



Research article

Sustainable finance: political challenges of development and implementation of framework conditions

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Abstract: According to the 2015 Paris Agreement, a long-term goal is the commitment to “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.” Reconciling climate change objectives and financial flows is an enormous challenge in the 21st century. States in general and Germany in particular have various instruments at their disposal to initiate appropriate measures. On the one hand, the state can exert direct influence by orienting its own activities towards sustainability, for example by meeting sustainability standards for investments and participations by public institutions and by anchoring divestment strategies in law. On the other hand, the development of suitable framework conditions is a requirement for encouraging private financial market players towards sustainability.

A key requirement for the development of sustainable financial system is a uniform taxonomy of sustainability. Standards and labels for identifying business activities can then be implemented. The development of political framework conditions is currently facing far-reaching challenges at European and national level: There is a risk that current approaches will only be applied to a limited extent. Sustainable investments currently account for approximately 3% of the total market (2017).

This article aims to focus on the extent to which policy frameworks currently being developed at national and European level can contribute to the development of sustainable finance. In addition to the challenges of implementing and developing new policy approaches, the limits of existing instruments will be identified. Beyond the indirect influence of the state, investment strategies and

criteria of public institutions and procurement are analysed, which represent a direct influence of the state for the development of a sustainable financial sector. A case study on the Divestment Strategies is used for this purpose.

Keywords: sustainable finance; ESG; divestment; procurement; european union

JEL Codes: G18, G23

Abbreviations: CSR: Corporate Social Responsibility; CRA: Carbon Risk Assessments; CBI: Climate Bonds Initiative; ESG: Environment Social Governance; EU: European Union; GBP: Green Bond Principles; GDP: gross domestic product; H4SF: Hub for Sustainable Finance Germany; RNE: German Council for Sustainable Development; OECD: Organisation for Economic Co-operation and Development

1. Introduction

The state plays a special role in the development of sustainable finance. On the one hand, high levels of investment are required. It is estimated that additional investments of EUR 180 billion per year are needed at European level to achieve the climate and energy targets by 2030 (European Commission, 2018). On the other hand, the development of appropriate political framework conditions to transform the financial system goes far beyond individual investment sums (SRU (Sachverständigenrat für Umweltfragen) 2019). A sustainable financial system requires a variety of measures at German and European level, which as shown below are currently facing far-reaching challenges. Existing approaches, such as ESG (Environment Social Governance) criteria, are limited in terms of climate compatibility and degree of implementation. Furthermore, this paper shows to what extent direct and indirect influence possibilities exist with regard to technology development and the creation of sustainable financial assets and how it can be used to a greater extent.

2. Policy framework to facilitate sustainable investment at EU level

Sustainable finance aims to promote sustainable investments while providing the necessary resources for the transformation of our society. Berensmann and Lindenberg 2016 combine three elements: the financing of public and private sustainable investments (e.g. sewage treatment plants), the financing of government policies and costs (e.g. feed-in tariffs) and the components of a sustainable financial system (e.g., green bonds).

One of the biggest challenges in a green financial world is a uniform definition of “sustainable”. An inaccurate and inconsistent definition can lead to misguided incentives and greenwashing. At present there are more than 400 different standards for green bonds. Industry standards, such as the Green Bond Principles (GBP) or the Climate Bonds Initiative (CBI), have become de facto market standards, but are problematic because of their voluntary nature. A classification (taxonomy) of sustainability is currently being defined at EU level and standards for

financial market products are being developed TCFD (Task Force on Climate-related Financial Disclosures, 2017); WWF (World Wide Fund for Nature, 2018). In order to simplify the correct certification of the various financial products, it will first be ensured that the information on sustainability of the companies is sufficient. Hence, in parallel with the creation of standards, the disclosure obligations of companies must also be greatly expanded or extended to include sustainability aspects TCFD (Task Force on Climate-related Financial Disclosures, 2017); WWF (World Wide Fund for Nature, 2018).

In the context of the transformation of the financial system, the extent to which companies assume responsibility for their actions is of central importance. Corporate Social Responsibility (CSR) defines the social and ecological responsibility of companies. Since 2011, however, the CSR reports in the USA and Europe have increased significantly (Moravčíková et al., 2015), but it has also become apparent that CSR efforts to date are often of a symbolic nature and partly serve to conceal or greenwash. For investors, the assessment of entrepreneurial risks based on a business model based on fossil fuels is of particular importance. This can be done as part of a Carbon Risk Assessment (CRA). The CRA assessed the compatibility of business models and corporate purposes with the Paris 2° target and possible default risks with the full implementation of all necessary measures. Various approaches and procedures already exist for this, but there is no legal or voluntary market standard for a CRA, which is why there is no data compatibility and the CRA has not yet established itself in the market. Similar to annual financial statements, the CRA can be audited by external experts. With a German implementation Act (CSR-Richtlinie-Umsetzungsgesetz, CSR-RUG), which came into force in April 2017, the legislator is already moving in this direction by calling on companies to identify material risks, which is already increasingly taking place (Network and Econsense, 2018). The CRA can show investors which investments require action and which require divestment. The information obtained from CSR and CRA reports forms the basis for providing investors with information on the sustainability of companies. Transparent and comprehensible documentation of a company's sustainability is a basic prerequisite for creating sustainable financial products. It is crucial that the information provided in the CSR and CRA reports is taken into account when investors make investment decisions. In addition, carbon risk ratings can provide information for investment decisions based on sustainability within the framework of sustainability ratings.

Various institutions and stakeholders have joined forces in the Hub for Sustainable Finance Germany (H4SF) headed by the German Council for Sustainable Development (RNE) and Deutsche Börse AG to contribute to the development of a sustainable financial system in Germany. Ten theses for sustainable finance address the Hub's topics, such as that the Hub demands that laws and regulations relevant to the financial market should explicitly include aspects of sustainable development H4SF (Hub for Sustainable Finance Germany, 2017).

In March 2018, the European Commission released an action plan for financing sustainable growth. This action plan is based on the recommendations of a group of experts to develop an EU strategy for sustainable finance. The proposals were largely taken on board in the development of measures for legislative implementation. The aim of the action plan is to strengthen the contribution of the financial sector to sustainable growth and thereby increase financial stability by taking environmental factors into account. These objectives will be achieved through a series of

measures that can be grouped into three categories: Redirecting financial market flows towards sustainable investment and growth, reducing financial risks arising from climate change (financial market stability) and promoting transparency and sustainability of financial and economic activities. This is seen as necessary to make up the investment backlog of around €180 billion per year needed to achieve the EU's energy and climate goals by 2030. In order to achieve these targets, it is essential that companies report on their sustainability and long-term risks in a transparent manner (European Commission, 2018). The action plan proposes ten measures, some of which are highlighted below. The first measure is the introduction of an EU classification system for sustainable finance. A group of experts (Technical Expert Group on Sustainable Finance) are developing the taxonomy, with a classification system to be in place as early as the second quarter of 2019 (European Commission, 2018). Based on this classification system, the action plan will develop standards and labels for green financial products as part of the second measure. The fifth measure, which provides for the development of two benchmarks for sustainability, is also important in this context. The aim is to improve the comparability of the performance of green financial products. In addition to a “low-carbon benchmark” (less strictly sustainable, a benchmark that includes stocks with a CO₂ footprint below the industry average), a “positive-carbon impact benchmark” (more strictly sustainable and in line with the Paris 2° target or a benchmark that includes stocks with a positive CO₂ footprint) is to be developed (GILL, 2018). The seventh measure provides for the clarification of the obligations of institutional investors and asset managers, who have so far focused solely on pension funds (see case study Divestment). In order to be able to successfully label investments as sustainable, the ninth measure strengthens the regulations on the disclosure of sustainability information (European Commission, 2018). The disclosure of sustainability risks by financial market players is not yet mandatory; this can lead to voluntary disclosure leading to the embezzlement of risks (WWF (World Wide Fund for Nature), 2018). Nevertheless, with the adoption of the action plan for financing sustainable growth, recommendations of a previous group of experts will be implemented, which—depending on its further development—could create an important basis for a turn towards a sustainable financial system (High-Level Expert Group on Sustainable Finance Secretariat, 2018).

3. Opportunities for political influence at national level: public procurement and investment

Within the framework of transformation, the government can use direct and indirect influence on technology development and financial markets. The government can play a special role in the transformation of the financial system discussed in the previous chapter. On the one hand, it can change the financial system through framework conditions; on the other hand, as an investor it can invest sustainable while at the same time demanding certification through sustainability standards and thereby establishing them. Financial investments and public procurement can be set in line with the goals of sustainability. As a result, the government can act as a pioneer in many areas and contribute to the diffusion of new technologies and standards.

Within the framework of public procurement, the state can exert a direct influence on the sustainability of investment decisions. With an estimated purchasing volume of 260 billion euros per year, the public sector has considerable market power (Robert, 2015). In sectors such as

infrastructure, telecommunications and education, more than 90% of expenditure is controlled by the public sector (Chiappinelli and Zipperer, 2017). On average public procurement accounts for about 12% of gross domestic product (GDP) in the OECD. In Germany, the share of GDP is even higher at 15% (OECD (Organisation for Economic Co-operation and Development), 2017).

German public procurement was amended in 2016 as a result of the 2013 reform of EU public procurement, in particular Directive 2014/24/EU on public procurement. Since then, it is possible to impose not only environmental requirements on the product or service, but also on the method of production and the way in which the service is provided. Environmental label criteria may be referred to in the tender (Dieckmann, 2016). Sanctions and contractual penalties may also be determined in advance to ensure compliance with social and environmental criteria after the contract has been awarded. Green public procurement works in two directions: on the one hand, green purchasing reduces environmental impacts. On the other hand, public procurement can create lead markets for environmentally friendly products at an early stage in view of the high volume of public procurement.

The direct costs of procurement can be divided into acquisition, operating and disposal costs. Already the consideration of the direct costs arising over the entire life cycle can lead to a more environmentally friendly procurement, since these usually go hand in hand with lower energy and/or fuel consumption. In order to price in the total costs of procurement, however, indirect environmental costs must also be taken into account. These arise from production, operation and disposal (Haak, 2015).

Environmentally friendly public procurement has become increasingly important in Germany in recent years. Environmental criteria are taken into account in 20% to 40% of public tenders—the existing possibilities are therefore not yet sufficiently explored (Robert, 2015).

The German Environment Agency (UBA) primarily promotes local authorities through guidelines, training scripts and sample tender documents. Practical examples and legal information are made available online and can serve as a basis for other municipalities (UBA 2018/www.beschaffung-info.de). There, assistance in calculating life cycle costs is also offered. Environmentally friendly procurement remains a challenge for municipalities, as many legal rules must be observed to ensure that public contracts are awarded transparently and fairly.

Environmentally friendly public procurement has great potential to make a significant contribution to the decarbonisation of the economy. However, this effect can only be achieved if the contracting authorities adopt the strategic objectives in their practice (Hattenhauer, 2017). The emission reduction potential of GPP in Germany alone is estimated at 5 Mt CO₂eq by 2020, whereby these projects also have negative abatement costs. The greatest potential is seen in the building sector (BMUB (Bundesministerium für Umwelt Naturschutz Bau und Reaktorsicherheit), 2015). With regard to the potential by 2020, it must be noted that only a small stock of the public sector will be newly procured and thus the potentials by 2050 are considerably higher (Chiappinelli and Zipperer, 2017).

In addition to public procurement, the state can influence the financial sector as an investor. However, investments made by various public institutions, e.g. state banks, pension funds, nuclear waste disposal funds, can only be influenced indirectly in some cases. Here, therefore, the sustainability of the investments must be prescribed by budgetary law in the interests of the environment. Sustainability standards are therefore a suitable means of controlling investments.

The possible volume is currently estimated differently in Germany, but the pension fund of the Federal Employment Agency, the pension reserves and the pension fund of the Federal Government alone hold investments amounting to 22.6 billion euros. So far shares have also been used to invest in fossil energy companies with an uncertain future. The fund for the financing of nuclear waste disposal with a volume of 24 billion euros promises, according to the board of directors, that “the paid-in funds will be (invested) sustainably” (BMWI (Bundesministerium für Wirtschaft und Technologie), 2017), but here, too, no further specification is known. The use of ESG criteria (Environment Social Governance) is being considered. It is still unclear whether this will be made mandatory for public capital investments or, as is currently being discussed in the Finance Committee within the framework of a draft law on the amendment of financial market laws, whether it will merely extend the risk management of private investors. Accordingly, pension funds must make the handling of ESG criteria transparent, but not mandatory (BMF (Bundesministeriums der Finanzen), 2018).

At the same time, steps are being taken at local, state and federal level to limit public investment in unsustainable companies or to withdraw it from climate-damaging investments (divestment) and reinvest it in sustainable companies. In recent years, divestments from fossil energy companies have gained in importance both internationally and nationally. In addition to companies, insurance companies, banks and churches, this also includes the withdrawal of public funds from climate-damaging investments and their reinvestment in sustainable financial assets. In January 2017, Ireland became the first national parliament in the world to decide to reinvest its state pensions in sustainable investments. First steps for a Divestment in Germany, were already introduced several times on local level and country level. In May 2017, for example, the parliament of Bremen decided to invest public funds according to comparatively strong ethical and climate-friendly criteria (Bremische Bürgerschaft, 2017). The supply reserve of the federal state of Berlin, on the other hand, serves as an example of a public divestment with a high investment volume compared to other divestment examples (although still low compared to the total investment volume of the federal state of Berlin).

4. Case study divestment

In June 2016, the Berlin House of Representatives decided with the votes of all five parliamentary groups “to withdraw investments from companies whose business model contradicts the goal of climate neutrality within the next five years and to exclude these investments in the future by means of investment guidelines” (Abgeordnetenhaus Berlin, 2016).

The pension contribution plan (Sondervermögen “Versorgungsruecklage des Landes Berlin”) of the State of Berlin totalled EUR 935.9 million as of December 31, 2017, of which 19.3% is held as shares. The divestment currently relates to approximately EUR 177.821 million, which corresponds to 10% of the total portfolio (Senatsverwaltung für Finanzen Berlin o. J.). On behalf of the State of Berlin, oekom research AG and Solactive have compiled an index which is intended to exclude all coal, oil and gas companies due to the climate-damaging nature of their business model as well as the nuclear and defence industries (Senatsverwaltung für Finanzen Berlin o. J.).

The “BENEXX Solactive oekom ESG Fossil Free Eurozone 50 Index” It reflects the performance of a stock portfolio of 50 individual stocks of the 600 largest listed companies in the

Eurozone. These 50 companies are selected to provide the best sustainability performance in their industry according to the ESG criteria. For example, they must be rated as best-in-class with oekom “Prime” status (Solactive AG, 2017). The fund is managed by the Deutsche Bundesbank and since the first quarter of 2017 has also been open to other federal states that follow Berlin’s example and wish to use the index for this purpose. For this purpose, the index is replicated by the Deutsche Bundesbank by acquiring the shares contained in the index in accordance with their respective quotas (Senatsverwaltung für Finanzen Berlin o. J.).

According to the Federal State of Berlin, companies are not included in the index if they are active in the following business segments: Fossil fuels, nuclear power generation, development or manufacture and sale of war weapons.

Oekom research AG checks whether companies comply with the defined sustainability criteria, whether controversial business practices exist and to what extent the index must be adjusted as a result. Companies can be removed from the index by oekom research AG (Senatsverwaltung für Finanzen Berlin o. J.). The example of the supply reserve of the Federal State of Berlin has only symbolic character: on the one hand, the investment volume is very small compared to the total investments of the Federal State of Berlin, on the other hand, the composition of the companies, which include, for example, companies from the automotive industry and aviation (Solactive AG, 2017) and which are invested in ambitious climate protection, is questionable. Bremen is formally a stronger example with strong investment criteria, but so far there has been hardly any investment there. Nevertheless, the supply reserve of the state of Berlin can be seen as a pilot project with exemplary character for other federal states and the federal government.

5. Conclusion

The risks and dangers of climate change make it necessary to rapidly redirect the financial system in order to achieve the goals of sustainable development, whereby state and private actors are addressed so that the necessary framework conditions can be developed and the financing requirements covered.

Considering that there is neither a single taxonomy nor uniform standards for sustainable financial activities based on it, the proposed introduction of a classification system, standards and labels at EU level is an important element for the development of a sustainable financial system. Current regulatory projects at EU level, such as the disclosure of sustainability risks by asset managers and asset owners, as contained in the proposal on sustainable finance or the EU banking package, are also an important requirement for creating greater transparency with regard to the sustainability risks of investments and the business operations of banks.

However, the development of political framework conditions is currently facing wide-reaching challenges. The EU Action Plan does not provide a precise framework, as it currently stands, for the widespread use of the instruments needed to redirect financial flows and create a sustainable financial system. For example, with the first measure by the EU Commission, a proposal for a classification system has been put forward which, with regard to the disclosure of taxonomy compliance, should only be applied to already sustainable financial products. Due to the currently wording, there is a risk that the planned measures will not be applied directly to the mainstream of the financial sector. In order for the

taxonomy and the standards and labels based on it to be applied to all business activities, the criteria must be extended to the overall market and it must be clarified for which business activities the instruments can apply. On the one hand, this would be necessary in order to be able to examine the sustainability of the operations of conventional providers in terms of increased transparency, which is a requirement for advising and evaluating the asset-owner side. On the other hand, this could counteract the danger of a unilaterally increased reporting obligation for business activities that already offer sustainable financial products. The Technical Expert Group, which was set up to implement the legislative proposals and in which German financial players are represented, should be used to develop clear formulations which introduce a taxonomy and standards which can apply not only to already sustainable financial products but also to all financial activities (EU COMMISSION, 2018). In addition, the EU's climate targets should be more closely integrated and the necessary measures more closely aligned with them. It is currently controversial whether the classification system should gradually be broadened, starting with environmental issues or including social issues (RNE (Council for Sustainable Development), 2018; European Commission, 2018).

The addressing of the total market is of great importance for all projects. The mandatory introduction of ESG criteria at the national level could therefore be an important first step in redirecting the financial flows of private and state actors. Overall, it is clear that a clear definition of sustainability and the resulting standards is also crucial for the management of public investment (SRU (Sachverständigenrat für Umweltfragen) 2019).

Public procurement in Germany could be used more effectively, in order to use the improved legal possibilities at EU level to an increasing extent. Environmentally friendly procurement is compatible with EU public procurement law and has also been highlighted since 2014. Among other things, environmental labels could be included in the awarding of contracts at the German level. Monitoring should be strengthened to ensure compliance with the quantitative targets set by the Federal Government within the framework of the Sustainability Programme (SRU (Sachverständigenrat für Umweltfragen), 2016). In addition, earmarked funds and sufficient capacity building are required for increasing application. For example, municipalities, where the majority of public procurement is awarded, could receive financial transfers from the federal government (Chiappinelli and Zipperer, 2017). Obstacles to the use of environmentally relevant criteria also relate to the increased complexity of tenders, fears of higher bidding costs and a reduction in the number of potential bidders. On the one hand, this is countered by the argument that new, innovative companies are becoming increasingly competitive and will therefore have more providers to choose from in the future. On the other hand, higher financial acquisition costs are offset by avoided costs in the form of environmental damage, which are generally borne by society as a whole, so that there should be financial compensation at federal level (Chiappinelli and Zipperer, 2017). The public sector should increasingly commit itself to the procurement of environmentally friendly products and services, as has been done, for example, in §§ 67, 68 of the Public Procurement Law. This could strengthen the pioneering role of the state. The government can thus also help to set standards and bring early-adopter technologies to market maturity. It is also important to work closely with other major clients outside the public sector, such as the churches, in order to disseminate knowledge about environmentally friendly procurement.

Divestments from fossil energy companies have gained in importance both internationally and nationally. The case study shows great potential, especially at the national level, for obtaining financial support for sustainable investments.

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Conflict of interests

The Authors declare no conflict of interest.

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