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Corruption for sales[☆]

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ABSTRACT

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This paper investigates the impact of corruption on foreign affiliates' sales of German multinationals that differ in their level of experience in the foreign market. We exploit the panel dimension of a detailed firm-level dataset to show that more experienced firms are less likely to suffer from the costs related to corruption. Controlling for persistent and unobserved factors at the country and firm levels, we show that corruption reduces unambiguously the sales of new entering firms, while having no impact on the sales of incumbents. *Journal of Comparative Economics* **000** (2016) 1–11. University of Geneva, Switzerland; Ecole Normale Supérieure de Cachan, CEPII and CREST.

1. Introduction

An extensive literature in international economics seeks to identify the effects of corruption on the activity of multinational firms. The empirical literature has reached two opposite conclusions. On the one hand, corruption reduces multinational activities because of the additional cost it presents.[1] On the other hand, corruption may not necessarily discourage multinationals if these offer large payoffs to circumvent economic regulations and red tape, or to secure contracts.[2]

In this paper, we shed new light on the impact of corruption on foreign affiliates sales of multinational firms. We examine whether there is a difference in the impact of corruption on sales, by foreign affiliates, of new entrants vs. *incumbent* firms –

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[1] In the Enterprise Survey conducted by the World Bank, 36% of firms identify corruption as a major constraint worldwide. The share goes to 65% for the region of Middle East and Northern Africa.

[2] An example is Siemens, which "ended up paying $1.6 billion in 2008, in the largest fine for bribery in modern corporate history" (New York Times, 20 December 2008). The company spent an annual bribery budget of about $40 million to $50 million from 2002 to 2006 to corrupt government officials worldwide. It paid $5 million in bribes to win a mobile phone contract in Bangladesh, at least $40 million in bribes to win a $1 billion contract to produce national identity cards in Argentina, $20 million to senior government officials to build power plants in Israel, $16 million for urban rail lines in Venezuela, $14 million for medical equipment in China (⋯). The Siemens case is notable for its unique breadth, but it is not isolated. In numerous sectors and across recent years, there are various examples of multinational firms that have used bribes to secure contracts (See the Wal-Mart case in Mexico, New York Times, December 2012).

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or more experienced firms – in the foreign market. Various reasons explain the advantages that an experienced firm might have in corrupt countries (Rose-Ackerman, 1999, 2002). The firm can, for instance, gain political influence on the local government and alter the legal and regulatory environment. It can also avoid regulations in countries with weak institutions by organizing itself the local industry. The firm may also engage in briber to increase its output. Such activities are made possible thanks to a deep knowledge of the destination market, which is cultivated with time.

Our estimation sample tracks the sales of German multinationals by foreign affiliates from 1996 to 2006. This dataset allows us to control for a wide range of information at the levels of the firm, country and year. We use the time series and the geographic dimensions of the dataset to distinguish between firms that enter a country for the first time in a given year (new entrants), and firms that operating in the country since 1996. In our baseline cross-section estimations, we use an interaction term between the corruption variable and the incumbent status of the firm that allows the comparison between the foreign affiliates' sales of new entrants and incumbents. We use firm fixed effects to control for a broad set of unobserved firm attributes that explain the differences in the levels of foreign affiliate sales: the firm's productivity, ability to manage corruption, its corporate and managerial practices with respect to corruption, or its perception of corruption. We therefore identify the effect of corruption of foreign affiliates' sales by exploiting the within-firm variation across foreign markets. The use of firm fixed effects along with the interaction term allows us to compare the differential effect of corruption on foreign affiliates' sales of incumbents and new entrants respectively, across countries.

Our main finding is that corruption has an effect on foreign affiliates' sales of multinationals that varies according to their level of experience in the foreign market. This finding is robust to the introduction of the main driving forces of foreign affiliate sales listed in the literature, as well as to the inclusion of the foreign market experience of the firm.[3] We show that corruption reduces unambiguously the sales of new entering firms but it has no impact on the sales of German incumbents. These findings hold when we use the panel dimension of the dataset. We show, moreover, that corruption has a positive impact on the foreign sales of incumbent firms when we control for persistent and time-invariant unobserved country characteristics.

This paper contributes to the literature on the effect of corruption on multinational activities in several respects. A few papers have focused on the impact of corruption on foreign direct investment (FDI). Instead of measuring the activity of multinational firms by using foreign direct investment, we use the foreign affiliates' sales. A limitation of FDI data is that they are not only made up of equity, but also of debts from affiliated firms that inflate the value of the flows (Terrien, 2009). Measuring the real activities of foreign affiliates circumvents this issue.

The effect of corruption on multinational activities has been a topic of intense research interest. Beside the important contributions of Hines (1995) and Wei (2000a,b, 1998) many papers have found evidence that more corruption leads to less aggregate foreign direct investment (FDI) flows or stocks (Busse and Hefeker (2007); Egger and Winner (2005); Habib and Zurawicki (2001); Drabek and Payne (2002)) or to less foreign local affiliates' sales (Javorcik and Wei, 2009; Hakkala et al., 2008). Both papers provide interesting findings on foreign sales at the firm level. Javorcik and Wei (2009) show that corruption affects the structure of ownership by increasing the probability of joint-venture.[4] Hakkala et al. (2008) find an asymmetric effect of corruption concerning horizontal and vertical multinational activity. None of these papers addresses the effect of experience of the foreign market. Other papers have found that corruption encourages the foreign activities of multinational firms (Shleifer and Vishny, 1993; Kaufmann and Wei, 1999; Egger and Winner, 2005; Bjorvatn and Soreide, 2005; Wu, 2006; Barassi and Zhou, 2012). Using firm-level information on foreign sales and taking into account the foreign market experience of multinational firms allows us to reconcile this seemingly opposing evidence found in the prior literature.

This paper is related to another vein of research that investigates the relationship between corruption and competition.[5] An interesting paper by Campos et al. (2010) shows that corruption helps domestic firms to protect from the entry of new firms.[6] Other papers have examined the effect of corruption on firm's behavior. Using detailed data on the shipments that go through the ports of Durban and Maputo, Sequeira and Djankov (2014) show that firms adapt to different types of corruption by adjusting their transport strategies. Other papers have shown that corruption affects the performance of firms. Svensson (2003) documents that over 80 percent of Ugandan firms reported having to pay bribes. Fisman and Svensson (2007) show moreover that corruption has a deeper negative impact on Ugandan firms' growth than taxation.

The paper is also inspired from a broader line of recent research on the effect of institution on globalization at firm-level. This research, which focuses mostly on firm-level exports, suggests that weak foreign market institutions reduce the likelihood of export and firm-level trade (Söderlund and Tingvall (2014)). In a recent paper, Araujo et al. (2016) show that a firm's prior experience in the foreign market and the country's contractual environment increase initial foreign sales and

[3] We follow the extended gravity approach of Morales et al. (2015) and define foreign market experience as the number of similar foreign markets that the firm already serves. As in the studies of Albornoz et al. (2012) and Araujo et al. (2016), we therefore capture the importance of past experience in geographically close and culturally similar markets.

[4] In a similar vein, Kesternich and Schnitzer (2010) show that political risk in a broader sense affects the leverage and the ownership structure of the foreign affiliate.

[5] Starting with Johnson et al. (2002) and Shleifer and Vishny (1993), a vast literature investigates the role of competition on corruption (see for instance the studies of Tella and Ades (1999), Emerson (2006) and Alexeev and Song (2013)).

[6] Their findings rest on a very detailed survey of 98 Brazilian domestic firms in two sectors (consumer electronic sector and textile sector).

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