International Economics 140 (2014) 19–35

Contents lists available at ScienceDirect

International Economics

journal homepage: www.elsevier.com/locate/inteco

Financial constraints and export participation in India

Priya Nagaraj [1]

Cotsakos College of Business, William Paterson University, Department of Economics, Finance and Global Business,
1600 Valley Road, Wayne, NJ 07470, USA

ARTICLE INFO

Available online 25 July 2014

JEL classification:
D22
F14
G31
G32
L20

Keywords:
Export participation
Financial constraints

ABSTRACT

A firm making an entry decision into the export market faces various non-recoverable fixed costs. Financially constrained firms, unable to make this investment, cannot enter the export market. In this paper, I investigate this relation between financial constraints and the export market entry decision for manufacturing firms in India. Using multiple estimators, I find a strong correlation between the two. I find that firms entering the export market are financially healthier than non-exporting firms. I am also able to show that financial health is the cause and not an effect of exports. Further, the intensive margin of exports (increase in exports of continuing exporters) does not depend on the financial health of the firms. The extensive margin of exports (increase in exports due to new exporters) can be increased if financial constraints faced by firms are reduced. These results are important for the export promotion policies of a developing economy.

E-mail address: nagarajp1@wpunj.edu

[1] I would like to thank Sangeeta Pratap, Jonathan Conning, Michael Grossman and two anonymous referees for their invaluable inputs. I would also like to thank the Institute for Study in Industrial Development (ISID), New Delhi for their support with the data. This paper has greatly benefitted from the seminar participants at ISID, Graduate Center (CUNY), Hunter College (CUNY), 5th Annual Conference at ISI, New Delhi, and the Canadian Economic Association Annual Conference, 2010. I would also like to thank Nate Wright for his support with data cleaning and the invaluable support of Mr. Saket K. Sharma, RBI for his help with other data.

http://dx.doi.org/10.1016/j.inteco.2014.07.001

Please cite this article as: Nagaraj P. Financial constraints and export participation in India. International Economics (2014), http://dx.doi.org/10.1016/j.inteco.2014.07.001

1. Introduction

A firm entering the export market incurs costs for undertaking market research, market development, distribution channel development and other such activities. Many of these costs are non-recoverable fixed costs. A forward-looking manager would weigh these sunk costs incurred during market entry, against the future stream of income. Therefore, entering the export market becomes a question of which firms have the ability to undertake this investment. A financially constrained firm will not be able to undertake this investment, hindering its ability to enter the export market. A financially constrained firm will behave as if its discount rates were higher, which in turn affects its investment allocation. The financial constraint could be a result of asymmetrical information, underdeveloped financial markets, an unfavorable policy regime, regulated bank lending or corporate tax structure (Whited, 1992; Fazzari et al., 1988). In this paper, I investigate the relation between financial constraints and firms' export market entry decision for the manufacturing sector in India for the period 1989–2008.

The study of this relation between financial constraints and export participation is very important in the context of developing countries. Trade, and specifically export promotion, is important for the growth of developing economies. In the last two decades, many developing economies have deliberately replaced import substitution policies with export promotion policies. Argentina, Brazil, Turkey and India are some examples of economies pursuing trade reforms. However, trade liberalization by itself is not sufficient to promote exports. Financial constraints faced by firms act as an entry barrier to exports. Therefore, understanding the relation between financial constraints and export participation is critical to trade policy decisions.

India underwent both trade and financial liberalization in the last two decades. Trade liberalizing policies were undertaken prior to financial liberalization. The existence of underdeveloped financial markets in such a scenario makes the Indian economy a good candidate to study this relationship between financial constraints and export participation. The availability of panel data over a long period of time makes it possible to study this relationship as it addresses the issue of persistence in productivity and export behavior and the issue of unobserved heterogeneity of firms.

In the literature on export participation, much emphasis has been laid on the importance of a firm's productivity in its export participation decision (Melitz, 2003; Roberts and Tybout, 1997; Bernard et al., 2003). According to the Melitz (2003) model, firms self-select into the export industry if their productivity is high as it enables them to undertake the investment associated with new market entry. The Melitz model describes a plant level decision. If the decision to enter the export market is a firm level decision, a number of other factors come into play – one of which is financial constraints. In this paper, I consider the lack of availability of finance, which could constrain a firm's entry into the export market.

I use the data from the balance sheet and audited financial statements of Indian firms collected by Center for Monitoring Indian Economy's (CMIE) in their Prowess database. The data is an unbalanced panel of manufacturing firms for the period 1989–2008.

The measures of financial constraint that I consider are liquidity and leverage ratio of these firms. I use multiple estimators to estimate the effect of financial constraints on export participation while controlling for firm and industry specific effects. The three main estimation concerns are omitted variable bias in terms of firm level unobservables, simultaneity bias due to the binary nature of the dependent variable and endogeneity concerns due to the persistence in the export behavior of firms. I use multiple estimation models to address these issues. I use a linear probability fixed effect estimator, a Probit estimator and Generalized Method of Moments (GMM) estimator. I discuss these in detail in the estimation section. The results suggest strong correlation between financial health and export participation decision. The positive relation between finance and exports does not hold for the intensive margin of exports (increase in exports of continuing exporters). All these results support the hypothesis that presence of financial constraints hinders export market entry. It underscores the importance of having a well-developed and smoothly functioning financial market to the firms' export participation.

The paper is organized as follows. The next section describes briefly the institutional background in India. Section 3 describes the data, Section 4 and 5 discuss the empirical literature and model respectively, Section 6 gives the estimation procedure and the results in various subsections and Section 7 is the conclusion.

Please cite this article as: Nagaraj P. Financial constraints and export participation in India. International Economics (2014), http://dx.doi.org/10.1016/j.inteco.2014.07.001