

Essays on International Trade, Foreign Direct Investment and Technology Diffusion

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Abstract

The world has become even more globalized during the last decades: data from the World Bank shows that world trade has increased around 6% per year on average over the last two decades, while the annual increase of the stock of foreign direct investment (FDI) has been of 13% on average in the 1990's and 2000's (according to UNCTAD data). One important factor that has been partly responsible for the globalization of countries is technology. Conversely, increasing globalization also fosters technology adoption and transfer (i.e. through imports of machinery and software). Another factor that affects globalization is the shared customary values and beliefs embodied in the movement of people across borders, i.e. the social capital that emerges as migrants congregate in cultural centers related to their home country.

The aim of this thesis is to analyze different facets of globalization and to examine the role of technology in the two first essays, while the third one is related to cultural issues. The first essay analyzes the differential effects of the quality and quantity of the digital bandwidth (mainly of the Internet connections) on international trade. Results suggest that the number of subscriptions is not the only important element of Information and Communication Technologies (ICTs) in order to increase exports, but that the quality of these subscriptions also matters (especially for developing countries). The second essay relates to the development of additive manufacturing, commonly known as 3D printing, and its potential effects on international trade and FDI. A standard model with firm-specific heterogeneity predicts that 3D printing FDI will first take place in locations subject to high transport costs and high domestic demand. It will later replace traditional FDI and in further stages, with wider adoption, countries will just print products locally without need for international trade (or FDI). Empirical and suggestive evidence supports the predictions of the model. The final essay analyzes the importance of Spanish cultural associations abroad as a way to diminish information asymmetries and contract incompleteness among countries. The study shows that the amount of Spanish associations in different countries are correlated with higher Spanish FDI in these nations (and of these nations in Spain as well), while there is no evidence for such correlation in terms of international trade.