

Determinants of export  
intensity and propensity  
among small and medium-  
sized enterprises: The case  
of the Philippines



Philip Tuaño  
George Manzano  
Isabela Villamil

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## **Determinants of export intensity and propensity among small and medium-sized enterprises: The case of the Philippines**

Philip Tuaño, George Manzano and Isabela Villamil \*

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**Abstract:** The small and medium enterprise (SME) sector in the Philippines is a significant group within the economy in terms of firm numbers and total employment. However, the SME sector's share of exports is disproportionately small, which raises considerable policy concerns. Prompted by the aforementioned policy issue, this study assesses the different factors that affect SME decisions (a) to export (propensity) and (b) on how much to export (intensity), i.e., export performance. The study utilizes data from the World Bank enterprise surveys, which contain subjective elements concerning the impediments to conducting business in general, e.g., concerns regarding labour regulations, shipping etc.

Using a Heckman selection model, the study finds that firm size is a robust determinant, both of export propensity and intensity. It also suggests that while labour productivity is important in determining the value of firm exports, there are certain firm qualities that are important to the initial export decision, such as foreign ownership and the presence of informal competition. Finding such determinants of SME export intensity and propensity provides the direction for policy discussions.

**JEL Classification code:** F23, L25

**Keywords:** Small and medium-sized enterprises, export, propensity, intensity, performance, the Philippines, manufacturing.

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## Introduction

One of the main issues in the Philippine's trade and industrial policy concerns the existence of considerable segmentation in the size structure of the country's manufacturing firms (Balisacan and Hill, 2003). A recent review of the number of firms by size from the 2011 List of Establishments survey of the Philippine National Statistics Office shows that there are a disproportionately small number of medium-sized enterprises operating in the country, compared with the sizeable number of micro and small firms. Balisacan and Hill (2003) traced this "missing middle" phenomenon to government trade and industrial policy interventions in certain industries that do not have strong links to small enterprises. In addition, these interventions contain features that penalize micro-sized firms that "graduate" to larger business units in addition to restrictive labour market and land regulations, and infrastructure constraints.

Notwithstanding these constraints, the small and medium-sized enterprise (SME) sector in the Philippines clearly remains a significant group in the economy. Estimates from the 2008 Annual Survey of Philippine Business and Industry show that small-scale enterprises (with less than 20 employees) total 113,366 with a total of Philippine peso (P) 951.7 billion in revenue and P 221.5 billion in value-added, compared with 21,217 large enterprises (with 200 or more employees), P 6.3 trillion in revenue and P 2.08 trillion in value-added. However, the SME sector's share of exports is disproportionately diminutive. In the 2006 Census of Philippine Business and Industry, for example, small manufacturing firms produced P 3.6 billion in total exports and P 58 billion in the domestic market, while large enterprises produced P 1.1 trillion in exports and P 1.7 trillion in the domestic market.

During the past decade in particular, support for SME growth has been of important concern for the Government as it tries to prepare the sector for participation more fully in a number of bilateral and multilateral free trade agreements that the Philippines has signed (Micro, Small and Medium-Scale Enterprise Development Council, 2011). Thus, identifying the specific concerns of SME exporters is an important issue in formulating better and well-directed government policies.

Numerous studies have been carried out that identify the factors that motivate firms to export, (see, for example: Bernard and Jensen, 2004; Roberts and Tybout, 1997; and Clerides and others, 1998), in the past few years. More specifically, a number of papers

have examined the participation of SME firms in exporting, particularly in Asian countries (Amornkitvikai and others, 2012), in the case of Thailand, and Trung and others, Trung and others, 2008, in the case of Viet Nam). Like the Thai study, this paper examines the determinants of SME export activity in two parts, (a) the decision on whether or not to participate in exporting, and (b) the decision on the volume of exports, using a Heckman two-step selection model. This study utilizes a dataset of enterprises in selected regions of the Philippines, taken from the World Bank Enterprise Survey for the Philippines (World Bank, 2010).

This study assesses the different factors that affect the decisions made by SMEs to (a) export (propensity) and (b) on how much to export (intensity), i.e., export performance, in order to draw the appropriate policy implications. Section 1 provides a brief review of the SME sector in the Philippines, followed in section 2 by a review the literature on the factors that affect the SMEs' propensity and intensity of trade. Sections 3 and 4 contain short descriptions of the survey data used in the regression analysis, and the empirical model. Section 5 discusses the empirical results. The policy implications for the SME sector are described in section 6 followed by the conclusion in section 7.

## **1. Review of the small and medium-sized enterprises sector in the Philippines**

Micro, small and medium enterprises (MSMEs) in the Philippines are defined by the Department of Trade and Industry (2011) as “any business activity/enterprise engaged in industry, agri-business/services, whether single proprietorship, cooperative, partnership or corporation whose total assets, inclusive of those arising from loans but exclusive of the land on which the particular business entity's office, plant and equipment are situated,” and must have less than P 100 million in assets and at least 200 employees. The Small and Medium Enterprise Development Council, which is an attached agency of the Department of Trade and Industry, is tasked with coordinating efforts by the Government to assist small enterprises, defines firm size according to the following categories:

- (a) Micro enterprise – with up to P 3 million in assets, and 1 to 9 employees;
- (b) Small enterprise – P 3 million to P 15 million in assets, and 10-99 employees;
- (c) Medium enterprise – P 15 million to P 100 million in assets, and 100-199 employees;
- (d) Large enterprise – More than P 100 million in assets, and 200 or more employees.

According to the Updating List of Establishments Survey of the Philippine National Statistical Office, in 2011 the number of micro, small and medium enterprises (SMEs<sup>1</sup>) reached 774,644, comprising 99.7% of the total number of firms in the country. This number includes 709,899 micro enterprises (91.3% of the total number), 61,979 small enterprises (8%) and 2,786 medium enterprises (0.4%).

More than half of the SMEs are operating in the wholesale and retail trade sector, which also contains approximately half of the total number of firms in the country. The sectors that contain the highest share of SMEs in the total number of establishments include “other service” activities (99.98%), followed by accommodation and food services (99.93%), and wholesale and retail trade (99.91%). The sectors that contain the lowest share of SMEs include the electricity, gas, steam and air-conditioning supply sectors (85.39%), followed by mining and quarrying (93.81%) and construction (94.87%) (tables 1 and 2).

In terms of geographical distribution, in 2011 the National Capital Region contained the highest number of SMEs (210,574 or 27.1% of the total). This was followed by the Calabarzon Region (114,378 firms or 14.7%) and Central Luzon (79,219 or 10.2%); interestingly, these regions are located close to Metro Manila and also host the highest number of establishments. In terms of percentages of firms that are SMEs, the highest proportions are in the Mimaropa Region (99.94%), Ilocos Region (99.92%) and Cagayan Valley (99.91%); the regions with the lowest percentages of firms that are SME are National Capital Region (99.36%), Central Visayas (99.37%) and the Calabarzon Region (99.51%). Table 3 lists the number of firms by size and region.

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