
Editorial to the Special Issue: Sustainable Economics and Green Finance

Laura Marsiliani

Durham University Business School and Durham Energy Institute, Durham, UK
e-mail: laura.marsiliani@durham.ac.uk

Thomas I. Renström

Durham University Business School, Durham, UK
e-mail: t.i.renstrom@durham.ac.uk

Are environmental issues relevant at the time of an economic crisis? The current COVID-19 pandemic situation coupled with lockdowns and economic recessions across the world prompt us to reflect upon it. The COP26 UN Climate Change Conference will take place in Glasgow in November 2021 and provide an opportunity for countries, including the United States once again, to engage in discussion on how to best protect the global environmental goods. Around the world governments argue in favour of a green economic recovery that will allow countries to rebound from recession and reset the entire economic systems from fundamental principles. Green finance and climate finance will offer mechanisms and instruments to pursue these objectives. The EU recognises the role of green finance to spearhead sustainable economic growth and actively promotes the incorporation of green finance considerations into its financial policy framework. The UN, World Bank and IMF are all committed to mobilise Climate Finance to finance projects to mitigate Climate Change and its impact on society; notable examples are the World Bank Green Bonds worth over USD 13 billion since 2008. The responses by the private sector (responsible investors) and the public sector (e.g. national green bonds) have also been very promising. Since 1995, the net total assets of US funds incorporating Environmental, Social and Governance Factors has increased more than 400%. Green bonds have reached a record value of USD 257.7bn in 2019 (an increase of 51% from 2018), with the major issuer being the USA, followed by China and several European countries. New clean technologies will also play a crucial

role in realising the promises of the sustainability revolution. Opportunities can be raised by hydrogen-fuelled vehicles and carbon storage technologies among others. Government support is paramount in ensuring those technologies become economically feasible. The positive social welfare impact from decarbonisation is beyond doubt, especially when future generations are taken into account. Universities are signing up to the UN Accord on Sustainable Development Goals to provide education to students and staff on issues of Sustainable Development and its societal values. Trade and students unions are developing their sustainability agenda and business and NGOs their corporate social responsibility strategy. Perhaps as never before, the issue of Sustainability is at the core of all decisions of all stakeholders on the world stage. There are all the premises for the current economic crises to be turned into a once in a generation opportunity to protect our planet. Research has a crucial role in helping to shape our future.

This special issue includes four papers related to the economic effects of climate change and channels through which it can be mitigated (renewable energy, green finance, and carbon trading).

The first paper, “The Macroeconomic Implications of Climate Change on Sub-Saharan Africa: A Case for Sustainable Development” by Aydin Sandalli, addresses the question if climate change has a negative effect on economic growth, and if it affects poorer and hotter regions disproportionately, using a panel for 37 OECD countries and 47 Sub-Saharan African countries between 1970 and 2018. First, it finds that temperature variations

have a negative effect on per capita GDP growth. Second, temperature variations disproportionately lower income growth in low-income countries and countries with hotter climate. Third, poorer countries recover more quickly from temperature shocks. This suggests that climate change has a negative economic effect, challenging the view that there is a trade-off between climate change and economic growth.

The second article “Renewable Energy Consumption and its Main Drivers in Latin American and Caribbean Countries: A Robust Analysis between Static and Dynamic Panel Data Models” by Sindy Menéndez-Carbo investigates renewable energy consumption (REC), in 22 Latin American and Caribbean countries, using a panel from 2005 to 2014. It finds that REC is positively related to GDP, and its level in the previous period. First, there is evidence of inertia in REC. If a country has invested in REC, its use is likely to remain at a higher level. Second, REC has the property of a ‘luxury good’ in that a higher income level makes REC more affordable (society is more prepared to give up consumption to achieve a higher level of the environmental good). These effects are also independent of whether the country has signed up to Kyoto, and can be thought of as a voluntary measure. The article also suggests a future promising research agenda, the role of the Paris 2018 agreement.

The third paper «Practical Vitality of Green Bonds and Economic Benefits» by Ankita Kant, examines the pricing of green bonds, the effect on the share price of the issuer, and the effect on carbon emissions (the latter at country level). First it finds, in a sample of 200 green bonds

and 554 conventional, that the coupon is lower for green bonds, implying it is cheaper from the point of view of the issuer. This suggests a company can lower its cost of capital by undertaking ‘green projects’. It provides evidence of the idea that socially responsible investors are prepared to accept a lower return when holding ‘green’ assets. Second it finds, by computing the cumulative abnormal returns (event study) that the stock prices increase in response to the green bond issue, again confirming the idea that investors demand a lower future premium on stocks where firms conduct ‘green projects’. Finally, the paper points to the need of further research on whether the prevalence of green bonds in an economy will actually reduce overall carbon emissions.

The final article «The EU ETS and Aviation: Evaluating the Effectiveness of the EU Emission Trading System in Reducing Emissions from Air Travel» by Anne Marit Heiaas investigates the effects of carbon trading. The paper uses a synthetic control model to compare jet fuel consumption under the EU emission trading system (EU ETS) during 2012–2018 to a counterfactual without carbon trading. The paper shows that the EU ETS increased jet fuel consumption by 10% relative to the scenario without it. The finding highlights an important insight: since a trading system may increase production efficiency, it is likely the overall production and emissions increases. This is something to bear in mind when designing environmental policies in general.

We hope that this special issue will inspire researchers to pursue further investigation into these crucial questions.