



# Foreign direct investment and industry response to organized crime: The Mexican case



Nathan J. Ashby <sup>a,\*</sup>, Miguel A. Ramos <sup>b</sup>

<sup>a</sup> Department of Economics and Finance, The University of Texas at El Paso, 500 West University Avenue, El Paso, TX 79968, USA

<sup>b</sup> Department of Marketing and Management, The University of Texas at El Paso, 500 West University Avenue, El Paso, TX 79968, USA

## ARTICLE INFO

### Article history:

Received 14 March 2012

Received in revised form 24 January 2013

Accepted 25 January 2013

Available online 10 February 2013

### JEL classification:

F2

L2

O5

### Keywords:

Organized crime

Foreign direct investment

Mexico

## ABSTRACT

Organized crime is a disincentive for investment and business activity. We use murders as a proxy for presence of regional organized crime and study the relation between direct foreign investment and organized crime for different industries in Mexico. Our contribution is the focus on sectoral differences. The data is for net foreign direct investment from 116 countries into the 32 Mexican states from 2004 to 2010. Imputing causality, we find that organized crime deters foreign investment in financial services, commerce, and agriculture, but not oil and mining sectors for which we find increased crime associated with increased investment. There is no effect of organized crime on foreign investment in manufacturing.

© 2013 Elsevier B.V. All rights reserved.

## 1. Introduction

“They don’t bother us. We don’t bother them,” (Francisco Uranga, Foxconn’s Chief Business Operation Officer for Latin America, *Bloomberg Business Week* 6/10/2010)

“Organized Crime Extorting Retailers” (*Milenio* 7/31/2011)

Criminal activity can be organized and unorganized crime. Organized crime is defined as activities related to the supply of illegal goods and services by criminal organizations (Schelling, 1971) by organizations that are characterized by durability, hierarchy, and diversification (Reuter, 1983). Criminal organizations also invest resources in activities that reduce the effectiveness of state deterrence, by using violence or the threat thereof (Fiorentini, 1995). The primary effect of organized crime is to increase the costs of doing business (Hallward-Driemeier and Stewart, 2004; Daniele and Marani, 2011). The potential adverse effects are through assessment of regional security risk (Kotabe, 2005), security budgets (Spich and Grosse, 2005; Czinkota et al., 2010), salary premia (*The Economist*, 2011a), extortion (Brock, 1998; Daniele and Marani, 2011), kidnapping of workers (Clegg and Gray, 2002), disruptions in supply chains (Barnes and Oloruntopa, 2005; Czinkota, 2005; Gliberman and Storer, 2009; Branzei and Abdelnour, 2010), and decreases in local demand (Greenbaum et al., 2007). Local demand may decline due to emigration, business relocation, and firm closures (Greenbaum et al., 2007).<sup>1</sup>

\* Corresponding author. Tel.: +1 915 747 7791; fax: +1 915 747 6282.

E-mail address: [njashby@utep.edu](mailto:njashby@utep.edu) (N.J. Ashby).

<sup>1</sup> On the costs of internationalization, see Hymer (1976), Zaheer (1995), Mezas (2002), and Miller and Parkhe (2002); on the impact of crime on the costs of doing business, see North (1990), Hallward-Driemeier and Stewart (2004), Peri (2004), North et al. (2009), and Daniele and Marani (2011); on information asymmetry faced by foreign investors, see Aharoni (1966), Bass et al. (1977), Mariotti and Piscitello (1995), and Kotabe (2005).

The hazards indicate a negative effect of organized crime on foreign investment. Empirical evidence, albeit scarce, supports this conclusion. Brock (1998) finds relatively higher FDI in regions of Russia where the level of crime is lower. Madrazo Rojas (2009) finds empirical evidence of a negative association between violent organized crime and foreign direct investment (FDI) in Mexican states. Daniele and Marani (2011) find support for a negative relationship between total regional crime and FDI in Italy.

The contribution of our study is to investigate industry response to organized crime using data from Mexico. We find diversity across industries, with organized crime deterring foreign investment in financial services, commerce, and agriculture but not oil and mining sectors for which we find increased crime associated with increased investment. There is no effect of organized crime on foreign investment in manufacturing.

## 2. Predictions

We predict a diverse association between organized crime and FDI across industries. Firms in resource-based as in oil extraction and mining industries are constrained in location, which is also the case but with more flexibility for agriculture (Ellison and Glaeser, 1999). Increases in crime should deter foreign investment but multinational companies (MNCs) in primary sectors characterized by high sunk costs and long investment horizons can engage in risk management on an ongoing basis (Oetzel et al., 2007). Evidence suggests that MNCs in old globalized extractive industries have accumulated significant experience in coping with difficult regional conditions, including violent conflict and crime (International Peace Academy, 2001; Bennett, 2002). Such experience offsets the negative effect of crime. Thus, we do not have a strong prediction regarding the direction of association between organized crime and investment in extractive industries or agriculture.

Firms in service industries need to be geographically present in the markets they serve. In these industries, large populations attract foreign investors (Nachum, 2000). However, criminal activity can lead to emigration (Cullen and Levitt, 1999), decreases in personal consumption (Mejia and Restrepo, 2010), and business relocations and closures (Greenbaum et al., 2007). Firms in the retail sector are more likely to be targets of criminal organizations through extortion (Daniele and Marani, 2011). Thus, we predict foreign direct investment in these industries to be reduced by organized crime.

The anticipated effect of organized crime on FDI in manufacturing is less clear. First, manufacturers can supply increasingly distant geographic markets as transportation costs have significantly declined (Glaeser and Kohlhase, 2004; Hummels, 2007), thereby decreasing reliance on nearby markets potentially affected by crime. Second, as they rely less on direct and constant interaction with consumers relative to service industries, manufacturers can more easily buffer themselves by adopting risk management practices such as the employment of sophisticated security personnel and systems (Spich and Grosse, 2005), and use of physical barriers. Third, anecdotal accounts suggest that relative to services, firms in manufacturing industries tend to carry less cash, decreasing the likelihood of becoming crime targets (The Economist, 2011b). Thus, a foreign manufacturer may be present in a high crime region but supply unaffected distant markets, doing so from a secured facility. We therefore do not have a strong prediction regarding the relationship between organized crime and foreign investment in manufacturing.

## 3. Methodology

### 3.1. Empirical setting

We investigate industry-specific FDI into 32 Mexican states from 116 countries between 2004 and 2010. Focusing on one host country avoids the need to control country-level sources of risk such as political hazards, which have been found to be associated with FDI (e.g. Delios and Henisz, 2003). Criminal activity in our setting is primarily due to competing organized criminal organizations (Stratfor, 2009, 2010, 2011; Molzahn et al., 2012).<sup>2</sup> The criminal activity shows meaningful regional variation. One of the most dangerous cities in the world has been Ciudad Juárez, in the Mexican northern state of Chihuahua. In 2006 there were 1,023 murders in the state of Chihuahua. The number decreased a little in 2007 to 901. However, in 2008 the number jumped to 2,591 (77 per 100,000 inhabitants) and rose in 2009 to 2,914 (86 per 100,000 inhabitants). Sinaloa, Durango, and Michoacán have experienced similar trends in violence in recent years (ICESI, 2011). During our sample period, criminal activity has been stable in others states, or has even decreased. Fig. 1 shows Mexican states with the highest increase in homicides and the Mexican states with the largest reduction in homicides during the past decade.

It is generally understood that violent crime is driven by disputes among the drug ‘cartels’<sup>3</sup> to control key markets and trafficking routes (Stratfor, 2009, 2010, 2011; Molzahn et al., 2012). Crime increased in some regions because organized groups have diversified from drug production and trafficking into extortion, kidnapping, and human trafficking (Stratfor, 2009, 2010, 2011; Radden Keefe, 2012).

Mexico is an important recipient of FDI, ranked 16th between 2004 and 2010 globally, behind Australia and Singapore and ahead of India and Saudi Arabia (World Bank Group, 2012). Foreign direct investment into Mexico has been lower in recent years, but the emerging economies of Brazil, Russia, India, and China have experienced similar reductions due to the recent global economic crisis. Despite this slight downward trend and continuing violence, FDI into the most violent state (Chihuahua) in 2010 rose to record levels (Secretaría de Economía, 2012).

<sup>2</sup> Some scholars (e.g. Schelling, 1967) have argued that organized criminal activity can lead to a decrease in violence through oligopolistic collusion. We find this not to be the case in our setting.

<sup>3</sup> This term often used to name such organizations is misleading, as there is little evidence of collusion to fix supply or prices (Molzahn et al., 2012; Radden Keefe, 2012).

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات