



# EUROPE

// ZEWSNEWS JANUARY/FEBRUARY 2019



## PUBLISHER

**ZEW – Leibniz Centre for European Economic Research**

L 7,1 · 68161 Mannheim · [www.zew.de](http://www.zew.de)

President: Prof. Achim Wambach, PhD · Director: Thomas Kohl

### Editors:

Gunter Grittmann · Phone +49 621 1235-132 · [gunter.grittmann@zew.de](mailto:gunter.grittmann@zew.de)

Sarah Tiedemann · Phone +49 621 1235-135 · [sarah.tiedemann@zew.de](mailto:sarah.tiedemann@zew.de)

Kathrin Böhrer · Phone +49 621 1235-128 · [kathrin.boehmer@zew.de](mailto:kathrin.boehmer@zew.de)

### Full or partial reprint:

please indicate source and forward a copy

© ZEW – Leibniz-Zentrum für Europäische Wirtschaftsforschung GmbH Mannheim

Mannheim 2019



## FOCUS ON EUROPE

# New Perspectives in EU Innovation Policy

Europe is losing ground to its main Asian competitors when it comes to R&D investment, and is barely keeping pace with the United States. The European deficit becomes even more pronounced when looking at R&D-based innovations. Especially market-creating, disruptive innovations have been developed mostly outside of the EU, with the result that the relationship between R&D investment and productivity growth in Europe has become significantly weaker. Compared with the United States, the EU particularly lacks small firms delivering disruptive innovation – the kind that opens new markets and brings radical changes to the market place. Also, the rate of return on innovation seems to have fallen, and technologies used by the most productive firms take too long to reach the rest of the market.

### Linking knowledge generation to technology diffusion

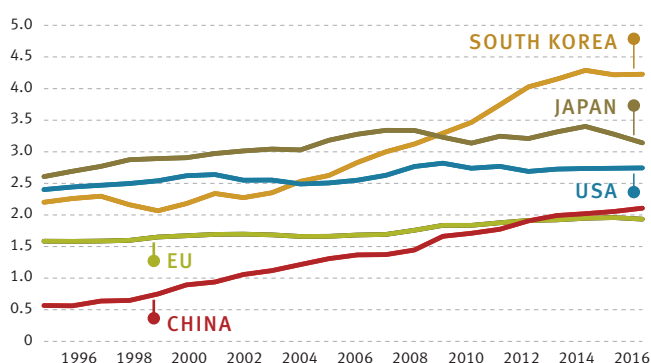
In this light, scholars and policymakers are arguing for a new approach to European innovation policy that puts more weight on the development of disruptive innovation and on the diffusion of new technologies throughout the market. Specifically, they have proposed a mission-oriented approach that enables a closer link between technology generation and diffusion and that incentivizes the rapid expansion of disruptive innovation. Both goals can be achieved by channelling resources into specific directions that are expected to achieve disruptive and impactful innovation and that are critical for European growth and well-being. Traditional supply-side measures can be combined with strategic actions in these key areas to create new markets and generate demand. For instance, policymakers could act as 'lead users' by investing in risky but high-potential technologies, thereby accelerating development in these areas. At the same time, firms must be encouraged to undertake risky innovation projects with potentially high rewards, while policies need to be put in place that ensure the adoption of new technologies throughout the entire European economy. Diffusion could also be fostered through the implementation of specific support programmes and innovative pre-commercial public procurement as well as the strengthening of the European market for financing young innovative firms.

Historically, innovation diffusion has received less public support than investment in innovation, despite the fact that

both have a considerable influence on a country's economic development and that firms face similar bottlenecks with each. These ideas are not revolutionary. Mission-driven government institutions, for instance, have played an important role in the creation of key technologies for years. The Defense Advanced Research Projects Agency (DARPA) established the basis of the modern internet. GPS was initially developed by the US Navy and the German Fraunhofer Society invented the MP3 and MPEG-4 compression technologies. These institutions are all tasked with the generation of new solutions through technological breakthroughs. However, these activities are of minor scale compared to traditional policies fostering firms' incentives to invest in research.

The EU will significantly increase its commitment to mission-oriented policy and innovation diffusion. Designed in coordination with citizens and industrial technology users to establish a closer link between innovation and society, they aim to foster collaborations across sectors and disciplines resulting in more effective actions. The ninth Framework Programme, Horizon Europe, will introduce a limited number of research and innovation missions as part of its Global Challenges and Industrial Competitiveness pillar to foster disruptive innovation. The SME instrument funds high-impact innovation projects pursued by small and medium-sized enterprises (SME), while the Fast

EVOLUTION OF R&D EXPENDITURES (% OF GDP)



Source: OECD

Track to Innovation funds consortia of firms in the process of bringing innovations to the market.

For Horizon Europe, these programmes will be brought under the same roof with the launch of the European Innovation Council (EIC). The EIC will serve as a central hub for innovation funding within in the scope of Horizon Europe. Apart from the SME instrument and the Fast Track to Innovation, the EIC organises two further programmes aimed at supporting the creation of disruptive technologies. The Horizon Prizes programme rewards whoever best meets a specific societal challenge, such as developing better batteries for e-vehicles. The Future and Emerging Technologies Open provides funding for early-stage research which potentially leads to paradigm-shifting technologies.

Funding for these programmes – the SME instrument, Fast Track to Innovation, Horizon Prizes, and Future and Emerging Technologies Open – amounted to 2.7 billion euros during H2020, corresponding to 3.8 per cent of the total budget of 80 billion euros. Horizon Europe foresees a significant boost in innovation spending: a full 10 billion euros (10 per cent of the proposed budget allocation) will be dedicated to the EIC for the 2021–2027 period.

A ZEW policy brief on this topic is available to download at: <http://ftp.zew.de/pub/zew-docs/policybrief/pb07-18.pdf>

Bastian Krieger, [bastian.krieger@zew.de](mailto:bastian.krieger@zew.de)  
Dr. Georg Licht, [georg.licht@zew.de](mailto:georg.licht@zew.de)  
Dr. Maikel Pellens, [maikel.pellens@zew.de](mailto:maikel.pellens@zew.de)

## Development Aid to Be Pooled in EU Budget

In the post-2020 EU Multiannual Financial Framework, the Member States of the European Union should pool their development resources in the EU budget. Joint EU funding would help to overcome the fragmentation of European development aid, while ensuring that all Member States contribute to the EU development budget according to their gross national income.

These are the recommendations of a study on EU development policy conducted by ZEW together with the Bertelsmann Stiftung. The study starts with a close look at the status quo of European development aid, which is currently highly fragmented. The EU and its 28 Member States all act as individual donors, which often results in harmful competition and creates unnecessarily high costs due to the lack of coordination. This state of fragmentation also often prevents EU Member States from having as much an influence as other major donors such as the US or China. What is more, the current system leads some Member States to follow a free rider strategy. Although the whole EU-28 benefits from a more stable situation in, say, African states, contributions to development funding vary widely between the individual Member States – even between those with a similar level of income.

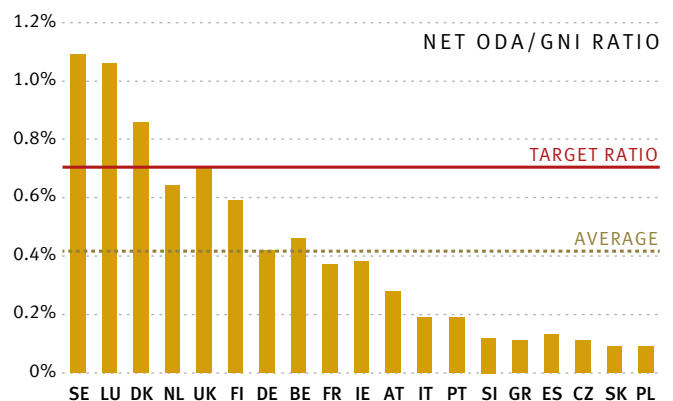
### EU development aid to be more influential

The model proposed by ZEW and the Bertelsmann Stiftung would exploit the advantages of a joint financing approach, while avoiding the disadvantages of excessive centralisation. According to this model, EU development aid would be financed through the EU budget's own resource system, in which the national contributions are proportional to each country's gross national income. This means that EU countries with the same level of income would bear the same financial burden relative to their size.

At the same time, however, EU Member States should continue to be able to contribute their specific expertise when it comes to cooperating with certain target countries. As so-called "lead states", certain Member States should thus be tasked with

designing and implementing EU development programmes in partner states they have a special relation with, such as a common history and/or language.

NET ODA/GNI RATIOS OF 19 EU MEMBER STATES (2014)



The figure displays the net Official Development Assistance (ODA) / Gross National Income (GNI) ratio (in per cent) of 19 EU countries in 2014. The solid red line indicates the United Nations' target ratio of 0.7 per cent, while the dotted green line shows the average ratio of the 19 countries. Source: OECD

Development policy is a good example of a field where the EU can create tremendous added value for all Member States. With the same amount of money, a joint EU budget would cause European development aid to be more influential and effective than the current fragmented system. In addition, pooling resources in the EU budget would create a lot more fairness, as it would prevent single EU countries to engage in the popular free-riding strategy of benefiting from the development efforts made by other Member States.

The study is available to download at: <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/why-and-how-there-should-be-more-europe-in-development-policy/>

Prof. Dr. Friedrich Heinemann, [friedrich.heinemann@zew.de](mailto:friedrich.heinemann@zew.de)



Italy was not only hit with severe flooding, but it is also in a debt crisis. A study by ZEW has now shown that so-called crisis-proof countries whose banks hold government bonds from affected states could also be vulnerable to turmoil.

# Lack of Equity Capital in EU Banking Sector Heightens Risks for Member States

Current EU bank regulations assign government bonds issued by Member States a zero-risk weight. As a result, European banks are not required to back up risky or bad bonds with an equivalent amount of equity capital. A recent ZEW study has found that zero-risk policy has increased the likelihood that excessive government debt could increase premiums on credit default swaps in EU countries directly hit by economic crisis and create turmoil in countries whose banks hold government bonds from affected states. When the next crisis hits, multiple states could face partial or total insolvency.

The study's authors focus on the lack of financial resources in the banking sector. This results from the fact that though banks hold debt securities of states with high credit default risks, Basel III and the European Capital Requirements Directive (CRD) permit banks to set the risk weights of EU government bonds to zero. The recently conducted study investigates the implications of zero-risk weighting of sovereign debt for crisis spillovers in the Eurozone.

## EU government bonds regarded as "risk free"

Basel III requires Europe's banks to assign a risk weight for every loan they issue. This weight determines how much equity capital the bank must hold for the loan. If there is a high default risk due to a poor credit rating, the bank is required to put up a high share of equity capital. But current regulations regard EU government bonds as "risk free", because until the sovereign debt crisis of 2009/2010 it was generally assumed that Europe's countries would always be able to service their debt and interest payments.

The authors of the study assigned a risk weight to each EU government bond. This weight is based on the credit rating of the state or the premiums on the debt interest for high-risk loans. They then measured the risk assets for each portfolio in which banks hold government bonds from European countries. What they found is that premiums for so-called credit default

swaps increased in the EU Member States that were immediately affected by the aftermath of the 2007 economic crisis. This crisis then bled over into other EU countries in which banks held government bonds from crisis countries.

## Banks might have to rely on taxpayers' money

The zero-risk weighting permitted by Basel III, coupled with the resulting lack of equity capital of banks who hold EU government bonds, increases the risk that if another economic crisis leaves particular countries partially or completely insolvent, the havoc will spill over elsewhere.

For if country risk increases again as it did in 2009 and 2010, Europe's banks will lack a sufficient equity capital buffer to cushion the blow. Ultimately, this increases the risk that in the event of an economic crisis credit institutes will have to rely on taxpayers to foot the bill.

## Downward spiral also threatens crisis-proof countries

In the wake of the sovereign debt crisis which occurred in 2009/2010, it was assumed that countries that are already highly in debt such as Greece or Ireland are primarily affected by this type of downward spiral. But the ZEW study found that because government debt securities lie with foreign banks as well as domestic ones, so-called crisis-proof countries such as for instance Germany could also be vulnerable in the future. Risks might spill over from risky periphery sovereigns to the banking sectors of safer core countries. The authors of the ZEW study thus propose the introduction of stricter banking regulations to avoid negative external effects. These include higher equity capital requirements and positive risk weights for loans. More bank capital as well as positive risk-weighting for sovereign exposures mitigate spillovers.

The study can be downloaded at: [www.zew.de/PU79638-1](http://www.zew.de/PU79638-1)

Dr. Karolin Kirschenmann, [karolin.kirschenmann@zew.de](mailto:karolin.kirschenmann@zew.de)



# Wanted: New Fiscal Guardian for EU

On 19 December 2018 the EU Commission reached a budget deal with Italy that avoids the opening of an excessive deficit procedure at this stage. According to the terms of the agreement, Italy agreed to lower its planned budget deficit for 2019 from 2.4 per cent of GDP to 2.04 per cent. Pierre Moscovici, the EU economics commissioner, characterized the decision to forgo sanctions on Italy as “a victory of political dialogue.” There is, however, a more sceptical interpretation. It seems that the Commission increasingly gives weight to political considerations. This comes at the cost of a proper application of the Stability and Growth Pact (SGP).

There are good arguments that the corrections Italy promised to the European Commission in December 2018 are mostly cosmetic. The country still fails to comply with the EU’s SGP in several ways. First, Italy’s deficit would have to sink by three per cent relative to GDP each year for 20 years to lower its debt lev-

More and more, the interpretation of European debt rules is based not on facts and agreed upon conditions but on blatant political considerations. The weighing of political costs and benefits when applying fiscal rules – which, as the case of France shows, is not limited to Italy – calls the EU Commission’s role as a neutral referee into question.

For decades, the Commission accomplished great things in areas such as state aid control and anti-trust regulation precisely because the application of EU rules was technocratic in the best sense. The Commission was not concerned with the reputation of interest groups when it was breaking up state monopolies. And it paid no heed to protectionist reflexes while enforcing domestic market rules.

This Commission’s neutral, technocratic approach is now a thing of the past, at least when it comes to SGP compliance. The most relevant criterion for the European Commission seems to be whether a decision is politically opportune. Moreover, what they have defended as a strategy for containing populist financial policies might do the opposite. Three weekends of protests by the gilets jaunes in Paris were all it took to invalidate France’s deficit limit set by the SGP. It is hard to imagine any better encouragement for populist pressure groups. The new line in Brussels is, therefore, counterproductive and is paving the way for more irresponsible fiscal policies in Europe.

## A new hope in the European Fiscal Board

If the European Commission can no longer apply the rules in a neutral and non-political way, a new fiscal guardian must be found. For two years now, a new institution in Brussels – whose role has already been dealt with in a ZEW policy brief – has made a name for itself with smart and balanced reports on SGP implementation: the European Fiscal Board (EFB). The Board consists of five experienced experts from fiscal policy, public finances and economics. The EFB, which has yet to garner much media attention, was founded as an independent advisory body, though its secretariat is staffed by Commission officials. Nevertheless, its analyses have proven to be salubriously non-political – and very critical of EU states’ wavering commitment to balancing their budgets.

If the EU wants to save the SGP, the EFB should be given a broader mandate when it comes to decisions about imposing fines and other sanctions. The European Commission’s transformation into a political institution may already be irreversible. This is why it is all the more important that they entrust their fiscal guardianship role to someone who can do it better.

A ZEW policy brief on the EFB is available to download at: <https://www.zew.de/PU78949-1>

Prof. Dr. Friedrich Heinemann, [friedrich.heinemann@zew.de](mailto:friedrich.heinemann@zew.de)



Photo: ©iStockphoto/PierreOlivierClement/Mantion

The Commission’s technocratic approach to EU rules is a thing of the past.

el to 60 per cent of GDP, as required for SGP compliance. Second, because Italy is a high-debt country, it is subject to stricter deficit limits than the standard three per cent of GDP. In the medium term, the country must submit a balanced budget (after accounting for cyclical effects). Third, the SGP requires Italy to cut its deficit in increments of 0.6 percentage points until the budget is balanced. But the coalition of Lega Nord and Five Stars is on course to expand Italy’s deficit considerably.

Even when viewed charitably, the “compromise” reached with the EU Commission will not put Italy on the road to fiscal compliance. Moscovici, in justifying the deal, asserts that it was a strategic decision in the face of Italy’s growing nationalism. But this just shows how politicized the EU Commission has become. The trend began in 2016, when Commission president Juncker was asked why the EU decided to give France budget leeway on its ballooning deficit. “Because it is France,” he replied.

*A longer version of this opinion piece appeared in the Süddeutsche Zeitung on 6 January 2019.*