved through the expanded use of alternative drive technologies and energy sources as well as through improvements in energy efficiency. The policy instruments selected by the EU to achieve these goals range from the inclusion of air transport in the European Emissions Trading System to setting mandatory CO₂ standards for new automobiles. The close link between economic growth and transportation demand presents particular challenges for regulators. The “Transport and Mobility” research area is investigating economically feasible policy instruments that could be implemented to achieve a reduction in greenhouse gasses as well as reduced dependency on fossil fuels in the transport sector. A key evaluatory criterion in this regard is cost efficiency.

A recent topic of research was household automobile purchase decisions under consideration of various CO₂- and energy-saving drive technologies. These research activities took place in part during a research stay at the University of California in Irvine. It is doubtful whether a decision to buy an energy-efficient automobile leads to the desired environmental effects in and of itself, as lower consumption costs could potentially lead to more intensive use. This effect in the field of transport studies is being examined along with other rebound effects in a project titled REBOUND, which is being financed by the German Federal Ministry of Education and Research. The REBOUND project is being conducted in collaboration with the “Energy Economics” research area. In climate policy and research increasing attention is being devoted to international shipping. To date, greenhouse gas emissions from these transport carriers have not been included in any climate policy regulations. In a project for the German Federal Ministry of Transport (BMVBS), various options for the formulation of a Maritime Emissions Trading System (METS) were analysed, particularly with regard to their economic implications for the maritime industry. Through this project, the research area provided support to the BMVBS in negotiations at the International Maritime Organisation (IMO) regarding the introduction of market-based instruments for reducing CO₂ emissions.

In 2010 the ProgTrans/ZEW Transportmarktbarometer (Transport Market Barometer) once again played an important role in the work of this research area. Since 1998, this quarterly survey has queried leaders in the transport industry about their expectations regarding prices and volume trends in freight traffic. The Transport Market Barometer is a trusted indicator of economic activity in the transport sector and is also a valuable source of information for the press and lay public.

RESEARCH AREA “MACROECONOMIC ANALYSIS OF ENVIRONMENTALLY RELEVANT POLICIES”

- Analysis of institutional frameworks at the international level for environmental and resource policies
- Analysis of trade-offs between international trade and environmental policies
- International climate and resource policy

This research area is distinguished by its unifying function within the department “Environmental and Resource Economics, Environmental Management”. Many of the activities undertaken in this research area overlap with the previously presented research areas. Researchers employ a modular system of computable general equilibrium models known as PACE in order to assess environmentally relevant policies from a problem-oriented perspective.

In 2010 this research area conducted a study on behalf of the EC’s Directorate-General for Enterprise and Industry concerning the extent to which energy-intensive industries might relocate production abroad as a consequence of ambitious EU climate policies (resulting in so-called “carbon leakage”). To this end, changes were made to the CGE model to more strongly disaggregate energy-intensive sectors such as the cement and steel industries. In the project “Global Sectoral Approaches as Part of a Post-2012 Framework”, researchers used this model to analyse the competitive effects of international agreements that may be introduced following the expiration of the Kyoto protocol. Findings from this study were included in the communication from the European Commission “Analysis of Options to Move Beyond 20 % Greenhouse Gas Emission Reductions and Assessing the Risk of Carbon Leakage”. The model-based calculations by ZEW analysed the economic implications of a stricter emissions reduction requirement of 30 % (in relation to 1990 emission levels). Within the scope of this project, a ZEW researcher conducted a research stay at the European Commission’s Directorate-General for Enterprise and Industry in Brussels, as part of the Directorate-General’s Economist Visitors Programme.

In 2010 researchers also linked the department’s disaggregated CGE model with partial models of energy-intensive sectors. To this end, a partnership was initiated with the Finnish Institute for Forest Research (METLA) within the context of a research symposium. A visiting researcher from METLA worked with ZEW researchers to study the effects of the EU energy and climate package on the competitive situation in the paper and pulp industry. The involved researchers combined a partial model of the paper and pulp industry developed by METLA with ZEW’s modular CGE system (PACE). Results from these analyses were presented by the European Commission at a joint workshop with numerous representatives from academia and industry.

In a project for the EC’s Directorate-General for Research, development work continued on an environmental module for CGE model of Russia that will allow a quantitative evaluation of sustainability strategies to be conducted at regional and federal levels. The project was presented at a conference on regional sustainable development in Yekaterinburg, Russia, which was attended by regional and federal government representatives as well as a large number of researchers and the lay public. The challenges of sustainable economic development for energy-intensive

industries in Russia and Ukraine were also the focus of a research stay at the International Energy Agency (IEA) in Paris.

In addition, researchers in the research area are working on a project for the EC's Directorate-General for Research that is seeking to incorporate endogenous technological change into a computable general equilibrium model. Guest researchers from the Fondazione Eni Enrico Mattei (FEEM) in Venice provided support to the ZEW team during the past year in efforts to develop a database of R&D investments and to expand the CGE model. This collaboration will be further intensified in the future.

The research area also began work on the construction of a prototype for an inter-industrial international computable general equilibrium model which will simulate global trade and energy consumption. This model has the specific goal of making complete use of a database developed in a project undertaken by the EC's Directorate-General for Research titled "WIOD – World Input-Output Database: Construction and Applications".

Last year, researchers in this research area also played an active role in Stanford University's Energy Modeling Forum (EMF), which is an international platform for exchange between experts involved in climate and energy modelling. The effects of climate policy measures on competitiveness are the topic of the current forum exercise.

OUTLOOK

In light of the mounting need for action, energy and climate policy will remain the focus of research in the department for the foreseeable future. In particular, the department will devote increased attention to the effects of energy and climate policies on international competitiveness and trade; to the role played by innovation and technological progress in environmental protection; as well as to the importance of decisions by consumers to purchase green products for the achievement of energy and climate policy goals. Furthermore, the department will continue its research on the determinants of voluntary cooperation between sovereign nations and, in turn, on the chances for ratifying international climate agreements.



RESEARCH GROUP INFORMATION AND COMMUNICATION TECHNOLOGIES



Prof. Dr. Irene Bertschek
Head of Research Group



Dr. Marianne Saam
Deputy

RESEARCH AREAS

- **ICT Sector and Diffusion of ICT**
Contact: Jörg Ohnemus
- **ICT and the Labour Market**
Contact: Dr. Marianne Saam
- **ICT, Firm Strategies and Competition**
Contact: Dr. Daniel Cerquera

MISSION STATEMENT

The research group “Information and Communication Technologies” (ICT) studies economic aspects of the production and use of ICT. The group investigates how human capital, firms, and markets should be optimally organised in order to fully exploit the potential offered by ICT for growth and employment.

The group’s research is concerned in particular with the way economic processes are changed on a sustained basis due to the adoption and diffusion of ICT. While empirical and microeconomic methods are dominant in the group’s work, applied theoretical techniques and simulation models as well as empirical macroeconomics are used on a supplementary basis. The group’s cooperation with selected interdisciplinary partners in the fields of management science, information systems, sociology, and psychology has also proven fruitful.

The common feature of the group’s broad-based approach to research is its investigation of the multifaceted role played by ICT: as a tool; market platform; medium for the transmission of information and knowledge; infrastructure element; and as an enabling factor for business management and innovation in the knowledge-based economy.



RESEARCH AREA “ICT SECTOR AND DIFFUSION OF ICT”

- IT and media sector
- Service providers of the information society
- Diffusion of ICT

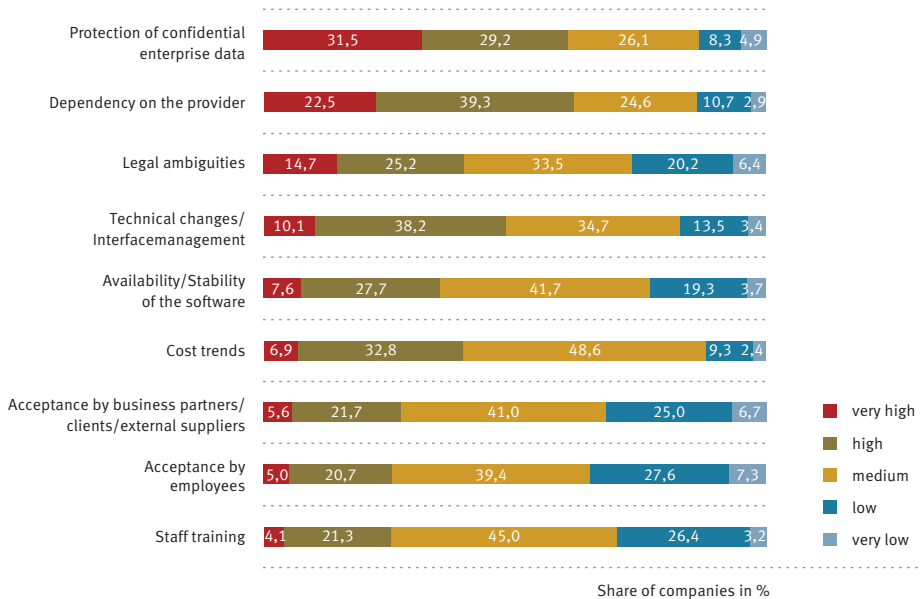
The “ICT Sector and Diffusion of ICT” research area studies the spread of ICT use as well as the success of companies in the ICT sector and ICT-intensive industries. Data surveys conducted by the researchers in this research area investigate the extent to which ICT applications are utilised by firms, the goals firms pursue with ICT, as well as the associated obstacles they perceive. The research group uses surveys to explore topics relevant to real-world practice, and communicates its findings to the general public through its media relations work. At the same time, the data collected in these surveys is used as the basis for demanding quantitative research.

A firmly established element of the research programme is the quarterly business survey “Service Providers of the Information Society”. Since 2003 ZEW has published a business sentiment indicator based on this survey, known as the ZEW “Service Providers of the Information Society” indicator (ZEW-IDI). During 2009 and 2010 the survey permitted close observation of the effects of the economic crisis and showed a relatively rapid recovery in the ICT and knowledge-intensive service sectors. The survey also gathers data on various topics of current interest related to ICT use. In 2010, for example, questions were posed concerning mobile internet, internationalisation, cloud computing, and the Internet of Services. The Internet of Services was also the subject

of a special report commissioned by the German Federal Ministry of Economics and Technology. The internet is increasingly establishing itself as a platform for obtaining a range of services and technologies (Internet of Services). These services include the web-based use of business software and IT-infrastructure from external service providers, such as computing power or storage capacity. However, many firms remain sceptical of these web-based services. More than 60 % of respondents cited concerns about dependence upon a single provider and the safeguarding of confidential business data as the most significant hurdles to the use of such services. Firms are also concerned about the technical conversion required and interface management. Less concern, however, is voiced by firms concerning acceptance on the part of business partners, customers, suppliers, and employees, or concerning the training of employees. Only approximately one-quarter of the firms surveyed see great or very great difficulties with these issues (see Figure 1).

The research group conducted its representative ICT survey for the fifth time in 2010. Participants in the survey included more than 4,400 companies employing at least 5 persons in the manufacturing industry and selected service branches. An important issue addressed in the 2010 survey was IT outsourcing. Among the firms that were surveyed, 78 % indicated that they had

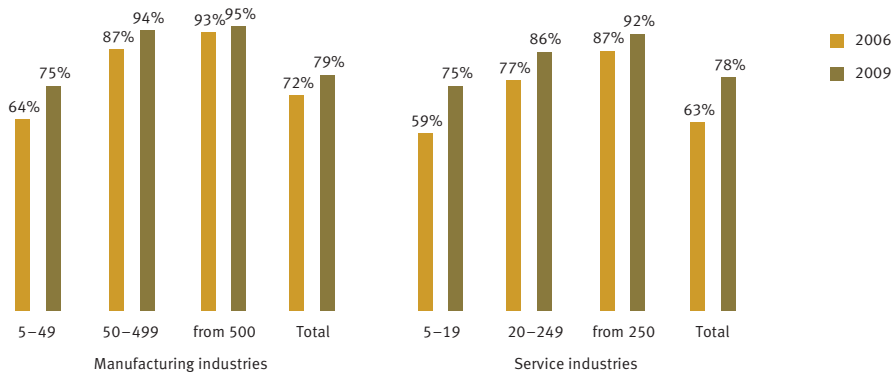
1] DIFFICULTIES IN USING SOFTWARE AND IT-INFRASTRUCTURE FROM EXTERNAL SERVICE PROVIDERS THROUGH THE INTERNET (CLOUD COMPUTING)



Reading aid: About 15 % of the service providers of the information society regard legal uncertainties as a grave difficulty in the usage of IT-infrastructure supplied by external providers. Comment: The data is projected onto the population underlying the survey. Source: ZEW/Creditreform.

purchased IT services from an outside provider in 2009. When compared to 2006, this reflects a significant increase of 15 percentage points. While large firms continue to outsource IT services more frequently than small firms, the greatest increase in outsourcing was demonstrated in the smallest size class. In comparison to 2006, the proportion of smallest firms using outsourcing rose in each sector by 11 and 16 percentage points, respectively, rising to a level of 75 % in both sectors in 2009 (see Figure 2).

2] IT OUTSOURCING

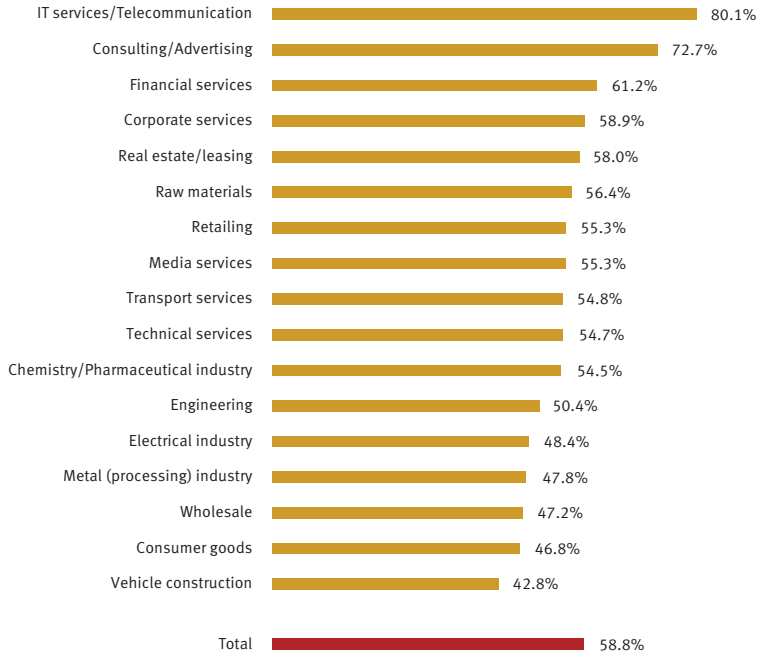


Reading aid: 94 % of all enterprises in the manufacturing sector with 50-499 employees have outsourced IT services in the year 2009. In 2006 it was 87 %. Comment: The data is projected onto the population underlying the survey.

Source: ZEW ICT survey, 2010.

An additional focus of the ICT survey was the use of social software applications, such as wikis, blogs, online social networks, and collaborative platforms (also known as social media or Web 2.0). Social media have a reputation for being primarily used for online social exchange and as a diversion. Nevertheless, 59 % of the firms surveyed in 2010 that utilised such applications considered them to be an element of their business strategy. The most frequent users of social media for strategic purposes are IT and CT service providers and firms in the business consulting and advertising sectors. Manufacturing firms, by contrast, are much more reticent about this tool (see Figure 3).

3] SOCIAL MEDIA AS CORPORATE STRATEGY



Reading aid: For 50 % of the enterprises in the engineering sector employing social media applications, the use of these tools is considered a part of the corporate strategy. Comment: The data is projected onto the population underlying the survey. Source: ZEW ICT survey, 2010.

RESEARCH AREA “ICT AND THE LABOUR MARKET”

- Workplace organisation
- Qualification and wage structure
- Age structure of employees
- Training and further education
- Preprofessional education

The continuous development of new information processing and communications technologies requires the ongoing adaptation of user skills and company organisation. The “ICT and the Labour Market” research area focuses on the effects of newer technologies on employees in various groups (e. g. based on age, gender, or qualification).

In this research area, the work of the research group pays particular attention to older employees. Other projects examine the preprofessional phase as well as the use of interactive web applications.

As part of a series of studies on the use of ICT in an aging society, researchers completed a research project that examined the relationship between process innovation and the age structure of company workforces. Using data from ZEW's ICT surveys from 2004 and 2007, the researchers explored whether the age structure of a company's workforce has an impact upon innovation activities driven by ICT. According to the project's findings, the probability of achieving process innovations is positively correlated with the intensity of a firm's IT use. By contrast, a higher percentage of employees greater than 49 years of age is negatively correlated with the probability of innovation. This negative relationship is further amplified by the fact that the interaction between this age group and ICT intensity is negatively correlated with the probability of process innovations. The probability of innovation increases when firms offer IT training to older employees. This suggests that it is not the age of older workers per se that impedes a firm's innovation ability, but instead, that older employees lack sufficient IT skills.

In the realm of preprofessional education, the research area is collaborating with the research department "Labour Markets, Human Resources and Social Policy" to analyse the skills, qualifications, and social integration of young persons from birth to the start of their professional lives. The study takes into consideration the causes and effects of ICT and media use in relevant life stages. Currently, ZEW is helping to design a National Education Panel Study, which is anticipated to facilitate more detailed analyses beginning in 2011.

The research group is also participating in a project supported by the Leibniz Association that is examining the socio-economic factors that influence knowledge formation in online networks. In particular, the research group will study the role of connectedness in knowledge formation and aggregation. Researchers will analyse whether the connectedness of the individual who first expresses an idea in an online network plays a role in determining if other persons will take up and continue to develop that idea. In continuing research activities, this question will be examined using Wikipedia articles. Conducted within the framework of the ScienceCampus Tübingen "Informational Environments", this project will contribute to the development of IT infrastructure for the evaluation of data from online social networks.

RESEARCH AREA "ICT, FIRM STRATEGIES AND COMPETITION"

- Productivity and innovation
- Outsourcing and IT consulting
- Internationalisation
- Competition economic aspects
- Macroeconomic effects of ICT use in firms

In a knowledge-based economy, new ICT applications represent a key tool for enabling firms to respond to competitive pressures resulting from increasing internationalisation, an unstable economic environment, and changing demand conditions. The motivations for using ICT and its effects, as well as complementary business strategies (such as outsourcing and IT consulting)

are the focus of study in this research area. Additional research activities address strategies and interaction in online marketplaces. Furthermore, researchers in this research area study the effects of ICT expansion on macroeconomic growth and the particularities of competition and regulation in the ICT sector and in ICT-intensive user branches.

In preparation for the 5th National IT Summit, the research group, together with the research department “Industrial Economics and International Management”, conducted a study commissioned by the Federal Association for Information Technology, Telecommunications and New Media (BITKOM) about the role of ICT as an enabler of innovation. The critical importance of ICT for Germany’s innovation activities is demonstrated by the fact that the ICT branch is one of the most innovative branches in Germany, with 7 % of revenues devoted to innovation projects. At the international level as well, Germany plays a leading role in the area of ICT innovations, as 12 % of all patents related to this field originate from Germany. As a “general purpose technology”, ICT also provides impetus for innovation in other branches. Among innovative firms, 40 % introduced ICT-based innovations in 2010.

The research area conducted a study on behalf of Deutsche Telekom regarding the effects of broadband use on firm success. For the period between 2001 and 2003, the study demonstrated a positive effect of broadband use upon firms’ innovation activities. As data was available on when broadband became available at firms’ postal code area as well as on firms’ broadband usage, it was possible to take the endogeneity of broadband use into account.

In a project supported by the Fritz Thyssen Foundation, the research group studied the role of ICT as a general purpose technology in intermediate product markets. When a general purpose technology is used, the full benefits of the technology (in terms of usefulness and knowledge accumulation) may only be enjoyed when other economic actors also employ that technology. With respect to intermediate product markets, researchers were able to use data from the ZEW ICT survey to demonstrate that the ICT intensity of an individual firm is positively correlated with ICT utilisation on the part of its suppliers and customers. In this research, ICT intensity was measured in terms of various responses concerning ICT infrastructure and ICT applications within the company.

Two projects supported in early 2010 are being carried out in collaboration with the “Industrial Economics and International Management” research department. The projects are being financed through the EU’s Seventh Framework Programme for Research. The INDICSER project has the goal of developing indicators for measuring the performance of service sectors in the EU. The SERVICEGAP project examines the impact of the market service sector upon economic growth in the EU.

Research undertaken in cooperation with Johannes Kepler University in Linz studied price-setting practices at price comparison websites. This study specifically explored the role of “just-below pricing”. Frequently, prices end in 99 cents or in the case of durable consumer goods such as PCs, are set at 99 euros or 999 euros. An analysis of 20,000 products with 820,000 sale prices clearly shows that prices are likelier to end in “9” and that online shops stick to such prices for a longer time than prices with other endings. Moreover, it was demonstrated for the first time that competitors are slower to underbid a price leader if the price leader’s product has

a price ending in nine. Research about price comparison websites is being continued in a SEEK project that began in autumn 2010. In this project, competitive strategies over the product life cycle are being examined.

In November 2010, together with the research department “Environmental and Resource Economics, Environmental Management”, the research group organised an international workshop titled “The Economics of Green IT”. The term “green IT” is used to designate energy-saving measures in the production and utilisation of information technologies as well as IT-based innovations that are targeted at (1) reducing energy consumption by equipment and in production processes, (2) improving electrical grids, and (3) organising energy markets in a more efficient way. Although green IT is heavily discussed by industry, the field of economics has yet to develop a systematic research approach to this subject. The aim of the workshop was to foster debate about green IT in economics and related disciplines. The keynote speaker, Prof. Philippe Aghion, PhD, of Harvard University, spoke about designing optimal climate protection policy in view of the coexistence of “cleaner” and more environmentally polluting technologies.

OUTLOOK

Activities that will shape the research agenda in coming years include: the assessment of data from a large survey regarding the relationship between ICT use and firm success; research projects related to the European service sector; and the analysis of strategies and interactions in online marketplaces.



RESEARCH GROUP GROWTH AND BUSINESS CYCLES



Prof. Dr. Dr. h.c. mult. Wolfgang Franz
Head of Research Group



Dr. Marcus Kappler
Deputy

RESEARCH AREAS

- **Analysis of Long-Term Macroeconomic Relationships**
Contact: Dr. Marcus Kappler
- **Analysis of Short-Term Macroeconomic Relationships**
Contact: Dr. Marcus Kappler, Dr. Atilm Seymen
- **Development of Analytic Tools and Methods**
Contact: Martin Scheffel

MISSION STATEMENT

The research group utilises advanced methods in macroeconometrics and theoretical macroeconomics. Particular areas of expertise include the analysis of panel data as well as the use of cointegration models and structural vector autoregressive models. The latest estimation procedures are tailored to each application. The group uses dynamic equilibrium models to analyse the economic consequences and general welfare impacts of changes to fundamental factors.



The research group utilises advanced methods in macroeconometrics and theoretical macroeconomics. Particular areas of expertise include the analysis of panel data as well as the use of cointegration models and structural vector autoregressive models. The latest estimation procedures are tailored to each application. The group uses dynamic equilibrium models to analyse the economic consequences and general welfare impacts of changes to fundamental factors.

The macroeconomic expertise of the Centre for European Economic Research is concentrated in this research group, which is responsible for coordinating all cross-unit research projects with a macroeconomic focus. The researchers in this group are also the primary liaisons to the media and broader public for questions about global macroeconomic developments and economic policy.

Unlike the other research units at ZEW, this group is set apart by its primary use of macroeconomic research techniques. The group advises public institutions and industries in Germany and Europe with data, analyses, and forecasts about macroeconomic challenges of regional, national, and global scope.

In 2010 the research group once again hosted an international conference together with the University of Mannheim titled “Latest Developments in Macroeconomics”. The goal of this annual conference is to provide a platform for intensive discussion and scholarly exchange on the latest advances in macroeconomic research. The talks given by the keynote speakers Prof. Hashem Pesaran, PhD, of the University of Cambridge, Prof. Giuseppe Bertola, PhD, of the University of Turin, and Prof. Dr. Fabrizio Zilibotti of the University of Zurich were particularly well received. Yet beyond the talks given by these speakers, excellent presentations were made in a variety of macroeconomic fields, including labour market economics, fiscal and monetary policy, and economic growth in times of the financial market crisis.

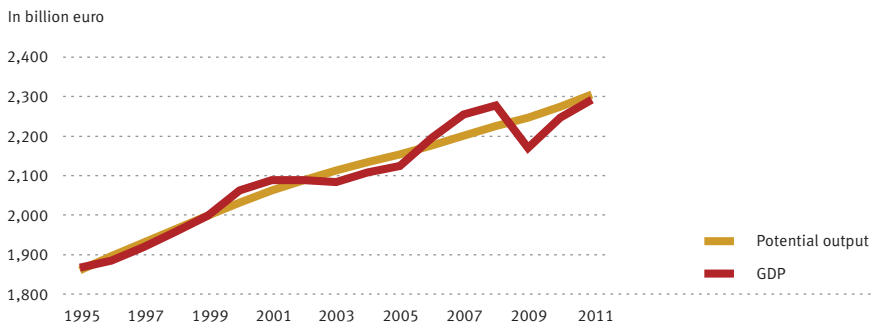
RESEARCH AREA “ANALYSIS OF LONG-TERM MACROECONOMIC RELATIONSHIPS”

- Determinants of the potential output of industrial countries
- Quantitative analysis of long-term unemployment
- Impact of institutional reforms on growth and employment
- Effects of globalisation on employment and income distribution

In analysing long-term macroeconomic relationships, researchers in this research area focus in particular on factors impacting potential output and structural unemployment. One aim of the research area is to conduct multinational comparative macroeconomic studies that illuminate how globalisation and effective institutional frameworks impact economic growth in Germany. Another aim is to develop empirically based macroeconomic models that enable the quantitative assessment of the effects of reform on economic growth and long-term unemployment in Germany and Europe.

Members of the research group have accumulated specialised knowledge in their studies and estimations of potential output and assessments of medium-term macroeconomic forecasts. Since autumn 2010, this knowledge has been incorporated into a bi-annual macroeconomic diagnosis prepared by leading economic institutes (“Gemeinschaftsdiagnose”). During the next three years, the research group will be collaborating with the Kiel Institute for the World Economy in working on this prominent project, which is commissioned by the German Government. With-

GDP AND POTENTIAL OUTPUT IN GERMANY



in the consortium, the research group will be responsible for assessing potential output as a basis for the medium-term macroeconomic forecast for Germany. Such forecasts are invaluable to the Federal Government for medium-term budget planning and for developing its stability programme within the Stability and Growth Pact of the euro area Member States. They are also a vital element for deriving structural budget balances and for official tax estimation. The figure shows Germany’s estimated potential output together with actual output in terms of GDP.

In autumn 2010, members of the research group led for a second time the academic supervision of a multi-month training programme for professionals from China and Vietnam. The course is designed to impart a deeper understanding of fiscal and monetary policy, labour and financial markets, and trade policy. An additional focus of the ten-week programme is on the analysis and discussion of development strategies for China and Vietnam. One aim is to provide the participating professionals with theoretical knowledge about these areas of activity in economic policy. Another aim is to acquaint participants with the practical implementation of that knowledge in Germany and the EU. The course at ZEW is part of the training programme “Strengthening Macroeconomic Policies”, organised by Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) – formerly Internationale Weiterbildung und Entwicklung gGmbH (InWEnt) – under contract from the Federal Ministry for Economic Cooperation and Development.

A further topic of study pursued by this research area is the investigation of the employment effects of labour and product market institutions in Europe’s national economics. In this research, special attention is devoted to interactive effects between institutions. Institutional regulations that affect the labour market include protections against dismissal, taxes and mandatory contributions on labour, market entry barriers in product markets, and trade barriers for firms. The impact of institutional restrictions on competition as well as the effects of reforms on the labour market are often unclear from a theoretical perspective, for mutual interdependencies cause many institutional factors to have countervailing effects, thus making it difficult to determine the primary factor affecting the labour market at any given time. In the empirical literature, there is a lack of studies that reach well-founded conclusions about the type and extent of these interdependencies.

The research group completed a study during the year under review which demonstrated that a number of factors have a significant impact upon a nation’s labour market. Specific factors showing a strong effect included taxes on wages and consumption, the wage replacement ratio during the first, fourth, and fifth years of unemployment, barriers to market entry, government property, the coordination of wage agreements, and protections against dismissal. In a follow-up step, a theoretically based empirical analysis will be undertaken to cast light on the interactions within an institutional system. This will provide a more rigorous foundation for evaluating the need for reforms and their effectiveness, as well as for precisely assessing how an institutional system consisting of a product and labour market should be configured.

Another planned project will analyse the effects of globalisation on growth and employment. Globalisation is not a unitary phenomenon. It presents nations, firms, and individuals with ever new challenges. Success in resolving these challenges has a decisive impact upon prosperity and growth. The impacts resulting from constantly increasing global trade and ever greater integration of economic zones have long been an important concern for macroeconomic research on the labour market. However, there is little detailed knowledge about the effects of newer forms of globalisation, such as offshoring. Theoretical considerations suggest that increasing globalisation will have a non-linear aggregate effect upon employment, and will have a heterogeneous impact upon affected individuals. The studies conducted by the research group aim to further develop theoretical knowledge and then to verify it in a rigorous fashion. The group models both

the aggregate dynamics of employment and the relative demand for labour. It also studies the problem of increased volatility on the labour market related to globalisation. New insights obtained about the impact of economic shocks upon permanent income are analysed and correlated with aggregate savings and consumption decisions.

RESEARCH AREA “ANALYSIS OF SHORT-TERM MACROECONOMIC RELATIONSHIPS”

- Synchronisation and convergence of international business cycles
- Origin and transmission of business cycle shocks
- International capital links and the business cycle

The following questions stand at the forefront of the analysis of short-term macroeconomic relationships: Which shocks influence the business cycle? Which common factors underlie movements in the business cycle and how strongly synchronised are the economic cycles of industrialised nations? Which sectors are particularly sensitive to “news shocks”, that is, to new information regarding future technological developments? What impact does international capital integration have on business cycle interrelationships between different nations? These questions are currently addressed using modern methods of time series econometric analysis. In the future, quantifiable theoretical multi-country models will also be used. The research group regularly evaluates the accuracy of growth forecasts made by external sources in order to assess their reliability and usefulness.

The group plans to expand its research agenda by studying industry-specific business cycles. In this regard, a particular focus will be placed on sector-specific news shocks. Until the 1970s, macroeconomic theory was dominated by the viewpoint that business cycles are primarily a demand-based phenomenon, as they are characterised by cyclical and recurrent movements of the macroeconomic dynamic around a long-term trend. The Real Business Cycle (RBC) theory introduced at the beginning of the 1980s suggested instead that supply-side effects – in particular, technology shocks – could be an important driving force behind business cycles. Earlier forms of RBC theory often modelled technology shocks in terms of shocks affecting a production function. The original RBC model has been expanded over the years to include both new types of shocks and new macroeconomic mechanisms. Formerly there was a consensus in the literature that neutral technology shocks were not a key driver of the business cycle. However, a quite recently developed body of literature suggests that another type of technology shock – the “news shock” – plays an important role in business cycle fluctuations. The literature to date has only examined the role of news shocks in the overall economy. The goal of a project funded under the SEEK research programme is to identify news shock at a sectoral level and to measure its effects upon the business cycle of the branch. This should generate important conclusions about commonalities and differences between sectors in their “digestion” of news shocks, thus permitting researchers to estimate the vulnerability of specific branches with respect to technology-related news.

This research area will also be examining the relationships between business cycle changes and foreign direct investment. A research proposal related to this subject is in the process of preparation at this time, and will be submitted to the German Research Foundation (DFG) during the first half of 2011. During the last few decades, foreign direct investment has increased substantially. Between 1982 and 2008, global direct investment increased nearly nineteen-fold. About a third of global trade is currently conducted by multinational corporations. These changes have stimulated numerous studies about the determinants and long-term consequences of economic activities by multinational firms. However, hardly any attention has been given to short-term effects in the area of business cycles. The empirical literature suggests that national business cycle fluctuations during the past twenty years have been greatly influenced by cross-border interrelationships. In this context, the research group will study to what extent the enormous growth of linkages between corporations has changed the relationship of business cycles between different nations.

RESEARCH AREA “DEVELOPMENT OF ANALYTIC TOOLS AND METHODS”

- Business cycles and growth in a unified theoretical and empirical framework
- Macro-theoretical DSGE (dynamic stochastic general equilibrium) model
- Macroeconometric multi-country model

Models which are continually refined based on specific research questions are essential for the rigorous study of macroeconomic interrelationships in a national and international context. The “Development of Analytic Tools and Methods” research area provides a framework for the ongoing development and fine-tuning of modelling methods. To this end, the group develops and refines analytic tools for the evaluation of the short- and long-term effects of policy measures as well as for forecasting mid-term macroeconomic changes. These models are used for a variety of purposes – for example, to study the spread of business cycle shocks with a focus on effects in euro area Member States. The recent global economic turmoil has highlighted the importance of a systematic examination of global dependencies and reciprocal relationships.

In this area, the group also maintains methods used specifically for creating mid-range forecasts in the area of joint diagnosis. In this regard, a method used by the European Commission as part of the EU’s European Stability and Growth Pact is of key significance. This method is also used to determine cyclical components of the German federal budget (as part of the implementation of the debt ceiling agreed upon in the Federalism Commission II).

In 2009 and 2010 ground-breaking work was conducted for creating a dynamic stochastic general equilibrium model (DSGE). The DSGE model explicitly captures basic economic relationships, such as household consumption and savings decisions. This allows analysis to be performed even when parameters change due to preference shocks or institutional reforms. The model’s microeconomic foundations in household data are a particular advantage, for this allows the welfare effects of institutional reforms to be quantified and assessed on the basis of individual household preferences.

In 2010 the model was the basis for evaluating both stages of the Hartz IV reforms (the first stage implemented in 2005 consisted of combining unemployment and social assistance into one long-term unemployment benefit [Arbeitslosengeld II], and the second stage in 2006 implemented a reduction in the maximum period for receiving short-term unemployment benefits [Arbeitslosengeld I]). The next step will be to adapt the model for calculating the features of an optimal unemployment insurance system. In this process, the concept of the model provides a critical advantage in that the balance of consumption, savings, and search decisions is independent from the underlying wealth distribution. This significantly shortens the time period needed for calculation and simulation.

OUTLOOK

The group's research plan is directed at the analysis of the long-term economic development of product and labour markets. Thus, the group examines factors that affect potential output along with long-term trends for potential labour input in advanced economies using multinational indicators and statistics. In addition, new explanatory approaches for understanding globalisation and its effects upon economic growth and employment are being pursued in order to shed light at an early stage on relevant developments along with related options for formulating policies. The global economic recession that stuck in 2008 will continue to be an important subject of research.

Compete in Eco

SCIENTIFIC OUTPUT, COMMITTEES AND EXTERNAL RELATIONS

► SCIENTIFIC OUTPUT

► COMMITTEES AND EXTERNAL RELATIONS

nce nomics

▶ SCIENTIFIC OUTPUT

Publications in Refereed Journals	118
ZEW Book Series	120
ZEW Discussion Papers	120
Conferences and Workshops	122

PUBLICATIONS IN REFEREED JOURNALS

- Addison, J., P. Teixeira and T. Zwick (2010), German Works Councils and the Anatomy of Wages, *Industrial and Labor Relations Review* 63 (2), 24–70.
- Ammermüller, A., C. Lucifora, F. Origo and T. Zwick (2010), Wage Flexibility in Regional Labour Markets: Evidence from Italy and Germany, *Regional Studies* 44 (4), 401–421.
- Anger, N., C. Böhringer and A. Löschel (2010), Paying the Piper and Calling the Tune? A Meta-Regression Analysis of the Double-Dividend Hypothesis, *Ecological Economics* 69 (7), 1495–1502.
- Arnold, J. and K. Hussinger (2010), Exports Versus FDI in German Manufacturing: Firm Performance and Participation in International Markets, *Review of International Economics* 18 (4), 595–606.
- Artz, M. (2010), What Attracts Human Capital? Understanding the Skill Composition of Interregional Job Matches in Germany, *Regional Studies* 44, 423–441.
- Aschhoff, B. (2010), Who Gets the Money? The Dynamics of R&D Project Subsidies in Germany, *Jahrbücher für Nationalökonomie und Statistik* 230 (5), 522–546.
- Bartling, B., E. Fehr, B. Fischer, F. Kosse, M. Maréchal, F. Pfeiffer, D. Schunk, J. Schupp, C. Spieß and G. Wagner (2010), Geduld von Vorschulkindern – Ergebnisse einer Experimentalstudie im Haushaltskontext von Kindern, *Schmollers Jahrbuch – Journal of Applied Social Science Studies* 130 (3), 297–323.
- Beninger, D., H. Bonin, J. Horstschräer and G. Mühler (2010), Wirkungen eines Betreuungsgeldes bei bedarfsgerechtem Ausbau frühkindlicher Kindertagesbetreuung: Eine Mikrosimulationsstudie, *DIW Vierteljahrshefte zur Wirtschaftsforschung* 79 (3), 147–168.
- Benz, E., A. Löschel and B. Sturm (2010), Auctioning of CO₂ Emission Allowances in Phase 3 of the EU Emissions Trading Scheme, *Climate Policy* 10 (6), 705–718.
- Bischoff, I. and W. Gohout (2010), The Political Economy of Tax Projections, *International Tax and Public Finance* 17 (2), 133–150.
- Blomeyer, D., M. Laucht, F. Pfeiffer and K. Reuß (2010), Mutter-Kind-Interaktion im Säuglingsalter, Familienumgebung und Entwicklung früher kognitiver und nicht-kognitiver Fähigkeiten: Eine prospektive Studie, *DIW Vierteljahrshefte für Wirtschaftsforschung* 79 (3), 11–26.
- Bonin, H. (2010), Die Bildungs-Card: Ein Instrument nachhaltiger Arbeitsmarktpolitik?, *ifo Schnelldienst* 18, 14–17.
- Boockmann, B. and S. Steffes (2010), Workers, Firms, or Institutions: What Determines Job Duration for Male Employees in Germany?, *Industrial and Labor Relations Review* 64 (1), 853–871.
- Borgloh, S. and F. Heinemann (2010), Der Non-Profit-Sektor in Europa: Wenig erforscht, aber nicht unbedeutend, *integration* 33 (3), 240–254.
- Cockx, B., C. Göbel and S. Robin (2010), L'effet sur l'emploi du complément de revenu au travail à temps partiel en Belgique, *Revue Économique* 61 (2), 299–312.
- Czarnitzki, D. and A. Toole (2010), Is There a Trade-Off Between Academic Research and Faculty Entrepreneurship? Evidence from U.S. NIH Supported Biomedical Researchers, *Economics of Innovation and New Technology* 19 (5/6), 505–520.
- Czarnitzki, D. and K. Kraft (2010), On the Profitability of Innovative Assets, *Applied Economics* 42 (15), 1941–1953.
- Czarnitzki, D. and K. Kraft (2010), Which Firms Buy Licenses? Market Positions and License Expenditures, *Scandinavian Journal of Economics* 112 (3), 471–488.
- Dannenberg, A., B. Sturm and C. Vogt (2010), Do Equity Preferences Matter for Climate Negotiators? An Experimental Investigation, *Environmental and Resource Economics* 47 (1), 91–109.
- Dannenberg, A., T. Menzel, D. Osberghaus and B. Sturm (2010), The Role of Government in Adaptation to Climate Change, *Environment & Planning C: Government & Policy* 28 (5), 834–850.
- Deaves, R., E. Lüders and M. Schröder (2010), The Dynamics of Overconfidence: Evidence from Stock Market Forecasters, *Journal of Economic Behavior & Organization* 75 (3), 402–412.
- Dick, C. and Q. Wang (2010), The Economic Impact of the Olympic Games: Evidence from Stock Markets, *Applied Economics Letters* 17 (9), 861–864.
- Dovern-Pinger, P. (2010), Come Back or Stay? Spend Here or There?, *International Migration* 48 (5), 142–173.
- Fryges, H. and J. Wagner (2010), Exports and Profitability – First Evidence for German Manufacturing Firms, *The World Economy* 33 (3), 399–423.
- Gebel, M. and F. Pfeiffer (2010), Educational Expansion and Its Heterogeneous Returns for Wage Workers, *Schmollers Jahrbuch – Journal of Applied Social Science Studies* 130 (1), 19–42.
- Geys, B., F. Heinemann and A. Kalb (2010), Voter Involvement, Fiscal Autonomy and Public Sector Efficiency: Evidence from German Municipalities, *European Journal of Political Economy* 26 (2), 265–278.
- Gottschalk, S., K. Müller and M. Niefert (2010), Entry Strategies, Founder's Human Capital and Start-Up Size, *International Journal of Entrepreneurship and Small Business* 11 (4), 403–423.
- Grimpe, C. and H. Fier (2010), Informal University Technology Transfer: A Comparison Between the United States and Germany, *Journal of Technology Transfer* 35, 637–650.
- Grimpe, C. and U. Kaiser (2010), Balancing Internal and External Knowledge Acquisition: The Gains and Pains of R&D Outsourcing, *Journal of Management Studies* 47 (8), 1483–1509.
- Gröpl, C., F. Heinemann and A. Kalb (2010), Die Zweckentfremdung des kommunalen Kassenkredits – Eine rechtlich-ökonomische Analyse, *Perspektiven der Wirtschaftspolitik* 11 (2), 178–203.
- Gürtzgen, N. (2010), Rent-Sharing and Collective Wage Contracts – Evidence from German Establishment-Level Data, *Applied Economics* 42, 2835–2854.
- Hagedorn, M., A. Kaul and T. Menzel (2010), An Adverse Selection Model of Optimal Unemployment Insurance, *Journal of Economic Dynamics and Control* 34 (2), 490–502.
- Heinemann, F. (2010), Eine Gabe an St. Nimmerlein? – Zur zeitlichen Dimension der Schuldenbremse, *Perspektiven der Wirtschaftspolitik* 11 (3), 246–259.
- Heinemann, F., P. Mohl and S. Osterloh (2010), Reforming the EU Budget: Reconciling Needs with Political-Economic Constraints, *Journal of European Integration* 32 (1), 59–76.
- Heinze, A. and E. Wolf (2010), The Intra-Firm Gender Wage Gap: A New View on Wage Differentials Based on Linked Employer-Employee Data, *Journal of Population Economics* 23 (3), 851–879.

- Hüschelrath, K. and J. Weigand (2010), A Framework to Enforce Anti-Predation Rules, *World Competition Law and Economics Review* 33 (2), 209–240.
- Hüschelrath, K. and N. Leheyda (2010), A Methodology for the Evaluation of Competition Policy, *European Competition Journal* 6 (2), 397–425.
- Hüschelrath, K., N. Leheyda and P. Beschorner (2010), Assessing the Effects of a Road-Surfacing Cartel in Switzerland, *Journal of Competition Law and Economics* 6 (2), 335–374.
- Hussinger, K. (2010), On the Importance of Technological Relatedness: SMEs Versus Large Acquisition Targets, *Technovation* 30, 50–64.
- Kalb, A. (2010), The Impact of Intergovernmental Grants on Cost Efficiency: Theory and Evidence from German Municipalities, *Economic Analysis and Policy* 40 (1), 23–48.
- Kleff, V. and M. Weber (2010), Aspects of Payout Policy of German Savings Banks, *Kredit und Kapital* 43, 39–63.
- Köhler, M. (2010), Ownership Structure, Regulation and the Market for Corporate Control in the EU Banking Sector, *European Journal of Law and Economics* 17 (3), 259–283.
- Kröncke, T.-A. and F. Schindler (2010), Downside Risk Optimization in Securitized Real Estate Markets, *Journal of Property Investment & Finance* 28 (6), 434–453.
- Lange, A., A. Löschel, C. Vogt and A. Ziegler (2010), On the Self-Interested Use of Equity in International Climate Negotiations, *European Economic Review* 54 (3), 359–375.
- Löschel, A. (2010), Sind Umweltzölle ein geeignetes Instrument zur Ermöglichung fairen Wettbewerbs zwischen Ländern mit hohen und geringen Klimaschutzanforderungen?, *Zeitschrift für Wirtschaftspolitik* 59 (2), 174–181.
- Löschel, A., P. Heindl, V. Lo, A. Detken and V. Alexeeva-Talebi (2010), KfW/ZEW CO₂ Panel: Vermeiden oder kaufen – Deutsche Unternehmen im Emissionshandel, *Zeitschrift für Energiewirtschaft (ZfE)* 34 (1), 39–46.
- Löschel, A., U. Moslener and D. Rübhelke (2010), Energy Security – Concepts and Indicators – Editorial, *Energy Policy* 38 (4), 1607–1608.
- Löschel, A., U. Moslener and D. Rübhelke (2010), Indicators of Energy Security in Industrialised Countries, *Energy Policy* 38 (4), 1665–1671.
- Meyer, J. (2010), Does Social Software Support Service Innovation?, *International Journal of the Economics of Business* 17 (3), 289–311.
- Mohl, P. and T. Hagen (2010), Do EU Structural Funds Promote Regional Growth? New Evidence from Various Panel Data Approaches, *Regional Science and Urban Economics* 40 (5), 353–365.
- Mühlenweg, A.M. (2010), Young and Innocent – International Evidence on Age Effects Within Grades on Victimization in Elementary School, *Economics Letters* 109 (3), 157–160.
- Mühlenweg, A.M. and P. Puhani (2010), The Evolution of the School Entry Age Effect in a School Tracking System, *Journal of Human Resources* 45 (2), 407–438.
- Müller, K. (2010), Academic Spin-Offs' Transfer Speed – Analyzing the Time from Leaving University to Venture, *Research Policy* 39 (2), 189–199.
- Niefert, M. (2010), Characteristics and Determinants of Start-Ups from Unemployment: Evidence from German Micro Data, *Journal of Small Business and Entrepreneurship* 23 (3), 409–429.
- Overesch, M. and G. Wamser (2010), Corporate Tax Planning and Thin-Capitalization Rules: Evidence from a Quasi Experiment, *Applied Economics* 42 (5), 563–573.
- Overesch, M. and G. Wamser (2010), The Effects of Company Taxation in EU Accession Countries on German FDI, *Economics of Transition* 18 (3), 429–457.
- Overesch, M. and U. Schreiber (2010), Asset Specificity, International Profit Shifting, and Investment Decisions, *Zeitschrift für Betriebswirtschaft Special Issue* 2, 23–47.
- Patuelli, R., A. Vaona and C. Grimpe (2010), The German East-West Divide in Knowledge Production: An Application to Nano-material Patenting, *Tijdschrift voor economische en sociale geografie (Journal of Economic & Social Geography)* 101 (5), 568–582.
- Rennings, K. and W. Smidt (2010), A Lead Market Approach Towards the Emergence and Diffusion of Coal-Fired Power Plant Technology, *Economia politica* XXVII 2, 301–327.
- Rennings, K., P. Markewitz and S. Vögele (2010), Why Radical Innovations Fail: The Case of Technological Change in German Coal-Fired Power Plants, *African Journal of Science, Technology, Innovation and Development (AJSTID)* 2 (1), 10–36.
- Rotfuß, W. and P. Westerheide (2010), Eine Analyse der Wohnungsbauprämienförderung aus empirischer Sicht, *Kredit und Kapital* 43 (1), 97–123.
- Schindler, F. (2010), Spillover Effects Between International Real Estate Stock Markets, *Journal of Interdisciplinary Property Research (Zeitschrift für Immobilienökonomie)* 1/2010, 5–25.
- Schindler, F., N. Rotke and R. Füss (2010), Testing the Predictability and Efficiency of Securitized Real Estate Markets, *Journal of Real Estate Portfolio Management* 16 (2), 171–191.
- Schleife, K. (2010), What Really Matters: Regional Versus Individual Determinants of the Digital Divide in Germany, *Research Policy* 39 (1), 173–185.
- Schmidt, T. (2010), Absorptive Capacity – One Size Fits all? A Firm-Level Analysis of Absorptive Capacity for Different Kinds of Knowledge, *Managerial and Decision Economics* 31(1), 1–18.
- Sofka, W. and C. Grimpe (2010), Specialized Search and Innovation Performance – Evidence Across Europe, *R&D Management* 40 (3), 310–323.
- Spengel, C. and C. Elschner (2010), Steuerliche Anreize für Forschung und Entwicklung – Empirische Befunde, internationaler Vergleich und Reformansätze für Deutschland, *Zeitschrift für Betriebswirtschaft Special Issue* 2, 1–22.
- Spengel, C., C. Ernst and K. Finke (2010), Harmonisierung der steuerlichen Gewinnermittlung in der EU und effektive Steuerbelastung von Unternehmen in den 27 EU-Mitgliedstaaten, *Die Betriebswirtschaft* 70 (4), 283–300.
- Sprietsma, M. (2010), The Effect of Relative Age in the First Grade of Primary School on Long-Term Scholastic Results: International Comparative Evidence Using PISA 2003, *Education Economics* 18 (1), 1–32.
- Toole, A. and D. Czarnitzki (2010), Commercializing Science: Is There a University 'Brain Drain' from Academic Entrepreneurship?, *Management Science* 56 (9), 1599–1614.
- Ziegler, A. and M. Schröder (2010), What Determines the Inclusion in a Sustainability Stock Index? A Panel Data Analysis for European Firms, *Ecological Economics* 69 (4), 848–856.

ZEW BOOK SERIES

ZEW Wirtschaftsanalysen

This book series is published by

Nomos Verlagsgesellschaft
Postfach 610 · 76484 Baden-Baden
Germany
Phone +49/(0) 7221/21040
Fax +49/(0) 7221/210427
Internet www.nomos.de

Publications in 2010:

- Schröder, M. (2010), Die Eignung nachhaltiger Kapitalanlagen für die Vermögensanlage von Stiftungen, Vol. 98.
Schröder, M. and P. Westerheide (2010), Wirtschaftliche und gesellschaftliche Bedeutung von Familienunternehmen, Vol. 97.
Spengel, C., K. Finke and B. Zinn (2010), Bedeutung der Substanzbesteuerung in Deutschland, Vol. 96.
Egeln, J., M. Dinges, A. Knie, D. Simon, H. Braun-Thürmann, H. Fryges, H. Gassler, S. Gottschalk, R. Hilbrich, D. Höwer, K. Müller, C. Rammer, J. Schmidmayer and F. Steyer (2010), Evaluation des Existenzgründungsprogramms EXIST III, Vol. 95.
Heinemann, F., T. Hagen, P. Mohl, S. Osterloh and M.O. Sellenthin (2010), Die Zukunft der EU-Strukturpolitik, ZEW Wirtschaftsanalysen, Vol. 94.

ZEW Economic Studies

This book series is published by

Physica Verlag/Springer Verlag
Tiergartenstraße 17 · 69121 Heidelberg
Germany
Phone +49/(0) 6221/4870
Fax +49/(0) 7221/210427
Internet www.springer.de

ZEW DISCUSSION PAPERS

International Finance and Financial Management

- 10-001 Schertler, A. and T. Tykvová, What Lures Cross-Border Venture Capital Inflows?
10-002 Köhler, M., Corporate Governance and Current Regulation in the German Banking Sektor: An Overview and Assessment.
10-004 Schindler, F., Further Evidence on the (In-)Efficiency of the U.S. Housing Market.
10-013 Gropp, R. and M. Köhler, Bank Owners or Bank Managers: Who Is Keen on Risk? Evidence from the Financial Crisis.
10-030 Schindler, F., How Efficient Is the U.K. Housing Market?
10-033 Schindler, F., Market Efficiency in the Emerging Securitized Real Estate Markets.
10-034 Kroencke, T. and F. Schindler, Downside Risk Optimization in Securitized Real Estate Markets.

- 10-038 Conrad, C., D. Rittler and W. Rotfuß, Modeling and Explaining the Dynamics of European Union Allowance Prices at High-Frequency.
10-045 Schmidt, S. and D. Nautz, Why Do Financial Market Experts Misperceive Future Monetary Policy Decisions?
10-051 Schindler, F. and S. Voronkova, Linkages Between International Securitized Real Estate Markets: Further Evidence from Time-Varying and Stochastic Cointegration.
10-064 Dick, C., M. Schmeling and A. Schrimpf, Macro Expectations, Aggregate Uncertainty, and Expected Term Premia.
10-070 Lischewski, J. and S. Voronkova, Size, Value and Liquidity. Do They Really Matter on an Emerging Stock Market?
10-076 Bohl, M., J. Lischewski and S. Voronkova, Pension Funds' Performance in Strongly Regulated Industries in Central Europe: Evidence from Poland and Hungary.

Labour Markets, Human Resources and Social Policy

- 10-003 Wichert, L. and W. Pohlmeier, Female Labor Force Participation and the Big Five.
10-007 Guven, C., C. Senik and H. Stichnoth, You Can't Be Happier than Your Wife: Happiness Gaps and Divorce.
10-008 Stichnoth, H., Does Immigration Weaken Natives' Support for the Welfare State? Evidence from Germany.
10-011 Büttner, B. and S. Thomsen, Are We Spending too Many Years in School? Causal Evidence of the Impact of Shortening Secondary School Duration.
10-012 Heinicke, K. and S. Thomsen, The Social Long-Term Care Insurance in Germany: Origin, Situation, Threats, and Perspectives.
10-014 Antonczyk, D., B. Fitzenberger and K. Sommerfeld, Rising Wage Inequality, the Decline of Collective Bargaining, and the Gender Wage Gap.
10-015 Antonczyk, D., T. DeLeire and B. Fitzenberger, Polarization and Rising Wage Inequality: Comparing the U.S. and Germany.
10-016 Aretz, B. and S. Kube, Choosing Your Object of Benevolence – A Field Experiment on Donation Options.
10-018 Horstschräer, J. and M. Sprietsma, The Effects of the Bologna Process on College Enrollment and Drop-Out Rates.
10-021 Aldashev, A., S. Thomsen and T. Walter, Short-Term Training Programs for Immigrants: Do Effects Differ from Natives and Why?
10-027 Thomsen, S. and T. Walter, Temporary Extra Jobs for Immigrants: Merging Lane to Employment or Dead-End Road in Welfare?
10-028 Coneus, K., M. Laucht and K. Reuß, The Role of Parental Investments for Cognitive and Noncognitive Skill Formation – Evidence for the First 11 Years of Life.
10-035 Boeters, S., Optimal Tax Progressivity in Unionised Labour Markets: Simulation Results for Germany.
10-040 Mühlenweg, A., Teaching, Organization, and Personal Problems – Evidence from Reforming Tertiary Education in Germany.
10-041 Blomeyer, D., M. Laucht, F. Pfeiffer and K. Reuß, Mutter-Kind-Interaktion im Säuglingsalter, Familienumgebung und Entwicklung früher kognitiver und nicht-kognitiver Fähigkeiten: Eine prospektive Studie.

- 10-043 Heinze, A., Beyond the Mean Gender Wage Gap: Decomposition of Differences in Wage Distributions Using Quantile Regression.
- 10-047 Horstschräer, J. and G. Mühler, School Entrance Recommendation: A Question of Age or Development?
- 10-054 Guertzgen, N. and A. Heinze, Should Low-Wage Workers Care About Where They Work? Assessing the Impact of Employer Characteristics on Low-Wage Mobility.
- 10-057 Beninger, D., H. Bonin, J. Horstschräer and G. Mühler, Wirkungen eines Betreuungsgeldes bei bedarfsgerechtem Ausbau frühkindlicher Kindertagesbetreuung: Eine Mikrosimulationsstudie.
- 10-069 Göbel, C. and T. Zwick, Which Personnel Measures are Effective in Increasing Productivity of Old Workers?
- 10-077 Fitzenberger, B., A. Osikominu and M. Paul, The Heterogeneous Effects of Training Incidence and Duration on Labor Market Transitions.
- 10-079 Coneus, K. and C. Spiess, Pollution Exposure and Infant Health: Evidence from Germany.
- 10-091 Horstschräer, J., M. Clauss and R. Schnabel, An Unconditional Basic Income in the Family Context – Labor Supply and Distributional Effects.
- 10-093 Piatek, R. and P. Pinger, Maintaining (Locus of) Control? Assessing the Impact of Locus of Control on Education Decisions and Wages.
- 10-101 Sprietsma, M., Explaining the Persisting Mathematics Test Score Gap Between Boys and Girls.
- 10-103 Fitzenberger, B., S. Steffes und A. Strittmatter, Return-to-Job During and After Maternity Leave.
- 10-104 Niepel, V., The Importance of Cognitive and Social Skills for the Duration of Unemployment.
- 10-106 Boockmann, B., S. Thomsen, T. Walter, C. Göbel and M. Huber, Should Welfare Administration Be Centralized or Decentralized? Evidence from a Policy Experiment.
- Industrial Economics and International Management**
- 10-009 Koebel, B. and F. Laisney, The Aggregate. Le Chatelier Samuelson Principle with Cournot Competition.
- 10-010 Prady, D. and H. Ullrich, Entry and Competition in Freight Transport: The Case of a Prospective Transalpine Rail Link Between France and Italy.
- 10-025 Müller, E. and F. Reize, Loan Availability and Investment – Can Innovative Companies Better Cope with Loan Denials?
- 10-026 Metzger, G., Business Closure and Financial Loss: Who Foots the Bill? Evidence from German Small Business Closures.
- 10-031 Grimpe, C., Scientific Excellence and Extramural Research Grants: Beggars Can't Be Choosers?
- 10-032 Müller, K. and B. Peters, Churning of R&D Personnel and Innovation.
- 10-039 Wörter, M., C. Rammer and S. Arvanitis, Innovation, Competition and Incentives for R&D.
- 10-048 Fier, H. and A. Pyka, Against the One-Way-Street: Analyzing Knowledge Transfer from Industry to Science.
- 10-060 Czarnitzki, D., J. Dick and K. Hussinger, The Contribution of Corporate Ventures to Radical Innovation.
- 10-062 Kaiser, U., S. Mendez and T. Rønde, Regulation of Pharmaceutical Prices: Evidence from a Reference Price Reform in Denmark.
- 10-063 Chandra, A. and U. Kaiser, Targeted Advertising in Magazine Markets.
- 10-066 Hussinger, K., Absorptive Capacity and Post-Acquisition Inventor Productivity.
- 10-071 Czarnitzki, D. and A. Wastyn, Competing Internationally: On the Importance of R&D for Export Activity.
- 10-073 Czarnitzki, D. and C. Bento, Evaluation of Public R&D Policies: A Cross-Country Comparison.
- 10-078 Czarnitzki, D. and B. Ebersberger, Do Direct R&D Subsidies Lead to the Monopolization of R&D in the Economy?
- 10-080 Bilotkach, V. and K. Hüscherlath, Antitrust Immunity for Airline Alliances.
- 10-081 Hüscherlath, K. and N. Leheyda, A Methodology for the Evaluation of Competition Policy.
- 10-082 Hüscherlath, K. and J. Weigand, Predation Enforcement Options: An Evaluation Using a Cournot Framework.
- 10-083 Bilotkach, V. and K. Hüscherlath, Airline Alliances, Antitrust Immunity and Market Foreclosure.
- 10-084 Hüscherlath, K. and J. Weigand, Fighting Hard Core Cartels.
- 10-087 Veith, T., Supply and Demand for Telecommunication Infrastructure.
- 10-088 Veith, T., European Telecommunication Regulation – Effects on Telecommunication Providers.
- 10-089 Veith, T., The National Regulatory Structure Against the Background of the European Regulatory System.
- 10-090 Nikogosian, V. and T. Veith, Der Einfluss öffentlichen Eigentums auf die Preissetzung in deutschen Haushaltsstrommärkten.
- 10-095 Cerquera, D. and H. Ullrich, Consumer Welfare and Unobserved Heterogeneity in Discrete Choice Models: The Value of Alpine Road Tunnels.
- 10-096 Balsmeier, B. and D. Czarnitzki, Ownership Concentration, Institutional Development and Firm Performance in Central and Eastern Europe.
- 10-098 Malvaa, A. and K. Hussinger, Corporate Science in the Patent System: An Analysis of the Semiconductor Technology.
- 10-099 Schmiele, A., Intellectual Property Infringements due to R&D Abroad? A Comparative Analysis Between Firms with International and Domestic R&D Activities.
- 10-102 Peters, B. and A. Schmiele, The Influence of International Dispersed vs. Home-Based R&D on Innovation Performance.
- 10-105 Hottenrott, H. and S. Thorwarth, Industry Funding of University Research and Scientific Productivity.
- Corporate Taxation and Public Finance**
- 10-017 Heinemann, F. and T. Hennighausen, Don't Tax Me? Determinants of Individual Attitudes Toward Progressive Taxation.
- 10-019 Elschner, C., C. Ernst and C. Spengel, Fiskalische Kosten einer steuerlichen Förderung von Forschung und Entwicklung in Deutschland – Eine empirische Analyse verschiedener Gestaltungsoptionen.
- 10-020 Heinemann, F. and M. Kocher, Tax Compliance Under Tax Regime Changes.

- 10-029 Borgloh, S. and P. Westerheide, Social Return on Investment of Mutual Support Based Housing Projects: Potential for Socio-Economic Cost Savings and Higher Living Quality.
- 10-036 Finke, K., J. Heckemeyer, T. Reister and C. Spengel, Impact of Tax Rate Cut Cum Base Broadening Reforms on Heterogeneous Firms – Learning from the German Tax Reform 2008.
- 10-052 Borgloh, S., A. Dannenberg and B. Aretz, Small is Beautiful – Experimental Evidence of Donors' Preferences for Charities.
- 10-075 Heinemann, F., Voluntary Giving and Economic Growth: Time Series Evidence for the US.
- 10-092 Osterloh, S., Words Speak Louder Than Actions: The Impact of Politics on Economic Performance.
- 10-097 Dreßler, D. and M. Overesch, Investment Impact of Tax Loss Treatment – Empirical Insights from a Panel of Multinationals.

Environmental and Resource Economics,

Environmental Management

- 10-006 Dannenberg, A., T. Riechmann, B. Sturm and C. Vogt, Stability and Explanatory Power of Inequality Aversion – An Investigation of the House Money Effect.
- 10-037 Dannenberg, A., A. Lange and B. Sturm, On the Formation of Coalitions to Provide Public Goods – Experimental Evidence from the Lab.
- 10-044 Oberdorfer, U., V. Alexeeva-Talebi and A. Löschel, Understanding the Competitiveness Implications of Future Phases of EU ETS on the Industrial Sectors.
- 10-046 Osberghaus, D. and C. Reif, Total Costs and Budgetary Effects of Adaptation to Climate Change: An Assessment for the European Union. 10-049 Tavoni, A., A. Dannenberg and A. Löschel, Coordinating to Protect the Global Climate: Experimental Evidence on the Role of Inequality and Commitment.
- 10-055 Koesler, S., Pollution Externalities in a Schumpeterian Growth Model.
- 10-056 Alexeeva-Talebi, V., Cost Pass-Through in Strategic Oligopoly: Sectoral Evidence for the EU ETS.
- 10-059 Buchholz, W. and M. Schymura, Expected Utility Theory and the Tyranny of Catastrophic Risks.
- 10-061 Osberghaus, D., E. Finkel and M. Pohl, Individual Adaptation to Climate Change: The Role of Information and Perceived Risk.
- 10-065 Rennings, K. and C. Rammer, The Impact of Regulation-Driven Environmental Innovation on Innovation Success and Firm Performance.
- 10-067 Pothen, F., Industrial Ecology in Policy Making: What Is Achievable and What Is not?
- 10-068 Löschel, A., B. Sturm and C. Vogt, The Demand for Climate Protection – An Empirical Assessment for Germany.
- 10-072 Dannenberg, A., Voting in International Environmental Agreements – Experimental Evidence from the Lab.
- 10-074 Rennings, K. and S. Rexhäuser, Long-Term Impacts of Environmental Policy and Eco-Innovative Activities of Firms.
- 10-085 Borgloh, S., A. Dannenberg and B. Aretz, On the Construction of Social Preferences in Lab Experiments.
- 10-086 Alexeeva-Talebi, V., Cost Pass-Through of the EU Emissions Allowances: Examining the European Petroleum Markets.
- 10-094 Achtnicht, M., Do Environmental Benefits Matter? A Choice Experiment Among House Owners in Germany.

Information and Communication Technologies

- 10-022 Hackl, F., M. Kummer and R. Winter-Ebmer, 99 Cent: Price Points in E-Commerce.
- 10-042 Coneus, K. and K. Schleife, Online But Still Divided – Inequality in Private Internet Use in Germany.
- 10-053 Bertschek, I. and J. Meyer, IT Is Never too Late for Changes? Analysing the Relationship Between Process Innovation, IT and Older Workers.
- 10-100 Engelstätter, B. and M. Sarbu, Enterprise Software and Service Innovation: Standardization Versus Customization.
- 10-107 Klein, G., Cartel Destabilization and Leniency Programs – Empirical Evidence.
- 10-108 Ohnemus, J., IT Outsourcing and Employment Growth at the Firm Level.

Growth and Business Cycles

- 10-005 Klarl, T., Spatial Model Selection and Spatial Knowledge Spillovers: A Regional View of Germany.
- 10-023 Hogrefe, J., B. Jungz and W. Kohler, Readdressing the Trade Effect of the Euro: Allowing for Currency Misalignment.
- 10-024 Hogrefe, J. and M. Kappler, The Labour Share of Income: Heterogeneous Causes for Parallel Movements?
- 10-050 Krebs, T. and M. Scheffel, A Macroeconomic Model for the Evaluation of Labor Market Reforms.
- 10-058 Sachs, A., A Bayesian Approach to Determine the Impact of Institutions on the Unemployment Rate.

CONFERENCES AND WORKSHOPS

Workshop: Nationale Fiskalregeln – Ein Instrument zur Vorbeugung von Vertrauenskrisen (9.12.2010)
Organisation
Friedrich Heinemann, ZEW

Workshop: Neue Entwicklungen in der verhaltensbasierten Mikrosimulation (7.–8.12.2010)
Organisation
Holger Stichnoth, ZEW

Workshop: Soziale Beziehungen und Anreize am Arbeitsplatz (26.–27.11.2010)
Organisation
Susanne Neckermann, ZEW

ZEW Research Seminar: Executive Functions in ADHD: The Influence of Self-Regulation Strategies (25.11.2010)
Organisation
Andrea Mühlenweg, ZEW

Workshop: The Economics of Green IT (22.11.2010)

Organisation
Irene Bertschek, ZEW
Daniel Cerquera, ZEW
Andreas Löschel, ZEW
Tim Menzel, ZEW

ZEW Research Seminar: Motivational Goal Bracketing
(18.11.2010)

Organisation
Susanne Neckermann, ZEW

Workshop: Sector Specific Activities in Industrial Energy & Carbon
Efficiency – From Data and Analyses to Action (11.11.2010)

Organisation
Andreas Löschel, ZEW
Sebastian Voigt, ZEW

Conference: Vierte Konferenz des Forschungsnetzwerkes
Nichtkognitive Fähigkeiten: Erwerb und ökonomische
Konsequenzen (21.–23.10.2010)

Organisation
Friedhelm Pfeiffer, ZEW

Conference: Conference on Quantitative Analysis in
Competition Assessments (21.–22.10.2010)

Organisation
Kai Hüschelrath, ZEW
Nina Leheyda, ZEW

Conference: Tax Policy Decision Making (14.–15.10.2010)

Organisation
Steffen Osterloh, ZEW
Friedrich Heinemann, ZEW

Conference: 2nd ReCapNet-Conference (11.–12.10.2010)

Organisation
Felix Schindler, ZEW
Peter Westerheide, ZEW

ZEW Research Seminar: Reliable Estimators for Propensity
Score Matching Estimation (7.10.2010)

Organisation
Holger Bonin, ZEW

Workshop: Regulation and Management of Innovations
Towards Sustainable Development (6.–7.10.2010)

Organisation
Klaus Rennings, ZEW

Workshop: Wenn weniger mehr ist – Nachhaltiger Konsum in
Wohngebäuden (29.–30.9.2010)

Organisation
Klaus Rennings, ZEW

Conference: 3rd Conference on Financial Integration and Stability:
Systemic Risk and Incentives (23.–24.9.2010)

Organisation
Matthias Köhler, ZEW
Michael Schröder, ZEW

Workshop: Empirische Forschung in der Betriebswirtschaftlichen
Steuerlehre (16.–17.9.2010)

Organisation
Katharina Finke, ZEW
Michael Overesch, University of Mannheim
Friedrich Heinemann, ZEW

Conference: 3. Eberbacher Klostersgespräche (3.9.2010)

Organisation
Andreas Löschel, ZEW
Hessisches Ministerium für Umwelt, Energie, Landschaft und
Verbraucherschutz

Workshop: Studie Auswirkungen von Steuervereinfachungen
(6.7.2010)

Organisation
Friedrich Heinemann, ZEW

Conference: 8. ZEW Conference on the Economics of Information
and Communication Technologies (2.–3.7.2010)

Organisation
Irene Bertschek, ZEW
Martin Peitz, University of Mannheim and ZEW

Conference: 2nd Conference on Recent Developments in
Macroeconomics (24.–25.6.2010)

Organisation
Martin Scheffel, ZEW
Marcus Kappler, ZEW

Workshop: 12th ZEW Summer Workshop for Young Economists:
Expectations and Expectation Formation in Financial Markets
(15.–17.6.2010)

Organisation
Frieder Mokinski, ZEW
Christian Dick, ZEW
Michael Schröder, ZEW

Workshop: Messfehler bei administrativen Daten
(Measurement Errors in Administrative Data)

(14.–15.6.2010)
Organisation
Stephan Dlugosz

Workshop: Frühjahrsworkshop ReCapNet (7.–8.6.2010)

Organisation
Felix Schindler, ZEW
Peter Westerheide, ZEW

Conference: Platform Markets – Regulation and Competition Policy (31.5.–2.6.2010)

Organisation

Gordon Jochem Klein, ZEW

Daniel Cerquera, ZEW

Matthias Hunold, ZEW

Martin Peitz, University of Mannheim and ZEW

Kai Hüschelrath, ZEW

Workshop: 8. Workshop des Student Chapters der GEE (7.5.2010)

Organisation

Andreas Löschel, ZEW

Nikolas Wölfling, ZEW

ZEW Research Seminar: Cut-Off Dates and Their Effect on Player Selection, Salaries and Hazard Rates in the German Bundesliga (1.4.2010)

Organisation

Andrea Mühlenweg, ZEW

Workshop: Flexibilisierungspotenziale bei heterogenen Arbeitsmärkten (25.–27.3.2010)

Organisation

Benedikt Lang, ZEW

Workshop: PAKT Kick-Off (15.3.2010)

Organisation

Andreas Löschel, ZEW

Michael Schymura, ZEW

ZEW Research Seminar: Glück – Die Sicht der Ökonomie (26.2.2010)

Organisation

Holger Bonin, ZEW

Susanne Neckermann, ZEW

ZEW Research Seminar: Uncertainty and Economic Activity: Evidence from Business Survey Data (25.2.2010)

Organisation

Holger Bonin, ZEW

Co-Reach Workshop: Innovation, Employment and Welfare in China and Europe (10.–11.2.2010)

Organisation

Bettina Peters, ZEW

Workshop: Evaluation von Maßnahmen gegen soziale Ausgrenzung (21.1.2010)

Organisation

Christian Göbel, ZEW

Competence in Econom

▶ COMMITTEES AND EXTERNAL RELATIONS

Supervisory Board	126
Scientific Advisory Council	127
Research Associates and Research Fellows	128
Visiting Researchers	129
ZEW Sponsors' Association for Science and Practice	130
ZEW Alumni	131

SUPERVISORY BOARD

Chairman

Gerhard Stratthaus MdL, Minister of Finance, State of Baden-Württemberg, ret.; Financial Market Stabilization Agency



Vice-Chairman

Dr. h.c. Eggert Voscherau,
National Employers Association Chemistry



Members

- Prof. Axel Börsch-Supan, PhD, Mannheim Research Institute for the Economics of Aging
- Ernst Burgbacher MdB, Secretary of State, Federal Ministry of Economics and Technology
- Prof. Dr. Claus Eiselstein, Director, Ministry of the State Baden-Württemberg
- Dr. Hans Freudenberg, Head of Ministry Department, Ministry of Economic Affairs Baden-Württemberg
- Prof. Dietmar Harhoff, PhD, Ludwig Maximilian University Munich
- Prof. em. Dr. Dr. h.c. mult. Otto H. Jacobs, University of Mannheim
- Dr. Gisela Meister-Scheufelen, Head of Ministry Department, Ministry of Finance Baden-Württemberg
- Dr. Theo Spettmann, Südzucker AG Mannheim/Ochsenfurt, ret.
- Klaus Tappeser, Head of Ministry Department, Ministry of Science, Research and the Arts Baden-Württemberg

SCIENTIFIC ADVISORY COUNCIL

Chairman

Prof. Dr. Friedrich Buttler, Secretary of State, ret., Ministry of Science, Research and Culture Brandenburg; Regional Director of Europe and Central Asia, ret., International Labour Organization (ILO)

**Vice-Chairman**

Prof. Dr. Dres. h.c. Arnold Picot, Institute for Information, Organization, and Management, Ludwig Maximilian University Munich

**Members**

- Prof. David Bruce Audretsch, PhD, Indiana University
- Prof. Dr. Uschi Backes-Gellner, Institute for Strategy and Business Economics (ISU), University of Zurich
- Dr. Kurt Bock, BASF SE, BASF Corporation
- Prof. Dr. Christoph Engel, Max Planck Institute for Research on Collective Goods
- Prof. Dr. Michael Heise, Allianz Group Economic Research, Dresdner Bank AG
- Dr. Dieter Hundt, Confederation of German Employers' Associations
- Prof. Dr. Gebhard Kirchgässner, Swiss Institute for International Economics and Applied Economic Research (SIAW), University of St. Gallen
- Prof. Dr. Kai A. Konrad, Max Planck Institute for Tax Law and Public Finance
- Prof. Dr. Franz Luzius, IHK Rhein-Neckar, ret.
- Prof. Pierre A. Mohnen, PhD, UNU-MERIT, Maastricht University
- Prof. Dr. Hermann Remsperger, Deutsche Bundesbank, ret.
- Prof. Dr. Dr. h.c. Dieter Sadowski, Institute for Labour Law and Industrial Relations in the European Community
- Prof. Dr. Dres. h.c. Bertram Schefold, Johann Wolfgang Goethe University Frankfurt am Main
- Prof. em. Dr. Bernd Schips, KOF Swiss Economic Institute, ETH Zurich, ret.
- Prof. Dr. Beatrice Weder di Mauro, Johannes Gutenberg University Mainz
- Prof. Dr. Dietmar Wellisch, International Tax Institute, University of Hamburg
- Prof. Dr. Heinz Welsch, Institute for Economics and Statistics, Carl von Ossietzky University Oldenburg

RESEARCH ASSOCIATES

Research associates and research fellows are professors at German and international universities, who work in close collaboration with ZEW concerning research activities. They usually function as managers of research projects at ZEW. They also supervise dissertations of ZEW employees and, in addition, get involved in creating or maintaining major ZEW research focuses. This also includes fundraising from third parties.

- Prof. Dr. Christoph Böhringer, Carl von Ossietzky University Oldenburg
- Prof. Dr. Claudia Buch, Eberhard Karls University Tübingen
- Prof. Dr. Thomas Cleff, University of Applied Sciences of Pforzheim
- Prof. Dr. Dirk Czarnitzki, Catholic University Leuven, BE
- Prof. Dr. Oliver Fabel, Vienna University, AT
- Prof. Dr. Lars P. Feld, Heidelberg University
- Prof. Dr. Michael Finus, University of Exeter Business School, UK
- Prof. Bernd Fitzenberger, PhD, Albert Ludwig University Freiburg
- Prof. Dr. Markus Frölich, University of Mannheim
- Juniorprof. Christina Gathmann, PhD, University of Mannheim
- Prof. Reint Gropp, PhD, European Business School, Oestrich-Winkel
- Prof. Dietmar Harhoff, PhD, Ludwig Maximilian University Munich
- Prof. Dr. Uwe Hassler, Johann Wolfgang Goethe University Frankfurt am Main
- Ass. Prof. Dr. Katrin Hussinger, Maastricht University, NL
- Prof. em. Dr. Dr. h.c. mult. Otto H. Jacobs, University of Mannheim
- Prof. Dr. Eckhard Janeba, University of Mannheim
- Prof. Jürgen Kähler, PhD, Friedrich Alexander University Erlangen-Nuremberg
- Prof. Dr. Ulrich Kaiser, University of Zurich, CH
- Prof. Dr. Kornelius Kraft, University of Dortmund
- Prof. Tom Krebs, PhD, University of Mannheim
- Prof. Dr. François Laisney, University of Strasbourg, FR
- Prof. Dr. Andreas Lange, University of Hamburg
- Prof. Dr. Michael Lechner, University of St. Gallen, CH
- Prof. Ernst Maug, PhD, University of Mannheim
- Prof. Dr. Andreas Oestreicher, Georg August University Göttingen
- Prof. Dr. Martin Peitz, University of Mannheim
- Prof. Dr. Winfried Pohlmeier, University of Konstanz
- Prof. Thomas Rønde, PhD, University of Copenhagen, DK
- Prof. Dr. Reinhold Schnabel, University of Duisburg-Essen
- Prof. Dr. Ulrich Schreiber, University of Mannheim
- Prof. Dr. Robert Schwager, Georg August University Göttingen
- Prof. Dr. Steffen Sebastian, University of Regensburg
- Prof. Dr. Christoph Spengel, University of Mannheim
- Prof. Yossi Spiegel, PhD, University of Tel Aviv, IL
- Prof. Dr. Alfred Spielkamp, University of Applied Sciences of Gelsenkirchen
- Prof. Dr. Alexandra Spitz-Oener, Humboldt University of Berlin
- Prof. Konrad Stahl, PhD, University of Mannheim
- Prof. Dr. Bodo Sturm, Leipzig University of Applied Sciences
- Juniorprof. Dr. Stephan Lothar Thomsen, Otto von Guericke University Magdeburg
- Prof. Andrew Toole, PhD, Rutgers University, New Brunswick, US
- Prof. Dr. Uwe Walz, Johann Wolfgang Goethe University Frankfurt am Main
- Prof. Dr. Berthold U. Wigger, Karlsruhe Institute of Technology (KIT)
- Prof. Dr. Peter Winker, Justus Liebig University Gießen
- Prof. Dr. Michael Woywode, University of Mannheim
- Dr. Andreas Ziegler, ETH Zurich, CH
- Prof. Dr. Thomas Zwick, Ludwig Maximilian University Munich

RESEARCH FELLOWS

- Dr. Stefan Boeters, Centraal Planbureau, Den Haag, NL
- Dr. Christina Elschner, University of Mannheim
- Prof. Dr. Horst Entorf, Johann Wolfgang Goethe University Frankfurt am Main
- Prof. Dr. Patrick A. Puhani, Leibniz University Hannover
- Dr. Andreas Schrimpf, Aarhus University, DK
- Qingwei Wang, Bangor University, UK
- Dr. Ralf Wilke, The University of Nottingham, UK

VISITING RESEARCHERS

In 2010 ZEW welcomed the following visiting researchers for a research stay in Mannheim:

- ◉ Bachmann, R., University of Ann Arbor, US
- ◉ Bertoni, F., Polytechnic University of Milan, IT
- ◉ Bond, S., University of Cincinnati, US
- ◉ Canello, J., University of Queensland, Brisbane, AU
- ◉ Cappelli, R., University of Insubria, Varese, IT
- ◉ Changhe, L., Fudan University, Shanghai, CN
- ◉ Dazhong, C., Fudan University, Shanghai, CN
- ◉ Deutscher, C., University of Paderborn
- ◉ Drechsler, W., Johann Wolfgang Goethe University Frankfurt am Main
- ◉ Dwenger, N., Max Planck Institute for Tax Law and Public Finance, Munich
- ◉ Eichfelder, S., University of Wuppertal
- ◉ Gathmann, C., University of Mannheim
- ◉ Gawrilow, C., Johann Wolfgang Goethe University Frankfurt am Main and DIPF, Frankfurt a.M.
- ◉ Gensowski, M., University of Chicago, US
- ◉ Goel, R., Illinois State University, US
- ◉ Gök, B., Ege University, Izmir, TR
- ◉ Gotsch, M., Karlsruhe Institute of Technology (KIT)
- ◉ Grönqvist, E., IFAU, Uppsala, SE
- ◉ Grossbard, S., San Diego State University, US
- ◉ Hahn, A., University of Mannheim
- ◉ Hanyin, L., Fudan University, Shanghai, CN
- ◉ Häussler, C., Ludwig Maximilian University Munich
- ◉ Helmes, C., London School of Economics, Centre of Economic Performance, UK
- ◉ Hernandez, V., University of Alcalá, ES
- ◉ Hottenrott, H., Catholic University Leuven, BE
- ◉ Hui, Z., Fudan University, Shanghai, CN
- ◉ Hussinger, K., University of Maastricht, NL
- ◉ Janys, L., Aarhus University, DK
- ◉ Jotzo, F., The Australian National University, Canberra, AU
- ◉ Jürgens, I., European Commission, Brussels, BE
- ◉ Kangas, H.-L., Finnish Forest Research Institute, Helsinki, FI
- ◉ Klose, B., University of Zurich, CH
- ◉ Laitenberger, U., University of Würzburg
- ◉ Lazar, S., University Ai. i. Cuza, Iasi, RO
- ◉ Lehmann, P., Helmholtz Centre for Environmental Research – UFZ, Leipzig
- ◉ Lei, J., McMaster University, Hamilton, CA
- ◉ Libo, W., Fudan University, Shanghai, CN
- ◉ Lijian, S., Fudan University, Shanghai, CN
- ◉ Lopes Bento, C., Catholic University Leuven, BE
- ◉ MacKie-Mason, J., University of Michigan, Ann Arbor, US
- ◉ Mairesse, J., CREST and UNU-MERIT, Paris/Maastricht, F/NL
- ◉ McCabe, M., University of Michigan, Ann Arbor, US
- ◉ Millot, V., OECD, Paris, FR
- ◉ Morefield, B., University of North Carolina at Greensboro, US
- ◉ Müller, E., Frankfurt School of Finance and Management
- ◉ Nafziger, J., Aarhus University, DK
- ◉ Neumann, S., University of Mannheim
- ◉ Parrado, R., FEEM, Venice, IT
- ◉ Peyer, S., University of East Anglia, Norwich, UK
- ◉ Robb, A., Kauffman Foundation, Kansas City, US
- ◉ Schelldorfer, J., ETH Zurich, CH
- ◉ Schimke, A., Karlsruhe Institute of Technology (KIT)
- ◉ Schmidt, T., Deutsche Bundesbank, a.M.
- ◉ Schrimpf, A., Aarhus University, DK
- ◉ Sofka, W., Tilburg University, NL
- ◉ Sturm, B., Otto von Guericke University Magdeburg
- ◉ Szabo, D., University of Konstanz
- ◉ Thorwarth, S., Catholic University Leuven, BE
- ◉ Vandenbergh, V., Catholic University of Louvain, BE
- ◉ Vogt, C., Bochum University of Applied Sciences
- ◉ Vuong, V., Pennsylvania State University, State College, US
- ◉ Ward, M., University of Texas at Arlington, US
- ◉ Wei, C., Zhejiang Sci-Tech University, CN
- ◉ Weiqi, T., Fudan University, Shanghai, CN
- ◉ Werner, P., University of Cologne
- ◉ Worroch, G., University of California, Berkeley, US
- ◉ Wörter, M., KOF Swiss Economic Institute, ETH Zurich, CH
- ◉ Wunsch, C., University of St. Gallen, CH
- ◉ Xu, D., Fudan University, Shanghai, CN
- ◉ Zhang, M., University of Maastricht and UNU-MERIT, NL

ZEW SPONSORS' ASSOCIATION FOR SCIENCE AND PRACTICE

In 1993 representatives of trade and industry of the Rhine Neckar region established the ZEW Sponsors' Association for Science and Practice (Registered Society) ("Förderkreis Wissenschaft und Praxis am Zentrum für Europäische Wirtschaftsforschung e. V.") to support ZEW's work. Since its foundation, an impressive number of large and medium-sized enterprises as well as personalities from the region and the federal state of Baden-Württemberg, and the federal government are counted among its members.

The purpose of the association is laid down in its statute. It accompanies ZEW's activities with advice and support. It promotes research projects that are relevant for practice and supports events at the Institute by financial contributions. This involvement is funded by membership fees which are paid annually.

Moreover, the association understands itself as a forum where companies and scientists from various fields can discuss vital economic and political issues. This dialogue proved to be fruitful for both sides. It gives companies scientifically sound answers to diverse topics and provides science with the necessary reference to practice.

The members of the ZEW Sponsors' Association for Science and Practice regularly receive the most important information of ZEW and are invited to all major events of the Institute.

Contact Persons

- Centre for European Economic Research (ZEW)
 Andrea Hüneke-Zindl
 L 7, 1 · 68161 Mannheim
 Germany
 Phone +49/(0) 621/1235-101
 Fax +49/(0) 621/1235-222
 E-mail hueneke-zindl@zew.de

- Chairman of the ZEW Sponsors' Association
 Dr. Dr. Peter Bettermann
 Company Spokesman
 Freudenberg & Co. Kommanditgesellschaft
 69469 Weinheim
 Germany
 Phone +49/(0) 6201/80 44 40
 Fax +49/(0) 6201/88 20 41



Meeting of the ZEW Sponsors' Association for Science and Practice in Mannheim



ZEW Alumni meeting 2010 on the occasion of the ZEW Economic Forum

ZEW ALUMNI

The ZEW alumni network provides former employees and employees leaving ZEW with a forum where they can stay in contact with each other and also with ZEW. On the one hand, former employees regularly receive ZEW publications. This helps them to keep informed about the latest research results and further training courses. On the other hand, former employees can provide ZEW with valuable input for the research work. The ZEW alumni traditionally meet once a year, after the ZEW Economic Forum ("ZEW Wirtschaftsforum").

An online alumni group was created by ZEW on the internet platform XING exclusively for its former employees. Via this group ZEW alumni receive information about and from ZEW as well as information on upcoming events. In addition, the XING group promotes the direct exchange between former ZEW staff members.

For the first time, black polo shirts and hooded zippers with the ZEW logo embroidered were made. Alumni and everyone who is interested can buy them at cost price. If you are interested, please contact Eric Platz (platz@zew.de). He will be happy to inform you about further details.

Contact Persons

- Dr. Volker Marnet-Islinger
Deka Investment GmbH
Mainzer Landstraße 16
60325 Frankfurt am Main
Phone +49/(0)69/7147-3422
E-mail volker.marnet-islinger@deka.de
- Prof. Dr. Christoph Spengel
University of Mannheim
Schloss, Ostflügel, Raum O 246
68131 Mannheim
Germany
Phone +49/(0) 621/181-1705
E-mail spengel@uni-mannheim.de
- Centre for European Economic Research (ZEW)
Ingrid Rahm
L 7, 1 · 68161 Mannheim
Germany
Phone +49/(0) 621/1235-112
Fax +49/(0) 621/1235-222
E-mail rahm@zew.de
- www.zew.eu/alumni

STAFF CONTACT

STAFF CONTACT

Centre for European Economic Research (ZEW)
 P.O. Box 10 34 43 · 68034 Mannheim · Germany
 Address L 7, 1 · 68161 Mannheim · Germany
 Phone +49/(0)621/1235-01
 Fax +49/(0)621/1235-224
 Internet www.zew.eu

- Please dial: +49/(0)621/1235-(extension number)

Executive Directors

Franz, Wolfgang, Prof. Dr. Dr. h.c. mult. (President)	100
Kohl, Thomas (Director of Business and Administration)	111
Secretaries: Hüneke-Zindl, Andrea	101, Fax 222
Rahm, Ingrid	112

International Finance and Financial Management

Schröder, Michael, Prof. Dr. (Head of Department)	140
Westerheide, Peter, Dr. (Deputy)	146
Secretaries: Schielke, Heidi	142, Fax 223
Treiber, Martina	361
Borell, Mariela	144
Dick, Christian	305
Halter, Manuel	396
Iliewa, Zwetelina	346
Jaroszek, Lena	380
Kröncke, Tim-Alexander	370
Lang, Gunnar	372
Mokinski, Frieder	143
Piaskowski, Wojtek, Dr.	163
Riedler, Jesper	379
Rotfuß, Waldemar	141
Schindler, Felix, Prof. Dr. (Ass. Prof., Senior Researcher)	378
Schmidt, Sandra, Dr.	218
Trela, Karl	148
Tykvová, Tereza, Dr. (Senior Researcher)	147

Labour Markets, Human Resources and Social Policy

Bonin, Holger, Dr. (Head of Department)	151
Arntz, Melanie, Ass. Prof. Dr. (Deputy)	159
Pfeiffer, Friedhelm, PD Dr. (Deputy)	150
Secretary: Altenrenger, Andrea	131, Fax 225
Aretz, Bodo	367
Bradler, Christiane	373
Clauss, Markus	364
Dlugosz, Stephan, Dr.	283
Dovern-Pinger, Pia	156
Eisenhauer, Philipp	284

Fries, Jan	376
Gregory, Terry	306
Gürtzgen, Nicole, PD Dr. (Senior Researcher)	155
Göbel, Christian, Dr.	374
Horstschräer, Julia	196
Maier, Michael F.	307
Mancini, Anna Laura, PhD	231
Mohrenweiser, Jens, Dr.	160
Mühlenweg, Andrea, Dr. (Senior Researcher)	280
Mühler, Grit, Dr.	152
Neckermann, Susanne, Dr.	309
Niepel, Verena	289
Reuß, Karsten	287
Sprietsma, Maresa, Dr.	375
Steffes, Susanne, Dr.	281
Stichnoth, Holger, Dr.	362
Walter, Thomas	363

Industrial Economics and International Management

Licht, Georg, Dr. (Authorised Signatory, Head of Department)	177
Egeln, Jürgen (Deputy)	176
Rammer, Christian, Dr. (Deputy)	184
Secretaries: Förster, Heidrun	197, Fax 170
Halder, Heidi	194
Aschhoff, Birgit, Dr.	182
Crass, Dirk	387
Creemers, Katrin, Dr.	297
De Smet, Dries	183
Doherr, Thorsten	291
Eckert, Thomas	298
Fryges, Helmut, Dr. (Senior Researcher)	189
Gottschalk, Sandra, Dr. (Senior Researcher)	267
Heger, Diana, Dr.	382
Hud, Martin	197
Hunold, Matthias	181
Hüschelrath, Kai, Juniorprof. Dr. (Senior Researcher)	384
Höwer, Daniel	187
Köhler, Christian	235
Laitenberger, Ulrich	197
Leheyda, Nina, Dr.	172
Moka, Jürgen	173
Müller, Bettina, Dr.	352
Müller, Kathrin, Dr.	385
Niefert, Michaela, Dr.	171
Nikogosian, Vigen	386
Peters, Bettina, Dr. (Senior Researcher)	174
Schliessler, Paula	186
Schwiebacher, Franz	234
Veith, Tobias, Dr.	296

Corporate Taxation and Public Finance

Heinemann, Friedrich, PD Dr. (Head of Department)	149
Secretaries: Schielke, Heidi	142, Fax 223
Treiber, Martina	361
Borgloh, Sarah	395
Dreßler, Daniel	377
Ernst, Christof	191
Evers, Lisa	168
Finke, Katharina	397
Heckemeyer, Jost Henrich	398
Hennighausen, Tanja	169
Kalb, Alexander, Dr. (Senior Researcher)	282
Misch, Florian, PhD (Senior Researcher)	394
Moessinger, Marc-Daniel	161
Osterloh, Steffen	165
Scheuering, Uwe	393
Zinn, Benedikt	162

**Environmental and Resource Economics,
Environmental Management**

Löschel, Andreas, Prof. Dr. (Head of Department)	200
Rennings, Klaus, Dr. (Deputy)	207
Secretary: Peter, Kornelia	210, Fax 226
Achtnicht, Martin	208
Alexeeva-Talebi, Victoria	214
Dannenberg, Astrid	332
Heindl, Peter	206
Hermeling, Claudia, Dr. (Senior Researcher)	216
Hübler, Michael, Dr.	210
Kesternich, Martin	337
Koessler, Simon	203
Lutz, Benjamin	210
Mennel, Tim, Dr. (Senior Researcher)	201
Osberghaus, Daniel	205
Pothen, Frank	368
Reif, Christiane	209
Rexhäuser, Sascha	213
Schenger, Oliver	210
Schymura, Michael	202
Voigt, Sebastian	219
Wölfling, Nikolas	217

Information and Communication Technologies

Bertschek, Irene, Prof. Dr. (Head of Group)	178
Saam, Marianne, Dr. (Deputy)	285
Secretary: Merkel, Ulrike	360, Fax 333
Cerquera, Daniel, Dr. (Senior Researcher)	359
Engelstätter, Benjamin	134

Klein, Gordon Jochem	356
Kummer, Michael	357
Niebel, Thomas	228
Ohnemus, Jörg	354
Sarbu, Miruna	334

Growth and Business Cycles

Franz, Wolfgang, Prof. Dr. Dr. h.c. mult. (Head of Group)	100
Kappler, Marcus, Dr. (Deputy)	157
Secretaries: Schielke, Heidi	142, Fax 223
Treiber, Martina	361
Busl, Claudia	336
Hogrefe, Jan	348
Sachs, Andreas	145
Scheffel, Martin	338
Seymen, Atılım, Dr.	349

Information and Communication

Grittmann, Gunter (Head of Department)	132
Secretary: Tillich, Jasmin	102, Fax 222
Bräutigam, Yvonne	322
Böhmer, Kathrin	103
Hagens, Bettina von	109
Heres, Kerstin	130
Immig, Beatrix	135
Reichert, Stephan	104
Retzlaff, Eric	137

Knowledge Transfer and Qualification Programmes

Kohl, Thomas (Head of Department)	111
Hey, Barbara (Coordinator)	244
Secretary: Pauli, Vera	240, Fax 224
Braun, Axel	241
Krause, Silvana	243
Pretsch, Claudia	247
Schackmann, Valentin, Prof. Dr.	242

General Services

Kohl, Thomas (Head of Department)	111
Secretary: Mintner, Stefani	259, Fax 254
Bröder, Ottilia (Reception)	258

Human Resources

Brettar, Doris	250, Fax 254
Hanke, Ilona	256
Spiegel, Steffi	251

STAFF CONTACT

Finance and Accounting

Arent, Erika	266, Fax 269
Efe, Hilal	264
Finger, Jürgen	265
Schulz, Anke	263
Thelen, Thomas	113
Ufland, Renata	268

IT

Bräutigam, Robert	272, Fax 224
Ludwig, Helmut	260
Michelfeit, Andreas	270
Reißig, Flemming	326
Soos, Frank	321

Organisation and Purchase

Bohrmann, Jens	262, Fax 254
Flörsch, Priska	261
Platz, Eric	327

Media Design and Distribution

Dichiser, Erich	120, Fax 125
Lupp, Yvonne	127
Schlamp, Simone	121
Weiland, Michael	126

Event Management

Karle, Nicole	123, Fax 125
Pauli, Vera	240

Apprentices

Gauglitz, Julia	258
Sattel, Lisa	258
Wesch, Eva	276

Absence

Goodman, Claudia	
Farzanegan, Mohammad	
Cerquera, Katrin	

Selected Contacts

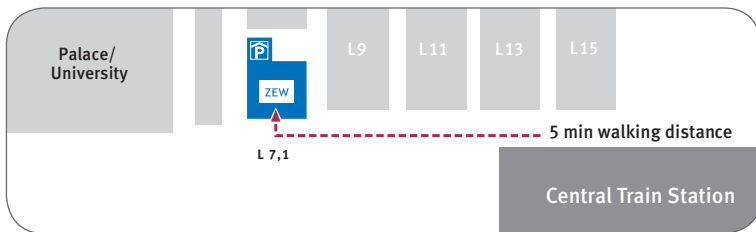
Public Relations	
Grittmann, Gunter	132
Seminars	
Pauli, Vera	240
ZEW Sponsors' Association for Science and Practice (Registered Society)	
Hüneke-Zindl, Andrea	101
Special Library	
Retzlaff, Eric	137



Travelling by plane via Frankfurt International Airport

Mannheim is just a short trip from Frankfurt International Airport. Travel time by ICE high-speed train to Mannheim central station is about 30 minutes.

Travel time to Frankfurt by plane (non-stop):
 from New York: approx. 8 hrs / from Beijing: approx. 10 hrs



By foot from Mannheim central train station

It is a five-minute walk from the central train station to ZEW.

Centre for European Economic Research (ZEW)
 L 7, 1 · 68161 Mannheim/P.O. Box 103443 · 68034 Mannheim · Germany
 Phone +49 621 1235-01 · Fax +49 621 1235-224
 E-mail info@zew.de · Internet www.zew.eu



ZEW

Zentrum für Europäische
Wirtschaftsforschung GmbH
Centre for European
Economic Research

L 7, 1 · 68161 Mannheim · Germany
P.O. Box 10 34 43 · 68034 Mannheim · Germany
Phone +49/(0)621/1235-01
Fax +49/(0)621/1235-224
E-mail info@zew.de · Internet www.zew.eu