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EXPORTING TO INSECURE MARKETS: A FIRM-LEVEL ANALYSIS

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NON-TECHNICAL SUMMARY

Recent empirical analyses using firm-level export data have documented that only a relatively small proportion of manufacturing firms export. In most countries, the share of exporting firms varies between 14 and 20%. This evidence reveals the importance of formal and informal trade barriers and conforts managers' experience that often put forward their difficulties to develop arms-length transactions in international trade. It supports also recent trade models with heterogeneous firms (Melitz, 2003). These models consider that firms willing to export have to pay an additional fixed cost. Consequently, exporting is profitable only for firms that are competitive enough to earn a sufficiently large market share abroad.

Among the numerous hurdles creating frictions in international trade is insecurity in a broad sense. A large body of work already documents the role of insecurity and institutional quality on international trade. Most of these papers show that countries with better institutions trade more (see Anderson 2000, Anderson and Marcoullier 2002, Dollar and Kraay 2002, François and Manchin 2006, and Levchenko 2007…). In most of these studies, political risk and institutional failures are assimilated to an ad-valorem trade barrier. For instance, Anderson and Marcouiller (2002) assert that "predation by thieves or by corrupt officials generates a price markup equivalent to a hidden tax or tariff". And Blomberg and Hess (2006) estimate that the impact of terrorism and wars is equivalent to a 30% tariff.

Our purpose is slightly different. Indeed, considering seriously the impact of institutional failures in an heterogeneous firms trade model, we emphasizes a major difference between tariffs and insecurity. Our major point is that tariffs (and actually all formal trade barriers) affect simultaneously and homogeneously all potential exporting firms, whereas insecurity does not. Indeed, in an insecure foreign market, all exporting firms may be hurt by a wide range of negative and costly events that are potentially a reason to give up exporting. Insecurity affects all firms since all of them face the same risk. But ex-post, some of them are not hurt. In an insecure foreign market, some exporters may for instance loose their shipments because of hijacking, they may be forced to pay a bribe, or may be expropriated because of institutional failures. However this is never true for all exporting firms. Only a random subset of exporting firms is subject to predation while others are lucky and export without misfortune.

That makes a serious difference. We develop an original trade model with heterogeneous firms and insecurity in the export market. Insecurity introduces a micro level uncertainty on the amount of the export sunk cost. Unlucky firms thus have two possibilities: either pay the additional sunk cost and export, or give up exporting. Then, insecurity decreases bilateral exports by reducing the number of exporters. However, in contrast with the existing literature, a higher level of insecurity may dissuade unlucky productive firms from exporting, while some lucky unproductive ones may succeed. Our model thus proposes a theoretical explanation for one empirical failure of the recent literature in international trade with heterogeneous firms. This class of models suggests that all firms which can afford to export to a relatively distant and small market should always export also to more popular destinations. This strict hierarchy of export destinations is a feature of the model in Eaton, Kortum and Kramarz (2007), however they show that it is not observed in the data.

We derive two empirically estimable implications of insecurity for international trade. First, firm's productivity is a less important determinant of the decision to export in countries with a high level of insecurity, because the selection of firms into these exportmarkets with respect to their productivity is weakened. Second, the intensive margin of trade (i.e. the mean value of bilateral shipments) first increases and then decreases as insecurity becomes more severe. Both predictions are confronted to the data. We use individual French firm-level export data to more than 100 destinations, together with data provided by ICRG (International Country Risk Guide) as a proxy for insecurity. Results provide clear evidence in favor of the two above propositions.

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