



Does Access to Finance Facilitates the Firm's Ability to Export?

Experience from Asia-Pacific Countries





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#### Abstract

Financial development plays an important role in the structure of the trade balance and promoting economic development. Trade literature suggests that differences in economies' endowments of labour, land, physical capital and technology explain the dynamics and patterns of international trade flows. More recent literature argues that it is the heterogeneity in productivity of firms which mainly accounts for the decision and survival in the international markets. Given the growing importance of Global Value Chains and Regional Production Networks in the emerging economies, financial development is essential to support credit facilities for the traders and provide hassle free transactions. In this context, this study attempts to examine the impact of access to finance on firms' export decisions in the Asia-Pacific countries. In particular, we have studied whether financial development and institutional quality that support financial access promote international trade. The study found that access to finance plays a significant role in promoting firm's ability to export. Unlike institutional quality, financial development indicators positively interact with access to finance to promote firm's ability to export. The study also found that infrastructure bottlenecks negatively affect firms' export decisions.

**Keywords:** Financial development, Trade, Access to finance, Institutional quality, Trade costs

**JEL:** D22, F14, O16, O53

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#### 1. Introduction

For the past two decades, Asia-Pacific countries have shown significant improvements in trade performance. In particular, the contribution of trade in Global Value Chains (GVCs) and Regional Production Networks (RPNs) has reached 75 to 80 per cent despite the global financial crisis (ESCAP, 2015). Given global competitiveness, Asia-Pacific countries face two major challenges: on one hand, existing firms essentially require additional capital to move up the value chain. Since access to capital is limited, firms are held at low value-added stages of the supply chain and restricted from utilizing profitable opportunities. On the other hand, new firms entering the export market require additional investment, as a large part of this investment is sunk and upfront in nature.<sup>1</sup> Thus firms that have financial constraints would find it difficult to enter and remain sustainable in the export market. Several studies find that international trade is driven by financial development (see, for instance, Beck, 2003; Svaleryd and Vlachos, 2005; Manova, 2006; Becker and Greenberg, 2007; Manova, 2008). Some studies, however, find that the demand for a well-developed financial sector is higher in countries with industrial structures that heavily rely on external finance (see for instance Huang and Temple, 2005; Klein and Olivei, 2008; Baltagi et al., 2009; Do and Levchenko, 2007). In line with the recent and growing literature on the relationship between financial development and international trade, we attempt to examine how access to finance facilitates the firms' decisions on entering the export market in developing Asia-Pacific countries. Additionally, we will examine the role of financial development and institutional quality on firms' exporting decisions. We also examine the relative importance of access to finance with respect to trade costs.

The study predicts that a well-developed financial system, at a country level, would reduce information asymmetry and uncover untapped savings which would improve infrastructure development, and encourage a conducive business environment. At a firm level, it would also lower the cost of borrowing and improve access to external finance. Hence, addressing the role of financial development in international trade would enable the policy makers to formulate and adopt new policies for increasing industrial competitiveness in the international market, as well as improving job opportunities, thereby stimulating economic growth in a more equitable society.

The rest of the paper is organized as follows: Section 2 reviews the earlier studies related to the study area, Section 3 provides data source, methodology and variable description,

<sup>&</sup>lt;sup>1</sup> These upfront investment includes market search, development of distribution networks etc. and they are sunk as they are non-recoverable in nature.

Section 4 provides the empirical results and discussions, and Section 5 contains a summary and policy implications of our findings.

#### 2. Related literature

Given the importance of international trade in economic growth, studies have tried to understand the dynamics of international trade and sources of comparative advantage in trade. One branch of existing trade literature suggests that endowment of labour, land, physical capital, and technological difference across countries explains the dynamics of international trade flows. Another branch argues that it is the heterogeneity in productivity that mainly accounts for entry decisions and survival in the international market (Kletzer and Bardhan, 1987 and Baldwin, 1989). Using the Heckscher-Ohlin framework, Kletzer and Bardhan compared two international trade models with the same factor endowments. However, in one of the models they introduced external finance for working capital and showed that credit market restrictions determine the country's specialisation for the sector. For instance, countries with less credit market restrictions specialize in sectors that use more of external finance and the countries with higher levels of credit market restrictions specialize in sectors that do not require working capital or external finance. Therefore, they argued, financial development could lead to a comparative advantage in industries that rely on external finance and that in turn could explain the variance in trade structures across the countries. On the other hand, the Baldwin (1989) model was based on the risk-diversification function of a financial market consisting of two countries, two sectors, and one factor where the demand for one sector is subject to demand shocks and the other is not. He argued that the country with a financially developed market can diversify risk and thus specialize in producing a risky good with relatively lower risk premiums. Following Kletzer and Bardhan (1987), Beck (2002) investigated the relationship between financial development and international trade by building both a theoretical model and an empirical model to test his hypothesis. He found that countries with better developed financial systems have higher export share and trade balances in manufactured goods. Thus development in financial sectors enables technological advantages in the production of goods in manufacturing sectors.

Several empirical studies on the financial development and international trade link have emerged at both firm-levels and country or sectoral levels. Greenaway et al., 2007, Muuls, 2008, Berman and Hericourt, 2008, Bellone et al., 2010; Berman and He'ricourt, 2010; Amiti and Weinstein, 2011; Minetti and Zhu, 2011 are among those who focus on firm-level data.

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Financial development brings comparative advantage to firms through different sources. One prominent channel is reducing liquidity constraint. Financial development would be more beneficial to exporting firms, as they tend to face higher liquidity constraints and require more external finance. Financial sector development through reform would reduce the credit constraints, and in turn will sprout investment and so, all firms with productivity above a certain level become exporters (Melitz, 2003). Besides, weak and inefficient financial institutions increase liquidity constraints in domestic markets and prevent a subset of productive firms to enter the export market (Chaney, 2005). Using a dataset on export transactions at the firm level for the Belgian manufacturing sector, Muul (2008) investigated the effect of credit constraints on export behaviour. Study results suggested that firms with higher productivity levels and lower credit constraints are more likely to be exporting. Therefore, the theoretical model predicts that financial development will strengthen production and trade.

Interestingly, while examining differences in credit constraints faced by Chinese firms exclusively selling in domestic markets vis a vis firms operating in export markets, Feenstra et al., (2014) found that higher trade costs for exporters (measured in terms of time to export) places more financial constraints on exporters compared to domestic firms. Similarly, Greenaway et al., (2007) argued that the relationship between finance and firm export runs from export to finance rather than as claimed by other studies that it runs from finance to export.

There are also several studies that examined the role of financial development on export decisions. Using data for 5000 firms from nine developing countries, Berman and Hericourt (2010) found that financial development disproportionally increases the probability of exporting in more productive firms. Likewise, Jaud and Kukenova (2011) showed that agrifood products need more external finance to survive longer in export markets and are more dependent on the countries' financial development. Alvarez and Lopez (2014) examined

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