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CONTENTS

Editorial .... Page 5

1 EU Innovation Policy: Strengthen European Companies' Competitiveness and Capacity for Innovation .... Page 6

2 EU Digital Policy: Make Up Lost Ground in the Digital Transformation .... Page 10

3 EU Climate Policy: Design Efficient European CO_2 Markets that Stimulate Growth .... Page 13

4 EU Energy Policy: Revamp and Expand European Infrastructure to Prepare it for the Future .... Page 17

5 EU Sovereignty: Strengthen Resilience and Supply Security .... Page 20

6 EU Migration Policy: Accelerate Labour Market Integration .... Page 23

7 Sustainable EU Finance Policy: Mobilise Private Capital for the Green Transformation .... Page 26

8 EU Fiscal Policy: Provide Funding for Policies that Benefit Europe .... Page 30

Contact details .... Page 34

EDITORIAL

Germany is confronted by a need to act on multiple fronts. The new federal government must improve conditions for productivity-enhancing investment; shape the green and digital transformations in a manner that fosters growth; and strengthen the resilience of the economy and society at large. No less importantly, these issues must be addressed in key respects at the European level.

With these challenges in mind, researchers at ZEW – Leibniz Centre for European Economic Research in Mannheim have developed specific recommendations for European economic policy that seek to mould broader developments in Europe. These recommendations are partially informed by the structure of the Draghi report on European competitiveness.

This publication thus presents responses to the core economic policy issues that preoccupy today's society and that are in need of creative solutions. ZEW researchers have engaged with these issues in a variety of ways: they have undertaken intense study; have published corresponding articles and reports; have presented their findings and engaged in dialogue at conferences; and have served on special commissions.

The policy recommendations are reproduced here in abridged form. Accordingly, our aim is not to comprehensively dissect each topic but rather introduce readers to the main issues and provide impetus for further discussion.

We hope you enjoy reading this publication and welcome any opportunity for further dialogue.

Achim Wambach, President of ZEW

1 EU INNOVATION POLICY: STRENGTHEN EUROPEAN COMPANIES' COMPETITIVENESS AND CAPACITY FOR INNOVATION

ANALYSIS: INVESTMENT IN RESEARCH AND DEVELOPMENT AND THE IMPORTANCE OF YOUNG COMPANIES

Innovation and technology are key drivers of growth and prosperity. This insight is all the more true in the face of growing ecological and demographic challenges. Recently, however, experts have been drawing increasing attention to the growing innovation gap between the US and China, on the one hand, and Europe, on the other hand. Artificial intelligence (AI) and its applied technologies such as autonomous systems represent one area in which this gap is pronounced. Another is Europe's investment in research and development (R&D), which lags behind that of the US, China, and South Korea (see figure below).

Investment in R&D essential for future competitiveness

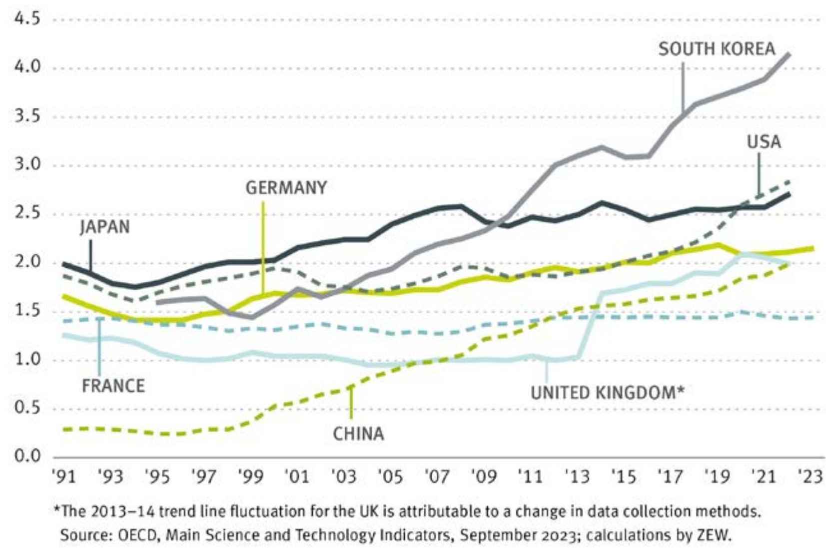
The large-scale challenges facing Europe today demand productivity increases and sustainable innovations. In Germany, governments at the federal and state levels significantly increased funding for R&D over the 2005–2021 period. During this time, government R&D funding as a share of GDP rose from 0.69 per cent to 0.94 per cent. However, the data indicate an end to this trend.
Germany's lagging research spending has yet to be offset by joint European funding programmes. Not only is the volume of funding at the EU level relatively low; its programmes are fragmented. Improved cooperation between Member States – particularly necessary for the creation of strategically important technologies – could help scale up research and development initiatives. Some positive examples here are CERN and the European High Performance Computing Joint Undertaking (EuroHPC).

The importance of business formations for fundamental innovation

Rapid technological progress is currently happening in the field of generative AI, and its potential is far from exhausted. While young companies have played a key role in advancing AI, they often face substantial hurdles, mostly due to a lack of financial resources. Another factor is regulatory uncertainty, which, when combined with Europe's fragmented markets for goods and labour, has produced an environment in which few high-growth companies emerge. The risk profile of investments in young companies in the market for innovative technologies makes venture capital (VC) a suitable source of financing. Augmenting VC investment for business formations would mean additional opportunities for rapid firm growth. However, VC investment is much scarcer in the EU than elsewhere

in the world. Europe's global share of VC is only 5 per cent. By contrast, the US is responsible for 52 per cent of global VC investment, while China accounts for 40 per cent.

FIGURE: R&D SPENDING AS A PERCENTAGE OF GDP



*The 2013–14 trend line fluctuation for the UK is attributable to a change in data collection methods.
Source: OECD, Main Science and Technology Indicators, September 2023; calculations by ZEW.

RECOMMENDATIONS: CREATE NEW IMPETUS FOR RESEARCH, INNOVATION AND BUSINESS FORMATION

Promote science and its application

Germany's past federal governments laid an important foundation for stable and predictable R&D funding in the private sector through the passage of the R&D tax credit and the Growth Opportunities Act. In the academic sector, however, current levels of institutional and project funding can only compensate for increased costs to a limited extent. This is fatal, as almost all future technologies are science-driven. In order to be effective and build on strengths, research and science funding should focus on high-risk projects and cutting-edge research.

The R&D tax credit has proved valuable as an R&D funding instrument in the private sector. It has already led to a significant increase in the number of companies with continuous R&D activities. Germany should continue the path taken with the Growth Opportunities Act to better help medium-sized companies by further increasing the upper limit for eligible R&D spending.

Recognise government R&D spending as an investment in the future

An across-the-board budget increase in EU programmes for R&D cannot be anticipated. At the European level, a stronger focus on Important Projects of Common European Interest (IPCEIs) is therefore crucial. In order to improve the necessary financial resources for Germany's national-level R&D funding, R&D spending by federal and state governments should be recognised for what it is in economic terms: an investment. This is already the case in the national accounts used to calculate gross domestic product. Federal and state budget rules should be revised accordingly.

Improve financing for young companies

The attractiveness of VC in Europe could be increased for both investors and companies through improved exit options and more flexible stakeholding models. Due to regulatory requirements, stock exchange listings in the EU are so complex and costly that IPOs for young growth companies are rare. The ability to issue shares with different voting rights throughout Europe would increase the attractiveness of public offering for founders, as they would be able to secure more voting rights. In Germany, the Future Financing Act (ZuFinG) is an important reform that should be implemented throughout the EU. To create better financing opportunities for scale-ups, requirements could be relaxed at the European level via the Solvency II regulatory framework. The mandate of the European Investment Bank (EIB) should also be expanded to enable investment in equity markets.

The introduction of a special EU-wide legal form known as an Innovative European Company (IEC) for start-ups could reduce the limits to expansion that young companies face due to market fragmentation in Europe. This new legal form would not only facilitate the establishment of innovative companies, but also grant them a special status with regard to certain regulations (such as financing, insolvency, taxation, location flexibility). In addition, the costs for patent applications should be reduced for young, innovative companies as part of the Unitary Patent system. The

Competitiveness Compass for the EU presented in January 2025 addresses these challenges and proposes a European Innovation Act to improve conditions for innovative companies by offering them R&D funding, regulatory sandboxes and access to research and technology infrastructure. A "28th legal regime" would also create opportunities to reduce the competitive disadvantages caused by fragmentation.

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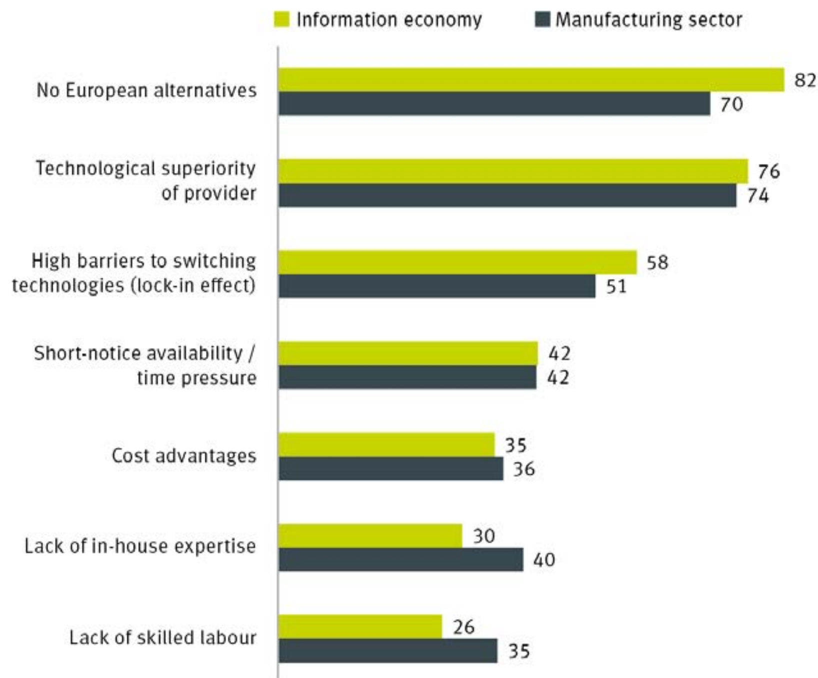
2 EU DIGITAL POLICY: MAKE UP LOST GROUND IN THE DIGITAL TRANSFORMATION

ANALYSIS: DIGITALISATION POTENTIAL IN THE EU REMAINS UNTAPPED

Digital technologies play an important role in advancing other technologies and in supporting various industries. But Germany and the EU have noticeable shortcomings in the development and application of digital technologies, including in the highly dynamic field of artificial intelligence (AI). The EU has failed to tap the full potential offered by digitalisation for innovation and productivity, which is one of the main reasons for innovation gaps and weak growth exhibited by Europe in general and Germany in particular in relation to the US. More than 80 per cent of companies in Germany report being dependant on non-European providers of digital technologies and applications. The main reasons cited are the lack of European alternatives and the technological superiority of non-European providers (see chart below). Access to digital technologies without one-sided dependencies and the skills to further develop and apply them are prerequisites for European digital sovereignty. This is becoming increasingly important, not least because of growing geopolitical tensions.

The regulatory framework for digitalisation is largely set in Brussels, as the examples of the Digital Markets Act (DMA), the General Data Protection Regulation (GDPR) and the recent AI Act show. Despite the large number of regulations, there is often leeway in their implementation at the Member State level, which is at odds with the uniform application of the law. This can hinder the development and deployment of digital technologies – and, by extension, innovation. It also limits the advantages that a single digital market should be able to offer.

REASONS FOR COMPANY DEPENDENCY ON NON-EUROPEAN PROVIDERS/PARTNERS



Note: 35 per cent of companies in the information sector cite cost advantages as a reason for being dependent on non-European providers/partners for digital technologies and applications.

Source: ZEW Economic Survey of the Information Economy, 2nd fiscal quarter 2024

RECOMMENDATIONS: INCREASE INVESTMENT AND ADOPT INNOVATION-FRIENDLY REGULATION

Invest in digital infrastructure and strengthen digital sovereignty

Computing capacity is the foundation for the development and use of digital technologies, especially AI applications. In the coming years, the EU will continue to rely on the computing capacity of the US, whose lead in this area is nearly insurmountable. But Europe also needs to invest in its own capacity to strengthen its digital sovereignty and to develop and maintain the necessary competence in the field. Such investment is an important prerequisite for R&D in AI and quantum computing. A promising strategy here would be to embark on public-private partnerships that allow private investors to supplement public computing infrastructure investment – such as that provided for by the European High-Performance Computing Joint Undertaking.

Design an innovation-friendly regulatory framework

Right now, the EU Member States are focusing on the implementation of the Artificial Intelligence (AI) Act. Their aim should be to find a balance between establishing legal certainty on the one hand and fully tapping innovation potential on the other. In this connection, it is important to ensure that the implementation of the AI Act is consistent with other regulations, such as the GDPR. Practical guidelines can support small and medium-sized enterprises (SMEs) in developing and applying AI solutions that comply with the law. The Federal Network Agency, the coordinating institution for the implementation of the AI Act in Germany, should always check to see whether domestic developments are in harmony with EU provisions.

Living labs play an important role in testing innovative solutions, even when legal rules are temporarily suspended. This allows both the AI solutions to be improved and the rules of the AI Act to be adapted over time through "regulatory learning" based on new knowledge. The option of adapting regulations to dynamic technological developments in generative AI should feature centrally in the act's implementation.

Improve data access and data usage opportunities

The application of digital technologies – including in particular AI models – requires access to data. Simplifying and harmonising the regulations governing data-handling practices can be particularly helpful for SMEs. According to the European Data Governance Act, "data intermediation service providers" are to support companies in checking and establishing compliance with European regulations. However, it is important for the process to remain quick and straightforward.

Initiatives such as the European Health Data Space can help develop better diagnoses and therapies by pooling health data. But Member States differ in their industry structures and comparative advantages. For example, the German economy is strong in Industry 4.0, and thus possesses promising data in this area. In view of such differences, actors in the Member States should set their own priorities and develop AI models tailored to their domestic economies. All of Europe wins when these specialised solutions can be used across the EU's single digital market.

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3 EU CLIMATE POLICY: DESIGN EFFICIENT EUROPEAN CO_2 MARKETS THAT STIMULATE GROWTH

ANALYSIS: ARE EUROPEAN CO_2 MARKETS FIT FOR PURPOSE, GIVEN THE GOAL OF CLIMATE NEUTRALITY?

Numerous scientific studies have shown that the costs of combatting climate change are far less than the economic damage it causes. This is especially true when the tool to combat it utilises market forces that reduce greenhouse gas emissions cost-effectively and promote sustainable solutions through appropriate economic policy. A proven tool in this regard is CO2 pricing, which has become a central tool of climate action in Germany and the EU generally. CO_2 pricing cuts emissions while allowing the economy to grow. Since the introduction of the European Emissions Trading System (EU ETS) in 2005, greenhouse gas emissions have fallen by 32 per cent in Germany and 31 per cent in the EU. At the same time, real GDP has risen by 24 per cent in Germany and 21 per cent in the EU.

Climate neutrality in Europe's sights

The climate neutrality goals set by Germany and the EU require extensive decarbonisation. Starting in 2027, an additional emissions trading system (EU ETS 2) will come into effect, covering emissions from fuels and combustibles that were previously regulated at the national level. Once it is in place, 86 per cent of all greenhouse gas emissions in the EU will be subject to CO_2 pricing. Given this scope, it is all the more important that this key climate policy instrument be designed properly for the challenges ahead. Doing so will mean thinking about climate action in an even more European way. National climate measures to curb greenhouse gas emissions that are already covered by the EU ETS or the EU ETS 2 may only shift emissions between EU member states, leading to higher costs but without any effect on the EU's overall emissions. By contrast, the decarbonisation aimed at by the EU-wide emissions trading systems is controlled by the EU's internal CO_2 market and thus avoids unnecessary economic costs in achieving climate targets. In view of the enormous pressure to bring about a green transformation and the difficulty that government agencies have had in designing efficient climate measures, such a market-based approach would seem eminently sensible.

Fragmentation, double regulation and incomplete pricing

But whether a market-based approach to decarbonisation is sustainable depends primarily on whether it covers as many emissions as possible and enables economic transactions between as many players as possible. Even after the introduction of the second emissions trading system,

the European CO_2 markets will remain highly fragmented. First, the two trading systems (EU ETS and EU ETS 2) will each set their own CO_2 price. There are currently no plans regarding how or when this schism is to be overcome. A second source of fragmentation comes from the national CO_2 markets of the individual EU member states implicitly enabled by the EU-wide Effort Sharing Regulation (ESR). For emissions that are not covered by the EU ETS, the ESR assigns the EU-wide CO_2 target to individual EU countries. In this way, each EU member state receives a national CO_2 budget for these emissions. At the same time, 100 per cent of the emissions covered by the EU ETS 2 will fall under both the ESR and national CO_2 budgets. This double regulation has the potential to undermine the effectiveness of the new EU ETS 2, for it is not market incentives created by the EU ETS 2 that determine were to abate emissions, but rather the politically defined allocation of national CO_2 budgets. Third, the carbon pricing systems currently do not cover greenhouse gas emissions from agriculture, which makes up around 11 per cent of the EU's total carbon emissions. In order to achieve the EU's climate targets, the European Court of Auditors in 2021 recommended examining the potential of applying the polluter-pays principle to agricultural emissions and rewarding farmers for long-term carbon abatement.

More than one European CO_2 price

Every tonne of CO_2 counts equally towards achieving EU climate targets, regardless of where it is abated. However, the cost of abating a tonne of CO_2 varies greatly depending on the industry, sector, EU country, or fossil fuel. A consistently implemented market-based approach would set only a single CO_2 price in the EU at any given point in time. Contrasting this with the current European architecture for CO_2 pricing shows: In addition to one CO_2 price for EU ETS and one CO_2 price for the EU ETS 2, there is also an implicit CO_2 price for each of the 27 EU member states based on their respective national CO_2 budgets – as well as a CO_2 price of zero for CO_2 emissions in agriculture. The larger the differences between explicit and implicit CO_2 prices, the higher the economic costs of decarbonisation in the EU.

RECOMMENDATIONS: IMPROVE EUROPEAN CO_2 PRICING AND ALIGN GERMAN CLIMATE POLICY WITH IT

Support the 2040 target as an important interim step to climate neutrality
Germany should work to strengthen and develop market-based carbon pricing at the European level. In the coming months, this will include supporting the EU climate target of achieving a 90 per cent emissions reduction by 2040, which is both necessary and possible according to climate scientists. An ambitious climate target will help send reliable market signals for the green transformation.

Shape the transition away from national fuel emissions trading at an early stage
The new German government should swiftly adopt and implement the amendment to the Greenhouse Gas Emissions Trading Act (TEHG). This is essential for regulating the transition from the German Fuel Emissions Trading Act (BEHG) to the EU ETS 2. To avoid administrative costs and uncertainties, the fixed-price phase in the BEHG could be kept until the start of the EU ETS 2.

Strengthen the market orientation of EU CO_2 pricing through long-term reforms
Germany should endeavour to remove existing obstacles in European carbon pricing systems that impair market forces. This is crucial for keeping the economic costs of decarbonisation as low as possible and, by extension, ensuring a public consensus for climate action – which is essential for its political viability. To this end, the ESR's flexibility for the intergovernmental trading of emission allowances should be increased and the effective double regulation of emissions in the EU ETS 2 and ESR should be eliminated. Because the targets of the current ESR only run through 2030, there is now the opportunity to develop a regulation on the future distribution of burdens between the EU Member States that is based less on historical emissions. As the scope of the ESR shrinks, the redistribution of CO2 revenues from the EU ETS and EU ETS 2 to the member states becomes more important. In the future, Germany should push for the merger of the EU ETS and EU ETS 2. The allocation of free emission allowances should be abolished in order to strengthen the polluter-pays principle.

Create CO_2 pricing for agricultural emissions

The climate provisions of the Common Agricultural Policy (CAP) have had virtually no effect, although about a quarter of its budget – which itself makes up about a third of the EU's total budget – is spent on climate-related initiatives. It is important, therefore, that agriculture receive its own emissions pricing in a separate trading scheme. An emissions trading system for agriculture could create financial incentives for the provision of natural CO_2 sinks through land use, land use change, and forestry.

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4 EU ENERGY POLICY: REVAMP AND EXPAND EUROPEAN INFRASTRUCTURE TO PREPARE IT FOR THE FUTURE

ANALYSIS: ENERGY INDEPENDENCE AND DECARBONISATION REQUIRE REENGINEERING EUROPEAN ENERGY INFRASTRUCTURE

The energy crisis has shown what happens when the EU becomes too reliant on energy imports and fails to exploit its negotiative strength as a large partner to third countries. Similarly, Europe's climate neutrality and energy decarbonisation goals can only be achieved by tapping potential for cooperation and coordination at the European level. Bolstering energy sovereignty and achieving climate neutrality will require major changes to Europe's energy infrastructure in the coming years. Major investments are needed in a variety of areas, including in electricity and hydrogen grids, energy storage, offshore renewable energy grids, electrolysers, the intelligent control of grid usage, and carbon storage.

Further expand the European electricity market

Electrification and renewable energy expansion are the major pillars of EU decarbonisation efforts. European electricity trading helps to reduce power costs while increasing the reliability of the power supplies. The centrally organised market improves the allocation of transmission and generation capacities and augments the efficiency of trade between countries. European power trading platforms for day-ahead and intraday electricity trading and for energy balancing are a key example of integration at the EU level. Countries can help each other by sharing reserve capacity and grid stabilization service; the dispersed generation of renewable energy across Europe helps to smooth divergence between supply and demand. This allows countries to strengthen resilience and security of supply while also reducing prices.

If Germany can benefit from power generated, consumed, and stored in other countries, it will require less reserve capacity in the form of battery storage and gas-fired power plants. The ability to export power when electricity prices are low or even negative help producers, lower government support payments for renewable energy, and reduces feed-in restrictions. The ability to import power when domestic production is low reduces prices for consumers while minimizing the need for reserve power plants. Opportunities for exerting local market power can also be reduced through increased cross-border trading. However, European neighbours have criticised cross-border electricity trading with Germany on the grounds that Germany's market distorts price formation.

Green hydrogen another needed component in the green transformation
Alongside renewable energy and electrification, another necessary measure to reduce dependence on imported fossil fuels is the introduction of green hydrogen. The ramp-up of green hydrogen will enable the storage of energy from regions with a high potential for renewable energy production (e.g. southern Europe or Africa) and subsequent transport to energy-intensive countries such as Germany. Countries with surplus renewable energy capacity will benefit from export opportunities and import countries such as Germany will gain access to cheap green hydrogen. Increasing cross-border ties in European infrastructure will close energy supply gaps.

RECOMMENDATIONS: ACHIEVE MUTUAL BENEFITS BY STRENGTHENING CROSS-BORDER INFRASTRUCTURE AND TRADE

Invest in European electricity trading
To simplify intra-European electricity trading and increase its volume, the EU has set the goal of standardising its electricity systems while retaining some of their regional particularities. Germany should take measures to strengthen intra-European trade, such as reducing bureaucratic barriers, investing in smart, cross-border transmission capacity, and supporting suitable offshore grids. In order to intensify electricity trade with European neighbours, price signals are needed that reflect cross-border shortages.
While the EU is evaluating the proposed bidding zones for electricity trading, the new German government should discuss recommendations for making the German electricity market more efficient and reducing resistance to trade with Germany. In order to reduce price distortions and strengthen trade in ways that benefit all the Member States, Germany should make targeted investments to eliminate structural bottlenecks, as well as accelerate related infrastructure-investment approval procedures, improve incentives for investment in demand flexibility and associated services and strengthen price incentives within Germany to reflect local and temporal supply shortages.

Take a Europe-wide approach to hydrogen trading
The distribution of hydrogen within the EU requires the development of a European hydrogen grid. This should be achieved in part by converting existing natural gas grids and storage facilities (when conversion is pos-

sible). A hydrogen distribution grid is a prerequisite for the rapid development of a functioning hydrogen economy. Cooperation within Europe is necessary to design the grid in an efficient manner and overcome resistance from countries through which much of the hydrogen will have to pass. One step in supporting European efforts is Germany's intention to co-develop the South H2 Corridor to connect North Africa, Italy, Austria and Germany. In order to benefit from low-cost hydrogen imports in the future, Germany must continue to involve itself in planning at the European level and to support the conversion and expansion of associated infrastructure.

Drive green transformation through innovation

The EU is promoting the modernisation of cross-border energy infrastructure as part of a holistic, future-looking restructuring of the EU energy system across its various sectors. A common infrastructure will strengthen European unity and energy sovereignty – thus benefitting all European countries, including Germany. Germany can promote its own competitiveness and help advance efficient transformation by favouring reforms that incentivise and enable innovative technologies and business models.

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5 EU SOVEREIGNTY: STRENGTHEN RESILIENCE AND SUPPLY SECURITY

ANALYSIS: EUROPE IS VULNERABLE

Concerns about energy supply bottlenecks and reduced oil imports as a result of Russia's war of aggression have made Europe's energy dependence abundantly clear. The potential supply crisis has been averted through alternative sources of oil and gas in combination with the expansion of renewables and measures to promote energy savings. Nevertheless, Europe generally and Germany specifically are dependent on non-EU countries not only for critical raw materials but also for advanced technologies.

Critical materials come from just a few countries

The green and digital transformations require large amounts of critical raw materials. Demand for these materials is on the rise. Furthermore, these materials are mined and processed in a limited number of countries. Europe's reliance on imports in this area poses risks. Limited sources of supply can lead to high and occasionally volatile prices. There are also fears that countries may deny access to critical raw materials to exert pressure on European countries. In order to reduce dependence on critical raw materials, investments are needed along the entire value chain – including in mining, processing, and recycling. The EU needs to take a more co-ordinated approach to these investments. The European Critical Raw Materials Act, which came into force in May 2024, represents an important step in this regard.

In addition to critical raw materials, the EU is also dependent on other countries in the area of advanced technologies. A prime example is the semiconductor industry. Chips are used in all digital products and are thus crucially important not only for the digital transformation, but also for the green transformation. The EU has a market share of around 10 per cent, making it heavily dependent on imports from third countries. There have been repeated bottlenecks in recent years, in part because the semiconductor industry is dominated by a few large players. The European Chips Act has the goal of doubling the EU's market share in semiconductors to 20 per cent by 2030. However, the EU also depends on foreign companies for other advanced technologies, including processors for artificial intelligence, cloud services, and quantum computing.

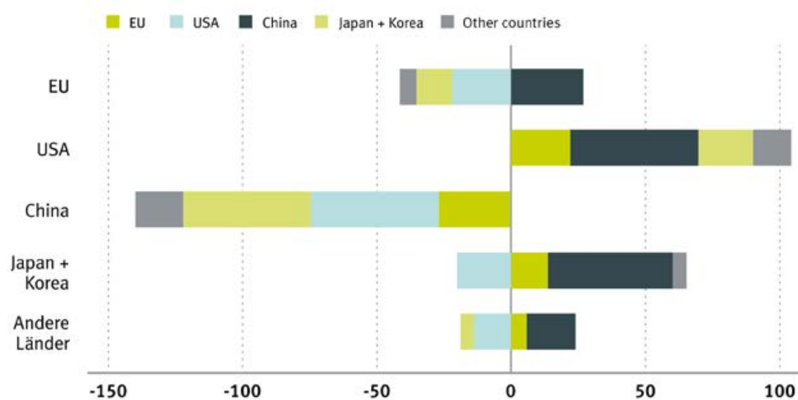
In the domain of technology, Europe's sovereignty is under threat or Europe is dependent on third countries

Technologically, Europe is closely intertwined with other countries. International cooperation is desirable as it promotes innovation and technological progress. However, interdependence can also jeopardise technological sovereignty if it leads to a one-sided dependence on third countries. An analysis of cited patents in the literature shows that only the US has bilateral technological independence. Europe, by contrast, is technologically dependent in several respects on other countries, including in particular the US. This is illustrated by the figure below. (For methodological reasons, the data only cover the period up to 2017.) In view of China's accelerated technological development, it is important to ensure that Europe's state of dependence in this area does not worsen.

Supply risks have increased

During the pandemic, interruptions to production significantly impaired supply chains for consumer goods in Europe. Extreme weather events – which have become increasingly frequent due to climate change – have caused additional disruptions to production and distribution. What is more, wars and other geopolitical tensions have jeopardised security of supply and have encouraged protectionist measures, as evidenced by Donald Trump's threat to impose tariffs on Canada, Mexico, and Europe.

FIGURE: MUTUAL DEPENDENCIES (2012–2017)



For each geographical area, the bar shows the strength of bilateral influence in comparison to the other areas. A value of 0 indicates a balanced mutual dependence between the area under consideration and the other regions. A value of 400 stands for complete independence, while -400 indicates complete dependence. The figures are based on calculations carried out by ZEW.

RECOMMENDATIONS: ADDRESS SECURITY OF SUPPLY AT THE EU LEVEL

Implement European regulations with resolve

The European Critical Raw Materials Act defines targets for European capacities along the entire value chain. Swiftly implementing this regulation will strengthen the strategic autonomy of Germany and Europe. A central element in the regulation is the diversification of supply chains. Mutual dependencies can reduce the risk of economic blackmail, while new free trade agreements can reduce dependence on a few countries for the supply of raw materials.

A coordinated European approach is essential. Joint procurement – for example, based on the EU Critical Raw Materials Platform proposed in the Draghi report – can coordinate the needs of countries and strengthen the EU's negotiating power with third countries. Targeted investments are necessary to cover the rapidly increasing demand for critical raw materials in the coming years. For example, some raw materials can be extracted in the EU and others can be reutilised through recycling. In addition, technical innovation can reduce the demand for critical raw materials, thus enhancing security of supply. The German government should advocate a joint approach at the EU level.

Create a European authority for monitoring security of supply

Currently, systematic surveys of actions being taken by countries to secure their supply chains are lacking. Specifically: to what extent are diversification and stockpiling efforts sufficient to guarantee security of supply in crisis situations? "Stress tests" based on those used in the banking sector could be an effective tool for identifying geopolitical risks and analysing security of supply shortcomings. A European authority charged with monitoring security of supply could play a central role in this regard. Its task would be to collect and provide data on supply chains, develop appropriate stress tests, and draw up concrete action recommendations for strengthening security of supply in Europe.

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6 EU MIGRATION POLICY: ACCELERATE LABOUR MARKET INTEGRATION

ANALYSIS: HIGH BARRIERS IMPEDE THE ENTRY OF MIGRANTS INTO THE WORKFORCE

The current geopolitical situation has put migration at the forefront of Europe's political agenda. Public attention has often focused on the potential risks of migration, such as negative fiscal effects on the welfare system. But migration can also important for maintaining the solvency of social programmes. In addition, Europe is facing a shortage of skilled workers that threatens to lower economic output. The rate of job vacancies in the EU has fallen in recent years, but the 2.3 per cent vacancy rate witnessed in the third quarter of 2024 was still almost twice as high as the corresponding figure ten years ago. In Germany, around 68 per cent of companies have reported a shortage of skilled workers

Combining migration policy and the welfare state

It is often argued that if the unemployment benefits granted to immigrants are too generous, they will have less incentive to take up work. After all, economic studies have generally found that countries with greater economic redistribution are more likely to attract low-skilled migrants. But recent findings also show that the effects of economic redistribution are not strong enough to trigger significant waves of migration. This means that a less restrictive migration policy may not necessarily be in conflict with the welfare system, as is often assumed. Instead of seeking to avoid either the one or the other, EU Member States should thus focus on ensuring the rapid integration of migrants in the labour market.

Labour market integration: Eliminating barriers, harnessing potential

To reduce the potential negative fiscal effects of migration and maximise its benefits, government should remove barriers to rapid labour market integration. Recent studies have found that, compared with EU citizens, migrants in Europe more frequently perform lower-quality jobs with higher rates of term-limited employment, less favourable working conditions, and lower wages. Institutional barriers, particularly when it comes to the recognition of professional qualifications from abroad, can contribute to lower employment rates and to a higher likelihood of overqualification for migrants. Approximately 20 per cent of migrants questioned in an EU-wide workforce survey reported experiencing institutional barriers of various kinds that prevented them from finding employment. Among those surveyed, the asylum seekers were the worst off in this respect: an

average of almost 50 per cent said that they had faced obstacles (WeLaR, 2024). Research has also shown that temporary bans on work for refugees reduce the likelihood of long-term participation in the labour market.

RECOMMENDATIONS: COORDINATED STRATEGY NEEDED AT THE EU LEVEL

Create a coordinated EU strategy for labour market integration

The evidence is clear: migration demands a coordinated EU strategy. This is particularly true given the importance of the topic for the EU as a whole. While the EU's Pact on Migration and Asylum is a step in the right direction, it gives too little attention to labour market integration. A more important development in this regard is the European Commission's action plan to address shortages in labour and skills. It sets out clear measures for addressing key issues in the labour market integration of migrants – namely, the activation of underrepresented groups in the labour market; skills development, general education, and professional training; the improvement of working conditions in certain sectors; fair policies giving workers and trainees more geographic mobility in Europe; and the recruitment of skilled workers from third countries. To meet today's labour challenges, Member States should effectively implement the action plan and develop it further at the EU level.

Simplify the process for recognising professional qualifications from abroad

The EU needs a simple, standardised process for recognising professional qualifications from abroad. Such a process will ensure faster labour market integration and remove institutional barriers to employment, especially for asylum seekers. The German government should permit asylum seekers to work while their applications are being processed. (Currently, asylum seekers are prohibited from working for the first three months after arriving in Germany.) The government should also cut waiting times for long-term work permits. Before March 2020, Germany barred asylum seekers from entering the labour market. At the time, officials explained the ban by pointing to unemployment rates – which were higher than today's – and the perception that refugees were taking jobs from local workers. However, in view of the current shortage of skilled workers and the high demand for labour, that justification no longer holds up.

Invest across the EU in integration infrastructure and skilled labour recruitment

Attracting skilled workers from outside the EU and rapidly integrating them into the labour market will require investment in infrastructure and the creation of a well-designed regulatory framework. Accordingly, infrastructure deficits throughout the EU should be addressed with targeted investments. A key example is the need to expand childcare services, which – in addition to being crucial for families – facilitate integration. Studies in Germany have shown that refugee families – especially mothers – become better integrated into society when children have access to daycare centres from an early age. Daycare strengthens both social and professional integration and increases the attractiveness of specific locations for skilled workers. Germany's federal government should therefore work to expand such services.

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7 SUSTAINABLE EU FINANCE POLICY: MOBILISE PRIVATE CAPITAL FOR THE GREEN TRANSFORMATION

ANALYSIS: FRAGMENTED CAPITAL MARKETS AND A LACK OF FINANCIAL LITERACY HAVE HAMPERED THE GREEN TRANSFORMATION

For the green transformation of the European economy to succeed, huge sums of equity and debt capital will need flow into green projects over the coming years. This is not something that the public sector can do alone; indeed, Europe's capital markets and banking system will have to play a significant role in financing the green transformation. The financing of innovation through capital market is essential, especially for the transformation of CO2-intensive industries, as the necessary technologies are either not yet available or not available in sufficient quantities.

European capital markets have various weaknesses, however. For one, cross-border financing is minimal, due to market fragmentation. Furthermore, in contrast to the situation in the US, external equity capital in Europe is significantly more expensive than debt capital. As a result, European financing options for startups lag far behind those across the pond. In addition, Europe has much smaller securitisation markets. Institutional investors, who have a crucial role to play in raising the huge sums of private capital needed for the green transformation, often find themselves held back by regulation. Another problem is that private investors in most European countries are less likely to be active in capital markets. There are many reasons for this, including the reduced importance of investment in capital markets for long-term retirement savings. At the same time, a lack of financial literacy – not only generally, but also in the area of sustainable investment – has reduced the capital market participation of private investors.

A single capital market in the EU would help to facilitate access to financial resources. While European policymakers have been working to develop an integrated Capital Markets Union since 2014, progress has been limited. In summer 2024, the EU Rapporteur on the Future of the Single Market, Enrico Letta, proposed developing the as-yet incomplete Capital Markets Union into a Savings and Investment Union. His idea is to make the savings of EU citizens available for investment within the EU via the capital market.

At the same time, the European economy will remain highly dependent on bank financing over the medium term – in part because banks are the most important external source of financing for small and medium-sized enterprises (SMEs). Securitisation is an important instrument for better linking the European banking system to capital markets. But the current market potential for European securitisations is significantly lower than

policymakers have estimated, and the originate-to-distribute securitisation model envisaged under the Capital Markets Union, in which banks sell a pool of loans to a separate entity that finances the assets by selling tradable, interest-bearing securities with different risk-return profiles to institutional investors, does not yet seem to be a good fit for the European context.

RECOMMENDATIONS: STRENGTEN PRIVATE AND INSTITUTIONAL INVESTORS AND CREATE A FAVOURABLE ENVIRONMENT FOR INVESTMENT

Strengthen capital market-based pension provision and increase financial literacy

In many countries, the pressure on pay-as-you-go systems has already led to increased investment in capital markets, either directly or by way of pension funds. However, capital market-based pension provision in Germany and other EU countries could be significantly expanded. This would require, on the one hand, a reform of Germany's Riester pension scheme to make it sustainable and, on the other, the creation of an attractive European range of pension products. With regard to the second objective, the pan-European Pension Product (PEPP) only has one provider thus far. However, various measures, such as the standardisation of EU's tax policy through upstream taxation, could significantly reduce administrative burdens while incentivising investment.

Financial literacy is an important factor influencing whether people participate in the capital market. In 2022, the EU introduced the "Financial competence framework for adults in the European Union". Germany should also pursue a national strategy for financial education and contribute at the EU level to the exchange of ideas on best practice and the evidence-based development of education programmes.

Strengthen the role of institutional investors

The activation of institutional investors will likely be decisive for mobilising the huge sums sustainable investment from the private sector required for the green transformation. Yet large institutional investors such as insurance companies, pension funds, and pension plans are subject

to heavy regulation. If these investors are to be won over, then regulation at the European and national levels must assure a balanced relationship between returns, liquidity, risk, and sustainability.

Do more to intermesh capital markets and the banking sector

Securitisation can provide a lever for financing green transformation. While large companies obtain direct funding from the capital market, SMEs rely mainly on external loans when they finance green projects. The assets underlying securitisations should have similar properties so that investors can easily understand what they are buying. To this end, country-specific insolvency laws within the EU should be harmonised. And non-reporting SMEs should not incur additional costs for information, as the burden they already bear from the new supply-chain reporting obligations is considerable. Overall, securitisations should be placed on an equal regulatory footing – e.g. terms of documentation obligations and capital requirements – with financial products that carry similar risk.

Attention should be paid to interdependencies between sustainability reporting, the promotion of securitisation, and financial stability. The Green Asset Ratio (GAR) provides an incentive for banks to hold as many green loans as possible on their balance sheets. If banks securitise brown assets, these will be held in less regulated and less transparent parts of the financial system, and could pose a threat to financial stability should climate risks materialise. One option for further incentivising banks to securitise green loans and use the proceeds to finance new green loans would be to include the securitised assets in the calculation of GAR, even when they are no longer held on a bank's balance sheet.

Create a favourable environment for green investment instead of small-bore regulation

Financial sector regulation that favours sustainable investment is no substitute for effective climate policy in the real economy. For instance, effective CO2 pricing makes non-sustainable investments less profitable, regardless of how they are financed. Carbon pricing can also target the climate effects of production. By contrast, the indirect approach of financial sector policy carries the risk of diminishing the desired outcomes and making them dependant on the requirements and types of external financing. For the optimal integration of the financial sector into the green transformation, the EU should focus less on overly-narrow regulations and more on creating an environment that leverages the potential of capi-

tal markets. Measures in this regard could include the financial education of private investors or the creation of a framework for transition financing. It is important here to focus on clear and consistent rules that do not undergo constant revision, as financial market actors require a dependable basis for long-term decision-making.

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8 EU FISCAL POLICY: UNLOCK FUNDING FOR EUROPEAN PUBLIC GOODS

ANALYSIS: THE EU BUDGET ALLOCATES TOO MUCH FOR THE WRONG POLICIES

One of the most difficult challenges for the German government in the European Council will be determining the Multiannual Financial Framework (MFF) for the period after 2027.

Agriculture and cohesion spending marked by distribution problems and low effectiveness

Today, the EU budget is dominated by spending on Common Agricultural Policy (CAP) and cohesion policy, which together account for around a third of total current expenditures. Nevertheless, these spending areas are highly controversial. The CAP's flat-rate land subsidies have been criticised for their distribution policy, which primarily favours land ownership and provides little incentive for ecological, animal-friendly, and climate-friendly agriculture. In addition, empirical studies have repeatedly found that the effectiveness of cohesion policy is limited. Decades of heavy spending have produced little demonstrable convergence. Moreover, cohesion policy has lost its focus over the years and now addresses many different objectives throughout the EU, in some cases even providing for transfers to wealthy countries and regions.

Mobilise funding for policy areas that benefit the EU

Officials at the upcoming EU budget negotiations must figure out how to spend more on policy areas that stand to bring a high degree of value to the union. These include the expansion of European defence; financial and military support for Ukraine in the Russian war of aggression and help with post-war reconstruction; climate and energy; and innovation, research, and industry. No matter how one quantifies the funding requirements, the EU budget has clearly neglected these policy areas relative to CAP and cohesion, where spending is massive. But the other policy areas represent common goals that promise genuine benefits for the EU, provided that appropriate funding is set aside.

The high interest costs of EU debt

Two approaches are conceivable for funding the new policy priorities: cutting CAP and cohesion spending and/or increasing the EU budget. Alone or in combination, these approaches will set aside more money for defence, climate, science, and industry. When increasing the EU budget,

however, it is important that higher revenues be generated to avoid compensatory cuts in traditional policy areas. Both the Letta and Draghi reports favour stabilising EU debt along the lines of the Next Generation EU (NGEU) extra-budgetary fund financed by EU bonds.

But permanent deficit spending is a controversial issue in the EU. Debt from NGEU already represents a major financial burden on the EU's budget. The cost of servicing the debt rose significantly more than was projected when the NGEU was introduced. The original plan assumed that the interest rate on EU bonds would rise from 0.55 per cent in 2021 to 1.15 per cent in 2027. However, these projections became worthless in 2022, when interest rates rose to 2.5 per cent and then to just over 3 per cent for ten-year EU bonds. The higher rates significantly increased debt-servicing costs, as did the EU's comparatively poor financing terms.

There is also the risk that the EU's new options for taking on debt will only be used to circumvent its own debt regulations. The recently reformed rules on fiscal governance oblige Member States to maintain sustainable debt levels. But the rules do not consider the liability of Member States for debt at the EU level. Accordingly, Member States may seek to sidestep the rules by replacing their national debt with European debt. Were this to happen, it would further undermine the transparency of public finances and the sustainability of public debt in the EU and would disincentivise the creation of responsible national budgetary policies.

RECOMMENDATIONS: GERMANY SHOULD TAKE THE LEAD IN REPRIORITISING THE EU BUDGET

During the MFF negotiations for the post-2027 period, Germany – in keeping with its long-standing commitment to the EU – should urge the other Member States to reprioritise the EU budget. The numbers justify German leadership in the negotiations. For one, Germany is by far the largest net contributor to the EU budget in absolute terms. What is more, according to the Bundesbank, its net contribution to the NGEU and the EU core budget is, relative to economic output, higher than that of any other Member State. Germany should use its high level of financial solidarity with the EU to push for a more pro-Europe budget.

Support spending cuts to CAP and cohesion policy
The German government should support budget increases for policies that benefit the EU, preferably through spending cuts to the CAP and cohesion policy. It would run contrary to the principles of results-oriented budgeting if the EU continued to pump massive amounts of money into existing cohesion and agriculture policies that are poorly targeted, ill-conceived in distribution, and, in many instances, lacking measurable impact.

Resolve internal divisions that undermine Germany's bargaining position
Germany's new government should also develop strategies to persuade the federal states to accept cuts in cohesion policy spending. While the German government has repeatedly shown itself to be open to such cuts, the German states have remained strictly opposed. From their point of view, transfers from the EU represent EU acquis and further financial equalisation. But the German government needs to prepare the federal states for the phase-out of EU cohesion programmes in rich Member States. To do so, it needs to negotiate instruments that provide them compensation for the cuts. Similarly, a Germany that embraces a leadership role in the EU will have to keep special interest groups in the agricultural sector at bay.

Continue to reject deficit spending for the EU's core budget
Since the euro debt crisis, Germany has taken a cautious stance towards EU debt instruments. In moments of acute crisis, Germany has accepted particular debt instruments, but it has always vetoed EU debt as the general funding instrument for the EU's core budget. The new German government should do the same. Giving the EU a general debt function for its core budget would remove a crucial debt limit without bringing any advantages. Any new debt instruments should be limited in scope and used only as a last resort for funding demands that cannot be postponed and that cannot be realistically covered through the reallocation of other expenditures. One such demand that looks likely from today's perspective is further aid for Ukraine.

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