

## **ETHNIC NETWORKS, INFORMATION, AND INTERNATIONAL TRADE: REVISITING THE EVIDENCE**

Gabriel J. Felbermayr, Benjamin Jung & Farid Toubal

### **NON-TECHNICAL SUMMARY**

Deregulation and technological progress have decreased trade costs. There are many empirical studies dedicated to the analysis of the importance of these changes. In particular, studies of the border effect have shown that informal barriers are still important. According to Anderson and van Wincoop (2004), informal barriers altogether explain a large share of trade costs. Recent empirical works show that migration contributes to decrease informal trade barriers between countries and thus enhances their bilateral trade.

In an influential paper, Rauch and Trindade (2002) – henceforth R&T – use an empirical trade flow model to show that the network formed by the overseas Chinese population has a major trade creating effect. Quantitatively, they find that “for trade between countries with ethnic Chinese population shares at the levels of prevailing in Southeast Asia, the smallest estimated average increase in bilateral trade in differentiated products attributable to ethnic Chinese networks is nearly 60%” (p. 116). They argue that this effect is due to the reduced information costs and improved contracting conditions that networks may bring about, this is the trade cost channel or network effect.

As Combes et al. (2005) point out, ethnic networks may affect bilateral trade not only through their effect in trade costs (information and contracting costs), but also through preferences: members of ethnic minorities abroad may derive higher utility from goods imported from

countries that host their ethnic majority. It is therefore difficult to clearly disentangle the trade cost from the preference effect.

Separate identification, however, would be welcome, since trade-cost savings from networks free up resources and therefore represent welfare-improving efficiency improvements. The preference channel is not associated to such efficiency gains. The existence of a measurable and sizable trade-cost effect would be another – hitherto neglected – channel through which international migration leads to an improved allocation of resources worldwide.

The overall contribution of this paper is to revisit the findings of R&T. More precisely, we extend the literature in two main ways. First, we propose a theory-grounded gravity framework for the estimation of the network effects. This allows to discuss the identification of the trade-cost channel of networks. We argue that, excluding the links of ethnic minorities with the ethnic majority country, one may minimize the preference effect and come closer to the pure trade cost effect. Besides the identification issue, we use state-of-the-art econometric techniques to the data of R&T. We show that the large trade-creating effect of 60% estimated by R&T is probably two to four times too large. Most of the overestimation comes from the omission of the multilateral resistance terms; the preference channel seems to be less important.

The second part of our contribution is to extend the analysis beyond the Chinese network studied by R&T. Using data from the World Bank for the year of 2000, we proxy the networks of some ethnic group  $k$  by the stock of individuals born in  $k$  but residing in some foreign country  $i$  or  $j$ . This gives us a more narrow definition of ethnic networks than the one used by R&T, because it excludes descendants of individuals who have migrated long ago or whose parents have always lived as ethnic minorities in those foreign countries. Moreover, the World Bank data allow to check for the existence of other ethnic (or better: migrant) networks. Besides the Chinese network, we document the existence of a Turkish, a Mexican, or a Pakistani network, to name only a few. Interestingly, in terms of trade-creating potential, the Chinese network is by far not the most important one. We also find substantial heterogeneity in the trade-creating potential of different networks which we can partly explain by characteristics of the migrants' countries of origin. For example, when the share of high-skilled individuals in the source country is larger, or the population less strongly ethnically fragmented, the network effects are smaller.

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