

5. CONCLUSION

As noted by Tybout (1998), imported capital and intermediate goods may be the most important channel through which trade diffuses technology. Using the stochastic frontier methodology and applying the method by Battese and Coelli (1995), this article provides the first empirical evidence of the importance of these channels. As the theoretical model in Section 2 implies, FDI and imported capital goods are important channels for improving efficiency. Because of the externalities in foreign direct investment, knowledge diffused through this channel is more general (disembodied) than that from imported capital goods (embodied). Such foreign technology transfer has important policy implications. In fact, since imported capital goods create externalities, government intervention is justified. Governments need to facilitate the process of technology transfer by encouraging the establishment of the necessary infrastructure and providing incentives to support the development of domestic innovative capabilities. For countries at the early stage of industrialisation, it will be more effective and economically more convenient to import foreign technologies rather than developing them locally. Another important policy implication of the results in this article is that the infant-industry argument seems invalid: with respect to efficiency, protectionism is harmful. Policies promoting free trade and importing foreign capital goods will help developing countries to increase productivity growth and to close the gap with the technology frontier.