Chapter 6

Economic Growth and Environmental Impacts of Foreign Direct Investment in Emerging Market Economies

Adem Gök
Kırklareli University, Turkey

ABSTRACT

The chapter investigates the role of FDI on growth, the role of FDI on environmental quality, and the role of environmental quality on FDI in 23 emerging market economies over the period of 1993-2014 by panel VAR analysis. It observes that FDI contributes to economic growth and environmental degradation in emerging market economies. In addition, environmental degradation attracts FDI inflows into host emerging market economies. The results support pollution haven hypothesis and contradict pollution halo hypothesis.

INTRODUCTION

Foreign direct investment (FDI) is an integral part of an open and effective international economic system (OECD, 2002). Emerging market economies have removed many restrictions on financial flows in and out of their countries so that the greater mobility of capital, coupled with extensive privatization and greater globalization in production, has resulted in increase in FDI flows since 1990s (Mabey & McNally, 1999). Also, environmental degradation has accelerated in the forms of greenhouse gas emissions, deforestation and loss of biodiversity since 1990s, which has been driven by increased economic activity, of which FDI has become an increasingly significant contributor (Mabey & McNally, 1999). FDI can fuel economic growth that overwhelms host country regulatory capacity, resulting in inefficient and irreversible environmental destruction (Mabey & McNally, 1999). Hence, it is critical to understand the effects of FDI to identify suitable policy responses.

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We will analyze whether the economic growth produced by FDI are fueled at the expense of environmental degradation or not. In order to analyze the effect of FDI on both growth and environmental quality simultaneously in 23 emerging market economies, the study employs panel VAR methodology over the period of 1993-2014. The analysis also allows testing pollution heaven hypothesis for emerging market economies. Hence, three relationships will be examined among FDI, environmental quality and growth. First, is the effect of FDI on growth; second, the effect of FDI on environment and last, the effect of environmental quality on FDI.

THE EFFECT OF FDI ON GROWTH

The main benefit of FDI is that it is more conducive to long-run growth than other forms of capital inflows based on the following facts (Walsh and Yu, 2010). FDI is a major source of technology and knowledge. FDI assists human capital formation, contributes to international trade integration and helps to create a more competitive business environment (OECD, 2002). FDI enables knowledge and technology spillover from foreign firms to domestic firms.

There is no universal agreement in the literature about the role of FDI on growth. While, most of the empiricists have found positive significant effect of FDI on growth, others found negative significant or insignificant effect. A brief literature for the effect of FDI on growth is as follows.

Bos et al. (1974) analyzed the effect of US FDI on host countries’ growth. They found a negative effect of FDI on growth of host countries based on the finding that the profit outflows back to the US home base exceeded the level of new investment in host countries for the 1965-1969 period. By using 1960 cross-section data for 78 developing countries, Blomström et al. (1994) found that FDI is growth enhancing only if the country is above a certain threshold level of development. Using cross-section data for 46 developing countries, Balasubramanyam et al. (1996) found that FDI as an instrument of international technology transfer has stronger effects on economic growth than domestic investment. In a cross-country analysis of 69 developing countries, Borensztein et al. (1998) found that FDI has positive effect on growth only if the level of education in a host country is higher than a given threshold. In an industrial level panel data analysis of US MNCs in four European countries, Barrell and Pain (1999) concluded that FDI may have positive significant effect on the growth performance of host country if there are transfers of technology and knowledge through FDI. By using data for 11 economies in East Asia and Latin America, Zhang (2001) found that FDI tends to promote economic growth when host countries adopt liberalized trade regime, improve human capital, encourage export-oriented FDI and maintain macroeconomic stability. Reisen and Soto (2001) concluded that developing countries should encourage foreign direct investment and portfolio equity inflows to stimulate long-term growth in a panel data analysis covering 44 countries over the 1986-1997. In a panel GMM analysis of 72 countries over the 1960-1995 periods, Carkovic and Levine (2002) could not find a statistically significant relationship between FDI and host country growth. In a panel data analysis of 18 Latin American countries for the 1970-1999 period, Bengoa and Sanchez-Robles (2003) found that FDI is positively correlated with growth. They concluded that the host country requires adequate human capital, economic stability and liberalized market for growth enhancing FDI. Using cross-country data between 1975 and 1995, Alfaro et al. (2004) concluded that FDI promotes economic growth only if the host country has sufficiently developed financial market. Durham (2004) could not find a significant direct relationship between FDI and economic growth in an analysis of 80 countries for the 1979-1998 period. In a Bayesian panel data...