
Green Finance: Case Studies

CLAUDIA KEMFERT, DOROTHEA SCHÄFER, WILLI SEMMLER, AND ALEKSANDAR ZAKLAN

Claudia Kemfert, German Institute for Economic Research DIW Berlin, German Advisory Council on the Environment (SRU) and Hertie School of Governance Berlin, ckemfert@diw.de

Dorothea Schäfer, German Institute for Economic Research DIW Berlin, CeFEO at Jönköping International Business School and CERBE Center for Relationship Banking and Economics, Rom, e-mail: dschaefer@diw.de

Willi Semmler, New School for Social Research, New York, Department of Economics; University of Bielefeld, Faculty of Economics; International Institute for Applied Systems Analysis, Senior Researcher at IIASA, SemmlerW@newschool.edu

Aleksandar Zaklan, German Institute for Economic Research DIW Berlin, azaklan@diw.de

Editorial

Every sector, industry, and branch requires finance. This makes finance a powerful tool for initiating and facilitating the green transformation of the entire economy, nationally and internationally. In this complementary issue **Green Finance: Case Studies** (complementary to **Green Finance: the macro-perspective**), we examine the role of finance for the green transformation in specific industries, firms, countries, and financial instruments.

Nicoletta Batini examines, in **Transforming Agri-Food Sectors to Mitigate Climate Change: The Role of Green Finance**, the challenges facing financial markets and governments in facilitating the necessary “Great Food Transformation.” Tracing today’s agri-food main global developmental and financial trends, she proposes a set of financially-oriented public policies to accelerate this transition with a focus on advanced and large emerging market economies. Suggested measures include public lending, insurance, and guarantee schemes to aid the transition; financial training schemes; changes to prudential regulation to account for financial risks of non-sustainable farming; alongside a bolder approach to ESG investment of public funds and steps to expand green and sustainable bond markets.

In **Financial constraints of firms with environmental innovation**, Febi Jensen, Dorothea Schäfer, and Andreas Stephan concentrate on the financing of green innovation in Germany. In particular, the authors aim to answer the fundamental question of whether Germany environmental innovator firms have higher financial needs and are more financially constrained than non-environmental innovator firms. The answer to this question is important as it indicates the presence or absence of market failure in funding the green transformation and the justification of intervention by public agencies to correct those market failures. Using the Mannheim Innovation Panel, the authors find that German environmental innovator firms are more likely to have higher latent financial need in comparison to their non-environmental peers. This implies that environmental innovator firms have latent projects that they have not yet realized, but would implement if they had the financial means to do so. One tentative conclusion from this finding is that public subsidies might mitigate the financial restrictions of environmental innovation.

Claudia Kemfert und Sophie Schmalz (**Politische Einflussmöglichkeiten auf die Entwicklung nachhaltiger Geldanlagen: Herausforderungen der Implementierung und Entwicklung politischer Rahmenbedingungen**) consider the role of policy frameworks currently under development at the national and European levels for the development of sustainable finance. They find that the government can exert direct influence by orienting its own activities toward sustainability, e.g. by meeting sustainability standards for investments under the participation of public institutions and by enshrining appropriate divestment strategies in law. They also identify public procurement as one promising avenue for direct control over meeting sustainability standards, through which governments can directly influence the development of a sustainable financial sector. They conclude that government action can foster the development of suitable framework conditions that encourage the shifting of private financial market players toward sustainability.

Beate Gebhardt und Ines Kefer focus on environmental-social-governance (ESG) criteria in their work, **Ansätze und Herausforderungen der Implementierung von ESG-Kriterien in Wettbewerben und der unternehmerischen Nachhaltigkeitsbewertung**. Specifically, the authors conduct a survey of organizers of awards competitions for companies in Germany for compliance with specific environmental-social-governance (ESG) criteria in Germany. They find that social aspects, such as occupational safety, human rights, and ecological aspects, e.g. climate change, are typically the main focus of the awards evaluations. However, they also find that the process behind awards is frequently lacking in transparency and that quality standards are not comparable across competitions. While the authors find that award competitions can be a promising way of improving the ESG performance of companies, they recommend introducing unified quality standards and minimum criteria for receiving an award.

Finally, Hella Engerer evaluates Sovereign Wealth Funds (SWF) and their capacity to function as financing sources for sustainable development (**Sovereign Wealth Funds – Finanzierungsquelle für nachhaltige Entwicklung?**). The SWF assets are generated by revenues of commodity exports or budget surpluses. Usually the funds' means are used for growth smoothing, in particular for overcoming economically difficult times, for intergenerational redistribution, and for structural change. So far, green investments have played a minor role for the investment strategy of SWF. Among others, one reason was revenues increase less dynamically, as was the case before the global financial crisis, because of moderate oil price development in recent years. In addition, "resource rich" countries with SWF have few incentives to invest in climate-friendly, resource saving, policies. In the course of the 2030 Agenda for Sustainable Development, SWF have taken first initiatives to introduce a strategy for sustainable development. In principle, SWF could act as bridge builders by utilizing assets accumulated during the phase of commodity exports for de-carbonization and diversification of the economy. However, negotiations on climate targets reveal that it will not be easy to convince all parties involved to agree on a mature financing strategy.