## Geographic Barriers and Comparative Advantage in International Trade: Empirical Analysis<sup>\*</sup>

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Abstract. We estimate Eaton and Kortum (Econometrica, 2002)'s model using bilateral trade in manufactures for a cross-section of 16 countries in 2005. The parameters correspond to: (i) each country's state of technology, (ii) the heterogeneity of technology, and (iii) geographic barriers. We find that relatively cheap foreign sources are usually close to importing countries. We also find that the price index increases the most when the all of manufacturing commodities arrive in the developed countries. Our sample shows that the most competitive countries are Japan and the United States among 16 countries, and China is almost as competitive as those two countries. The larger countries seem to be more competitive. The distance plays a major role to reduce trade volume across countries. FTA helps trade between partner countries, but its impact is not dramatic. The most open countries are China, US and Singapore in our sample. We also find that Japan has the highest absolute advantage in terms of technology, and Chinese absolute advantage is one of the lowest while its competiveness is one of the highest. Lastly, we find that the distance increases barriers the most. Exporting to China and US costs the least and exporting to Cambodia and India costs highest.

Key Words: Trade, gravity, technology, geography, bilateral. JEL Classification Numbers: F10, F14.

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