LINGUA FRANCA: How shared languages and better education boost world trade

Shared languages make trade links between countries even stronger when one of the partners is not using their mother tongue. That is the central finding of research by Enrique Martínez-García and colleagues, to be presented at the annual congress of the European Economic Association in Mannheim in August 2015. Their study also finds that language barriers to trade are less severe among countries whose populations are more educated and literate.

There are close to 7,000 documented native languages around the world, but over time only a few of these – such as English – have become shared trading languages. The new study looks at trade links based on which languages either partner speaks and whether or not they use their mother tongue. It does this by using a database of the languages spoken in Spain, Brazil, Japan and Papua New Guinea, where multilingualism is more important when fewer other countries share the main language.

The researchers find that while trade links are stronger when both sides share a language (such as Spain trading with other Spanish-speaking countries), they can be even stronger when that language is non-native for one of the partners (such as Japanese business people using English). As immigration causes more and more languages to spread across the world, this effect becomes stronger and more two-way links between countries develop, promoting trade. The authors add:

‘We find that the roles of the different channels of communication evolve as countries attain higher levels of education and development.’

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There is growing recognition that language affects bilateral trade through multiple channels, as most gravity trade models routinely include a language variable. The literature has emphasised the direct communication channel based on a common native (or official) language or based on more gradient measures of linguistic proximity across different native languages (for example, relying on their phonological or lexical similarity).

The existing evidence shows statistically significant and positive effects on bilateral trade of sharing a common or similar native language. Yet the interpretation of these findings on the role that communication plays in facilitating trade remains incomplete. The literature simply fails to account for the fact that there are close to 7,000 documented native languages around the world (according to the latest report of Ethnologue), but it is estimated that at least half of the world’s population, if not more, is bilingual/multilingual (Grosjean, 2010).

In other words, at least one in two people have the ability to communicate at a functional level in two or more languages including languages that are not their mother tongue. Hence, considering only the role of native languages in communication and trade misses the extent of multilingualism and how this opens up indirect communication channels through non-native (spoken) languages.

Melitz (2008) and Melitz and Toubal (2014) consider some aspects of communication through non-native languages – distinguishing between native and spoken languages,
and investigating the emergence of trading languages based on the handful of most widely spoken languages (with English being the most prominent global trading language).

This paper builds on these insights and is the first to quantify the trade effects of indirect communication through non-native languages separately from the effects of native languages. It also provides the first comprehensive evaluation of those effects taking into account the general equilibrium impact as well (Head and Mayer, 2015).

In order to do so, the authors construct a novel database by number of speakers that includes official languages, other indigenous native languages spoken in the country (by at least 4% of the population), immigrant languages (languages that are spoken by immigrant groups) and second languages (that are not the native tongues of the speakers but for which they have achieved some degree of communicative ability). The study also includes other related measures such as phonological linguistic proximity, linguistic diversity and literacy.

The findings suggest that the impact of indirect communication through a non-native language is potentially larger than that of a shared native (or official) language. Accounting for the effects of a shared native language, having the possibility of communicating in another language that is non-native for one of the trading partners (a second language or an immigrant language) is greatly beneficial in fostering bilateral trade.

These findings are consistent with ongoing research on the emergence of global/regional trading languages (lingua franca) suggesting that this may facilitate communication and help reduce the language barriers to trade. It indicates that immigration, as proxied by the presence of immigrant languages, can cultivate closer bilateral trade ties too.

These novel results also indicate that the effects of communication are nonetheless non-linear – in particular, the positive contribution of direct and indirect communication to facilitating trade is mitigated by the literacy level of the trading partners. In other words, language barriers are less severe among countries whose populations are more educated and literate. The study finds that the roles of the different channels of communication evolve as countries attain higher levels of education and development.

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Speaking of Trade: Quantifying the Contribution of Multilingualism to Overcome the Language Barriers to Trade
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