http://dx.doi.org/10.1016/j.worlddev.2013.12.013

# Out of Sight, Not Out of Mind. Education Networks and International Trade

### MARINA MURAT\*

University of Modena and Reggio Emilia, Italy

Summary. — University students typically develop between them long-lasting ties of friendship and trust, as well as an attachment to their university. If they are foreign students, they also form a bond to their country of study. This paper investigates the impact of university ties on the UK's trade with 167 countries during 1999–2009. I find robust evidence that education network ties boost the UK's bilateral trade flows. Specifically, the impact of networks is stronger on trade between the United Kingdom and countries with dissimilar institutions and culture, and particularly with post-communist economies. Results are robust to different econometric specifications and regressors.

© 2014 Elsevier Ltd. All rights reserved.

Key words — bilateral trade, international students, alumni, higher education, networks, UK

Good morning Exeterians! The company I work for [...] is hiring project managers for large scale mobile marketing campaigns. If anyone is interested feel free to send me an email. Exeter Alumni Greece, Facebook 20 September 2012.

"Doing business is about building relationships, it's people betting on people, so you still want to trust the people you're dealing with. A lot of trust is developed through friendship and professional networks like school alumni relations, business associations, and industry ties."

[(Saxenian, 2000)]

#### 1. INTRODUCTION

According to the UNESCO definition, international students are students that have left their country of origin and moved to another country for the purpose of study. International students numbered only 50,000 in 1950, but this figure had grown to 3.5 million by 2010. These rapidly growing numbers have recently attracted the attention of experts and scholars in various fields, including economists, with a consequent increase in the amount of studies on this topic. Despite this interest, however, important aspects of the phenomenon remain unexplored. Considering that many countries lack clear and specific policies regarding foreign students, this is not without consequence.

In the economic literature, international students are often seen as a potential inflow of human capital for the receiving country. From this perspective, the main aim of the investigation is that of shedding light on the determinants of students' choices on whether to study abroad, and if so, where to study, and the on consequences of a potential brain gain for the host country. Among the determinants, Beine, M. Noël, and Ragot L. (2012), Rosenzweigh (2006), Bessey (2007) and Perkins and Neumayer (2013) analyze the choices of students regarding the country of destination, the strategies of universities to attract foreign students, and the immigration policies of countries. Regarding the consequences, Chellaraj, Maskus, and Mattoo (2008) measures the impact of international students on growth and innovation in the host country; while Le (2010) and Park (2004) evidence that, under certain circumstances, international students may also generate benefits for the sending economy. Human capital flows are undoubtedly part of the phenomenon, but the stylized facts point to a wider and more composite picture.

International students move to foreign countries with the purpose of investing in a human capital that will be used later either in the labor market of the home economy, the country of their studies, or of some other country. Empirically, the great majority of foreign students leave the host country after the completion of studies: based on OECD destination countries, this figure was about 75% in 2009 (OECD, 2011). This implies that the potential human capital that is transferred from the students' home countries to the country of study is only a part of the overall phenomenon. The high fraction of students leaving the host countries after the completion of their studies would point to brain circulation rather than brain drain, but even this interpretation would miss some of the story.

The human capital these students invest in has the characteristic of being transnational, as is the social capital they accumulate while at university. Typically, students at university develop ties of friendship and trust, and an attachment to their university that may last long after the completion of studies, sometimes even for life. 1 Together with these friendship ties, international students tend also to develop a positive attitude to their country of study. Moreover, after the completion of their studies, some students become members of groups and associations that have the express aim of maintaining the links built at university through life and across borders. Alumni associations—a phenomenon typical of English-speaking countries—are generally managed from the university premises; their branches often extend abroad and in some cases reach many countries. Several informal international groups of alumni that are not officially managed by the university also exist and are very active (a quotation at the beginning

<sup>\*</sup>I thank the participants to the 2013 NORFACE Migration Conference and to the 2013 ETSG for useful discussions. I'm particularly indebted to Anzelika Zaiceva, Selma Terzimehic, and three anonymous referees for helpful suggestions. Final revision accepted: December 21, 2013.

of this paper provides an example). Considering all this, it seems reasonable to think that international students can substantially influence the interactions between the countries involved in their movements.

These interactions can be of a political, institutional, cultural, and economic nature. Starting from the assumption that foreign students have a positive attitude toward their country of study, Spilimbergo (2009) evidences the impact of foreign education on the political system of the students' home countries. By regarding economic interactions, the present paper takes into account the network ties built by students during their years at university. The base hypothesis of the theory of social networks is that social links between individuals tend to lower the fixed costs and the informal barriers that impede the regular functioning of markets. At the international level, social networks lower the invisible barriers that hinder trade between countries (Rauch, 2001). Education networks in particular are composed of skilled individuals possessing an international social capital and valuable knowledge of foreign markets. What is more, international students often belong to the well-off and elite classes of the origin countries. All this makes them privileged actors in international markets, likely to affect—be it directly or indirectly—economic exchanges between countries. The empirical literature on networks includes numerous studies (reviews are in Egger, von Ehrlich, & Nelson, 2012; Felbermayr & Toubal, 2012). Some studies find the impact of skilled migrants and business networks to be higher than that of unskilled ones (among them: Aleksynska & Peri, 2012; Docquier & Lodigiani, 2010; Felbermayr & Young, 2009; Flisi & Murat, 2011).

The hypothesis I test in this paper is that international students enrolled in UK universities positively and significantly influence the UK's bilateral trade flows with their home countries and, more generally, the countries where they live after graduation. To this end, I consider 167 partner economies during the period 1999–2010, and three proxies for university (or education) networks. The first of these is international students. Data on this variable are from UNESCO Statistics. The second is foreign students registered at UK universities during 1971–72. These former students are individuals in their fifties and early sixties during the database's time span (1999– 2010). These data were provided by the British Council. Third, I take into account the foreign branches of the alumni associations of UK universities, their members being former students living either in their home country or in another country. The data on associations have been purposely collected from the universities' websites and alumni offices for this investigation. As alumni groups are a direct proxy for international networking activity, they are expected to have strong effects on bilateral trade.

I find that the three variables of education networks—international students, former international students (hereafter referred to as *old networks*), and alumni associations—all have a positive and significant influence on bilateral trade, the strongest being that of the alumni associations. This leads to a second question: are the effects of education networks homogenous across groups of countries? As networks are supposed to smooth the impediments to trade determined by dissimilarities between countries, they should be more effective as the dissimilarity between the partner country and the United Kingdom increases. I take into account cultural and institutional factors of similarity already considered in the literature of international networks. Moreover, I consider the political and economic system of the partner country during the last century. Since the early 1990s, the flows of students

from post-communist to Western countries, especially the United States and United Kingdom, have grown rapidly; and since the same period, the political, legal, and market institutions in their home countries have experienced profound modifications. In this context, the role of international students should be especially significant; in general, they are expected to be favorable to the opening of the home economy to international trade, but they are expected to boost trade with the country of university studies in particular. Hence, I further measure the impact of education networks by taking into account the degree of similarity between the partner country and the United Kingdom, as well as the post-communist status of countries, and find evidence supporting the above hypotheses. In particular, the education networks linked to post-communist countries have a strong and positive impact on trade. The results prove to be robust to different model specifications and regressors.

To my knowledge, this is the first study on the impact of foreign students on international trade. The rest of the paper is structured as follows. Section 2 briefly presents the data and some descriptive statistics; Section 3 presents the model specification; Section 4 deals with the results and Section 5 concludes.

#### 2. DATA AND DESCRIPTIVE STATISTICS

About 300,000 international students were registered in UK universities every year during the period 1999–2010. After the United States, the United Kingdom is the world's second most popular destination of student flows. Students originate from a vast number of countries. This paper considers 167 foreign economies, and about 95% of the total stocks of international students in the United Kingdom. In Table 1, the average number of students of a partner country is 1734. During the period considered, the number of international students increased more than that of the overall students' population: the proportion of international students was 11% in 1999 and 15% in 2010 (UNCTAD).

Table 1 shows that the average number of foreign students registered during the early 1970s—thus falling under the old networks—is considerably smaller than that of students in the last decade. Also, the old networks are only partially related to the more recent cohorts of students. The main reason being that, except for a few cases, in the early 1970s, students did not originate from communist countries. In descending order, the countries most represented in UK universities during 1999–2010 were: China, Greece, India, Ireland, Germany, the United States, and France. During 1971-71 these were: Malaysia, France, the United States, Mauritius, Jamaica, Ireland, and Nigeria. The different composition of *old networks* and international students can be seen in the columns corresponding to noncommunist and post-communist countries of Table 1, where the average number of students from a postcommunist economy is much lower than that from a nonpost-communist country. Overall, the students from communist countries were 1% of the total number of foreign students in the United Kingdom during 1971-1972, while the proportion of students from these same countries (now post-communist) was 17% during 1999-2010.

During recent decades, the change in the composition of student inflows in the United Kingdom has been reinforced by the gradual enlargement of the European Union and the freer movements of people within this area. What is more, regarding students, the process of harmonization of third level

## Download English Version:

# https://daneshyari.com/en/article/991702

Download Persian Version:

https://daneshyari.com/article/991702

<u>Daneshyari.com</u>