Can Growth of a Trading Partner Harm a Country?

Kwok Tong Soo  
Lancaster University

Abstract

Can growth of a trading partner harm a country? This paper seeks to answer this question through the use of an eclectic trade model which is similar in flavour to Markusen (1986). This paper makes two contributions. First, it develops a simple and tractable model of international trade based on a combination of imperfect competition, comparative advantage, and identical but non-homothetic preferences in a three country framework. Second, it uses this framework to consider the possibility of losses from partner-country growth in a free-trading environment. We find that the presence of nonhomothetic preferences in particular, leads to a home bias in consumption which dampens any negative welfare effects when a country's trading partners grow.

- JEL classification: F12, F14
- Keywords: International trade, Three countries, Non-homothetic preferences

I. Introduction

Since the early 1990s, China and India have emerged as the fastest-growing economies in the world. Their rapid growth has inspired much debate and speculation in the media. For example, analysts at Goldman Sachs (Wilson and Purushothaman (2003)) predict that China, the US and India will be the three largest economies in the world by 2050. This growth in China and India has been fueled by an outward-orientated economic policy, which has seen export growth in both countries of over 10 percent per year since the 1980s.
This rapid growth has led to fears especially in the US, that China and India may threaten the livelihood of the people in the developed countries. This sense of a threat is compounded by recent policy incidents, for example the US tariff on steel imports in 2002 and the EU’s quota restriction on textile imports in 2005. These fears were given academic support in Samuelson’s (2004) Journal of Economic Perspectives paper, as well as in an earlier Journal of Economic Literature paper (Samuelson (2001)), which argued that in a simple Ricardian model of trade based on technological differences across countries, the US may lose from economic growth in China if China becomes more similar to the US in terms of its comparative advantage. That a country can be made worse off by changes that occur in its trading partner(s) poses a conundrum, since it is demonstrably true in the context of the model that Samuelson (2004) sets out, yet at the same time appears to fly in the face of trade economists’ gains from trade result.

It should be stressed that the result in Samuelson (2004) that the US may lose from growth in China is merely one of several possibilities; Panagariya (2004) has pointed out that much earlier work by Johnson (1954, 1955) had shown that economic growth in a country may lead to lower welfare levels for its trading partner(s). Also, recent work by Jones and Ruffin (2007) using a similar framework to Samuelson (2004) shows that technological transfer from the US to less developed countries in its comparative advantage industries may lead to gains to the US rather than losses. Samuelson’s (2004) and Jones and Ruffin’s (2007) results may be thought of as reverse immiserising growth of the Bhagwati (1958) type, since in this case growth in the trading partner may harm or benefit the home country, depending on its impact on the terms of trade.

In an extended discussion section, Samuelson (2004) argues that the insight from his simple model can be generalised to richer models. This paper sets out to perform this generalisation. We develop a three-country model based on increasing returns to scale at the level of the firm and monopolistic competition, combined with differences in relative factor endowments and technology across countries, and non-homothetic preferences. In the interest of keeping the model as simple as possible, we impose strong assumptions on the technology side along the lines of Krugman (1981), and we adopt the simplest possible, quasi-linear utility function. The underlying monopolistic competition model is that of Krugman (1980), based on the Dixit-Stiglitz (1977) framework.

In addition to considering Samuelson’s result in a more general framework, this paper also differs from the eclectic approach of Markusen (1986). Our setup is