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The economic returns to proficiency in English in China

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ABSTRACT

We examine economic returns to proficiency in English in China using two waves of the China Labor-Force Dynamics Survey (CLDS). We find positive earnings returns to proficiency in English. We find considerable heterogeneity in the economic returns to proficiency in English across age groups, coastal and inland provinces, levels of education and occupation. We find that the returns to proficiency in English are higher in the coastal region, higher for women and evidence of education-language and skill-language complementarity. We also see differences in the economic returns to English between urban and rural residents and between rural-urban migrants and urban locals. Our findings help to explain why the demand for learning English is so high in China, as well as having implications for the Chinese government at a time when it is re-evaluating the importance attached to learning English in the curriculum.

> "China is, or soon will be, the largest English-speaking nation in the world".
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> Jon Huntsman, former Utah Governor and US Ambassador to China, on July 26th 2011 in a speech at Dartmouth College, cited in Gregg (2011).
>
> "There are approximately 300–350 million people who have studied English in China. That's more than the entire population of the United States. …. However, there is a big difference between people who study English versus those who speak English. I teach 421 graduate students, all of whom have studied English for over ten years, many for as much as 15 years. Roughly 10% of them can speak the language".
>
> Blog poster, 2011.[1]

1. Introduction

Foreign language skills are a form of human capital that can be expected to result in higher earnings (Chiswick & Miller, 2015). There are several reasons why speaking a foreign language can result in higher earnings. Speaking a foreign language may be

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[1] https://answers.yahoo.com/question/index?qid=20110407195151AABgch2 (last accessed June 9, 2015).

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associated with skill-based productivity increases or signal unobserved ability to employers (Stohr, 2015). Knowledge of a second language has been shown to develop an individual's cognitive, and communicative, abilities and improve analytic and interpretive capacities (Stohr, 2015). Several studies suggest that students who are learning a second language have better academic results across the board (Olsen & Brown, 1992). Knowledge of a second language can also facilitate trade links that may be valued by the firm, in which the individual is employed (Melitz, 2008).

Specifically, proficiency in English can be expected to increase earnings in countries in which English is not the first language because English is increasingly coming to be regarded as a *lingua franca*. According to the British Council, by 2020 two billion people will be studying English (Clarke, 2012). By 2115, it is predicted that only about one tenth of today's 6000 languages will remain, making English even more dominant (McWhorter, 2015). As a consequence, in countries in which English is not the first language, it is fast becoming "a basic skill needed for the entire workforce, in the same way that literacy has been transformed in the last two centuries from an elite privilege into a basic requirement for informed citizenship" (Clarke, 2012). In many countries in which English has traditionally been taught as a foreign language at the secondary school level and above, it is now being taught at earlier grade levels as a standard part of the curricula (Butler, 2014). English proficiency is likely to be associated with higher earnings because, particularly in jobs that involve trade, inward and outward foreign investment and any engagement with individuals from other countries, it makes workers more productive. As a consequence, there is strong demand from employers in the labor market in many non-English speaking countries for workers who are proficient in English; yet, often, on the supply-side, there are relatively few potential employees who speak English well. This scarcity value contributes to higher wages for those who can communicate well in English.

Most studies have focused on returns to speaking a foreign language in developed countries. There are few such studies for developing countries (Azam, Chin, & Prakash, 2013; Di Paolo & Tansel, 2015; Duncan & Mavisakalyan, 2015; Toomet, 2011 are exceptions). Positive returns to speaking foreign languages may be expected to be higher in developing countries than developed countries, given lower levels of human capital in the former. Di Paolo and Tansel (2015) suggest that knowledge of a second language, along with formal schooling and the development of cognitive skills, may represent an important catalyst for economic development, particularly in a globalizing world.

In this paper we examine the economic returns to speaking English in China. To do so, we use two waves of the China Labor-Force Dynamics Survey (CLDS). Studying returns to English in China is interesting for several reasons. The first is the sheer number of people learning English in China. Based on the national 'Survey of the Language Situation in China', which is the most comprehensive survey of foreign languages in China, 390 million people have studied English in China (Wei & Su, 2012). There is considerable interest in what this means for China's role as a growing economic superpower (Gil, 2011). The second is that, in China, speaking English is increasingly regarded as a vehicle for professional advancement (Jin & Cheng, 2013). In China, speaking English is regarded as the "entrance ticket to the working world" (Pang, Zhou, & Fu, 2002, p. 203) and a "passport to better paid employment" (Johnson, 2009, p. 148). He (2010) states: "There is no doubt that people who have a good command of English are more competitive than their peers".

Third, there is considerable heterogeneity in the ability to speak English in China. As the quotes at the beginning of this paper highlight, while the number of people learning English is huge, it is likely that only a small fraction of those who are learning English can actually speak English well. Data from CLDS, and other nationally representative surveys that we report on later, suggest that mean English proficiency in China is very low. This suggests that there is likely to be considerable variation in the economic returns to speaking English between individuals. Fourth, English has become increasingly important as China opens up to the outside world. This has particularly been the case since China joined the World Trade Organisation in 2001. English is typically the medium of communication, not only when dealing with investors and trading partners from countries in which English is the first spoken language, but is also the *lingua franca* when doing business with those from countries in which Mandarin is not spoken (Pang et al., 2002).

Guo and Sun (2014) examined returns to English proficiency, measured by College English Test-Band 4 (CET-4), for college graduates in China. Their main finding was that a one standard deviation increase in CET-4 scores corresponds to a 3.3% difference in starting salaries for college graduates. Our focus differs from Guo and Sun (2014) in several ways. First, we employ a broader sample. Guo and Sun's (2014) analysis is restricted to returns to speaking English among college graduates. We examine returns to speaking English for a sample of the workforce as a whole, including both college and non-college educated employees. Second, related to the first point, unlike Guo and Sun (2014), we examine heterogeneity in the returns to English proficiency across different segments of the workforce. The first two points, together, mean that we provide a more comprehensive picture of the returns to English in China. Third, Guo and Sun (2014) employ the monthly starting salary of graduates. We use the hourly wage of participants at the time they were surveyed. A limitation of the measure employed by Guo and Sun (2014) is that income may be biased upwards because it does not account for hours worked. Fourth, Guo and Sun (2014) use a cross-sectional survey (the 2010 Chinese College Student Survey) and employ ordinary least squares (OLS). While they add various controls to address unobservable variables that could be affecting English proficiency and starting salary, they do not instrument for English proficiency. In contrast to Guo and Sun (2014), we employ both cross-sectional and panel data. In addition to pooled OLS, fixed effects (FE) and random effects (RE), when using cross-sectional data, to address endogeneity of English proficiency we use instrumental variables (IV) as well as including a complete set of controls.[2]

[2] We acknowledge that we have just two waves, which are only two years apart in time (2012, 2014), possibly diminishing the advantages of panel data. It will become possible to address this point in the future when further waves of CLDS are released.