

ECA RESEARCH NOTES

Office of the Chief Economist

EUROPE AND CENTRAL ASIA

GREEN TRANSITION
JUNE 2021



Hi Everyone,

It is summer in Washington and we are now increasingly focused on a topic that is an important priority for the globe and our region - Climate Change. As many countries and corporations around the world are committing to net-zero emissions or carbon neutrality targets by 2050, this green transition will pose a complex set of challenges and opportunities. So, over the summer, we have a series of events addressing these.

In our June ECA talk, we focused on firms. Since the green transition will require significant corporate investments in cleaner technologies to reduce firms' carbon footprint, it is important to understand the constraints they face. Research underlines the importance of credit constraints as well as management quality and practices to promote green investments. Policy measures that incentivize the green transition will be needed to address these constraints and our discussion included ways of doing this.

Next month, we will be continuing our series of green talks and our July ECA Talk will focus on what we can learn from past efforts to adopt green stimulus in the aftermath of the 2008-9 Global Financial Crisis. We have included a round-up of papers on these topics below.

Finally, in August, we will be sending out the call for our 2021 research competition – ECA Academy. This year, our special focus will be on climate change, so please get your papers ready for submission.

Happy Reading,
Asli

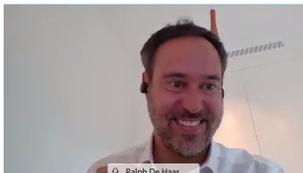
FEATURE STORY



Richard Damania (Internal)



Harry Huizinga



Raloh De Haas



Asli Demirgüç-Kunt

From upper left corner clockwise: Richard Damania, Harry Huizinga, Asli Demirgüç-Kunt, and Richard De Haas

Firm-level Barriers on the Path to Net Zero: How Firms Can Make or Break the Green Transition

In line with commitments under the Paris Agreement, many countries are aiming for net zero carbon emissions by 2050. This green transition will require massive corporate investments in cleaner technologies to reduce firms' carbon footprint. In a recent ECA Talk, Richard De Haas, Director of Research at the EBRD, discussed how financial and managerial constraints are holding back firms from making green investments and how this may thwart countries' ambitions to become carbon neutral over the next decades.

[Video and event details](#)

RELATED RESEARCH

[The Energy-Management Nexus in Firms: Which Practices Matter, How Much and for Whom?](#)

Arti Grover and Valerie J. Karplus, World Bank Policy Research Working Paper 9397 – September 2020

This study documents the link between structured management practices, energy use, and firm performance using a comprehensive firm-level database covering 31 countries. Results primarily driven by the manufacturing sector, for instance, show that management effort is directed toward saving costs but not reducing environmental impact. Vast heterogeneity in adoption and outcomes suggests that targeted approaches to encourage energy management practices in firms may be more effective than uniform ones.

[Regime-Dependent Environmental Tax Multipliers: Evidence from 75 Countries](#)

Christian Schoder, World Bank Policy Research Working Paper 9640 – April 2021

This paper reviews the main transmission channels of an environmental tax reform shifting the tax burden from labor to carbon emission, using the data of 75 high- and low-income countries from 1994 to 2018. The results suggest that, compared with income taxes, environmental taxes can be a less contractionary source of revenues to support the post-COVID-19 fiscal consolidation efforts, especially in countries that are at the beginning of their decarbonization efforts.

[Power Market Sophistication and Sector Outcomes : A Focus on Social Performance, Electricity Reliability, and Renewable Energy Penetration](#)

Djeneba Doumbia, World Bank Policy Research Working Paper 9585 – March 2021

The authors exploit a novel and comprehensive dataset on power market structure over 1989–2020 to analyze the relationship between power market sophistication — defined as the move toward a more competitive market — and final sector outcomes. The analysis shows that moving from vertically integrated utility models toward more sophisticated power markets is associated with higher electricity access, better consumer affordability, larger renewable energy penetration, and lower system average interruption duration index.

[Macro-Financial Aspects of Climate Change](#)

Erik Feyen, Robert Utz, Igor Zuccardi Huertas, Olena Bogdan, and Jisung Moon, World Bank Policy Research Working Paper 9109 – January 2020

This study brings together different strands of the literature on climate-related risks and how these relate to macro-financial management and risks. The paper finds that many countries face the "double jeopardy" of simultaneous elevated climate-related and macro-financial risks. Reducing macro-financial risks in countries under double jeopardy is an important component of international efforts to tackle climate change to complement and support country-specific efforts.

BLOGS



[Barriers to net zero: How firms can make or break the green transition](#)

Ralph De Haas, Ralph Martin, Mirabelle Muuls, & Helena Schweiger, March 29, 2021

This analysis combines granular data on more than 11,000 firms across 22 emerging markets and explore how organizational constraints can hold back the green transition. The results reveal how financial crises can slow down the process of decarbonization of economic production and demand caution against excessive optimism about the potential green benefits of the current economic slowdown.



[Dematerialization, degrowth and climate change agenda](#)

Michael M. Lokshin, May 4, 2021

Most developed countries are now in the stage of gaining forest area, making it more productive, and intensifying modern agriculture at the same time. If we believe these trends and the reduction of material consumption observed in those countries, that might have important policy implications. The international development institutions may want to consider mainstreaming resource efficiency into their development assistance programs.

[COVID-19 shock offers a historic opportunity for a green and just transition](#)

Anna Bjerde, April 21, 2021



The COVID-19 crisis has caused enormous loss of human life and triggered economic devastation of unprecedented proportions. However, in responding to the crisis, we have an opportunity to build back in a way that can tackle the mounting threat of climate change and environmental degradation. Ambitious initiatives towards a green recovery are underway across Europe and Central Asia region.



[Moving from ambition to action toward a greener financial system](#)

Jean Pesme, June 2, 2021

Reaching net-zero emissions and other climate-related and environmental goals will require significant investments to enable decarbonization and innovation across all sectors of the economy. The recent World Bank publication the [Toolkits for Policymakers to Green the Financial System](#) provides a menu of options that authorities could consider to scale-up green investments, stimulate local green finance markets, and enhance climate-related and environmental risk management.

CALENDAR OF EVENTS



July 1, 2021 || 10:30AM EDT

ECA Talk "[Building a Greener Recovery: Implications for Emerging and Developing Economies](#)" featuring **Edward B. Barbier**, University Distinguished Professor in the Department of Economics (Colorado State University)



September 23, 2021 || 10:00AM EDT

ECA Talk "[Rising Corporate Market Power and Competition Policy](#)" featuring **Dr. Ufuk Akçığit**, Arnold C. Harberger Professor of Economics (University of Chicago)

Check [ECA Lectures](#) and [ECA Talks](#) to learn more about our past and future events.

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