


Chapter 11

Institutional Factors and Green Economic Growth in China: Traversing the Path of Sustainability

Rochna Arora

 <http://orcid.org/0000-0002-2399-2538>

Amity University, Noida, India

Baljit Kaur

 <http://orcid.org/0000-0002-3606-8053>

Guru Nanak Dev University, India

ABSTRACT

The work tries to investigate the role of institutions for achieving green economic growth for the Chinese economy by considering the period from 1996- 2021. Besides institutional factors, foreign direct investment, renewable energy consumption, and expenditure on research and development also are considered. The results from the Bounds test show a high degree of long-term relationship. The research investigates the overall impact of governance on green growth and the individual impact of each of the governance indicators. For institutional quality, a positive impact on green economic growth is observed. Within institutional quality it is seen that barring rule of law and control of corruption, all other variables show a positive impact on our dependent variable. With respect to Foreign direct investment it is seen that the impact is negative which means the Pollution haven hypothesis is upheld for Chinese economy. For renewable energy consumption and expenditure incurred on research and development the impact yet again is positive.

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1 INTRODUCTION

The world is witnessing trailblazing revolutions in the form of artificial intelligence, the internet of things (IoT), and Blockchain technology, among many others but what remains old and still relevant is the environment within which the world is shaping their own growth trajectories. The environment, the emissions, the climate change still is placed at the central stage that attracts major attention. Among all the threats that the world faces, global warming and climate change still loom badly in the 21st century. Different intergovernmental agreements have shaped the global landscape but all with very little success. What inroads the success of these is the institutional and governance quality of the countries that are party to the movement. Within the institutions, there are legal, political, and economic factors that can help cut down the emissions of carbon dioxide (Sarkodie and Adams 2018). With a stringent institutional environment being put in place, the path to sustainability will be much easier and more gradual (Ibrahim and Law 2016). According to Greenidge *et al.*, (2016) political stability, corruption, rule of law are effective pillars of governance. A stringent institutional set up can provide double benefit firstly to the domestic economy and as well as generate a positive spillover to neighbouring country via a spatial effect. The earlier works have tried to assess the correlation between institutional quality and level of carbon emissions (Galinato and Galinato, 2012; Purcel, 2019; Cole, 2007; Chen *et al.*, 2018 and Hassan *et al.*, 2020). The research hitherto has not talked about how institutional quality can affect green economic growth. The only paper to address the same was Tawiah et al (2021) wherein the authors tried to look at the major determinants of green growth for both developed as well as developing countries. As China looks to strike a balance between long-term development and environmental sustainability, green economic growth has emerged as a key governmental goal. The majority of research on China that has already been done looks at green growth through the prisms of sectoral transitions, energy structure, technical innovation, and environmental regulation. Institutions are frequently treated as background circumstances rather than as active drivers.

The contribution of the chapter is meaningful. This work is certainly an innovative contribution by studying the role of institutional quality for green economic growth. Majority or rather all the earlier works have investigated the causes of increased carbon emissions at large. Secondly, the present work is first to be based on Chinese economy while the same has been done for India, Romania (single country cases) and Organisation for Economic Co-operation and Development (OECD) and set of developed as well as developing countries. Lastly, we have adopted ARDL methodology which distinguishes between short run and long run effects unlike the other works that work on estimating only long run coefficients. This chapter's contribution is to empirically show how various aspects of institutional quality produce diverse

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