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The effect of Confucius Institutes on US Exports to China: A state level analysis

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ABSTRACT

This paper uses the trade gravity model to examine the effects of Confucius Institutes (CIs) on the exports of US states to China in 2006–2010. Overall, we detect a 5–6% increase in state exports for each additional CI branch established in a given state. This provides strong robust evidence that CIs provide direct economic benefits to the United States.

1. Introduction

The Confucius Institute (CI) is a mega project initiated by Hanban (The Office of Chinese Language Council International) in 2004.[3] Its main purpose is to promote global knowledge of Chinese language and culture, and to deepen friendships between China and the rest of the world. The first CI was launched in 2004. Since then, the number of CIs has increased dramatically, and as of December 2011, there are a total of 358 CIs and 503 Confucius Classrooms (mostly satellite facilities related to the CIs) in 105 countries and regions around the world (Xu, 2012).

In a recent article, Lien, Oh, and Selmier (2012) demonstrated that, through enhanced understanding of Chinese language and culture, CIs also help promote trade and foreign direct investment between China and the host country of the CI. Because the effects of a CI tend to be localized through its partner organization, in this article, we are particularly interested in whether the cross-national trade and investment effects uncovered by Lien et al. (2012) would also prevail at the regional level within a country. To address this issue, we examine the trade effects of CIs residing in the same country, the United States.[4] The first Confucius Institute in the United States was established at University of Maryland in 2006. By December 2011, there are 75 Confucius Institutes in the United States.

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[3] Hanban, also known as Confucius Institute Headquarters, is a public institution affiliated with the Chinese Ministry of Education. In this paper, we will use Hanban and the Headquarters interchangeably.

[4] Due to the unavailability of foreign direct investment data at the state level, we only consider the export effect. While state imports recently became available, its limitations had not been explored. Lien et al. (2012) show CI has no effects on exports and foreign direct investment from China to OECD countries.

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The remainder of this paper is organized as follows. We first briefly describe the development of the CI programs. Next, we discuss the possible determinants for trade between a US state and China. Upon incorporating the number of CIs for every state as an additional explanatory variable, we apply various gravity model specifications to analyze the effects of CI. We then present the empirical results, followed by concluding remarks.

2. A brief introduction to the Confucius Institute Program[5]

China is not the first country to establish an international network of language and culture institutes. China's CIs are modeled after Germany's *Goethe-Institut*, France's *Alliance Française*, and the United Kingdom's British Council. However, Hanban introduced modifications to these models to fit its needs, important modifications are described below.[6]

A CI is owned by Hanban and hosted by a foreign partner organization. The establishment of a CI follows a standardized procedure. First, a foreign organization (usually a university) interested in hosting a CI submits an application to the Headquarters for approval. The proposal must demonstrate these three conditions: (i) there is a strong demand for Chinese language instruction in the university and local community; (ii) the potential host organization is willing and able to contribute to the establishment and growth of the CI both financially and physically; and (iii) a partner organization in China has been pre-selected by the potential host organization for this endeavor. After the proposal is submitted, it normally takes at least a year to obtain the final approval from the Headquarters (if approved). This is then followed by an agreement signed between the Headquarters and the host organization, and another agreement between the host organization and the Chinese partner. Thus, a CI will officially be functioning approximately 18 months after the submission of an application by the host institution.

The startup funding for a CI is provided by Hanban. Currently, the startup fund is set at US$150,000. Subsequent annual operation funding is provided by Hanban with one-to-one matching fund from the host organization. For 2010, the average operation fund of a CI is around US$500,000 (Xu, 2011).[7] For language class offerings, the teachers are usually dispatched from the Chinese partner organization whereas the facilities are provided by the host organization. The unique facilities-sharing arrangement with local institutions contributes to more efficient operations of the CIs compared to other models such as the British Council (Nakagawa, 2011; Starr, 2009).[8]

CIs enhance familiarity of the Chinese language and culture within local communities through their offerings of Chinese language and culture classes and the facilitation of Chinese culture programs, activities, and performances. Because language and cultural barriers are two major impediments to international trade and investment, it is expected that the presence of CIs across the US states would promote trade and development between China and the states hosting the CIs. In addition, CIs often serves as informational platforms on trade opportunities and relevant regulatory policies in China. For example, on March 1, 2012, the CI at Portland State University sponsored “China's Economic Forum: The Oregon-China Partnership.” The forum focused on the “development of economic, agricultural and travel resources in Southern Oregon and explored new models, possibilities, and opportunities for expanding mutual investment and trade between Oregon and China.” On June 4, 2012, Georgia State University's CI co-hosted China's Global Outlook Conference. The main theme is to explore “the strategies, challenges, and opportunities facing Chinese companies expanding into the US markets.”

3. Model specification and data description

Lien et al. (2012) employed gravity models to examine the effects of CIs on trade and foreign direct investment (FDI) from China to a foreign country. They found that CIs have a significant positive effect on trade and an even stronger effect on FDI for developing countries. All else equal, they estimate a 6.1–34.4% increase in trade and a 54.7–120.1% increase in FDI for each additional CI branch. The estimated effect for trade disappears and that for FDI is mildly significant for developed countries. In this article, we continue to rely upon the gravity model to analyze the effects of CIs on the trade volume between states in the United States and China.

The basic trade gravity equation includes trading partners' gross product, population, and physical distance from each other.[9] Since only one importing country (China) is considered, only the characteristics of the exporting states are included in our augmented trade gravity equation. We have panel data from 2006 to 2010. Since distance is non-time varying, it is excluded from the regressions, and its effects are subsumed in the state-specific fixed effects.

[5] This section is mostly drawn from Section 2 of Lien et al. (2012).

[6] Although the language and cultural awareness work of the CIs have broadly received positive reception worldwide, some have raised concerns over China's potential use of the CIs as projections of its soft power. See, for example, Ding and Saunders (2006) and Hsiao (2008) suggest that the Institutes were put in place specifically to enhance China's soft power.

[7] The rapid expansion of the CI network has raised budgetary concerns for Hanban. The long-term sustainability of the CIs was a major topic at the 5th Confucius Institute Forum in 2010 and the 6th Confucius Institute Forum in 2011.

[8] As of 2012, the British Council has offices in around 110 countries. Besides funding from the British government, these offices also need to generate their own revenues to meet their operational needs.

[9] Linnemann (1966) adds population to Tinbergen's (1962) basic gravity specification which includes trading partners' gross products and geographic distance.