

Book Review

- *The economics of climate change in Argentina*, edited by María Belfiori & Mariano Rabassa. Springer, 2021

Research on climate change suffers from a certain bias towards the Global North and English-speaking countries. Fewer publications are available on Latin America, at least to those who do not read Portuguese or Spanish, and the insightful contributions by colleagues who publish in these languages receive less attention in the global academic discourse than they deserve. *The economics of climate change in Argentina*, edited by María Belfiori (Torcuato Di Tella University, Buenos Aires) and Mariano Rabassa (Catholic University, Buenos Aires), is a step towards correcting this unfortunate situation. It comprises seven interesting studies by researchers – mainly economists – who are almost all based at Argentinean universities. The contributions begin with overviews of the impact of climate change and related mitigation efforts on the global scale, and then zoom into Argentina to provide in-depth analyses of important topics, ranging from agricultural productivity and extreme weather events to taxation as a means of decarbonising the economy. Most chapters are grounded in sophisticated econometrics, for example equilibrium model simulations and non-parametric models for panel data. They refer to quantitative data at a high level of aggregation, providing robust findings but also suffering from blind spots regarding the manifold effects of climate change on distinct economic players and social groups in Argentina. Readers who are not trained in quantitative research will benefit from the book because the explanations and interpretations provided by the authors are comprehensible and, in most cases, also plausible.

The first section of the book deals with the impact of climate change on the formal economy and Argentina's population as a whole. Chapter 1 explores the relationship of extreme temperatures and death rates, finding that higher temperatures increase especially the mortality of the elderly across Argentina. Lower temperatures have an even stronger effect. This may not be overly surprising for readers familiar with the vast literature on climate change and mortality rates in the Global North. Yet, we know much less about this phenomenon in developing countries like Argentina. Chapter 2 deals with yields of soybeans, which are Argentina's most important cash crop. These have, in the long run, declined

because of climate change. La Niña events and exceptionally high temperatures during the growing season reinforce this tendency. More natural fertilisation because of a higher share of carbon-dioxide in the atmosphere partly compensates though. Chapter 3 assesses the risk of floods in north-east Argentina, including the metropolitan area of Buenos Aires, where about 13 million of the country's 44.8 million inhabitants live. It shows a considerable surge of flooding due to heavy rain and the increased streamflow of the Paraná river since the early 1970s. Somewhat surprisingly, such events peaked for the entire area in the 1980s. In recent years, they have become more frequent in and around Buenos Aires only. This is reinforced by the expansion of agriculture and settlements, which leads to deforestation.

The second section contributes to our understanding of mitigation policies that focus on gross national emissions and their limits. Chapter 4 provides a multi-country analysis of economic growth and carbon-dioxide emissions. It shows that many high-income countries have managed to decouple growth from emissions, whereas the developing world has been much less successful in this regard. In the vast majority of upper middle-income countries, including Argentina, emissions are still on the rise but not as much as economic growth is. The predominant tendency for lower middle-income countries is an increase of emissions greater than economic output. Unfortunately, such calculations do not take into consideration that emissions by middle-income countries often result from the production of goods exported to high-income countries and consumed there. The impact of a carbon tax and tariffs to discourage environment-unfriendly trade is assessed in Chapter 5. Such measures appear to be particularly challenging for Argentina – and other countries from the Global South alike – because of constraints that result from capital volatility, fiscal imbalances, income inequality and unemployment, meaning problems that are less pronounced in the Global North. Chapter 6 also discusses policy options. It questions the sensibility of subsidies for renewable energies and – in contradiction to the previous chapter – makes a case for taxing carbon-dioxide emissions.

Chapter 7 stands somewhat apart from the rest of the book, as it does not focus on Argentina. Instead, the author suggests that climate change and worldwide population growth provide an opportunity for Latin America to supply other continents with much needed foodstuff, considering the availability of land and water in Latin America. Not all chapters reach the same quality. The line of reasoning in Chapter 7 is not convincing, to put it mildly. Chapter 6 is sketchy. It presents numerous equations, but there is no data. None of the equations is applied. The odd argument against subsidising renewable energies is that doing so induces a ‘green paradox’, meaning that companies involved in fossil fuels are going to extract much more of them because they will worry about being left with stranded assets. Measures to prevent such corporate strategies are not discussed. One may also wonder whether renewable energies would have ever become competitive – and, thus, a viable alternative to fossil fuels – if there had not been initial subsidies.

The editors should have pointed out in the preface that climate change is not an overly important political topic in Argentina. In addition to the Covid-19 pandemic, the country struggles with economic stagnation, an unsustainable and increasing public debt, and one of the highest inflation rates worldwide. Key policies of the current government and its predecessor have undermined climate change mitigation, most importantly through tremendous subsidies for fossil fuels consumption and the exploitation of unconventional hydrocarbon deposits. None of this is mentioned. It is unfortunate that there is almost no differentiation between social groups and sectors of the Argentinean economy. For instance, higher death rates associated with heat waves affect those who cannot afford air conditioning. Floods hit informal settlements, not upper-class districts. People who depend on subsistence farming cannot mediate climate change as effectively as transnational agribusiness can. Considering these gaps, the book would have benefited a lot from contributions by human geographers, political scientists and sociologists – academic disciplines that have much to say on the economics of climate change, especially regarding the blind spots that tend to mark econometric analyses.

The last lines should not discourage engagement with *The economics of climate change in Argentina*. The book provides valuable insights and demonstrates that convincing findings on the Global South can be made with quantitative methodologies, although data on developing countries is often difficult to access, incomplete and unreliable. Social scientists trained in qualitative research will be motivated to use these findings as a starting point and close the gaps of knowledge left open by the volume.

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