

Carbon Policies and Climate Financial Regulation

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If capital requirements are lowered for climate-related investments, regulated Development Finance Institutions can shift more financing towards the energy transition. In the paper, the authors consider the question of when this would be optimal. They find that even under efficient carbon policies, private parties underinvest in resilience, providing a rationale for capital requirements that boost such investments. With inefficient carbon policies, capital requirements should also be lowered for investments that reduce Greenhouse Gas (GHG) emissions.



Objectives and research questions

The urgency to tackle climate change is by now clear to most. In the 2015 Paris Accord, countries agreed to reduce GHG emissions. But they are too slow to act, and are failing to implement effective climate policies that would keep global warming to less than 1.5°C. As climate policies continue to be ineffective, hopes are increasingly pinned on financial institutions. **Can financial investors and markets be effective in channeling funds towards “green investments” in renewable energy and energy savings?**

Development Finance Institutions (DFIs) are on the forefront of this movement. They command about 10% of the world's investment flows, and are big players in long-term energy investments. But they are subject to stringent financial regulations, in particular concerning their equity capital. As public banks, they cannot raise more equity easily. So, they need to know whether it is advantageous to apply lower capital requirements when they lend to finance the energy transitions. The authors from Toulouse School of Economics decided to look for answers.



Methods

The paper builds a simulation model that is calibrated to the world's climate challenge. The model runs until 2080, and uses assumptions commonly used in economic climate models. It takes into account uncertainty about future technologies that underpin the energy transition, uncertainty about future energy demand, and uncertainty about climate risks.



Results

The main tool of climate policies should be a globally coordinated carbon price. But even when such efficient carbon policies are in place, there is a role for prudential financial regulation. This is because in very pessimistic climate scenarios, private actors anticipate public policy support, and hence make too little effort to enhance climate change resilience, themselves. Hence, regulators should start now to counteract this perverse effect. They should differentiate capital requirements and thus encourage investments in climate resilience.

The paper then looks at the role of financial regulators when climate policies in large parts of the world remain inefficient. In this case, the role of climate financial regulation is expanded. The authors show that regulators should then differentiate not only to encourage investments in resilience, but also green investments in energy transition that reduce carbon emissions.



Recommendations

The paper argues that bank capital requirements should consider the carbon content of investments. DFIs would be the financial institutions most affected by such a regulation change.

- This new policy should start now. National regulators should coordinate their policies.
- Even when they do, currently the impact of our recommendations on capital rules will be relatively modest. However, the optimal adjustments to capital requirements should be constantly updated.
- If climate risks continue to increase as they have done over the past 30 years, then the impact on regulatory standards will become substantial.

