IfW KIEL INSTITUTE FOR THE WORLD ECONOMY

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Prof. Dennis Snower, Ph.D.
President of the Kiel Institute for the World Economy

DEAR READERS,

I am pleased to present to you the Kiel Institute for the World Economy *Highlights 2016*. The past year was an eventful one for the institute, with many new and important impulses and initiatives that will accompany us in the coming years.

In particular, the mandate of the federal government to manage the international Think 20 process (T20) during the German G20 presidency in co-operation with the German Development Institute occupied us intensively in 2016, and will continue to do so especially in 2017 (read more on pages 4 through 7).

With the MEDAM project (pages 8 and 9) and the Leibniz ScienceCampus Kiel Centre for Globalization (page 10), we have firmly established two very current topics—migration and globalization—as research focal points at the Kiel Institute and were also able to recruit a pleasing number of young scientists for them.

In addition to these insights into new projects, we are presenting a few highlights from the full spectrum of our activities in research, consulting, and education. This magazine is intended to give you an impression of our activities and what is important to us. I am looking forward to your feedback.

With kind regards,
Yours truly,

T20 kick-off conference in Berlin

German Development Institute (DIE), Sylvie Weisshäu

THINK 20—THOUGHT LEADER AND THINK TANK FOR THE G20

In a turbulent global phase, the IfW has received the mandate to accompany Germany's G20 presidency. Concrete policy proposals for issues of global relevance now have to be prepared.

What now, world community? As it became apparent in the course of 2016 that the Institute for the World Economy (IfW) would be advising the group of the twenty leading industrialized nations and emerging economies (G20) during the German presidency, how great the challenges would be for the proponents of global cooperation was not yet foreseeable. Among other things, the Brexit vote followed and so did the election of US President Donald Trump, who is calling numerous international alliances into question. Thus the G20 not only has to focus on the important topics of recent years such as financial stability, climate change, or development policy. A general question also arises: How can international cooperation work in times of nationalist movements?

Against this background, the IfW since the summer of 2016 has the mandate of supporting Germany's G20 presidency in 2017 along with the German Development Institute/Deutsches Institut für Entwicklungspolitik (DIE) in Bonn. The two institutes are managing and organizing what is called the Think 20 Dialogue (T20), in which research institutes and think tanks of G20 nations examine the current topics of the G20 and develop and present recommendations for political decision makers. The goal is to incorporate these suggestions in the discussions at the G20 Summit on July 7 and 8, 2017 in Hamburg.

"Germany as a credible representative of a policy that counts on sustainability and long-term stability is facing a greater responsibility as a stabilizing force. With this year's G20 presidency, the federal government has a good opportunity to exert a moderating and mediating influence on the international community, and to promote the importance of global cooperation," says Kiel Institute President Dennis Snower. "We have formed a network with national and international think tanks to develop substantiated, concrete recommendations for the G20 topics. It is intended to form the intellectual backbone of the G20 process."

The T20 that has been accompanying the respective G20 presidency since 2012 will be organized into task forces for specific themes for the first time, thereby stringently gearing the work of the T20 towards results. The nine task forces are based on the program of the German presidency and pick up additional topics that have priority from the perspective of the think tanks:

- Agenda 2030 (UN development goals)
- Climate policy and its financing
- Global inequality and social cohesion
- Global tax cooperation
- Forced migration
- Sustainable agriculture and combating hunger
- Trade and investments
- Financial resilience
- Digital economy

The task force members are representatives of top-class research institutes and think tanks in the G20 nations with expertise in the respective fields. Each task force has one or more chairs who are experienced experts in their respective fields. From the IfW, the researchers Dennis Görlich (Digitalization), Gianluca Grimalda (Inequality), and Matthias Lücke (Migration) have been assigned to the task forces as co-chairs.

The task forces will present their recommendations in the form of policy briefs. In addition they are asked to develop "visions" that identify ways of implementing and politically communicating proposals. All recommendations are being published among other things on the Internet through the platform established by the IfW at *g20-insights.org*. It is intended to serve as a pool of ideas and knowledge for G20 decision makers even beyond Germany's G20 presidency (also see page 6).

In addition to the recommendations, the T20 will support the G20 through workshops, conferences, and public contributions. The IfW will also integrate its established Global Economic Symposium (GES) into the T20 process. The 2017 GES is being converged with the T20 Summit, where the proposals of the think tanks will be presented and discussed at the end of May in Berlin (also see page 7). Then they will be submitted to the German G20 presidency and become part of the public discussion.

"Promoting global coordination is more important than ever. All countries benefit from a liberal world order based on rules," says Kiel Institute President Snower. "The exploitation of one-sided negotiating power in economic and political relationships has to be resisted, otherwise the world will sink into a chaos similar to the interwar period in the past century. Platforms like the G20 are important for preventing this."

G20 GERMANY 2017
THINK 20 DIALOGUE

COUNCIL OF GLOBAL PROBLEM-SOLVING

COUNCIL OF GLOBAL PROBLEM-SOLVING

The Kiel Institute wants to support the G20 process in the long term—not only during the 2016/17 German presidency. That is why the Institute has initiated the Council of Global Problem-Solving (CGP). It includes leading research institutions from G20 nations that address cross-national problems and develop recommendations for resolving them. In the CGP network, they want to identify important global problems, formulate concrete solution proposals, present them to decision makers in politics and industry, and monitor progress in the implementation of the solutions.

http://www.global-economic-symposium.org/cgp

Fine-tuning the platform functions and page structure using sitemaps and wire frames

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A KNOWLEDGE PLATFORM FOR THE G20

On the occasion of Germany's G20 presidency, the IfW has developed a website for the presentation of concrete policy proposals

The twenty leading industrialized nations and emerging economies (G20) want to solve the great global challenges e.g.: Climate change, hunger, digital transformation, migration. In order to present solution proposals for these topics in the context of G20 resolutions and implementations by individual countries, the IfW on the occasion of Germany's G20 presidency has developed an online platform: *g20-insights.org*. It went live in December of 2016 and is a key element of the institute's activities within the scope of the T20 mandate.

The website is intended to be filled in the first six months of 2017 with proposals from think tanks of G20 nations that have joined the Think 20 group. Concrete solution proposals in the form of policy briefs are to be presented on the platform for policy fields of the G20. These policy briefs are complemented by links to existing agreements, data, background literature, and more. The platform will also contain "visions"—recommendations for politicians to implement and politically communicate the proposals. Institutions outside the T20 process can contribute as well.

A collection of concrete, high-quality policy recommendations can then be presented to the government representatives via the platform in a timely manner before the G20 Summit in Hamburg in July 2017. The goal is to continue operating the platform as a source of information for anyone interested in the G20 process even beyond the German G20 presidency.

g20-insights.org was developed and implemented jointly by the institute's Communication Center and T20 project team.

www.g20-insights.org

VIDEO: G20-INSIGHTS-PLATTFORM
Brief introduction to the knowledge platform by Dennis Snower

https://youtu.be/k1qu10UdOD4

THE T20 SUMMIT IN BERLIN: GLOBAL SOLUTIONS

Think tanks from the G20 nations will gather for the T20 Summit under the motto GLOBAL SOLUTIONS at the end of May 2017 in Berlin. Here they will present and discuss their solution proposals for G20 topics. On the occasion of German's G20 presidency, the Global Economic Symposium (GES) of the Kiel Institute (IfW) that has been held annually since 2008 is being combined with the T20 Summit. Preparations for the summit under the leadership of IfW researcher Dennis Görlich have been proceeding at full speed since mid-2016.

The goal of the T20 Summit will be to present relevant, implementable, science-based policy recommendations for the G20 governments. Here the T20 Summit will be based on the proven model of the Global Economic Symposium on the one hand but, on the other hand, also implement a novel conference format with existing and new partners. The intended result of the summit is "20 solutions for the G20".

It is therefore planned as the high point with regards to the content of the Think 20 (T20) process, for which the Kiel Institute and the German Development Institute (DIE) in Bonn were mandated by the federal government in 2016. The federal government will be represented at the T20 Summit in order to discuss its results and contribute to the preparations for the G20 Summit in Hamburg in July 2017.

With topics including migration, digitalization, sustainability, the resilience of the financial system, and climate change, the T20 Summit will be based on the federal government's focal points for Germany's G20 presidency. Topics contributed by the T20 think tanks or other partners will be discussed as well.

GLOBAL SOLUTIONS
FOR G20: THE THINK 20 SUMMIT
BERLIN 29 - 30 MAY 2017

G20 GERMANY 2017
THINK 20 DIALOGUE

The networks of the GES and the Council of Global Problem-Solving, a platform of international institutes initiated by the IfW (see page 5), will also contribute their know-how to the T20 Summit. Industry, political, and social organization representatives will be involved as well in order to assess the proposals of the T20 think tanks from their perspective.

The IfW and DIE are extending invitations to the T20 summit as the hosting think tanks, while the European School of Management and Technology (ESMT) in Berlin and the conference division of the Tagesspiegel publishing company are participating as organizers on site. The objective of the partners is to hold an annual conference focusing on G20 topics at the end of May in Berlin going forward.

www.global-solutions.international


Kick-off meeting of the MEDAM team in Kiel

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ASYLUM AND MIGRATION— WITH THE MEDAM PROJECT THE KIEL INSTITUTE COORDINATES A EUROPEAN RESEARCH ALLIANCE

Millions of people would like to come to Europe. What are the consequences for Europe's society, cohesion, and capacity to act? How can refugees and other migrants be integrated? The Kiel Institute examines the topics of **FORCED MIGRATION, LABOR MIGRATION, AND INTEGRATION** in several research areas, and is looking for answers to these questions. In addition, the Mercator Dialogue on Asylum and Migration (MEDAM) was initiated last year—a European research and consultation project that aims to close the gaps in existing research on asylum and migration policies, and to develop specific recommendations, primarily from an economic perspective. The three-year research project addresses the most urgent research questions as well as the concerns of the citizens and political decision makers.

More than 1.9 million asylum seekers arrived in Europe between January of 2015 and December of 2016 to escape war, persecution, and poverty. Political decision makers all over Europe are still struggling to provide for their basic needs, to distribute asylum seekers fairly among the EU member states, and to successfully integrate those who are allowed to stay into the receiving societies, as immigration from outside the EU has become one of the greatest concerns of European citizens.

At the same time, migration and mobility harbor tremendous potential for the European Union, the migrants themselves, and also for their countries of origin. Sustainable immigration from third countries can help alleviate demographic tensions and labor shortages in the EU, relieve strain on public finances and social insurance systems, and drive innovation and entrepreneurial potential while countries of origin can benefit from remittances, the transfer of knowledge, investments, and the establishment of new business relationships.

In reality however this potential is often realized only in part, with inadequate frameworks for migration and integration leading to suboptimal results. Considering the most recent arrival of refugees and migrants in particular, the search for better and faster methods of integration into the labor market and society forms a key challenge for the EU member states. While some countries like Sweden already have a long history of helping refugees and migrants find employment, others are only just beginning.

The complexity of the closely interdependent challenges of flight, migration, and integration makes it more difficult for political decision makers to develop comprehensive, implementable action strategies. This is one of the reasons why public confidence in the ability of governments and politicians to shape immigration to the EU while protecting the interests of all stakeholders is dwindling in some EU member states. The Brexit vote and the election of US President Donald Trump illustrate how populist and right-wing political views can gain strength, and how xenophobia spreads.

At the heart of MEDAM, three renowned research institutions are joining forces to address these major challenges. In addition to the **Kiel Institute,** the **Migration Policy Centre (MPC) of the European University Institute (EUI)** in Florence and the **Centre for European Policy Studies (CEPS),** a Brussels think tank, are participating as research partners in the MEDAM project, which is funded by Stiftung Mercator. The aim is to jointly develop solutions and responses, help de-emotionalize an often heated debate, and provide a scientifically sound basis for decision making. In doing so, MEDAM's research focuses on primarily economic issues in three broad areas:

- EU asylum and migration policies;
- the economic and social integration of immigrants;
- the impact of migration on countries of origin and countries of first asylum.

Beyond academic research, the transfer of knowledge between research institutions and politics forms a central part of the project. That is why a regular dialog with decision makers in politics, business, science, and civil society at both the national and European levels is important. "With the European University Institute and CEPS as a leading think tank in Brussels as partners as well as the prominent role of the Kiel Institute during Germany's G20 presidency, MEDAM is well-positioned to contribute with its research findings to the ongoing debate and develop researched-based solutions for asylum and immigration policies," explains Matthias Lücke, MEDAM's academic co-director and co-chair of the T20 Task Force on Forced Migration. "Through MEDAM, we can develop comprehensive solutions for the EU and its member states that not only enable the EU to meet its humanitarian obligations but also to promote the integration of immigrants and their descendants into the labor market and society, and thus their contribution to Europe's economic growth."

MEDAM

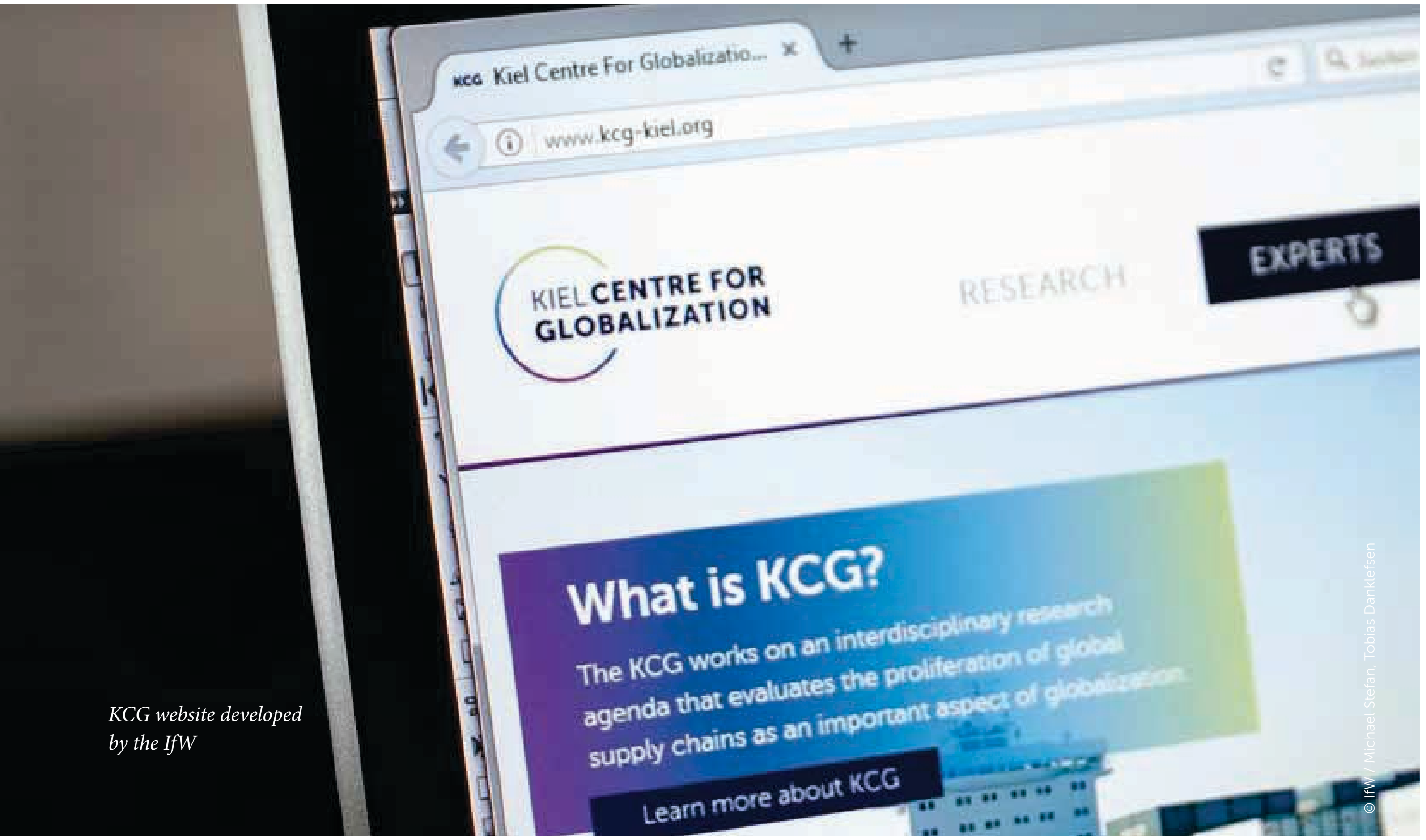
Mercator Dialogue on Asylum and Migration

Three renowned European research institutions form the core of MEDAM. Their aim is to address the most relevant research questions and concerns in the areas of asylum and migration in Europe, and to develop recommendations for action.

www.medam-migration.eu

STIFTUNG MERCATOR

The Mercator Dialogue on Asylum and Migration (MEDAM) was initiated by Stiftung Mercator, a private and independent foundation. Through its work it strives for a society characterized by openness to the world, solidarity and equal opportunities. "By funding the MEDAM project we want to improve the understanding of the interrelated challenges facing the EU and its member states in the areas of asylum, migration, and mobility, and engage European policy makers and civil society in a broad debate about comprehensive, implementable solutions," says Dr. Felix Streiter, Director of the Center for Science and Humanities at Stiftung Mercator.



KCG website developed by the IfW

KCG kick-off meeting in the IfW

THE KIEL CENTRE FOR GLOBALIZATION INVESTIGATES THE DEVELOPMENT AND CONSEQUENCES OF GLOBAL SUPPLY CHAINS

Globalization has rapidly intensified in the last few decades. Continuously expanding global supply chains are a key element of globalization. More and more companies are participating in cross-country production networks and supply chains in order to produce their products efficiently and continuously improve their competitiveness in the global markets. Global production and international trade enable companies to procure resources and intermediate goods needed for better prices in larger markets, and to sell their products globally. They also provide consumers with easier access to lower-priced and/or better products. However, globalization does not only have winners but also losers and undesirable side effects.

Investigating the positive as well as the negative consequences of globalization and in particular of the expanding global supply chains is one of the key objectives of the "Kiel Centre for Globalization" (KCG) founded as a Leibniz ScienceCampus in October 2016. The KCG is a joint initiative of the Kiel Institute and the University of Kiel. It is financially supported by the Leibniz Association, the state of Schleswig-Holstein and the two founding scientific institutions.

To investigate various aspects of globalization and global supply chains, experts from various disciplines such as economics, management, ethics, and philosophy work together closely on four different but interrelated research projects. Their knowledge in their specific research areas and their expertise in applying different research methods help mutually strengthen their research competence and further enhance the quality of the analyses. Building on the globalization research, the KCG also aims at providing policy suggestions to interested stakeholders, including the public.

The KCG research team is currently working on four different but interrelated projects:

(1) Cross-cultural differences in the perception of corporate social responsibility and consumer social responsibility along global supply chains (led by Prof. Dr. Ludger Heidbrink and Prof. Dr. Stefan Hoffmann)

Based on ethical standards, the research team starts with identifying relevant criteria that can be used to evaluate the negative effects of global supply chains. It will then investigate whether and how the perception and behavior of consumers with different cultural backgrounds would change if global supply chains become more and more transparent. Additionally it will investigate how consumers can be motivated to adopt more society- and environment-friendly behaviors.

(2) Experimental studies on moral responsibility in global supply chains (led by Prof. James Konow, Ph.D. and Prof. Dr. Till Requate)

The team investigates to whom the affected economic players (especially consumers) may assign the moral responsibility that is associated with the globally produced products. Will they expect manufacturers to assume more or less responsibility, when the complexity of global supply chains increases and more and more manufacturers are getting involved? The research team also investigates how outsourcing decisions of companies may be influenced, if consumers indeed adapt their moral responsibility expectations with the increasing complexity of the global supply chains.

(3) Modeling economic and social dimensions of global supply chains (led by Prof. Holger Görg, Ph.D. and Prof. Horst Raff, Ph.D.)

On the one hand, the team investigates whether and how firms' participation in global supply chains may affect their employment and production volatility in developing and emerging countries. On the other hand, it analyzes whether suppliers in these countries are less motivated, due to their weaker negotiating power, to invest in innovations and in the development and use of environment-friendly technologies.

(4) Global supply chains, environmental regulation, and green innovation (led by Prof. Aoife Hanley, Ph.D. and Prof. Dr. Katrin Rehdanz)

Based on different datasets from Germany and China, the research team investigates whether participation in global supply chains facilitates or hampers firms' engagement in environmentally efficient production processes. For example, the team analyzes whether and how the existing environmental regulatory provisions may influence the manufacturing sector in Germany. It also analyzes the ability of particularly Chinese companies to assess and utilize new environment-friendly technologies.

Up-to-date information about KCG research results, publications, and events can be found on the KCG website:

www.kcg-kiel.org

Contact:

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- Dr. Wan-Hsin Liu, KCG Coordinator

RESEARCH

Why women should also sit on the supervisory board, and how to better prevent violence against foreigners...

...in 2016 the research of the Kiel Institute once again focused primarily on practical applications. In seven research areas, our scientists examine numerous concrete questions of living together day-to-day, ranging from the division of labor to immigration.

GOOD FINANCIAL MARKETS AGAINST WEAK ECONOMIC DEVELOPMENT

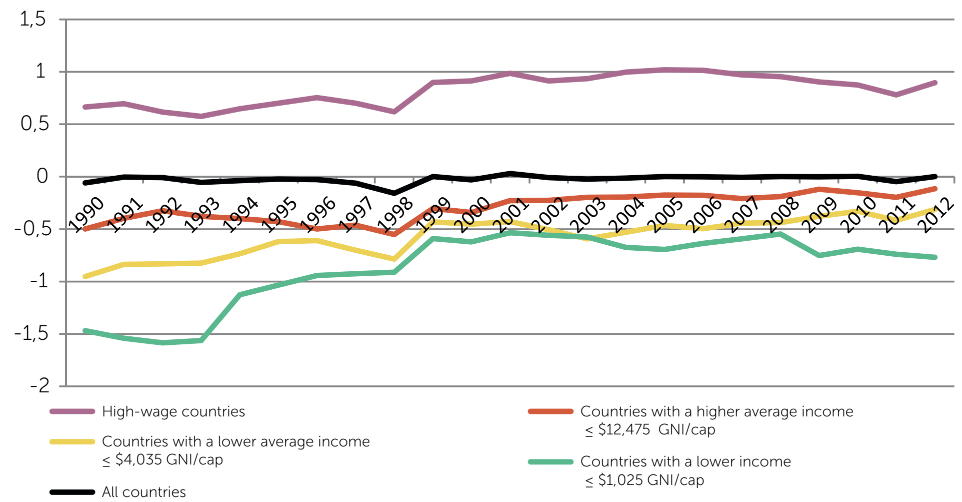
The deregulation of financial markets has acquired a genuinely bad reputation since the 2007/2008 financial crisis. However, access to well developed financial markets is of special importance for developing countries in particular in order to stabilize their economic development. Therefore, a possible **STRATEGY FOR DEVELOPING COUNTRIES** is to bet on multinational companies from financially progressive countries.

Deregulation of the financial markets since the turn of the millennium has been repeatedly named as one of the leading causes of the 2007/2008 global economic crisis. However, the important role played by the financial markets in the economic development of poorer countries is commonly forgotten here. Investments required to support these countries are especially costly. Well developed financial markets can help finance such investments.

In general terms, financial markets suitable for supporting the economic development of poorer countries should meet four criteria: depth, access, efficiency, and stability. Depth means that financial institutions and financial markets of sufficient size are available. Access means the degree to which economic players can and do use the financial services. Efficiency means that the financial institutions are able to successfully provide financial resources and facilitate financial transactions. Stability means low volatility of the markets and low vulnerability of the institutions (World Bank, 2016). An analysis based on these criteria shows that the development of financial markets in different parts of the world varies quite widely (see figure).

It comes as no surprise that countries with a high income have the most well developed financial systems. These also improved until 2005 and only worsened slightly afterward in the course of the financial crisis. In contrast, the countries with a low income also have to cope with the least developed financial systems. While the condition of the financial systems in these poorer countries initially appeared to improve in the 1990s (an effect seen in the very few countries for which observations are available for this period), it has subsequently worsened in most countries, especially since the financial crisis.

Combined indicator of financial market development



Source: Own calculations according to Donaubauer et al. (2016a, b)

Fortunately a country's economic development is not solely dependent on the options offered by the respective local financial system. Foreign direct investments (FDIs) in the form of joint ventures or companies that are wholly owned by foreign entities permit companies in one country to access the financial resources of another country. Subsidiaries of multinational companies in developing countries in particular can obtain benefits from the more highly developed financial markets in their respective home countries. It is possible to show in theory that subsidiaries of multinational companies are often subject to fewer credit restrictions than purely domestic companies. Furthermore, they can use internal company funds to a greater extent and therefore require correspondingly less external funding. Subsidiaries are therefore less dependent overall on local financial institutions than purely domestic companies (Görg and Kersting, 2016). This means that improvements in a country's financial development should lead to the use of more external and less internal funds. However, this should apply to a greater extent for domestic companies than for foreign ones.

Some new empirical studies do in fact show both: Companies in developing countries can benefit significantly from the improvement of the financial markets, and subsidiaries of multinational companies are less dependent on such improvements. Görg and Kersting (2016) compare the financing behavior of foreign owned companies in emerging markets and developing countries to the behavior of a control group of locally owned companies in their study. Donaubauer et al. (2016b) analyze how financial market improvements affect the distribution of FDI portfolios. The results of the two studies complement each other and each confirms the results of the other:

- Well developed financial markets, either in source countries or in host countries, promote bilateral foreign direct investments. The improved availability of external funds in the source country makes it easier to cover the costs for the FDI. A well developed financial market in the host country can also participate directly in FDI financing, among other things by hedging exchange rate risks or by facilitating the financial interactions of the foreign companies.
- Well developed financial markets in the source countries compensate for poorly developed financial systems in the host countries in generating FDI streams. Accordingly, the positive effect of a more highly developed financial market in the host country decreases when the source country already offers a particularly agreeable financial environment.
- Companies that are part of a multinational group face fewer restrictions in choosing their financial resources. Accordingly, these companies utilize fewer bank loans compared to purely domestic companies and tend to access internal sources.
- External financing gains importance compared to internal financing when the condition of a local financial market improves. A financial market improvement is primarily advantageous for domestic companies while the subsidiaries of multinational companies tend to benefit less.

This leads to two conclusions: First, subsidiaries under foreign ownership in developing countries are subject to reduced financial constraints compared to purely domestic companies since they can access the resources of their "parents" and the financial systems in the source country. Since access to the financial markets is of crucial importance for many business activity aspects such as exports, investments, and innovations, being integrated into a multinational company can be a good strategy, especially in developing countries.

Two, well developed financial markets make it easier for companies in developing countries to finance their investments. However, poorly developed financial markets can be compensated by well developed financial markets in the FDI source countries—at least to a certain extent. This is encouraging news, even though it means that the benefit of financial market reforms in developing countries has to be somewhat reduced. The importance of successful financial market institutions in the developed world for growth and progress, also in the developing countries, should be kept in mind when new rules for the financial markets are discussed.

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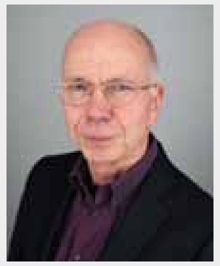

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THE CASE FOR FREE TRADE

Most economists view trade as benefiting countries overall but leading to winners and losers within nations. This article summarizes our recent survey about winners and losers from globalization and concludes that **TRADE PROTECTIONISM IS THE WRONG ANSWER**. It stresses that the policy debate should focus on identifying and compensating the losers from globalization rather than on considering protectionist measures that are detrimental to growth.

There is increasing public resistance to free trade in the developed world. In his election campaign US president-elect Donald Trump proposed the idea to protect US jobs with a massive tariff on imports from China and Mexico. Negotiations toward the Transatlantic Trade and Investment Partnership (TTIP) agreement between the US and the EU stalled on key issues amid fierce public opposition, particularly in the EU.

Concerns about free trade and new trade deals have some merit. There is ample evidence showing that globalization has increased inequality in both developed and developing countries (Goldberg and Pavcnik 2007, Ebenstein et al., 2014). Moreover, the adjustment of the labor markets after trade liberalization may have been costlier and slower then previously thought (Dix-Carneiro, 2014).

There is wide consensus among economists that, when taking countries as a whole, international trade is beneficial for all countries involved. A country that opens up to trade will enjoy an overall net welfare gain.

Evidence on the size of this net gain is mixed. Credible reduced-form estimates find it to be large. Feyrer (2009) measures the gain from a natural experiment. He looks at the closure of the Suez Canal between 1969 and 1975 to see how it affected countries' trade flows and income. He concludes that 10 percent more trade increases per-capita income by 1.6 percent. Gains from trade estimated from general equilibrium models are more modest. According to such studies a typical country is only about 1–2 percent richer due to trade than it would be in complete isolation (Arkolakis et al., 2012; Costinot and Rodríguez-Clare, 2014).

The welfare gains from trade may come from several sources. First, countries gain from specializing according to their comparative advantage. As a country sells whatever it produces more cheaply and buys whatever is cheaper abroad, the purchasing power of its consumers increases.

Second, free trade means firms can access a larger market, where economies of scale can be better exploited (Krugman, 1980). The resulting cost efficiencies can transform into lower prices and more product varieties, which benefit consumers.

Third, with globalization more competitive producers survive and grow, while others lose market share or go out of business. This reallocation of resources toward the more productive firms increases aggregate productivity (Melitz, 2003).

Firms can also gain from trade directly. They can access cheaper and/or better quality inputs abroad. Easy trade also makes firms able and willing to locate parts of their production in low-cost countries, which raises their profitability. Moreover, imported inputs or physical capital that represent higher technology than what is available domestically may trigger technological advance.

The importing of intermediate production inputs is shown to be an important source of growth in a globalized world. Using Hungarian data, Halpern et al. (2015) find that a manufacturing firm that increased its share of imported inputs from zero to 100 percent could raise its productivity by 24 percent. On the aggregate level they find that importing is responsible for more than a quarter of the observed productivity increase in the Hungarian manufacturing sector over the period 1992–2002.

A remarkable result of this study is that domestic input suppliers may not be hurt that much, either. The reason is that only half of the productivity gain is due to firms replacing domestic inputs with cheaper and/or higher-quality foreign ones. The other half comes from combining imperfectly substitutable domestic and foreign input varieties in the production.

Almost any change in openness to global competition creates winners and losers. In the simplest textbook case a reduction in import tariffs makes consumers better off, while import-competing producers worse-off. Models of new trade theory also produce losers, not only winners. In Melitz-type models, a fall in trade costs in an economy benefits the more productive firms who can enter the foreign market, while it hurts the non-traders who have to compete with the traders for scarce production resources.

Free trade losers have to be identified more clearly than in the past so that negative employment market effects can be reduced.

It is important to realize that these redistribution effects are not secondary to the aggregate gain from trade. Often it is precisely the redistribution that brings about the overall gain. As resources flow from less productive to more productive activities, the gains outweigh the losses. Countries open to trade, however, have both the means and the obligation to ease the burden on the losers of globalization.

Recent research has shown that, contrary to the earlier assumption, the reallocation of workers from shrinking sectors to expanding ones is not frictionless. In fact, the switching costs are estimated to be huge, amounting to several years of wage income. (Artuç et al., 2010, 2015; Dix-Carneiro, 2014). These costs fall disproportionately on unskilled, old, and female workers. The adjustment process after a trade liberalization can also take a long time, in some cases more than a decade, as Brazilian evidence shows (Dix-Carneiro and Kovak, 2015).

To reduce these negative labor market effects, we need to identify the losers and work out effective policy responses. Clearly, more work is to be done on this front. Recent research shows that targeted labor market policies are more effective than general ones (Davidson and Matusz, 2006). A well-designed policy response is likely to involve elements of active labor market policies such as retraining programs and moving subsidies, which compensate for the switching costs and facilitate the migration of workers away from depressed regions (Coşar, 2013).

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FROM 26 TO ONE: CHALLENGES FOR AN EU-CHINA INVESTMENT AGREEMENT

As the precursor to a free trade agreement or a contribution to deregulating the global framework for foreign investments: A bilateral trade agreement between the EU and China could make a valuable contribution to **GLOBAL ECONOMIC DEVELOPMENT**. China and the EU have been negotiating a comprehensive investment agreement for more than three years. In light of an initial situation defined by pronounced asymmetries between China and the EU, there are three main contentious issues that are hampering a successful conclusion of the negotiations.

There are currently 26 different investment agreements between the EU member states and China. The goal of a new, comprehensive agreement between China and the EU is to harmonize and expand the different existing provisions, and to establish a coherent legal framework to promote mutual investments. For the EU, the new agreement should go significantly beyond the existing agreements. It should improve legal certainty for European investors in China and lower market access barriers for European investors. For China, the agreement should help ensure that European markets stay open for Chinese investments. Even though these objectives are largely compatible with each other, there are also a number of contentious issues that impede the conclusion of a corresponding investment agreement. The three most critical issues are the application of the principle of equal treatment for domestic and foreign investors (national treatment), the liberalization of market access for foreign investments, and the design and implementation of investor-state dispute settlement procedures.

> ” *The starting position of the bilateral negotiations between the EU and China is characterized by considerable asymmetries.*

National treatment in the post-investment phase: Existing agreements between China and the EU member states exhibit a fundamental asymmetry regarding the level of protection that is granted to foreign investors. While the EU member states generally agree to the equal treatment of domestic and Chinese investments in the post-investment phase, the implementation of national treatment to European investors in China is severely limited. Current investment agreements usually contain provisions that allow China to retain existing laws and regulations that are incompatible with national treatment. China merely agrees not to increase discriminatory treatment and promises to progressively remove non-conforming measures. The EU is expected to demand concrete commitments from China to introduce post-investment national treatment, at least in some areas, that will go significantly beyond what China was willing to promise in the past.

Market-opening to foreign investors: Investment agreements traditionally do not contain any provisions to liberalize market access. This also applies for the existing agreements between China and individual EU member states. However, the EU has stated that liberalizing market access is a core issue in the ongoing negotiations with China. More specifically, the EU is urging the introduction of what is called a "negative list" of all industries in which market access for foreign investors can continue to be restricted, while the equal treatment of domestic and foreign investors in regards to market access is to be guaranteed for all other industries that are not listed. After experimenting with negative lists in several free trade zones, China appears generally willing to accept the negative-list approach in an investment agreement with the EU. However, China prefers a rather cautious and limited approach with a long negative list, and wants to exclude market access provisions from being possibly regulated by international dispute settlement procedures. In contrast, since European markets are already largely open to Chinese investments, the EU strives for a greater symmetry and thus for a short negative list.

Investor-state dispute settlement: Aside from differing views on the scope of application of investor-state dispute settlement procedures their design could also become an obstacle in the negotiations. Focusing on its design, the European Commission is striving for a comprehensive reform of current dispute settlement procedures in its investment agreements. This on the one hand is intended to ensure that the protection of foreign investments does not undermine the right of the governments to implement regulations in the public interest. On the other hand, traditional arbitration is to be replaced by a transparent procedure before a permanent arbitration court (with the possibility of appeals), as proposed in the recently negotiated free trade agreement between the EU and Canada (CETA). Difficult negotiations between the EU and China are expected, at least in regards to the second reform element.

The starting position of the bilateral negotiations between the EU and China is characterized by considerable asymmetries between the existing investmet regimes. Unlike China, the European markets are already largely open for foreign investments today and its discriminatory treatment of foreign investors is much less prevalent in the EU than in China. A comprehensive investment agreement therefore demands much more extensive concessions and reforms from China than the EU and its member states. Yet the Europeans will have to accept that it will not be possible to realize all economically reasonable and justified demands for reforms in a single agreement. In regards to several key issues, most notably the liberalizatiion of market access and the less restrictive application of national treatment, the EU-China investment agreement will however have to go considerably beyond the provisions that China has agreed to in existing investment agreements with other developed countries. To ensure the acceptance of the agreement in the EU and its member states, this likely applies to investor-state dispute settlement procedures as well.

In summary, it is clear that negotiating an EU-China investment agreement is not an easy task that can be completed quickly. While the current increase in the number of complaints by European companies about discriminatory treatment by government actors in China and rising concerns in parts of the German public and politics related to the takeover of German technology companies by Chinese investors surely do not make the conclusion of such an agreement any easier; they do make it all the more urgent.

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PROMOTING TOP-LEVEL RESEARCH IS INDISPENSABLE

Nine German universities among the world's top 100—but none among the top 25: The 2016 Times Higher Education Ranking yields mixed results. Against this background, a recent Kiel Institute analysis shows that top-level research is valuable, but focusing on a "German Ivy League" or "German Harvard" appears neither realistic nor reasonable. The **EXCELLENCE INITIATIVE OF THE GERMAN FEDERAL AND STATE GOVERNMENTS** has contributed to strengthening top-level research in Germany. However, it cannot make up for the necessary improvement of the German university system's institutional framework conditions and a modernization of its organizational structures.

Universities around the world are competing for the best minds in order to stay competitive by improving their research performance. Needless to say, the world-leading research universities have an advantage here that is difficult for German universities to make up for. But is own top-level research necessary at all? Would it not be easier and more efficient to leave fundamental research to others and focus on applied research instead? Given that research results are published anyway, shouldn't one further develop basic reserach results into marketable products to cash in on foreign investments? While this may initially sound like an attractive strategy, it is unlikely to work out for an innovation-based economy like Germany's. Fundamental research is continually shifting the boundaries of current knowledge. Without being involved in this process, it will be difficult to evaluate new technologies' market potentials. Thus, investments into basic research are key to preserving a country's innovative capacities and thus its global competitiveness.

Top-level research creates radically new insights. Without own adequate research experience, it is difficult, however, to fully understand these new insights and the underlying research methods. As a consequence, it will be difficult to further develop new insights into new products, services and processes. Applied research alone is thus not sufficient to benefit from basic research conducted abroad. One has to conduct some own basic research to keep in touch with the knowledge frontier. Consequently, even if German universities are not in a position to storm the top positions of international research rankings, it can still be assumed that investing in top-level research pays off: as an investment in the absorptive capacity and innovation capability in Germany.

How should German universities position themselves in international competition in order to create new knowledge as resource for the innovation process? A key element here is to intensify international cooperation, for instance with the USA. However, international cooperations require investments as well. Essentially, one has to offer something to find cooperation partners. Here we are not talking primarily about extensive project funding. Rather, this is about providing appropriate research infrastructure and the corresponding institutional conditions. Red tape, rigid rules, and outdated organizational structures deter international partners and impede scientific work. Moreover, the exchange of scientific personnel is usually rather one-sided since academic career opportunities in Germany are relatively limited and rather inflexible. Structural reforms in these areas would do more for the future of Germany as a location of science and research than generous investments in specific research projects.

American universities dominate the international research rankings. Not only do they generate the most output in qualitative terms, they also attract the most input: both in terms of research funding and in terms of academic talent. The best German universities are still lagging behind in this regard. Even if it were possible to get private investors much more involved in German university research funding, it would still be hardly possible to provide even a single German university with an amount of resources comparable to those available to an American Ivy League university. It is, however, too narrow to just compare top German universities with top US universities. The picture would be very different if one were to compare the average universities. In regards to the quality of research and education, the US university system exhibits a much greater variance than Germany's system. While nearly all German universities continue to emphasize the holistic combination of research and teaching, only the best US universities follow a similar paradigm. As compared to German universty degrees, degrees from US universities are more difficult to compare with each other. The differences between the two education systems reflect distinct federal traditions but also different cultures in regards to dealing with diversity and equal opportunities so that a focus on the universities at the "upper" end can easily lead to misjudgments. Apparently there is a trade-off between the research strength of the best university and the research strength of the average university. Developing a "German Harvard" without substantial system changes and significant costs for the other German universities is therefore hardly conceivable.

With the Excellence Initiative, the German federal and state governments have created a funding tool aiming at promoting top-level university research in Germany. Along that line, it is meant to encouraging German universities to create distinctive profiles. There is ample evidence suggesting that the Excellence Initiative is taking the right approaches. Recent research results indicate that the best way to promote top-level research is to increase universities' autonomy and foster competition between universities (Aghion et al., 2009). The decision of the federal and state governments to reform the Excellence Initiative and henceforth carry it on as the "Excellence Strategy" is therefore highly welcome, even though different solutions than those that have now been implemented would have been conceivable in some details of the reform (Bickenbach et al., 2016). That being said, the Excellence Strategy cannot eliminate the need to improve the basic endowments of German universities and to modernize their institutional framework conditions.

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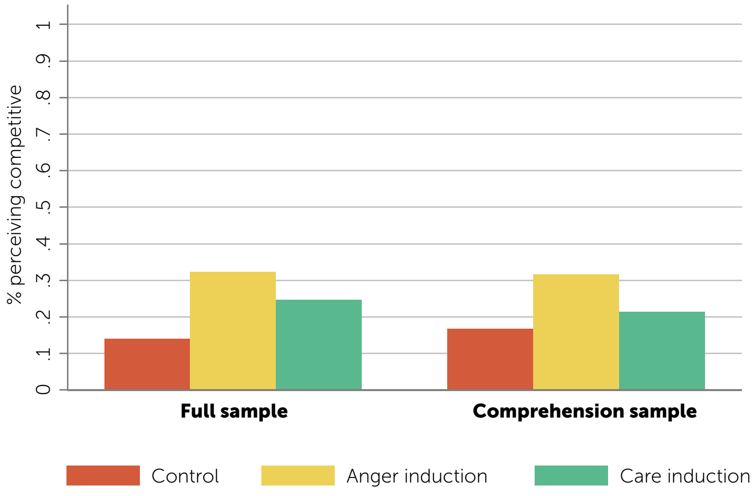
DECISION IN CONTEXT:
HOW MOTIVES DETERMINE OUR ACTIONS

Have you just helped a friend bury their recently deceased pet—or were you just on hold for what seemed like hours on a telephone hotline, only to end up speaking to an unfriendly employee who was unable to solve your problem? A current Kiel Institute study shows that these situations can have a **SIGNIFICANT IMPACT** on the financial decisions you make for yourself and also for others.

Proportion of subjects who see the Public Goods Game purely as a competitive game



The two situations described above are exemplary of two entirely opposite states that people can be in: What is known as the care motivation at one end of the scale and the anger motivation at the other end. In a laboratory experiment, we studied how the different motivations affect the willingness to contribute financially to a public good. One of the two motivations was respectively induced through an autobiographical recollection procedure. In this procedure, the participants in our study recall personal memories where they felt compassion for and helped another person (care motivation), or memories where they were frustrated, abused, or insulted (anger motivation).

The decisions in the Public Goods Game made by these two groups were compared to those of a control group who were asked to recall their previous day or a typical day in their lives. All study participants wrote down their personal recollections in a short essay. Directly after this motive induction procedure, the participants then made decisions in a neutral Public Goods Game. In this game the participants in groups of two first had to decide how much money they respectively wanted to contribute to a public good.

This very clearly showed that care-motivated participants are willing to pay significantly more for the public good than anger-motivated participants. In particular, this is true for those participants who fully understood the monetary incentives of the entire experimental game. This was tested using several math and comprehension questions. Over half the subjects showed a full understanding of the game's monetary and strategic incentives. The level of comprehension between the respective inductions did not differ significantly. The causal effect of different motives on decisions, evaluations, and perceptions can be analyzed most clearly for participants who fully understood the form of the game. That is why we present the study results for both the full sample and the "comprehension sample" (see figures).

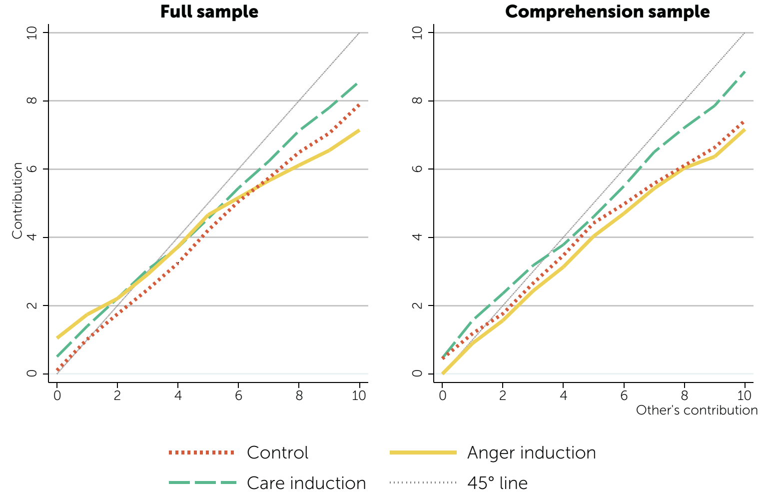
However, motives not only determine the objectives and therefore the behavior of the participants, but also their assessments of other participants and perceptions of the game. That is why additional motivation-specific data were collected in addition to the decisions to invest in the public good. For example, it was recorded whether the participants—depending on the motive induction—tended to be of the opinion that the game was about collaborating or about earning more money than the respective other group member. It turned out that the anger motivation is closely related to perceiving the Public Goods Game with a greater emphasis on competition. Figure 1 shows the relative proportions of participants for each induction who indicate that they perceive the game as purely competitive (as opposed to a cooperative, pure coordination game). Participants with the anger induction most often see the game as non-cooperative, aimed primarily at competing with the other player in the group, even though the game was always described neutrally and the same way for all participants.

Another sub-task for the subjects was to specify how much they would give if they knew how much the other group member had given (conditional contribution decision). For each action the other group member could have taken, the player specifies how much they want to contribute to the public good in this case.

There is a significant difference in the preferences of the participants depending on the induced motivation, which is shown by these conditional contribution decisions. The care induction clearly tends toward more prosocial preferences. Figure 2 shows that care-motivated participants are willing to contribute the most to the public good for a given contribution of the other group member.

In summary, our results indicate that the willingness to cooperate in favor of the public interest significantly depends on the current motivational state of the decision makers. This motivational state in turn depends greatly on the respective context in which an individual is at the time. In designing economic, social, and employment market policies for example, this fact should be considered. Political measures and the way they are received in society create a context that citizens respond to with different motivations and actions. This may be a performance motivation on the one hand but, on the other hand, also motives that are driven by anger and fear.

Conditional spending decisions



Source: Peterson and Weitzel, in publication

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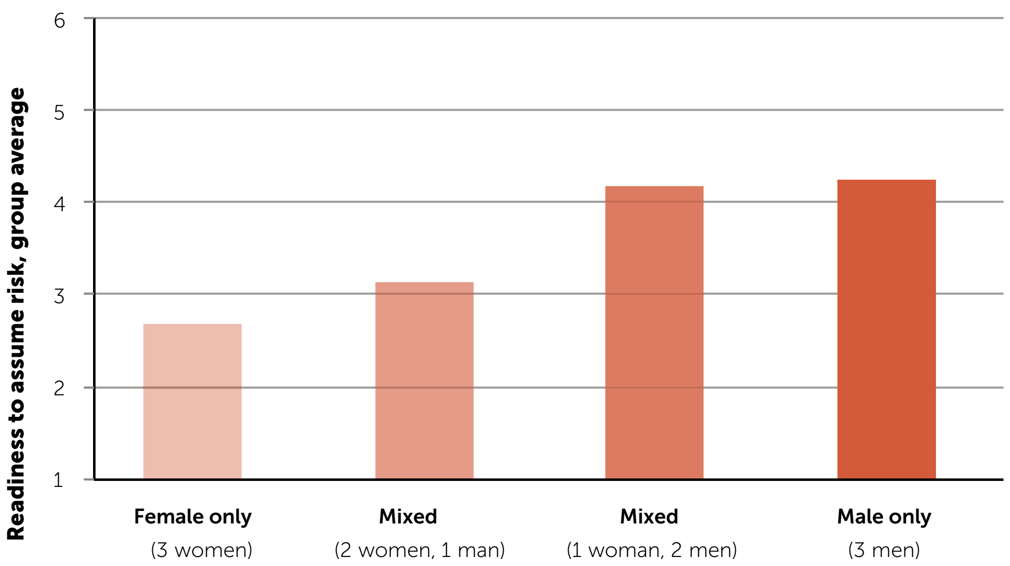
BETTER DECISIONS THROUGH DIVERSITY— THE RISKY SHIFT PHENOMENON

The proportion of women in leading positions in Germany, for example as supervisory board members, continues to be low. The gender quota introduced in 2016 is intended to change that. A current Kiel Institute study examines what effect this has on the decisions of such bodies. We show that groups that are highly dominated by one gender tend to make distorted decisions, for example because a **MALE DOMINATED GROUP** tends to accept a higher level of risk than what would be optimal from an individual perspective. Such unwanted distortions could be reduced and the decision quality improved by filling top positions with a mixture of men and women.

Readiness of the groups to assume risk increases with the number of male group members



Many economically and politically relevant decisions are made by groups, for example management boards, supervisory boards, and also parliaments and other political bodies. The overwhelming majority of these decision-making bodies is dominated by men, a fact that has been critically discussed in public for years. In order to strengthen the equal participation of women and men in leadership positions, a fixed gender quota of 30 percent applies in Germany since the beginning of 2016 for filling supervisory board positions in listed and fully co-determined companies. Since then the proportion of female supervisory board members in Germany has increased slightly and is currently at 27.2 percent (as of: August 28, 2016 according to the German Federal Gazette and "Frauen in die Aufsichtsräte", FidAR e.V). In addition to improving the equal treatment of women and men in the workplace, Federal Minister Manuela Schwesig for example hopes for a cultural shift in companies. Exactly what this cultural shift may look like remains open however.

Behavioral economics research examines the decision behavior of agents and institutions, and has shown among other things that the decision behavior of individuals is significantly influenced by personal characteristics such as gender or age and by the decision context. The different social context can cause group decisions to deviate substantially from individual decisions. Gender-specific differences in the individual risk behavior in particular were intensively discussed, with the predominant finding that women make less risky decisions on average than men. In contrast to decisions at the individual level, there is relatively little insight into decisions at the group level, for example whether the readiness of a group to take risk is systematically influenced by its gender composition.

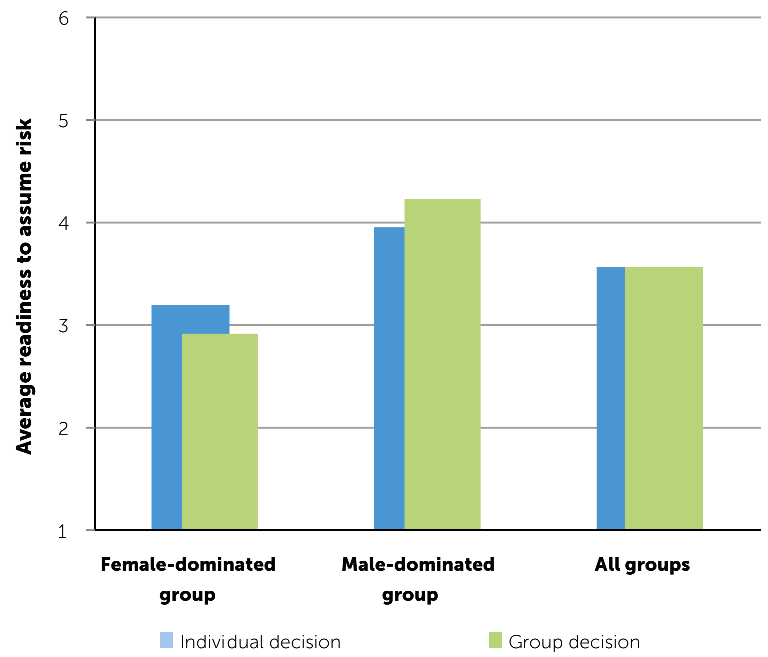
In order to investigate possible effects of the group composition in the willingness to take risk, the subjects were divided into groups of three. These groups then had to decide between six possible lotteries, first as a group and then as individuals, with the lotteries numbered so that selecting a higher number represented a higher willingness to take risk. The gender composition varied so that there were groups of just women and men, and also mixed groups (two women and one man, one woman and two men). Our results show that the gender composition of groups has a systematic effect on their behavior in choosing between risk options. On the individual level, we see that men choose riskier options on average than women. This is also reflected in the group decisions; the lower the proportion of female group members, the higher the willingness to take risk.

An interesting pattern emerges when one examines the difference in the willingness to take risk between individual and group decisions. While individuals and groups make equally risky decisions on average, there is a clear distortion between individual and group decisions when the group composition is taken into account. Groups dominated by men make more risky decisions than the group members would make individually. This means the group context leads to a higher willingness to take risk than what would be optimal from an individual perspective. The opposite applies for female dominated groups; here the group exhibits a lower willingness to take risk than the average individual decisions. There is no rational explanation for the changed decision behavior in the group since neither the probabilities nor the possible payouts change. A possible explanation may be risk taking is viewed as a sort of cultural norm for men and their decision in the group shifts in the direction of assuming more risk while the opposite applies for women.

In practice this could mean that decision making groups that are strongly dominated by one gender make distorted decisions, for instance because the group assumes too much (or too little) risk. Greater diversity in filling top positions could reduce such unwanted distortions. Provided the quota rule actually leads to a higher proportion of women in decision making bodies, the new gender composition could have a significant impact on decision quality.

Source: Own representation

Differences in the readiness to assume risk in decisions made in the group or by individuals



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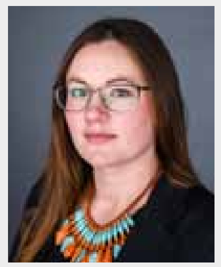

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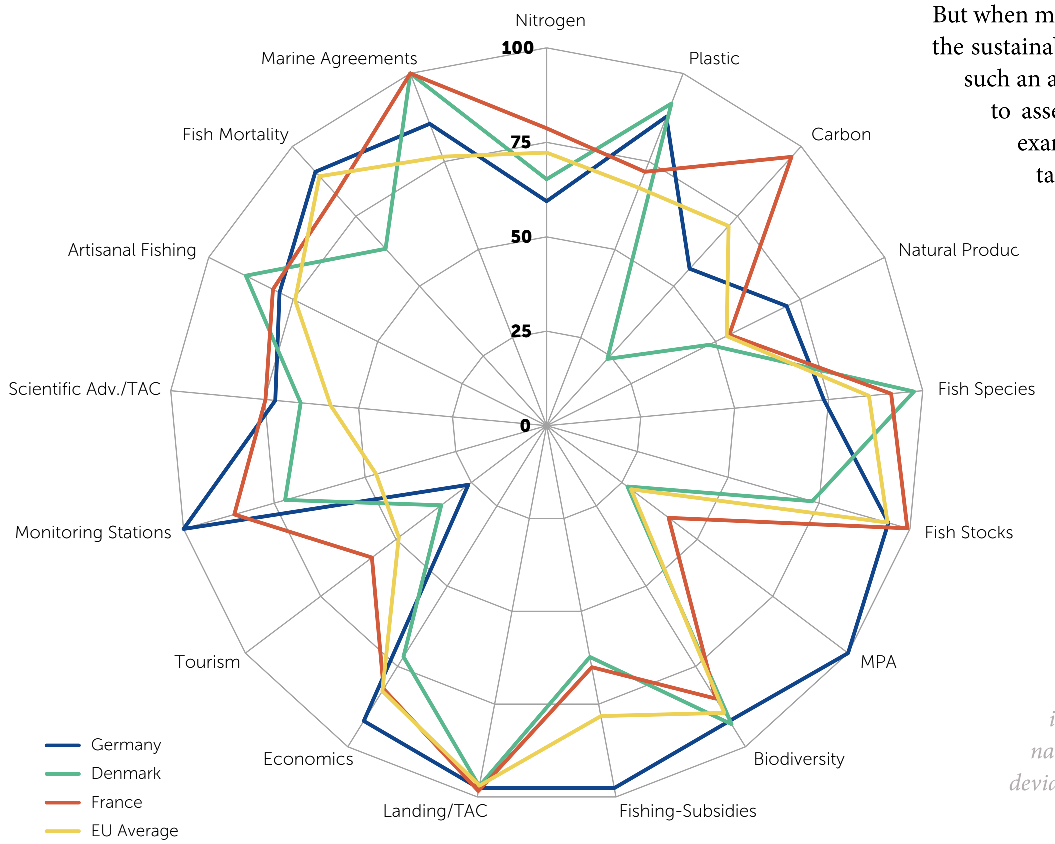
ASSESSMENT OF SUSTAINABLE DEVELOPMENT OF THE OCEAN IN THE EUROPEAN UNION

On 25 September 2015, the 193 members of the United Nations General Assembly approved the Agenda 2030 for sustainable development. This agenda encompasses 17 sustainable development goals (SDGs) with a total of 169 subgoals. Specific indicators are intended to verify **GOAL ACHIEVEMENT**. Rickels et al. (2016) perform a detailed analysis of the indicators related to goal 14: "Conserve and sustainably use the oceans, seas, and marine resources." Here the focus is on the coastal states of the EU.

The authors show that the assessment of sustainable development can benefit from additionally taking combined indicators into account. Figure 1 presents the standardized values for various indicators for the countries of Denmark, Germany, and France as well as the EU average. All indicators were defined so that a higher number of points means better performance. Thus, a high number of points for the carbon indicators means less carbon emissions. The figure therefore provides an impression of the relative strengths and weaknesses of the countries in question at first glance. For example, the results show that Germany has great potential for a more sustainable design of nautical tourism, and that France performs relatively well in regards to preventing CO_2 emissions, especially compared to Denmark. The high proportion of carbon-free energy generation with nuclear power is a possible explanation for France's low CO_2 emissions. Thus, it is important to closely examine the original data and national results, and possibly to also check whether the chosen indicator is appropriate or whether additional indicators are needed.

But when multiple indicators are used to measure the sustainability of ocean use, the complexity of such an analysis increases as well. It is difficult to assess whether France or Germany for example is more successful in the sustainable development of the oceans.

The authors therefore propose the additional inclusion of combined indicators in order to enable a direct assessment of overall sustainable development of the oceans. However, the various aspects and dimensions for sustainable development that have to be reflected in such an indicator set do not necessarily have the same substitution elasticity. One example: Presumably there are much better substitution possibilities between jobs in fisheries and nautical tourism than between jobs and the degree of biodiversity.



Comparison of SDG 14 scores for EU coastal states with unlimited substitution possibilities (weak sustainability criteria) and with limited substitution possibilities (strict sustainability criteria). The data point is the middle of the respective country name; error bars show the ± 1 standard deviation.

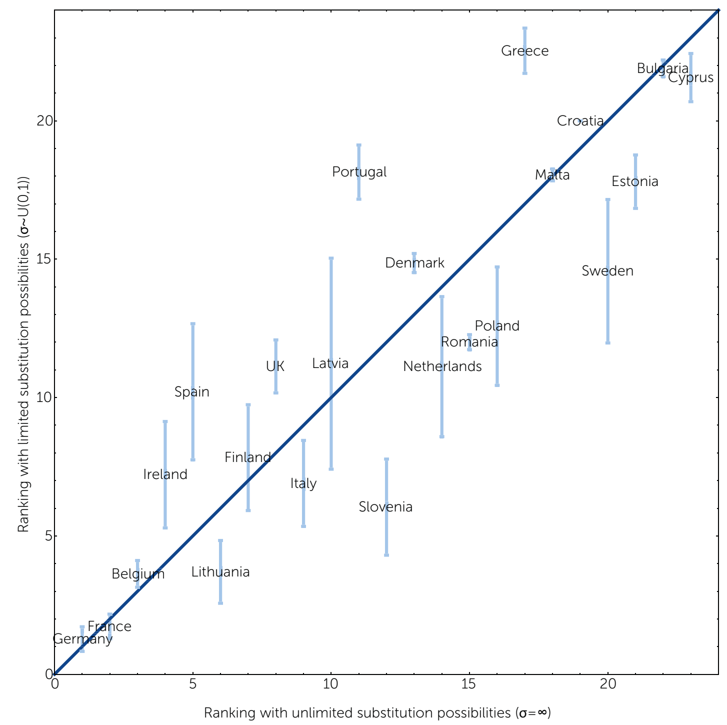
Source: Own representation

In view of this differing substitution potential between the various indicators, measuring sustainable development can be improved by constructing a multilayered combined indicator. The SDG framework with its division into goals, sub-goals, and corresponding indicators is a good template for the structure of such a combined indicator with three levels: first an indicator level, second a target level, and third an SDG level. Combined indicators are used for the assessment of the second and third levels.

As per Dovern et al. (2014), we assume that the substitution possibilities decrease from the first to the third level. This means the substitution possibilities are good on the indicator level, but minor on the SDG level. In particular, comparing between various substitution possibilities allows interesting conclusions to be drawn for the assessment of sustainable development.

Figure 2 shows the ranking of the EU coastal states for a concept of weak sustainability (high substitution elasticity) and for a concept of strong sustainability (low substitution elasticity), including the ± 1 standard deviation error bars. If the sustainability concept had no influence on the ranking, all countries would lie on the 45° line—they would have the same placement under both concepts. However, Figure 2 shows that the countries lie below and above the 45° line. The performance of countries that lie below this line is relatively balanced across all indicators. This means that these countries with a concept of strict sustainability criteria, and therefore with limited substitution possibilities, obtain a better ranking. This is the opposite for countries above the line. The performance of these countries is comparatively unbalanced across the various indicators. Under a concept of weak sustainability, they can compensate for the "poor" results of some indicators with the "good" results of other indicators, and therefore have a better ranking than they do under a concept of strong sustainability where these compensation possibilities are more limited.

Slovenia moves up 6 spots under a concept of strict sustainability criteria, while Portugal with its comparatively inconsistent performance drops 7 spots, respectively compared to the concept of weak sustainability criteria with good substitution possibilities. All countries are however quite close to the 45° line in general, indicating the performance of most countries tends to be balanced. The top placements are not affected by the sustainability concept, with Germany taking first place under both concepts.



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FOOD SECURITY VERSUS BIODIVERSITY— AN ANALYSIS OF POSSIBLE GOAL CONFLICTS

"Achieve food security" and "protect terrestrial ecosystems"—while these sound like two desirable goals at first glance and are therefore also part of the 2030 Agenda for Sustainable Development (Sustainable Development Goals—SDGs), their implementation harbors significant **CONFLICT POTENTIAL**. In a current Kiel Institute analysis, the authors juxtapose these two goals and show that the effects can be very different depending on the world region.

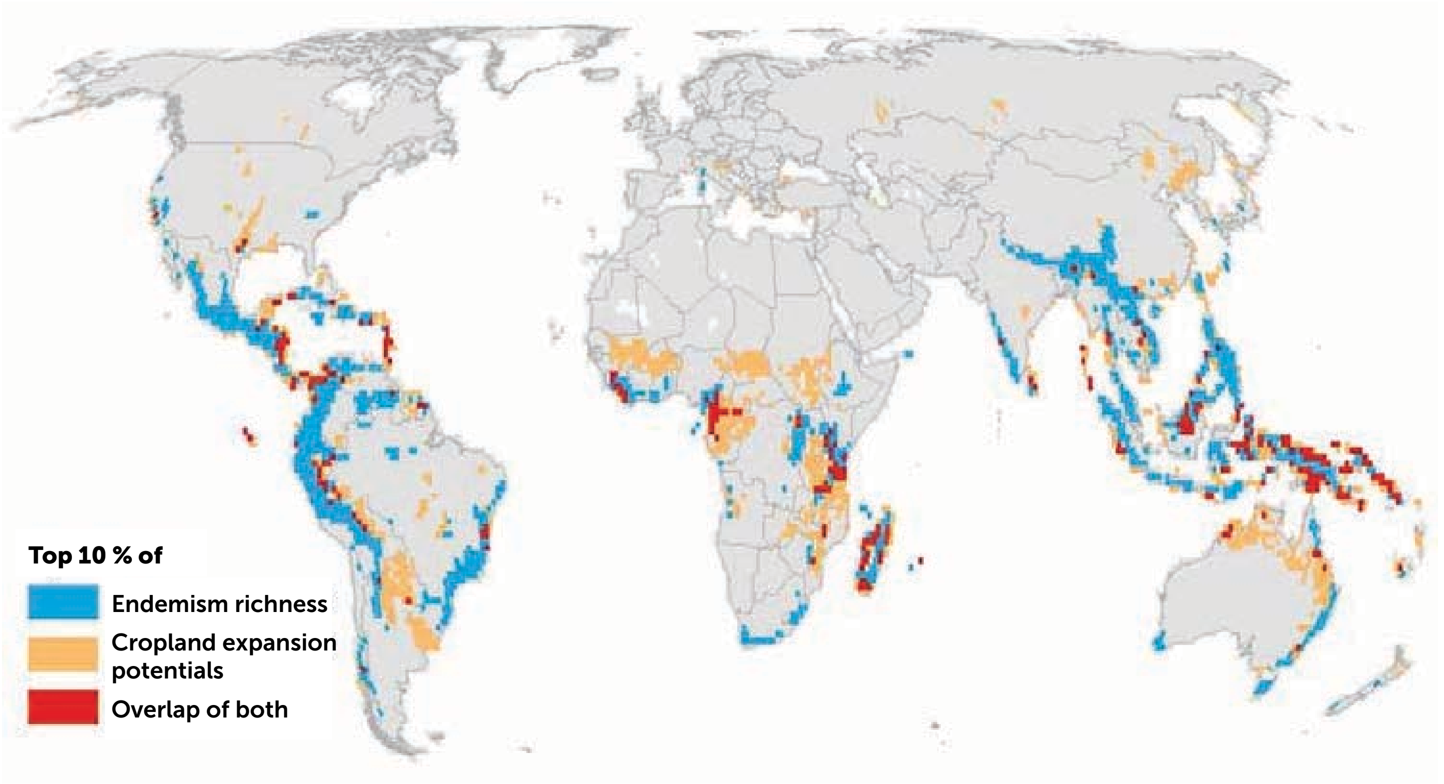
Is it even possible to implement the Sustainable Development Goals (SDGs) the way they were put on paper? With 17 goals that have very different focal points in diverse areas, it is no wonder that goal conflicts arise. Ruth Delzeit (IfW) together with Florian Zabel (LMU Munich), Carsten Meyer (iDiv), and Tomáš Václavík (UFZ) analyzed the conflicts that exist between the goals of food security and biodiversity in a study. The study identifies the endangered regions that have great, as yet underutilized potential for agricultural use and are simultaneously home to high biodiversity. However, the results also show that some regions exhibit comparatively low biodiversity notwithstanding high agricultural potential. Extensification could therefore focus on these regions while other regions are preserved.

The authors describe the possible goal conflicts between expanding the area under cultivation and protecting biodiversity. On the one hand, the expansion of land use not only improves food security in terms of falling prices and increased availability in the regions themselves, but also benefits importing countries such as India or China. On the other hand, the results show that many regions with high biodiversity could be affected by an expansion. According to the Food and Agriculture Organization (FAO), the biggest expansion of cropland from an economic perspective is expected in South America (especially Argentina, Bolivia, and Uruguay). Both a high potential for agricultural use and a high level of biodiversity are found in these regions. Accordingly, the value of maintaining this diversity is high, but there is great pressure to clear the land. Similar conclusions can be drawn for the regions in Australia, Brazil, and Africa (see figure).

> *Extensification could focus on certain regions while other regions are protected.*

> *Strategies need to be developed to protect regions with high biodiversity.*

The study emphasizes that further, detailed, and context-specific investigations are needed to understand the possible consequences of different food security strategies in key regions. Strategies also need to be developed to protection regions with high biodiversity.



The map shows areas with the highest species diversity and the greatest agricultural expansion potential (top 10 % respectively). The intersection of the two datasets (red) therefore shows the regions where high biodiversity could be particularly threatened by an expansion of cropland.

Source: Delzeit et al. (2016)

The study is one of the first examples that examines the problem of land use from more than two sides. It takes into account:

- Economic parameters that focus more on food security than on pure production
- Cropland as a complex social-ecological system
- Biophysical and socioeconomic factors that are geographically differentiated
- A definition of biodiversity that combines species diversity with the conservation value of the region.

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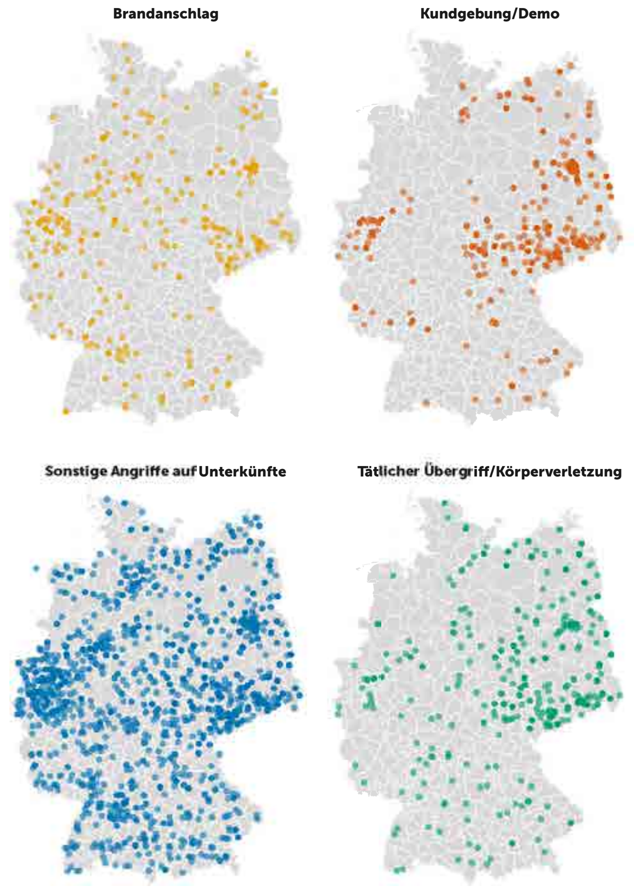
VIOLENCE AGAINST FOREIGNERS: ARSON ATTACKS PROVOKE THE MOST COPYCATS

The number of xenophobic incidents has increased significantly in the last two years. An initial analysis of detailed data reveals that there are **CONSIDERABLE REGIONAL DIFFERENCES** depending on the crime, that perceived competition—for example in the employment market—plays a major role, and that the risk of copycat incidents after a xenophobic crime is high.

Europe has been confronted with ever growing numbers of refugees over the last few years. Nationalist and xenophobic slogans have increasingly become part of the political discourse at the same time. Accordingly, the 2015 Annual Report on the Protection of the Constitution warns against the increasing prevalence of right-wing extremism.

Statistics on xenophobic violations in particular show how worrisome the situation is: The Federal Office for the Protection of the Constitution noted a fivefold increase in crimes against refugee centers motivated by right-wing extremism (in numbers: 170 incidents in 2014 → 894 incidents in 2015) and acts of violence against homes for asylum seekers (25 → 153). According to the statistics, arson attacks actually increased 15-fold (5 → 75).

Figure 1: Geography of anti-refugee incidents 2014–2016 by type of incidents



Since more in-depth research of the triggers, motives, and trends related to these crimes requires detailed information that goes beyond the statistics of the police and Federal Office for the Protection of the Constitution, we resort to an Internet chronicle of anti-refugee incidents that has been maintained since the beginning of 2014 within the scope of a joint project of the Amadeu Antonio Foundation and Pro Asyl. Here we first collected and sorted out all of the information listed online. Then all incidents were geocoded, meaning they were encoded with the corresponding coordinates of the location where they took place. These automatically determined coordinates are accurate to the municipal level so that a high degree of disaggregated analysis is possible. Linking the data to other sources is readily possible using the official municipality keys. Currently the dataset contains a total of 4,036 incidents for the period from 1 January 2014 to 31 December 2016.

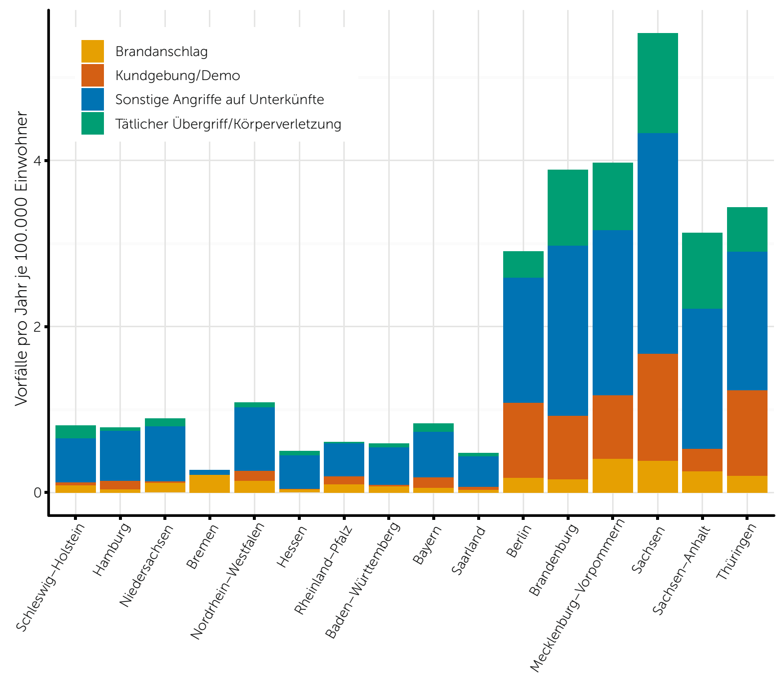
First off, the collected data show the extent to which all of Germany is affected by anti-refugee incidents. Since the Amadeu Antonio Foundation and Pro Asyl differentiate between four incident categories in their chronicle, the prepared dataset can also be used to for a differentiated representation (Figure 1). What are called other attacks on homes for asylum seekers, including for example graffiti or destroyed windows, took place throughout the federal territory. Anti-refugee manifestations on the other hand are regionally concentrated and, aside from the Ruhr region, occurred mainly in the new federal states. The regional pattern is similar for arson attacks and violent assault.

The difference in the number of anti-refugee incidents between the old and new federal states becomes clear when the difference in population figures is also considered (Figure 2). While less than 0.3 incidents per year and 100,000 residents occurred in Bremen during the period under review, the value in Saxony is over 5.5. Overall the number of incidents per 100,000 residents is 2.5 to 20 times higher in the new states compared to the west.

Since the occurrence of these xenophobic incidents in regional and time clusters is unlikely to be random, a more detailed analysis of the data is required to better understand the underlying processes. With the help of the data from Pro Asyl and the Amadeu Antonio Foundation, we are initially able to show that neither the average disposable income nor the regional unemployment rate constitute noteworthy influencing factors for the observed crimes. Thus, a general socioeconomic deficit cannot explain anti-refugee incidents. On the other hand, the data support both the competition and the contact hypothesis. According to the competition hypothesis, such a deficit has an effect when increasing competitive pressure (for example in the employment market) is perceived at the same time. The contact hypothesis states that people in regions with a higher proportion of integrated foreigners in the population are less xenophobic on average. Thus anti-refugee incidents are more likely to occur in regions with many refugees and simultaneous high unemployment in the population. However, this risk is reduced if there has been a high proportion of foreigners in the population for an extended time already.

Finally, it suggests itself to assume that not only regional conditions lead to the observed incidents; according to the logic of perceived legitimacy, past attacks on refugees can also favor additional incidents. An analysis of this regional and time diffusion shows that arson attacks in particular provoke copycats and considerably increase the risk of further anti-refugee incidents.

Figure 2: Number of anti-refugee incidents by federal state (per year and 100,000 residents)



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PRACTICING A CULTURE OF WELCOME?

CHARACTER COUNTS!

Do we consider ourselves cosmopolitan and open to new things or more risk averse and fearful? What influence answering this simple question has on our attitudes towards refugees and asylum seekers is shown by a current Kiel Institute study that offers new approaches for improving **THE SUCCESS OF INTEGRATION**.

There is no doubt that the social and economic integration of the many refugees who have come to Europe in the last few months is currently one of the biggest challenges faced by the European Union. Even as numerous EU countries are still grappling with providing basic services such as accommodations and healthcare, the bigger issues of how refugees and asylum seekers can build a life again, find their place in the host countries, and productively take part in society are already looming on the horizon.

On the one hand, the successful integration of immigrants can increase cultural diversity, which has proven advantageous for long-term economic development. On the other hand, a lack of integration can lead to dissatisfaction, segregation, and potentially violent extremism—on both sides.

Notwithstanding the importance of political decisions in the EU and the national governments, successful integration ultimately depends on the willingness of the population in the host countries to keep company with their new neighbors and to trust them. It is highly interesting to understand what factors contribute to the formation of a certain attitude among people. What determines the attitude towards immigrants? What promotes openness and what tends to cause walling off? The willingness of citizens to accept and actively integrate refugees not only depends on the own interests of the individual, such as the concern about jobs. Empathy and sympathy also play an important role.

> *When one understands how a certain inherent attitude develops and knows how to put this knowledge to use, integration can take a step forward.*

In order to examine the relationship between characteristics and the formation of attitudes towards refugees at the individual level, Kiel Institute scientists Tobias Stöhr and Philipp Wichardt conducted a survey experiment in the two German cities of Kiel and Rostock.

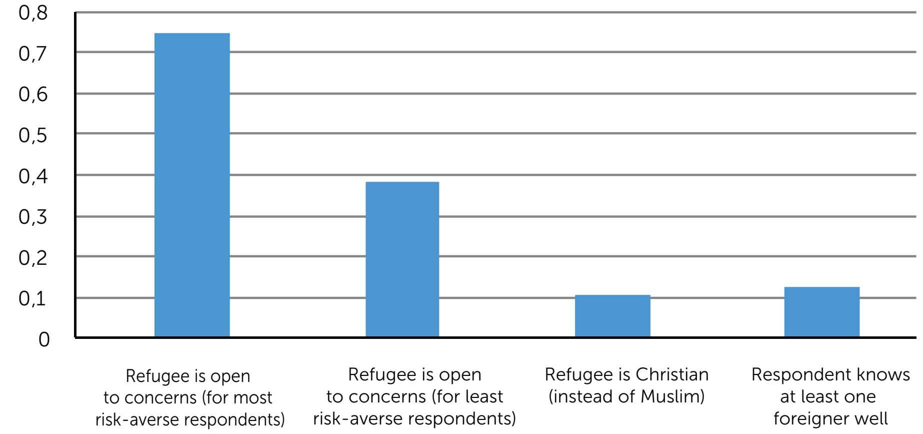
The respondents in Kiel and Rostock were shown the photo of a fictitious Syrian refugee and presented with different descriptions at random. Then the participants gave their assessment of the refugee and his individual socioeconomic characteristics.

Sympathy and trust increased significantly when the refugee was described so that concerns in the German population about the large influx of refugees—in regards to cultural change, the associated costs, and the fear of a potential increase in crime—are known to him and he is open to these concerns. This was the case among more risk-averse respondents in particular. In principle this group was also more fearful than others.

A generally positive attitude towards refugees as well as empathy for and trust in refugees differed according to the described situation. Nevertheless, the willingness to actually interact with the refugee was hardly influenced by whether the fictitious refugee shows an understanding for the concerns of the hosts. Here the most important influencing factors for the respondents were previous experiences, for example that they had non-German close friends or family, as well as their self-perception as social and not particularly risk-averse.

In showing that previous contact with foreigners is highly significant, the data confirm some long-standing assumptions about how important it is to address the concerns in the host population. However, the fact that personal preferences such as risk behavior for example, some of which are rooted in personality, are also high relevant emphasizes that considering voters who are afraid of refugees to be intolerant of others on principle is an oversimplification. The study suggests that an atmosphere that allows concerns and fears to be expressed and acknowledged can improve the attitude towards refugees. This does not mean one has to give in to these doubts, but it is worthwhile to consider that there is a lot of room between a practiced “culture of welcome” and xenophobia.

Fitted values of the effect on the sympathy perception of the refugee by the respondents

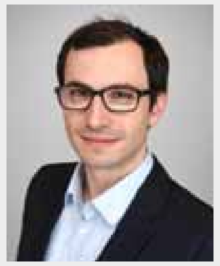


The dependent variable is scaled from 1 to 6. Only select coefficients are reported here. See the working paper for the complete model.

Source: Own calculations.

When one understands how a certain inherent attitude develops and knows how to put this knowledge to use, integration can take a step forward—not only so new citizens feel at home, but also so that fearful citizens do not feel overwhelmed.

AUTHORS



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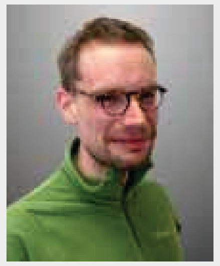

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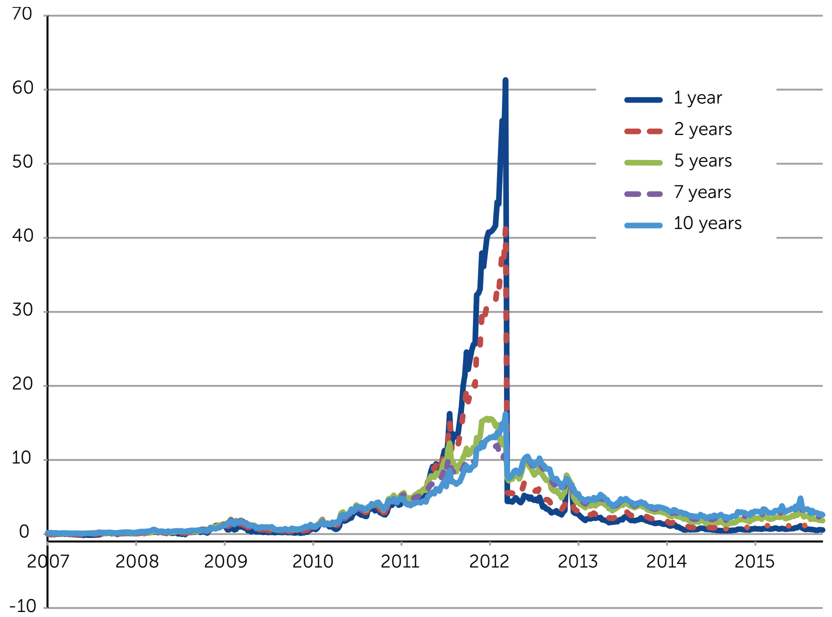
GOVERNMENT BONDS: HOW MUCH DID THE FEDERATION BENEFIT FROM THE EUROPEAN FINANCIAL CRISIS? LESS THAN THAN PREVIOUSLY THOUGHT

Motivated by the most recent political debates, we have developed a new method to measure what is known as the "flight to quality" with European government bonds. It turns out that the **FLIGHT TO QUALITY** only accounts for a small, albeit robust proportion of the decrease in the yield on German government bonds since the onset of the European crisis. The policies of the ECB and the global low-interest environment have a far greater influence.

Yields on German government bonds, 2007–2015

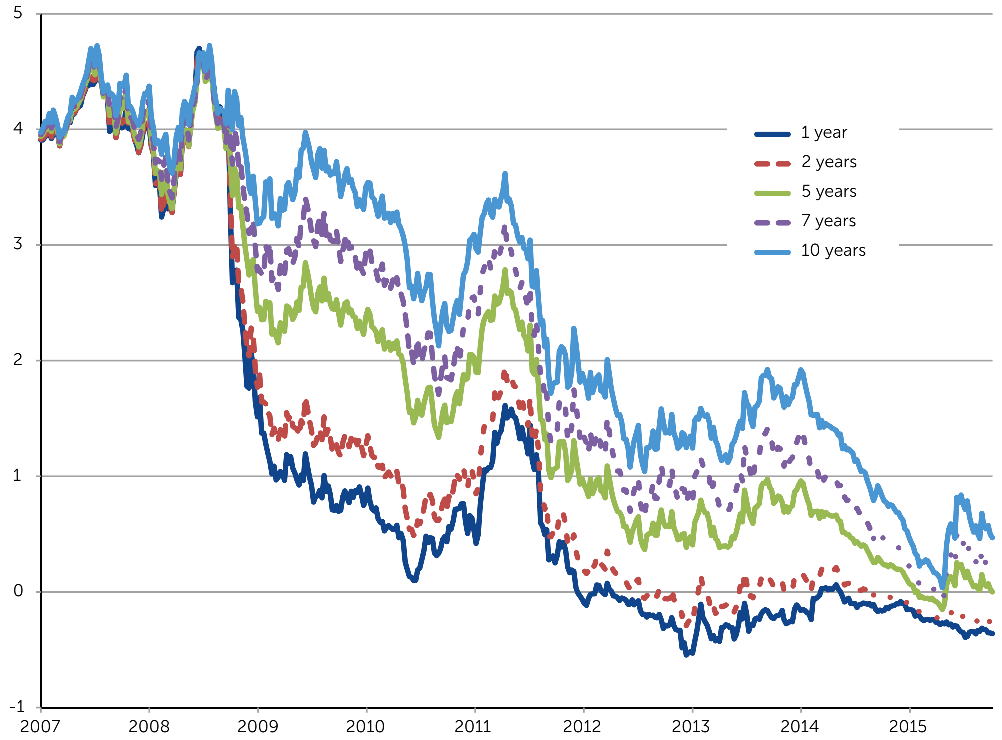


Yields on government bonds in Germany and large areas of the euro area have fallen since the onset of the European financial crisis (Figure 1). In fact the short-term yields on German bonds have been less than zero at times. During the same period, the yield difference compared to German federal bonds increased significantly in the crisis countries (Spain, Italy, Ireland, Portugal, and Greece), and subsequently stayed above its original 2007 level even though it dropped again.

This pattern of bond yields has led some authors (in particular Dany et al., 2015) to argue that Germany benefited tremendously from a flight to quality during the crisis. The drop in interest rates since 2007 had a direct impact on the federal government's interest payments with a magnitude of EUR 91 billion in the period in question up to 2015. However, the argumentation in some papers that these savings are solely due to the flight to quality is based on the assumption that bond yields should have remained at their 2007 level or that they should move according corresponding national macroeconomic parameters. Such assumptions disregard the fact that not only the interest on government bonds but also the general interest level has fallen considerably. Measuring the flight to quality therefore requires other identifying assumptions that are ultimately able to separate the effect being measured from the general interest trend.

Against this background, Boeing-Reicher and Boysen-Hogrefe (2016) measure the flight to quality in three different ways. First among these is a factor model, in which the flight to (or away from) quality is defined as a factor that ensures that the bond yields in Germany and the bond yields in the crisis countries move in opposite directions. The results of our model show that (1) our measurement for the flight to quality returns similar results as using yield differences as a crisis indicator; (2) the benefits of the flight to quality are not only clear in Germany, but also distributed among the other non-crisis countries—perhaps with the exception of Belgium; and (3) the crisis in most crisis countries was accompanied by a "decoupling" of their bond markets from the bond markets of the non-crisis countries, which means the yield changes hardly correlated with the yield changes in the core of the euro area any more. A "re-coupling" was seen in Ireland a few years into the crisis.

Our model estimates can also be used to represent hypothetical values for the yields on German federal bonds, subject to the assumption that the crisis did not happen or that no flight to quality occurred (as shown with 1 and 10-year yields in Figure 2). When we repeat the calculations of Dany et al. (2015) with these hypothetical values, we find direct effects on Germany's interest payments at a magnitude of EUR 26 billion since 2007. These calculations imply that the main cause of the low yields on German federal bonds lies in the actions of the European Central Bank and the global low-interest environment rather than the flight to quality.



Yield spread of German government bonds

Source: Own calculations.

The "flight to quality" is a financial market phenomenon that occurs when investors sell what they consider risky investments and buy investments considered risk-free, such as certain government bonds or gold. This is considered an indicator that investors are seeking less risk in exchange for lower yields.

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FURTHER READING

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PROTECTIONISM—MAJOR DAMAGE IN THE SHORT TERM

The Brexit vote in Great Britain and the US election with its protectionist slogans are just two prominent examples of the numerous calls in many western countries to **STOP GLOBALIZATION**. What many overlook: The effects of protectionist measures such as import tariffs are very negative, especially in the short term.

The gains from globalization are distributed unevenly, and often certain workers groups are losing out from freer trade. This helps explain the calls for protectionism that keep getting louder. Examples are found among other things in recent studies that have shown that increased trade with China leads to lower wages and job losses in sectors that compete with Chinese imports (Autor et al., 2013; Lechthaler and Mileva, 2013).

Thus, the unease about globalization can be explained at least in part by recent insights. However, the question arises whether imposing punitive tariffs on imports from China or other protectionist measures actually constitute suitable responses to this unease. The usefulness of the traditional trade literature is very limited here since it focuses almost exclusively on long-term developments and disregards short-term adjustments.

Arguments in favor of protectionism can in fact be found when these traditional models are used. While in these models free trade is optimal for the world

> ”*It is a false conclusions to assume that raising tariffs will have a positive effect in the short term.*

economy, a specific country can nevertheless have an incentive to impose tariffs. The reason is that raising a tariff constitutes a classical externality: The generated income benefits only one country while everyone pays the bill. Thus, the country imposing the tariffs puts itself in a better position to the detriment of all other countries. However, this only works as long as the other countries do not raise their tariffs on their own.

Thus in certain situations arguments in favor of protectionism can be found based on these traditional models. It is however doubtful that politicians in the midst of an election campaign are actually interested only in the long-term outcome and not in the next few years during which the economy adapts to this new situation. If one assumes on the other hand that politicians are more interested in the state of the economy over the next few years, the traditional trade models are entirely unsuitable for analysis since they ignore precisely these short-term adjustments.

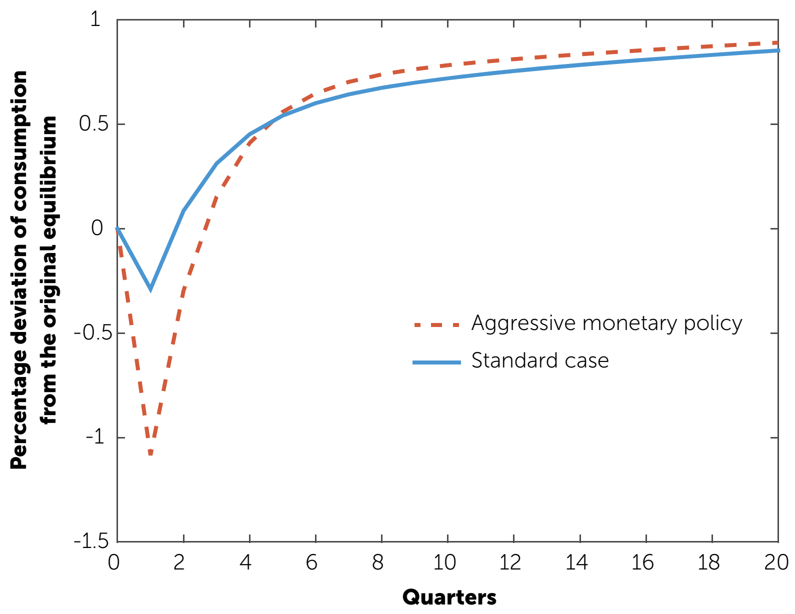
In order to take this deficiency into account, Larch and Lechthaler (2013) and Lechthaler (2016) use a dynamic model that is also suitable for analyzing the short-term adjustments after changes in tariffs. It turns out that developments in the short and long term can deviate dramatically from each other. While the model is able to replicate the long-term increase in consumption resulting from a one-sided increase in import tariffs, the development in the short term is entirely different. An increase in tariffs leads to a pronounced reduction of private consumption in the short term (see figure).

There are two reasons for this. First, imports get directly more expensive due to the import tariffs. Since the imports cannot be replaced with domestically produced goods immediately, consumption in general gets more expensive and demand falls. Second, new production capacities have to be developed. While this increases the production capabilities in the long term, it further reduces private consumption in the short term.

Thus import tariffs generate inflation since they lead to higher consumer prices, at least in the short term. This in turn implies a role for monetary policy that was ignored in previous studies, since the traditional static trade models are entirely unsuitable for this analysis. It turns out that a monetary policy that aggressively combats deviations from its inflation target makes the short term reduction in consumption even more pronounced. That is because the central bank increases the interest rate in order to counteract rising inflation, thereby further reducing demand and production. This relationship is clearly shown in the figure as well (see dotted line).

Thus, the analysis shows that it is a false conclusion to assume that raising tariffs will have a positive effect in the short term. To the contrary, higher inflation and reduced consumption can be expected as a result, especially when the central bank puts strong weight on stable prices, which is the case in the euro area. More suitable measures to counteract the detrimental effects of globalization are discussed by Lechthaler and Mileva (2014). They reach the conclusion that subsidizing the training of workers generates particularly positive effects, since it increases production and simultaneously reduces inequality.

Change in consumption over time due to a one-sided increase in import tariffs



Source: Own representation.

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CONSULTING

Figures, facts, proposals for action—the expertise of the Kiel Institute is in demand both nationally and internationally...

...Germany's economy and Europe's ongoing crisis: These were the focal points of economic policy consulting by the Kiel Institute. Especially pleasing: After a short break, the Kiel Institute is once again participating in the federal government's Joint Economic Forecast.

THE APPLE CASE:
A PAPER TIGER GROWS TEETH

In his analysis after the **DECISION OF THE EU COMMISSION** against Apple in August of 2016, Henning Klodt wrote that the initiative of the EU Commission to make tax collection from multinational enterprises more uniform and transparent was a comparatively harmless paper tiger until then. This changed abruptly with the decision to reassess Ireland's tax relief in favor of Apple.

Prohibited business aid—that was the judgment of EU Competition Commissioner Margarethe Verstager against Ireland's tax relief in favor of the IT giant Apple. She obligated the corporation to pay back taxes of EUR 13 billion to the Irish tax authorities. This shows what it can mean when the EU Commission, as announced, steps up enforcement against the tax policies of some member states in favor of international corporations. Additional audits of the commission with similar content relate to the tax treatment of McDonald's and Amazon in Luxembourg. The Commission also commenced two proceedings regarding tax rulings of the tax authorities in Luxembourg and the Netherlands, accepting extremely distorted internal transfer prices of the companies Fiat Finance & Trade and Starbucks.

In the Apple case, profit shifting was achieved by allowing the Irish subsidiaries to remit virtually all their profits to a tax-exempt administrative center until 2014. Other tax avoidance channels commonly used by multinational companies are the transfer of patents and brand names to subsidiaries in tax havens, loan relationships internal to a group with the corresponding shifting of interest income, and artificially distorted internal transfer prices for deliveries within a group. The tax havens are by no means all on remote idyllic islands but also in Ireland, Luxembourg, the UK, and the Netherlands.

All of these practices that corporate consultants like to call aggressive tax planning and that the tax havens refer to forward-thinking locational policy are a constant nuisance for the tax authorities of other countries and cause recurring diplomatic resentment on the international stage. A stylistic high point of such resentment was the declaration of the former Federal Minister of Finance Peer Steinbrück in March of 2009 that he wanted to send the cavalry into Switzerland for tax collection.

In order to solve the problem without cavalry, the governments of the G20 launched an initiative in 2012 aimed at making the applicable international tax collection procedures as uniform as possible. The OECD was commissioned to develop suitable measures for this BEPS initiative (Base Erosion and Profit Shifting). Yet the battle against aggressive tax planning practices remained a paper tiger without teeth so far in spite of BEPS. This has changed abruptly, at least within the EU. The simple application of the state aid law packs a far greater punch than the entire BEPS initiative.

While the Commission's course of action is definitely welcome in the Apple case, there are counterarguments as well:

- The first argument is that tax policy is not under EU jurisdiction, so that the Commission's decision in the Apple case is illegal. This however is incorrect since the case is not about tax policy in general but about favoring specific companies. There is no doubt that tax relief granted to specific companies meets the definition of aid according to Articles 107 through 109 of the Treaty on the Functioning of the European Union. Thus, the Commission clearly has the right to investigate such tax relief according to the standards of state aid control. The interpretation of the European legal framework designating this as a "distortion of competition" also appears comprehensible. Prohibited aid in the EU leads to the legal consequence of a contractual repayment obligation of the favored company to its tax authority.
- The second argument is based on legal certainty as a locational factor. When a government issues binding tax rulings for specific companies, these companies should be able to rely on those rulings in their investment planning. If the EU Commission can require the payment of back taxes years later, this impairs the legal certainty of international investors and damages the attractiveness of Europe as an investment location.

Should the respective national governments actually consider the latter argument relevant, prevention is simple: It is easy for them to recognize that tax relief for specific companies meets the definition of aid. To exclude the possibility of the EU Commission getting involved later on, they have the option to notify it of the tax rulings according to Article 108 of the Treaty on the Functioning of the European Union. Then the Commission generally has two months to object to this aid. If it allows this period to elapse, the aid is considered compatible with the single European market and a subsequent objection is no longer possible (in principle, the Commission can also initiate more detailed investigations in this context, and then has more than two months to complete them). Thus, the member states can ensure legal certainty themselves. Truly one cannot blame the community's competition policy for the fact that they generally do not want to do this since they tend to avoid public scrutiny of their tax rulings.

In fact the tax havens want to generate small amounts of additional revenues that lead to significantly lower tax proceeds in other countries. Such practices have nothing in common with desirable location competition in a market economy.

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FURTHER READING

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STILL IN CRISIS MODE?
A VISIT TO ATHENS

"Progress with the agreed reforms", "turning point of the economic downturn"—listening to the "institutions", it seemed that Greece was on the right track one year after the third bailout program approved in August of 2015. Yet **THE GREEK DEBT MOUNTAIN** simply does not want to shrink and the reforms have at best been partly initiated. Identification with the process continues to be lacking.

If one believes the current forecasts of the EU Commission, Greece will see considerable growth as early as 2017 after slight shrinkage last year. This growth trend is supposed to further intensify in 2018. Such optimism however is anything but new: These positive expectations for the future have been dashed repeatedly since the onset of the economic and financial crisis. Yet the pattern remains that the Greek economy will be on a growth course, if not next year than the year after that. Why? The positive forecasts were not based on the actual success of reforms, but were needed for projections intended to demonstrate the ability of Greece to carry its debt. Here the message is that debt sustainability can be established in the not too distant future by letting Greece "grow out of" its debt.

In the fall of 2016 the approval of additional aid by the Eurogroup was expressly linked to the expectation that implementing the promised reforms would stimulate growth in Greece starting in 2017. How realistic is this? The saviors are counting on Greece's reform process gathering the urgently required speed through the implementation of key reforms in the areas of old age security, banking supervision, the energy sector, and financial administration as well as the establishment of an independent privatization and investment fund that has long been delayed. This is because the "reform milestones" were far behind the agreed schedule on the memorandum's anniversary.

> *Greek politics would have to identify with the reform process and stop perceiving it as an expression of foreign rule. A haircut of some sort appears unavoidable.*

Progress is nevertheless discernible with some reforms: Flagship projects such as the sale of the port of Piräus, the concessions for the operation of 14 regional airports, and the sale of the old Elliniko airport in Athens were finally completed in the course of privatization. Progress was also reported with privatization projects in the energy sector and the national railway. However, it once again became clear that the target of EUR 50 billion in privatization proceeds specified by the creditors in the August memorandum is completely unrealistic and closer to EUR 15 billion in reality—with corresponding consequences for the state finances and debt sustainability.

The reforms passed in the meantime for VAT, income tax, and property tax by no means allow the tax proceeds to be increased to the desired level quasi overnight either. This requires effective tax administration and adequate incentives for tax refugees that are still lacking. On the goods and services markets, one continues to observe that deregulation measures are losing effectiveness due to inadequate implementation. The really big challenges such as the reform of healthcare, retirement provisions, and social security have not even been tackled—not to mention the setup of a functioning land register.

This list of pending reforms could be continued at will. Furthermore, Greece continues to lack a sustainable business model. While strengthening exports has been repeatedly evoked, this cannot be limited to re-establishing a flourishing tourism sector. Instead domestic and foreign investors would have to rediscover Greece as an attractive production site for industrial goods and services of high quality so competitive jobs could ultimately be created. But Greece is far away from that: In the 2017 Doing Business Ranking of the World Bank that measures the worldwide attractiveness of investment locations, Greece has in fact fallen to 61st place in the overall ranking—even though a large jump up was expected, especially due to the reforms.

In May of 2016 the Economic Policy Center had the opportunity to present its assessment of the Greek crisis to a domestic audience—academics, politicians, and media representatives—at a discussion event hosted by the University of Athens. Renowned experts from the Brussels think tank Bruegel, Princeton University, Universitá di Bologna, and Goethe University Frankfurt were represented on the podium. A consensus was quickly reached about the true causes behind the sluggish reform process: On the one hand, the Greek public administration is entirely overwhelmed with the implementation of complex reforms, and only rudimentary administrative and judiciary reforms have been realized to date. On the other hand, there is widespread resentment in politics and society of the "institutions" and creditor nations that are viewed as a threat to Greece's self-determination—a basic attitude that is also transferred to foreign investors. Yet there absolutely was an understanding that there is no way out of the crisis without external help and capital.

How can this dilemma be overcome? Greek politics would have to identify with the reform process and stop perceiving it as an expression of foreign rule. The insight that one is dependent on the help of the "institutions" and EU partners, even at the price of a temporary loss of sovereignty, should assert itself. Sooner or later Greece's creditors will also have to settle the debt issue, and a haircut of some sort appears unavoidable here. This however would have to conclude the bail-out process, with Greece assuming direct responsibility for shaping its future.

Traces of the protests in Athens on the tomb of the unknown soldier outside the Greek parliament

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FURTHER READING

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KIEL SUBSIDY REPORT:
REACHING A NEW HIGH

Germany distributed more subsidies than ever before at EUR 168.7 billion in 2015. That amount was even higher than the level before the financial crisis. This severely limits Germany's **FINANCIAL LEEWAY** to address challenges such as the integration of refugees, modernizing the infrastructure, or improving internal and external security. The federal government is actually planning to considerably increase its financial aid.

Subsidies from the state and federal governments, municipalities, special budgets, and the EU have reached a new high at EUR 168.7 billion according to the current Kiel Subsidy Report from the Institute for the World Economy (IfW). This is EUR 27.5 billion above the level reached before the financial crisis in 2007 and EUR 2.5 billion higher than the previous peak value in 2010. Two thirds of the subsidies consist of financial aid, one third of tax incentives. While subsidies for companies have fallen (share in the year 2000: 70 %, 2015: 53.7 %), what are known as "soft subsidies" for private and public nonprofit organizations increased sharply (2000: 30 %, 2015: 46.3 %). In particular, the federal government's subsidy to statutory health insurance rose considerably from EUR 1 billion in 2004 to currently EUR 11.5 billion.

Thus the subsidies recorded by the IfW are around three times as high as those in the federal government's official subsidy report, which does not contain the full extent of financial aid and tax incentives while soft subsidies are omitted entirely. They approximately correspond to Germany's entire wage tax proceeds or more than EUR 2,100 per resident. A new high for subsidies is remarkable in view of the fact that financial aid for the Federal Employment Office has decreased significantly since the employment market situation is currently very relaxed. Payments from the investment and repayment fund established during the financial crisis, which also funded the car-scrap bonus, ran out in 2010 as well. Thus the subsidization propensity increased considerably in recent years.

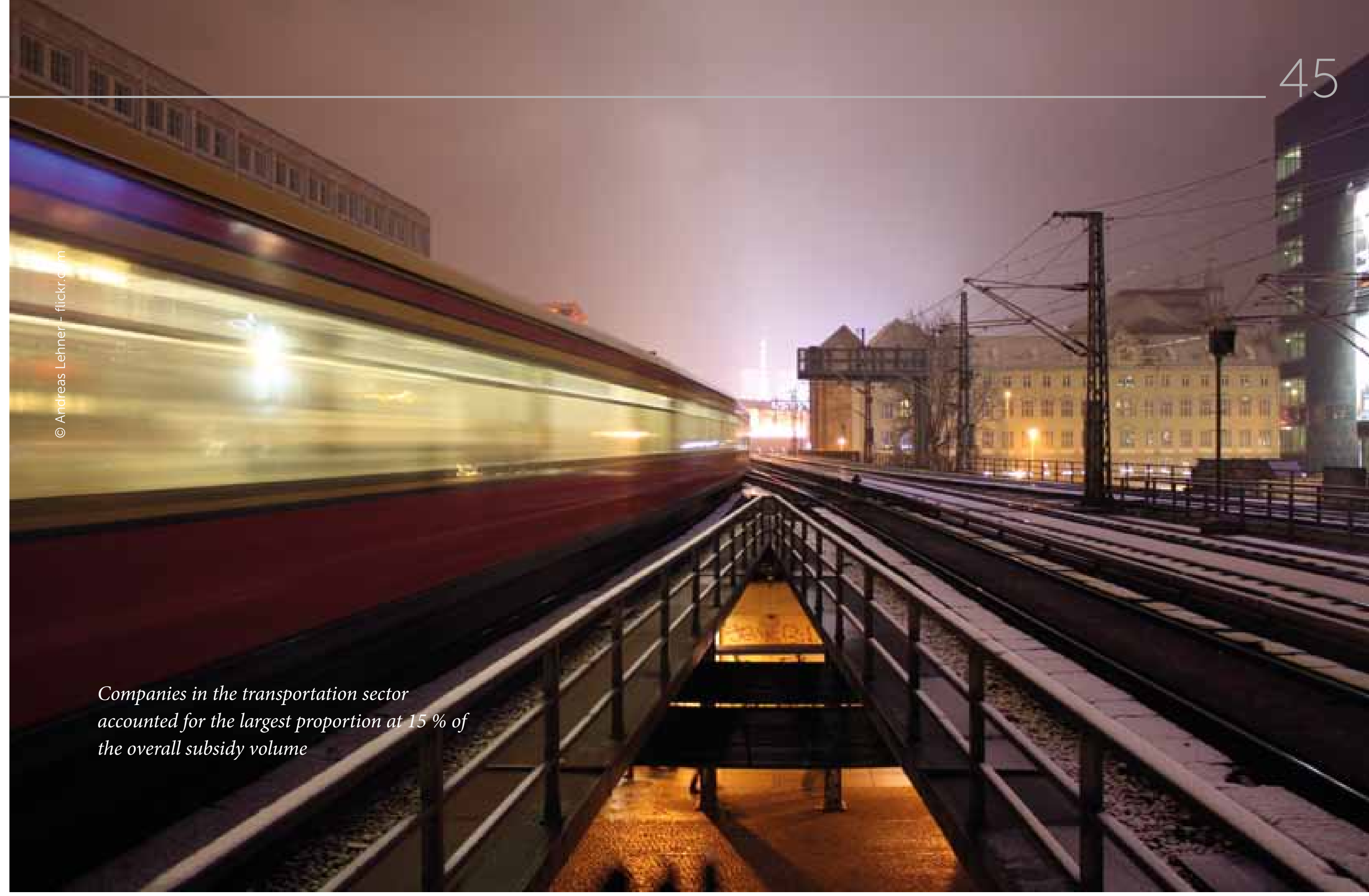
Pronounced increase in federal financial aid planned in 2016

Only planning data from the federal government were available for 2016 when the report was prepared. According to the planning figures, total federal financial aid that amounted to nearly EUR 45 billion in 2015 is slated to increase by another 18.8 percent or EUR 8.4 billion in 2016. Most of this is accounted for by a marked increase in federal subsidies for statutory health insurance, transportation, energy, and the environment. Spending for refugees on the other hand hardly plays a role. The increase in financial aid is highly questionable since foreseeable demographic shifts in Germany will dampen revenues and increase expenses. How long the currently favorable situation for public budgets will last is uncertain. Aside from the integration of refugees, upcoming challenges include modernizing the infrastructure and improving internal and external security. Instead of establishing reserves and making provisions for future financing bottlenecks, the spending imagination of political decision makers is blossoming. It is feared that this will further intensify in the 2017 election year.

Biggest beneficiary: railway transportation and mass transit

Subsidies that benefit companies in the transportation sector are the biggest item overall in 2015. They account for around EUR 25.2 billion or 15 percent of total subsidies. Here the largest single items were the regionalization funds paid to the states (EUR 7.4 billion), the legacy of rail privatization (EUR 5.3 billion) and federal subsidies for the Deutsche Bahn railways (EUR 4.5 billion). The states in turn subsidized the transportation sector with a net amount of EUR 4.6 billion, especially for public transit services.

Subsidies to companies are trending downwards over the long term, especially those benefiting agriculture and forestry, mining, housing policy, regional and structural policy, and employment policy. Aid benefiting the dwelling services sector in particular has dwindled from EUR 16.7 billion to EUR 3.5 billion since the year 2000. In addition to the expiry of the housing allowance including child allowance, this is because the federal government withdrew from promoting social residential development in 2006 and the states and municipalities have decreased their corresponding expenditures.



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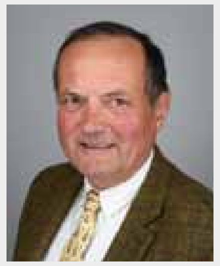
Companies in the transportation sector accounted for the largest proportion at 15 % of the overall subsidy volume

Among the "soft" subsidies, financial aid paid mainly by the states and municipalities to day-care centers and day nurseries has more than doubled since the year 2000. Here they are the largest or second-largest subsidy items overall at EUR 22.2 billion. It may be surprising that these government services are listed as subsidies, especially since their important sociopolitical contribution cannot be denied. However, a selection of childcare providers in line with the market is impeded as a result. Aside from the aforementioned federal contribution to statutory health insurance, tax incentives in the medical sector (EUR 15.4 billion) and cultural subsidies (EUR 8.2 billion) also carry a lot of weight.

There may be a plausible sounding justification for most subsidies. Overall however, subsidies can take regional authorities to the limits of sustainable fiscal policy. Furthermore, subsidies in principle always mean a selective intervention of the government in the economic process and are therefore associated with a loss of welfare and growth.

AUTHORS



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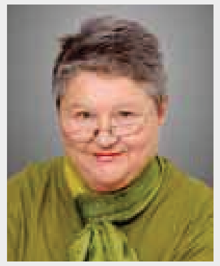
Expertise
- Crisis countries in the EU
- Foreign trade integration in the expanded EU
- Economy of the Baltic states
- Subsidies in Germany



Dr. Astrid Rosenschon

Expertise
- Subsidies in Germany
- Public budgets

FURTHER READING

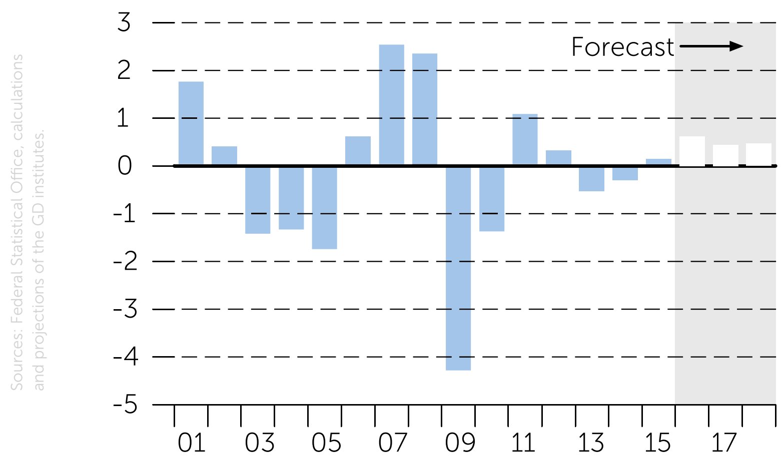
- Kiel Subsidy Report (in German): https://www.ifw-kiel.de/pub/wipo/volumes/wipo_9.pdf

JOINT ECONOMIC FORECAST— KIEL BACK ON BOARD

In autumn 2016, after a three-year break, the Forecasting Center returned to the circle of **ADVISERS TO THE FEDERAL GOVERNMENT** for preparing the Joint Economic Forecast ("Gemeinschaftsdiagnose", GD). The appointment for the maximum term of four years was a particular success. The Joint Economic Forecast serves the federal government as the basis for its own projections and gets a lot of attention from the public both nationally and internationally. This consulting project is among the most important regular research-based inputs for macroeconomic policy makers in Germany. It has an immediate impact on economic and growth policies as well as fiscal planning.

Within the framework of the Joint Economic Forecast, the leading German economic research institutes analyze and predict Germany's position in the business cycle for the short and medium term. This bi-annual forecasting exercise has a long-lasting tradition going back to the year 1950 with the Kiel Institute being among the founding fathers. Today, potential output estimations—a key variable both for economic analysis and for official fiscal rules—complement the detailed short-term economic forecast. Special topic chapters serve to explore current economic issues in greater depth. The institutes also assess the current macroeconomic policy stance and come up with specific recommendations in those fields that show major gaps with respect to stabilization and growth policies. The agreement among the participating institutes gives these recommendations a heavy weight. If they disagree the discussion of the reasons for the disagreement helps policy makers and the broader public to better understand the assumptions underlying alternative policy actions and their possible implications.

Output gap

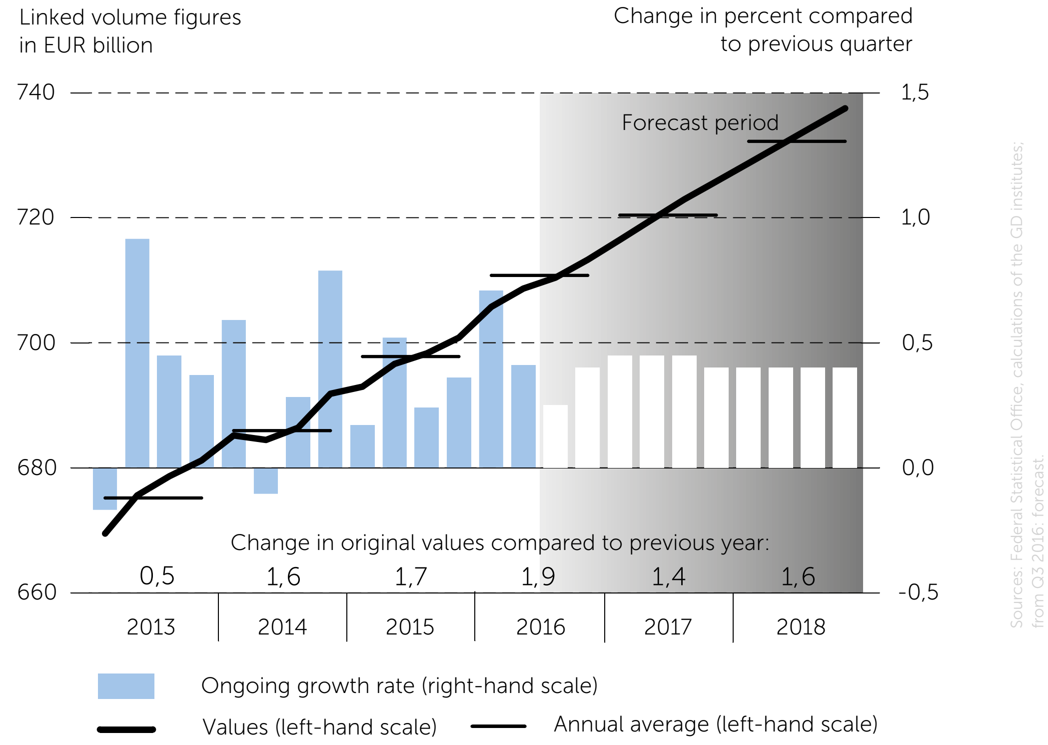


The first Joint Economic Forecast with the Kiel Institute back on board ("German economy on track—economic policy needs to be realigned") was prepared by the participating institutes in September in Berlin, and submitted to the federal government and presented at the federal press conference on September 29, 2016. Key topics that emerged during more than two weeks of working on the joint report included the economic impact of the Brexit vote on the German economy as well as an appropriate policy response against the background of current budget surpluses on the one hand and upcoming demographic developments on the other hand.

There was consensus among the institutes that the upswing of the German economy will continue although the cyclical pattern is unusually weak. While the institutes shared a unanimous view on the growth rate of 1.9 for the year 2016 they diverged more noticeably on the outlook for the two upcoming years. According to the finally reached joint view Germany's gross domestic product was expected to increase by 1.4 percent in 2017 and by 1.6 percent in 2018. For both years the Kiel Institutes projections suggested stronger rates of economic expansion while the forecasts of some other institutes foresaw even smaller growth numbers.

The unemployment rate is expected to remain at its historic low of 6.1 percent in 2017. Strong employment growth continues and nearly half a million new jobs are being created. In contrast to past upswings, the contribution made by manufacturing is below average.

Real gross domestic product



Investment spending and exports that have been comparatively weak for some time will however regain momentum over the forecasting horizon.

As one of the most open economies in the world Germany is particularly vulnerable to neo-protectionist policy interventions and economic disintegration. Britain's decision to leave the European Union increases the uncertainty for the business community and is likely to negatively affect the German economy during the forecast period although the Brexit is not seen as disrupting the current upswing in Germany. Nevertheless, the institutes see the risk that rising skepticism about free trade and international economic cooperation may dampen the global growth path with particular negative consequences for the German and other EU economies.

Overall, the utilization of macroeconomic production capacities in the forecast period is somewhat above the long-term average. However, the upturn so far is driven to a lesser extent by business investments. The ongoing increase in employment continues to primarily benefit consumption. A policy realignment is urgently indicated in view of the challenges arising from the migration of refugees, but also from demographic burdens on the German economy that are foreseeable in the medium term already. The institutes urge policy makers to put more weight on long-term goals and therefore to shift fiscal spending towards fixed and human capital formation along with employment-friendly tax reforms.

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Expertise
- National Accounts and business cycle analysis
- International macroeconomics
- Monetary policy and monetary systems
- Market workability diagnostics
- Computational economics

FURTHER READING

- Joint Economic Forecast Project Group (2016). German economy on track—economic policy needs to be realigned. Joint Economic Forecast, fall 2016.

"EURO AREA FISCAL STANCE"— THE PITFALLS OF FISCAL POLICY COORDINATION IN THE EURO AREA

Economic policy consulting is part of the Forecasting Center's core business. The Forecasting Center was able to considerably expand its consulting activities at the European level in the last few years. In addition to regular consulting projects extending over several years, the Forecasting Center also receives ongoing short-term requests for its expertise on current issues. For instance, the European Parliament recently requested an expert opinion on the question of whether the euro area needs more intensive **FISCAL POLICY COORDINATION**.

The Forecasting Center advises various political institutions about macroeconomic policy at the European level in a variety of ways. For example, the Kiel Institute has been regularly preparing expert opinions on current currency matters and monetary policy in the euro area for the European Parliament since 2015. Preparing the expert opinions that are requested respectively in preparation of the quarterly hearing of the President of the European Central Bank before the European Parliament's Committee on Economic and Monetary Affairs is coordinated by the Forecasting Center. In 2016 these expert opinions examined the effectiveness and risks of major repurchase programs of central banks ("quantitative easing"), business investments in the euro area, and whether monetary policy transmission in some regions of the euro area is disturbed. Furthermore, the Forecasting Center on behalf of the Federal Ministry for Economic Affairs and Energy supports the German representatives in the Output Gaps Working Group of the EU Economic Policy Committee. The working group is tasked with the further development of estimates for the output potential of the EU states. Here the focus is mainly on methodology issues. However, the economic policy significance of estimating the output potential must not be underestimated since it is decisive for the assessment and orientation of financial planning by the member states of the European Union. The committee meets approximately every two months and the Forecasting Center is responsible for the scientific preparation of materials sent out prior to the meetings. Similar consulting services are provided on behalf of the Federal Ministry of Finance with scientific support for the representatives in the LIME Working Group (Working Group on the Methodology to assess Lisbon related structural reforms) tasked with the further development of macroeconomic surveillance methodology in the EU.

With all of these consulting projects, the economic policy conditions of a currency union repeatedly play a leading role, directly in regards to monetary policy and also when it comes to matters of macroeconomic surveillance in the EU that is conducted within the scope of the European Semester. The objective of the Forecasting Center's work is to critically and constructively support the monetary policy of the ECB and the efforts for further economic policy coordination at the EU level. Taking the wrong track is to be avoided.

One such wrong track is the concept of the "fiscal stance" applied to the euro area within the framework of the European Semester and macroeconomic surveillance. A Kiel Institute team with significant assistance from the Forecasting Center critically discussed the concept in the short expert report prepared for the European Parliament, "Euro Area Fiscal Stance: Measurement, Implementation and Democratic Legitimacy" (Ademmer et al., 2016).

The fiscal stance refers to the general macroeconomic direction of fiscal policy. It is measured as the difference between the structural budget balance and the prior-year value. When the difference is positive, this corresponds to fiscal consolidation, which means a contractive impulse for the economy as a whole from the new-Keynesian perspective. Conversely a falling structural budget balance leads to an expansive impulse. The question of which fiscal stance is appropriate is generally assessed based on the macroeconomic situation and fiscal stability. An expansive impulse is recommended when capacities are underutilized and government debt is relatively low.

However, the problem in the euro area is that many countries exhibit both a weak economy and fiscal stability risks. Additional macroeconomic impulses would be desirable (at least from a new-Keynesian perspective), but are prohibited in order to avoid further worsening the debt position. In regards to the fiscal stance applied to the euro area as a whole, the EU Commission argues that either the "wrong", high-debt countries ensure the desirable fiscal policy expansion or that the fiscal stance is not expansive enough from the perspective of the euro area. From the perspective of the EU Commission, the solution is for the countries without fiscal stability risks—independently of their own macroeconomic position—to trigger fiscal policy impulses. Here Germany is at the center of the debate and the EU Commission recommends additional public investments of a considerable extent.

The Kiel Institute team has criticized this view and does not consider the examination of the fiscal stance in reference to the euro area meaningful. On the one hand, this is because an additional fiscal impulse in Germany would boost the economy and in particular the construction industry in a situation where capacities can be considered fully utilized, and overutilized in the construction sector. This would result in macroeconomic destabilization in Germany. At the same time, the positive consequences for the remainder of the euro area and the peripheral countries in particular are unclear. Insofar as monetary policy responds to an economic impulse, negative transmission effects to some countries are even possible and cannot be excluded. While it is argued that monetary policy in view of the zero interest limit should not increase interest rates, at least in response to the fiscal impulse, the expectations of an earlier exit from the ECB's securities purchase programs through the exchange rate channel could dampen the sales prospects of the export economy in the entire euro area. Insofar as the fiscal impulse does not radiate to the remainder of the euro area much or perhaps not at all, with simultaneous unwanted stimulation of the economy in Germany, this measure would further worsen the economic imbalance in the euro area which in turn considerably reduces the benefits of a joint monetary policy.

Overall the aggregate view of the fiscal stance at the level of the euro area is not a meaningful parameter for the orientation of fiscal policy. In principle, fiscal policy under consideration of the sustainability of national debt should continue to be able to respond to the own country's economic situation, which is appropriate in particular since monetary policy is already aligned with the aggregate.

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Expertise
- Business cycle analysis
- Time series analysis
- Public finance

FURTHER READING

BRIEFING PAPER FOR THE EUROPEAN PARLIAMENT:

- Ademmer, Esther, Claire Boeing-Reicher, Jens Boysen-Hogrefe, Klaus-Jürgen Gern and Ulrich Stolzenburg (2016). Euro Area Fiscal Stance: Measurement, Implementation and Democratic Legitimacy.
- Boysen-Hogrefe, Jens, Salomon Fiedler, Nils Jannsen, Stefan Kooths and Stefan Reitz (2016). Limits in Terms of Eligible Collateral and Policy Risks of an Extension of the ECB's Quantitative Easing Program
- Fiedler, Salomon, Klaus-Jürgen Gern, Matthias Raddant and Ulrich Stolzenburg (2016). Financial Market Fragmentation in the Euro Area: State of Play.
- Fiedler, Salomon, Isabel Hanisch, Nils Jannsen and Maik Wolters (2016). Transmission Channels of Unconventional Monetary Policy in the Euro Area: Where Do We Stand?
- Jannsen, Nils, and Martin Plödt (2016). Business Investment After the Crisis and the Impact of Monetary Policy.

EVENTS

Workshops, conferences, awards ceremonies—part of the reason for the Kiel Institute's excellent national and international networking…

© Kiel Institute for the World Economy / Michael Stefan

The Kiel Institute organizes various events in order to find solutions to global economic problems through exchanges with experts around the globe. Personalities who have rendered outstanding service in words, deeds, or insights are presented with multiple renowned prizes by the Kiel Institute.

2016 awards ceremony (from left to right): Prime Minister of Schleswig-Holstein Torsten Albig, Kiel Institute President Dennis Snower, Friede Springer, Federal Minister of Finance Wolfgang Schäuble, Mario Monti, Vice-President of the Schleswig-Holstein Chamber of Commerce and Industry Klaus-Hinrich Vater, Kiel's Mayor Ulf Kämpfer

GLOBAL ECONOMY PRIZE

"All of our prize winners were brave enough to give up a very comfortable situation in order to dedicate their strengths and virtues, in part also against heavy resistance, to the service of a greater cause." Kiel Institute President Dennis J. Snower praised the winners of the 2016 Global Economy Prize with these words. Federal Minister of Finance Wolfgang Schäuble gave the ceremonial address.

Mario Monti, former Italian Prime Minister and EU Competition Commissioner, and the publisher Friede Springer, majority shareholder and Deputy Supervisory Board Chair of Axel Springer SE, are the winners of the twelfth Global Economy Prize. The Kiel Institute presented the award in conjunction with its partners, the state capital of Kiel and the Schleswig-Holstein Chamber of Commerce and Industry, on June 19 in the IHK zu Kiel Haus der Wirtschaft. The prize is intended as an impulse for overcoming the major global economic challenges across borders. It is awarded to influential personalities who have made an outstanding contribution as forward thinkers for the benefit of a cosmopolitan, market-based, and social society. The prize, which is not endowed, is awarded in the politics, economy, and science categories.

Federal Minister of Finance Wolfgang Schäuble gave the ceremonial address. In his speech he warned: "The richer countries must turn far more towards the disadvantaged countries. Wealth and affluence can only be maintained if social divisions remain manageable." In this context, Schäuble spoke of a "restrained revolution in the century of globalization". He said that Europe in particular needs to invest more in crisis regions such as Libya or the sub-Sahara. "Africa is increasingly becoming a European problem, whether we like it or not." Schäuble said, walling off is no solution to the refugee crisis. "Walling off means stagnancy, openness stands for innovation."

Mario Monti, who was honored in the politics category, praised Kiel's Mayor Ulf Kämpfer as a pugnacious spirit and political visionary. "He has initiated important reforms in his home country against major resistance, and advocated the European idea with great spirit from the outset." Friede Springer, honored in the economy category, led the Springer publishing company out of the crisis and into the new media age with matchless discipline and endurance after the death of her husband, said Kiel Institute President Dennis Snower. "She carried on the fight of her husband, who passed away more than 30 years ago, for freedom in Europe and reconciliation between the nations. Today, when barbed wire fences are once again being erected in the midst of Europe and the world threatens to be lost in nationalism, this fight is just as relevant as it was then."

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THE 2016 PRIZE WINNERS

MARIO MONTI
ECONOMIST AND FORMER POLITICIAN, ITALY

Mario Monti, born on 19 March 1943 in Varese, Lombardy, is a former politician who has held important offices at the national and European levels. He became known primarily due to his pugnacious and unrelenting position against the market power of large corporations as EU Competition Commissioner. His successes earned him the nickname "Super Mario". In 2011 he succeeded Silvio Berlusconi as Prime Minister of Italy and laid the cornerstone for reforms in the country. Monti is considered a staunch European and important supporter of the euro. Today the economics professor is President of Luigi-Bocconi University in Milan.

FRIEDE SPRINGER
PUBLISHER, MAJORITY SHAREHOLDER AND DEPUTY SUPERVISORY BOARDCHAIR OF AXEL SPRINGER SE

Friede Springer, born on 15 August 1942 in Oldsum auf Föhr, is the majority shareholder and Deputy Supervisory Board Chair of Axel Springer SE, one of Europe's largest publishing companies. After the death of her husband Axel Springer in 1985, she rescued the publishing company from collapse by gradually buying back shares and thereby gaining control of the publishing house. She had to battle competing media companies, internal distrust, and probate disputes in doing so. Friede Springer repositioned the publishing company and transformed it into an international, multimedia and digital media company.

VIDEO: THE GLOBAL ECONOMY PRIZE
The Global Economy Prize recognizes influential representatives of politics, the economy, and science who have made a special contribution to a socially responsible society.

https://youtu.be/FdP4Y7GrhIk

© IfW / Michael Stefan

BERNHARD HARMS PRIZE
FOR A PIONEER OF MODERN FOREIGN TRADE THEORY

Marc Melitz, Professor for Political Economics at Harvard University in the USA, was presented with the Bernhard Harms Prize of the Kiel Institute for the World Economy in 2016. Kiel Institute President Snower praised Melitz's extraordinary service in global economic research. Melitz's essay from 2003 in the renowned journal *Econometrica* entitled "The Impact of Trade on Aggregate Industry Productivity and Intra-Industry Reallocations" with over 10,000 citations is one of the most frequently mentioned scientific articles of the past decades. The Melitz model presented in this essay is considered the cornerstone of modern foreign trade theory.

"Thanks to his work, we now understand when companies sell in their own country, when they export, and when they found foreign subsidiaries. We understand why companies with the same products and the same target group operate in completely different ways at the global level, and we have a concept of the extent to which trade can also strengthen the market position and productivity of a company in the home country," said Snower in his honorific speech.

The Bernhard Harms Prize of the Institute for the World Economy has been presented every two years since 1964. It honors scientists for distinguished research or practitioners for outstanding contributions to global economy relationships. Prize winners in past years include the economists Abhijit Banerjee (2014), Gene Grossman (2012), Raghuram Rajan (2010), Kenneth Rogoff (2008), Robert Feenstra (2006), Maurice Obstfeld (2004), Stanley Fischer (2002) and Jeffrey Sachs (2000).

Bernhard Harms founded the Kiel Institute in 1914. At the time, it was called the "Königliches Institut für Seeverkehr und Weltwirtschaft".

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PEGNET CONFERENCE

The challenges and opportunities of the African economy were the topic at the 11th conference of the "Poverty Reduction, Equity, and Growth Network" (PEGNet) in Kigali, Rwanda on September 15 and 16. The conference has served as a platform for dialog and the exchange of ideas between development researchers, practitioners, and political decision makers on the topics of poverty reduction and development since 2005.

www.pegnet.ifw-kiel.de

UNIDO CONFERENCE

This year's conference of the United Nations Industrial Development Organization (UNIDO) was held in cooperation with the Kiel Institute. Renowned experts gathered in Vienna from September 14 to 15, 2016 to discuss the opportunities of foreign direct investments for growth, wealth, and development.

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BEHIND THE SCENES AT THE KIEL INSTITUTE

The second **Science Night** in the Kiel region attracted numerous visitors for a chance to look behind the scenes at various scientific institutions. Among the highlights of the tour was the lie detector test used for behavioral economics research. The monetary policy computer simulation and TTIP round tables were also very well received. Similar insights were offered through eight **science walks** in July and August as part of the Kieler Kultursommer (summer of culture).

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“KIELER WOCHE” PRESENTATIONS

While the skiffs race against each other on the Baltic Sea during “Kieler Woche”, the Kiel Institute provides the necessary mental depth on land. On the agenda for the “Kieler Woche” presentation series:

- The long shadow of the GDR—long-term economic effects of German separation (Robert Gold)
- Does minimum wage destroy jobs? (Dominik Groll)
- To bill or not to bill—a future without cash? (Stefan Kooths)
- Refugee migration—global responsibility and local action (Matthias Lücke)
- Employment market integration of refugees—lessons from the past (Sebastian Braun)

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Ufuk Akcigit (University of Chicago) at the awards ceremony in Kiel

EXCELLENCE AWARDS IN GLOBAL ECONOMIC AFFAIRS

With the Excellence Awards, the Kiel Institute recognizes researchers and lecturers up to the age of 35 years for research work on global economic issues. Last year the prize went to four economists from the USA. Ufuk Akcigit (University of Chicago), David Atkin (Massachusetts Institute of Technology), Javier Bianchi (Federal Reserve Bank of Minneapolis) and Nicolas Sly (University of Oregon). The prize includes a research stay at the Institute for the World Economy that is financed by various bursaries (Horst Siebert Fellowship, Porsche Fellowship, Landeshauptstadt Kiel Fellowship and Birke Hospitality Fellowship).

From left to right: David Atkin, Ufuk Akcigit, Nicholas Sly, Jonathan Vogel (prize winner 2015), Dennis Snower, and Javier Bianchi

"Driving Growth or Driving Debt: Fiscal Stimulus Back on Stage?" The 94th International Business Cycle Conference at the French embassy

All photos on this page: © IfW / Michael Stefan

INTERNATIONAL BUSINESS CYCLE CONFERENCE

Is it better to incur more debt and spend money, or to save and consolidate the budget? The right fiscal policy was discussed among others by the Chief Economist of the German Ministry of Finance, Ludger Schuknecht, and the French Ambassador Philippe Etienne at the 94th International Business Cycle Conference in Berlin. Economic researchers at the Kiel Institute issue invitations to the International Business Cycle Conference twice a year, always alternating between Kiel and Berlin. The focus is on discussing the economic development of the leading economies and current economic policy developments. The 93rd International Business Cycle Conference was held on March 14 and 15 in Kiel, the 94th on September 19 and 20 in Berlin.

www.ifw-kiel.de/kkg

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View from the building of the Federal Reserve Bank of New York over Liberty Street in the direction of Broadway

EES CONFERENCE

NEW DEVELOPMENTS IN THE MACROECONOMICS OF LABOR MARKETS

In conjunction with the Federal Reserve Bank of New York, the Kiel Institute has been inviting scientists to the EES Conference (Ensuring Economic and Employment Stability) since 2009 in order to discuss the interplay of employment markets and the economy. Last year Peter Diamond (MIT) and Giuseppe Moscarini (Yale) spoke at the Federal Reserve Bank of New York from September 8 to 9.

www.ees.ifw-kiel.de

GES TAIPEI WORKSHOP

The GES Taipei Workshop was held for the third time in April in Taiwan within the framework of the Global Economic Symposium organized by the Kiel Institute. The topic "Dealing with Social and Economic Challenges to Achieve Green Growth" explored the question of how sustainable and environmentally compatible growth can be achieved notwithstanding the existing social and economic challenges.

Dennis Snower, President of the Kiel Institute (to the right in the photo) and Jean-Pierre Lehmann, Professor Emeritus for International Political Economics, IMD Switzerland

© ITRI (Industrial Technology Research Institute)

EDUCATION

Promoting new talent has always been the third supporting pillar of the Kiel Institute and has already produced many economists of international renown.

The study program of the Kiel Institute is taught by professors from all over the world. Nobel Prize candidate Marc Melitz was just one of them. Spaces are coveted by students and they too come to the Kieler Förde from everywhere.

"Open Economy Macroeconomics: Theory, Empirics and Big Data Applications", Robert Rigobon (MIT). ASP course 2016/17

ADVANCED STUDIES PROGRAM

The objective of the Advanced Studies Program in International Economic Policy Research (ASP) is to provide young economists with excellent further training in the field of international economic relationships. It started in 1994 and professors of great renown from notable universities such as Harvard, Stanford, MIT, Chicago, and Princeton were regularly recruited for the courses of the 10-month program. During a series of seminars, participants also gain insights into the practical activities of institutions and companies that operate internationally. Preparing an own research paper is another important element of the program. The participants benefit from instruction and support by the Kiel Institute scientists with practical experience.

Courses on the following topics are offered within the scope of the 2016/17 program: Macroeconomics in Open Economies; Financial Markets and the MacroEconomy; Debt Crises and Macro-Prudential Policy; Exchange Rate Economics; Firms in International Trade; Trade Policy Analysis; Economic Growth; Economic Development. Among the lecturers was Harvard Professor Marc Melitz, who is considered the founder of modern foreign trade theory and received the Berhard Harms Prize of the Kiel Institute for his work in this field in 2016.

More than 600 young economists from over 50 countries have successfully completed the program in past years. They remain connected to the institute through the ASP alumni organization. Numerous doctoral candidates from universities in and outside Europe also took part in the program's courses over the last few years.

Past graduates are engaged in a broad range of fields. About 80 of them work for international organizations, thereof more than 30 for the IMF and the World Bank. An approximately equal number is employed by national ministries and central banks. The number of graduates working for companies (especially in the financial sector) and associations around the world is especially high. Around 40 graduates currently work in research institutions, and about 70 have become professors at universities in Europe, North and South America, Asia, and Australia—40 percent of them are women. Among the most well know graduates of the program are Claudia Buch (Vice President of the German Central Bank), Marcel Fratzscher (President of the DIW), Volker Wieland (member of the Council of Experts), Julio Velarde (Central Bank President, Peru), José Carlos Echeverry (former Finance Minister, Colombia), and Jan Hatzius (Chief Economist, Goldman Sachs).

With the upcoming course, the ASP has a new director. Professor Harmen Lehment retired at the end of 2016 after successfully managing the Advanced Studies Program for 32 years. His is succeeded by Dr. Olivier Godart, himself a graduate of the studies program, who has already assumed management tasks within the scope of the program in recent years.

"Firms in International Trade", Marc Melitz (Harvard University). ASP course 2016/17

The participants in the 10th Summer School under the motto: "Education, Preferences, and Economic Outcome".

REFUGEE INTERNSHIP AT THE KIEL INSTITUTE

A 28-year-old Afghan asylum seeker with a masters degree in economic sciences completed a three-month internship at the Kiel Institute last year in the research area "The Global Division of Labor". Among other things, he researched the economic consequences of using robots and the topic of the "Trade Finance Gap in Afghanistan". "The ways most international money transfers from and to Afghanistan are handled is very detrimental to the country because they are economically inefficient and considerably promote the drug trade as well," is his conclusion. The Kiel Institute wants to contribute to the integration of refugees by offering internships for refugee students and academics.

10TH KIEL INSTITUTE SUMMER SCHOOL

What influence does education have on the social behavior of individuals and on living together in a society? This question took center stage at the 2016 Summer School. 25 young academics and employees of political institutions had the opportunity to attend lectures on the topic over four days and to participate in the workshop "Social and Biological Roots of Economics (SBRE)". The speakers were George Loewenstein (Carnegie Mellon University), Rachel Croson (University of Texas at Arlington), Matthias Sutter (University of Cologne), J.H. Sonnemans (University of Amsterdam), and Jens Möller (University of Kiel).

ORGANIZATION

Seven research areas, two consulting centers and a strong support team behind them...

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...around 180 employees from more than 15 countries work at the Kiel Institute. To ensure that scientific employees can focus on their core tasks of research, consulting, and education, they are supported by dedicated colleagues: Event Management, Fundraising, IT, Communication, and Administration. The Presidential Department and Management Board set the guidelines. The Board of Governors makes fundamental decisions. External support comes from the Scientific Advisory Council and Economic Advisory Council. Institutional funds are provided equally by the federal government and the community of German federal states.

THE GLOBAL DIVISION OF LABOR

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What are the structural changes caused by globalization in companies, regions, and countries? How do foreign direct investments and international migration in particular affect the source and destination countries, and who bears the greatest burden of adjustment costs?

What management methods are used by successful companies? Do different company cultures with special internationalization strategies exist in different countries?

What political measures can counteract undesirable globalization effects? What types of institutions become ineffective under globalization conditions, and how can social policy have an equalization effect?

The overall research objective in the research area "The Global Division of Labor" is to empirically analyze key aspects of the global division of labor in the course of advancing globalization, and to develop answers to challenges created by globalization. Research focuses on the determinants and effects of international trade and foreign direct investments at the worldwide and regional levels. The effect of international migration on destination countries was added as a new topic. Thus the research area works on topics that are highly relevant and extremely controversial in science and the public.

In 2016 the research area together with the Kiel Institute Forecasting Center prepared an expert report for the Federal Ministry of Finance and the Federal Ministry for Economic Affairs and Energy, examining the productivity weakness in Germany, especially compared to various other industrialized nations. The result is that even the diagnosis of this productivity weakness is afflicted with considerable measuring uncertainty, and the analysis of possible causes suffers from this. A few economic causes can be identified anyway: The fading of the reunification boom, a comparatively slow realization of digitalization opportunities, the aging of the population, and the increased integration of the unemployed into the employment market after the "Hartz" reforms. Offshoring and the banking crisis on the other hand hardly influenced the development of productivity, contrary to common expectations. In the Leibniz-subsidized project on management methods, potential for improvement was uncovered in the management of German companies compared to American firms that could improve their economic success. Additional research results relate among other things to the long duration of integration processes using displaced persons in Germany as an example, the surprisingly moderate decisions of international arbitration tribunals in trade procedures, and the significant repercussions of western sanctions against Russia for the sanctioning countries themselves (not even considering Russia's retaliatory measures). The research area participates to a significant extent in the new Leibniz-subsidized "Kiel Center for Globalization" and has initiated close cooperation with UNIDO.

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Which factors promote and which factors impede knowledge creation and growth in industrialized and emerging nations?

What role does the institutional and cultural environment play for innovation and growth? What role do location-specific factors play?

How are global flows of knowledge changing, and what effects does this change have on the global division of labor?

What consequences does the rise of emerging nations such as China and India as research and development locations have for the income and employment in industrialized nations?

One of the most important current global economic developments is the increasing shift of research and development as well as other knowledge-intensive activities from highly developed industrial to fast-growing emerging nations. Since new knowledge is among the most important long-term sources of growth, competitiveness, and employment, global shifts in knowledge production and changes in the international knowledge flows lead to global redistributions of income and wealth. The primary objective of this research area is to obtain a better understanding of the determinants of knowledge creation, knowledge diffusion, and knowledge-based growth in industrialized and emerging nations.

Among the key research topics in 2016 were the political and economic consequences of the Internet, the importance of school education for the entrepreneurial intentions of students, problems with the adoption of new technologies in emerging nations, and incentives for the implementation of environmentally friendly innovations in China. The field of economic policy consulting focused on questions of technology policy design, the economic importance of top-level research, and the development of the Chinese innovation system.

SOCIAL AND BEHAVIORAL APPROACHES TO GLOBAL PROBLEMS

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How do social context and physical reactions affect economic decisions?

What role does motivation play for human cooperation, and how can we change it?

What contributions can personality traits and the dopaminergic system make to explaining excessive risk taking?

The claim underlying this research area is that the conception of human motivation and decision-making in traditional economics is outdated and inconsistent with current evidence from other disciplines, such as neuroscience, cognitive science, cognitive psychology, developmental psychology, behavioral economics, and other disciplines. For example, people are not exclusively self-interested, since they have capacities for fairness, empathy, compassion, and care. They are not exclusively rational, because most of their behavior is substantially motivated by emotions and heuristics. They are not exclusively individualistic, since their preferences are significantly determined by the social groups to which they belong. Their decisions are not responses to propositional knowledge under conditions of risk, since their decision-making is a reflexive process (both cognitive and causative) made under uncertainty. This research area analyzes the impact of social interaction and behavioral responses of the single agents on the emergence of global economic problems and the design of possible solutions in view of these results. Currently the research area is pursuing two major projects. One of these is Motivational Systems and Global Cooperation: Based on the insight that all behavior is motivated, this project explores how external and internal stimuli can activate different motivational systems. These activated motivational systems can have a pronounced influence on preferences and therefore on decisions. Within this framework, the project has prepared models of context-dependent preferences and, with the help of these models, derived predictions for the way different motivations influence the readiness of people to contribute to public goods. A number of experiments designed to test these predictions are being prepared.

Neurobiological Foundations of Decision Making under Uncertainty is the second project: Global economic problems like mitigating climate change, fighting poverty, or, in particular, regulating speculation on financial markets cannot be properly addressed without taking into account behavioral reactions to the uncertainties involved. Excessive risk taking has been identified as one major reason for the recent financial crisis. Our goal is to contribute to a better and more comprehensive understanding of behavior under uncertainty. Our analysis is particularly devoted to subjects who are experienced in dealing with risks, such as professional investors and pathological gamblers.

THE ENVIRONMENT AND NATURAL RESOURCES

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What national mix of energy and climate policy tools can best support the energy revolution in favor or renewable energy sources?

What effects do new climate engineering interventions have, and how are they assessed in society?

What risks are associated with the extraction of natural resources in arctic regions?

What are crucial influencing factors for the use of public green spaces, and how green should a city be?

This research area investigates microeconomic and macroeconomic processes of adaptation to global and country-specific scarcities of natural resources. Natural resources include energetic and non-energetic raw materials as well as environmental quality. Research encompasses analyzing the determinants for the increasing scarcity of natural resources and the effects of this scarcity on the allocation of factors and goods in the world economy. Special emphasis is placed on the evaluation of national and international environmental policy aspects, and on proposals for using rational and efficient environmental policy tools. Our theme also includes sustainable land use and the increasing use of biomass. In cooperation with the "Future Ocean" excellence cluster of the German Research Foundation, we research economic issues of the oceans. Valuing nature's services (also called ecosystem services) and the tradeoff between use and protection are additional research focal points. We closely link scientific research to our consulting activities.

2016 was defined by the follow-up processes for the UN Climate Conference in Paris. The follow-up conference in Marrakesh and the challenges of the climate accord were the object of the 5th Climate Economy Forum in Berlin carried out within the scope of the Climate Economy Dialog subsidized by the Federal Ministry of Education and Research, where questions related to the implementation of the accord were discussed with stakeholders from the economy, politics, and civil society. The Kiel Institute hosted a conference on the Climate Engineering priority program of the German Research Foundation, examining the mandate approved in Paris and research on the measures required to keep global warming in this century below 1.5 °C. Members of the research area presented their related research results. Planning for expanded and more intensive research on the challenges of sustainable worldwide use of arable land was driven by new projects and the hiring of additional researchers.

POVERTY REDUCTION, EQUITY, AND DEVELOPMENT

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Do donors improve living conditions in destination countries with their development aid?

What can a European immigration system look like that favors the integration of migrants and simultaneously promotes development in the home countries?

To what extent is development in transformation economies affected by external players like the EU or Russia?

What influences do large-scale land investments in Africa have on the welfare of the local population?

The international community approved what are called the Sustainable Development Goals (SDGs) in October of 2015. Since more than 2 billion people still live off less than 3 dollars a day, fighting poverty remains an important goal. But now it is complemented by ecological goals—such as the protection and sustainable use of scarce resources like water, land, and forests—as well as growth, employment, and allocation goals. The importance of peace and good governance for sustainable development is also emphasized. The research area analyzes current development policy issues against this background. Key focal points are the effects of international migration on the welfare of migrants and their origin and destination countries. Another emphasis of the research efforts is on the poverty effects of international development cooperation. The members of the research area also examine the influence of regional and global integration on institutional and economic development in transition countries. Finally, questions arising from the specialization of many developing countries on agriculture are analyzed.

The scientific publications in 2016 showed for example that the attitude towards refugees can improve when the concerns of the local population are taken seriously, and that donors have to meet certain quality criteria so that development aid can be effective. Activities of the research area in political consulting were manifold. Options for solving the current refugee problem in the EU were discussed in several media reports in response to current events. Other examples include an expert report for the EU Parliament on the costs of reintroducing border controls in the Schengen area and a key policy brief on development prospects in Africa. As in the year before, the PEGNet network hosted by the research area was used for exchanges between research and practice. The 11th PEGNet Annual Conference in Kigali, Rwanda was dedicated to the topic of "Regional Integration in Africa" with the participation of African government representatives including two ministers.

MACROECONOMIC POLICY UNDER MARKET IMPERFECTIONS

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What drives fluctuations in the economic output, unemployment, and inflation over the business cycle?

What role do labor market frictions play for economic fluctuations?

What are the effects of monetary and fiscal policy on the business cycle?

Should monetary and fiscal policy have a stabilizing effect on the economy?

What are the effects of monetary and fiscal policy on neighboring countries?

Research in this area focuses on explaining business cycle fluctuations and the effects of monetary and fiscal policy on the business cycle. Our research topics are influenced by the current policy debate. Last year for example, we examined the effects of fiscal rules and monetary policy in financial crises. Using fiscal rules, governments want the burden of national debt and boost financial market confidence. We investigate how these rules affect economic fluctuations and the stability of the economy. A more detailed analysis of monetary policy shows that it is particularly effective during financial crises since it can boost consumer confidence in such a situation. However, monetary policy has virtually no stimulating effect anymore during the recovery phase after a financial crisis.

In addition to research, we are also engaged in the organization of scientific conferences. We founded an international network seven years ago that examines the core issues of the research area. Members of this network include the German Central Bank and the European Central Bank. In September of 2016, we hosted a conference in New York in cooperation with the US Federal Reserve Bank in New York. Nobel Prize winner Peter Diamond was among the conference participants

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ECONOMIC POLICY CENTER

Policy workshops with institute scientists and external experts

Economic policy publications in the own publication series—"Kiel Policy Briefs" and "Kiel Economic Policy Contributions" and in trade publications, online and print media

Economic policy expert reports

Participation in economic policy networks and committees

Economic policy consulting by the Kiel Institute is coordinated and organized by the Economic Policy Center. The center as a cross-sectional area is closely linked to the institute's research efforts and its national and international networks. Economic policy consulting products are developed and realized in cooperation with the institute's research and service areas.

The focus was on four topics in particular:

The center's **new subsidy report** reached the conclusion that the subsidies of the federal, state, and municipal governments and from special budgets reached a historic high at EUR 168.7 billion in 2015. Considerable increases are expected for 2016 as well. This severely limits Germany's financial leeway to address challenges such as the integration of refugees, modernizing the infrastructure, or improving internal and external security.

Our regular **analyses of the Greek crisis** clearly shows that the third bailout program from the year 2015 is once again failing to lead to the desired quick successes. While Greece's economic development may have passed its low point, growth that would make its debt load bearable is still far in the future. The lack of the Greek government's identification with the reform program continues to be the biggest obstacle to reforms.

The planned **Transatlantic Trade and Investment Partnership (TTIP) is on hold:** We had pointed out in the political discussion that the CETA agreement with Canada could serve as a blueprint for the TTIP in regards to the controversial design of the arbitration procedure for investor protection. But due to political change in the USA and growing resistance in some EU countries, there is a risk that not even a basic trade agreement with the USA may be realized. The future of multilateralism in trade policy will therefore remain an important topic.

In cooperation with Estonian colleagues at the Tartu and Tallinn universities, we explored the question of **why the market economy model country of Estonia has still not caught up economically notwithstanding a successful reform and EU accession process.** An elaborate structural analysis intended to expose development obstacles was initiated.

Additional topics were the costs of youth criminality, the tax loopholes for multinational companies in the EU, the "new normality" in China with less dynamic growth, the market response to the announced Brexit, the flare-up of the economic and financial crisis in Italy, and the economic upturn that can be observed in many African countries.

FORECASTING CENTER

How is the economy doing today and tomorrow? In Germany? Around the world?

What future tax proceeds can the government expect?

How to disentangle trend growth from cyclical fluctuations?

Where are the limits of macro-management?

How to identify macroeconomic coordination deficits symptomatically?

Financial crisis, debt crisis, euro crisis: How did the current distortions develop, and what comes next?

The Forecasting Center regularly analyzes and predicts economic developments in Germany, the euro area, and the rest of the world. It cooperates with other leading economic research institutions at the European level within the EUROFRAME Group and within the AIECE (Association of European Conjuncture Institutes). The results of ongoing economic research are published in the new format of the Kiel Economic Outlook reports and delivered to the public through intensive media relations. The Kieler Konjunkturgespräche (KKG) is the Kiel Institute's flagship conference on international business cycle analysis. Here we share our research work and discuss global macroeconomic issues with other forecasters, policy-makers, and business leaders. Since autumn 2016, the Forecasting Center is once again participating in the Joint Economic Forecast of Germany's leading economic research institutes after a three-year break. The Joint Economic Forecast provides economic projections on behalf of the Federal Ministry for Economic Affairs and Energy to serve as a basis for the forecasts of the federal government. The center is also involved in the expert group for official tax estimations.

National and international economic policy consulting in the form of research projects and stand-by advisory services forms the second pillar of the Forecasting Center. The Kiel Institute under the leadership of the Forecasting Center regularly advises the European Parliament's Committee on Economic and Monetary Affairs in the monetary dialog with the European Central Bank. For the Federal Ministry for Economic Affairs and Energy, the Forecasting Center organizes policy workshops on specific topics and supports the German members of the Output Gaps Working Group of the EU Economic Policy Committee. Similar scientific support is provided on behalf of the Federal Ministry of Finance for the LIME Working Group (Working Group on the Methodology to assess Lisbon related structural reforms) tasked with the further development of macroeconomic surveillance methodology in the EU. The Forecasting Center is also in charge of keeping the Federal Finance Ministry's international country monitoring system up-to-date. Several indicators for the world economy, the euro area, logistics, exports, and financial markets are also calculated, commented, and published regularly.

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GLOBAL CHALLENGES CENTER

International think tank activities

Solutions for current global challenges

Recommendations for Germany's G20 presidency

Conferences, workshops, and the G20 dialog platform

The Global Challenges Center has been coordinating the international think tank activities of the Kiel Institute since 2015. Establishing the Kiel Institute as one of the leading institutes for solutions to global challenges it the center's goal. The center's key projects include the Global Economic Symposium (GES), support for Germany's G20 presidency by coordinating the Think Tank 20 process, and management of the Council of Global Problem Solving (CGP), a network of leading international think tanks that is accompanying the G20 in the long term beyond the German presidency. The Global Challenges Center is also involved in the organization of workshops on current economic matters and in the European research and political consulting project Mercator Dialog on Asylum and Migration (MEDAM).

The Global Economic Symposium is the Kiel Institute's largest international conference. Leading international decision makers from politics, the economy, international organizations, and civil society have been gathering since 2008 to jointly develop solutions for the most urgent global problems. In 2017 the GES is being closely linked to the G20 process. Within the framework of Germany's G20 presidency, the Kiel Institute in conjunction with the German Development Institute (DIE) accepted the mandate for coordinating the accompanying think tank process (Think20, T20). The concluding Think 20 Summit will be held from 29 to 31 May 2017 with around 400 participants under the motto "Global Solutions" at ESMT Berlin (European School of Management and Technology). Developing "20 Global Solutions for the G20" is the conference objective.

The Think 20 Summit "Global Solutions" is being held at a historic time for the G20: Topics such as the environment and sustainability, the digital revolution, and social cohesion are becoming more important on the agenda, in addition to the traditional focus on growth and financial market stability. Among other things, the program for the Think 20 Summit reflects the work of the T20 task forces that prepare recommendations for the G20 decision makers (in the form of policy briefs). The task forces cover important political issues such as the Agenda 2030, climate policy, migration, social inequality, food security, trade and investments, financial policy, and technology change (more on the T20 and task forces on page 4).

The Kiel Institute support for the G20 process will continue beyond 2017: An annual conference discussing the current issues of the respective G20 presidency is to be held each May in Berlin under the motto "Global Solutions". A GES in Kiel with a more pronounced academic orientation is intended to deliver the latest research results on a select topic from the G20 agenda. On the Internet platform *www.g20-insights.org* founded by the Kiel Institute and DIE, experts in the T20 network and the Council of Global Problem Solving collect and analyze current policy recommendations on the G20 topics and continuously monitor their implementation and effects in the political process (more on the Insights platform on page 6).

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