

Doctoral Dissertation

Firm Productivity and Its Determinants in Vietnam

(Summary)

MAI HUONG GIANG

Graduate School for International Development and Cooperation
Hiroshima University

September 2019

Summary

Productivity has been acknowledged as an important factor of economic growth in any countries. In Vietnam, improving productivity, particularly firm productivity, is indispensable to the sustainability and development of the country. This dissertation aims to analyze productivity at firm level and identify factors that significantly influence firm productivity in Vietnam. It is divided into five chapters.

Chapter I introduces the study including dissertation background and motivations, dissertation objectives, dissertation methodologies, dissertation contributions and dissertation structure.

Chapter II investigates productivity and its determinants in agricultural sector by exploring a dataset of 420 enterprises over the period 2000-2009. First, productivity was measured as TFP obtained from production function estimation by using OLS. In the second stage, the association between TFP and a comprehensive set of variables including firm size, firm age, state ownership, foreign ownership, exporting, internet usage and financial accessibility in determining firm TFP was examined. The empirical results show that firm size, foreign ownership, internet, and credit accessibility were positively correlated with firm TFP. The foreign ownership contributed only 3.8%, but it exhibited a maximal impact on firm TFP, as compared to the other variables. Furthermore, it was shown that the agricultural firms in Vietnam were 86.4% <200 employees, but less productive than firms >200 employees.

Chapter III focuses on the impacts of investment climate factors on firm productivity. To do that, it utilized a unique survey dataset of 1310 enterprises operating in manufacturing sector in 2011, 2013, and 2015. In the first step, productivity also measured as TFP obtained from the production function. However, instead of using OLS technique, chapter III employed the Levinsohn and Petrin (2003) approach to measure TFP. The main advantage of this methodology is to mitigate the econometric problems, including endogeneity of input choices and selection bias that may arise from production function estimation. Next, with the firm TFP having been estimated, the relationship between the firm productivity and investment climate was investigated. With respect to investment climate factors, four broad dimensions—infrastructure, labor capacity,

regulatory governance and institutions, and access to finance—were considered. Furthermore, a set of firm-specific variables, including firm size, age, and export, was incorporated into the model. The empirical results show that restrictions on the investment climate were harmful to firm productivity. The lack of internet and financial accessibility, low educational level of employees, administrative burden and the cost of bribery were negatively associated with firm TFP. The chapter also provided a link between the investment climate and firm productivity across various industries in the manufacturing sector in Vietnam. These findings can be used to design appropriate industrial policies to enhance TFP in each corresponding industry.

Chapter IV of the dissertation digs into the relationship between access to finance and firm productivity in Vietnam. It focuses on firms that switch from "having no financial accessibility" in 2013 to "having financial accessibility" in 2015 compared with firms remain having no financial accessibility in the both two years. The main goal is to assess whether access to finance has any positive effect on TFP. First, the correlation between financial accessibility was investigated using OLS and fixed effect regressions. Next, in order to address the problem of missing data by measuring outcomes and covariates for both users and nonusers before and after intervention and identify the endogeneity due to self-selection bias and unobserved confounding of the effect, DID and PSM-DID were employed to evaluate the causal effects of access to finance on TFP. The empirical results shows that improving the financial accessibility can directly enhance firm productivity. Firms having access to bank loan could improve TFP by approximately 8.6% and 9% in the DID model and the PSM-DID model, respectively. Meanwhile, when a firm utilized the overdraft facility, its TFP grew by 12.3% in DID model and 15.7% PSM-DID models.

Chapter V demonstrates conclusions of the dissertation findings in summary and some implications that can contribute to strengthen productivity of firms in Vietnam, and thus, suggests basis for further researches in the future.