

RESEARCH ON FACTORS AFFECTING PRODUCTIVITY AND PRODUCT QUALITY IN CHINESE FOOD INDUSTRY: FROM THE PERSPECTIVES OF EXPORT PERFORMANCE, FIRM HETEROGENEITY AND REGULATORY STANDARDIZATION

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(中国食品産業における生産性及び製品品質に影響を与える要因に関する研究：輸出実績、企業の異質性、規制標準化の観点から)

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Thesis Summary

China has become one of the major players in international food exports. At the same time, less productive exporters and recurring food scandals have left the competitiveness of Chinese food firms far behind from the developed nations. Using highly disaggregated firm-product-level data, this research stresses three main objectives: first, to examine the impact of export performance on firm-level total factor productivity (hereinafter referred to as “TFP”) of Chinese food industry; second, to study the product quality of Chinese food exporters (hereinafter referred to as “export quality”) and its affecting factors from the perspective of firm heterogeneity; third, to investigate how Chinese national food regulatory standards (hereinafter referred to as “food standards”) affect the TFP and export quality.

In the beginning of this research, Chapter I mainly introduces the background and objectives; Chapter II reviews the recent literature dealing with TFP, export quality, and the effect of food standardization. In the principal part of this thesis, Chapter III calculates the TFP of Chinese food firms by using Olley and Pakes (1996) approach, then generalized propensity score matching is applied for examining the impact of export performance on firm-level TFP. Following Khandelwal et al. (2013) approach, Chapter IV estimates the export quality and discusses its affecting factors from the perspective of firm heterogeneity. Employing both random-effect and fixed-effect models, Chapter V studies the impact of food standards on firm-level TFP and analyzes how the relationships are moderated by different sub-industries, ownership, and trade types. Chapter VI further investigates the impact of food standards on export quality and assesses the mediating role of TFP in the relationship between food standards and export quality by applying the mediation model. At last, given the proceeding findings and reviews of previous literature, Chapter VII summarizes main conclusions and raises comprehensive policy implications.

This research highlights following main findings: (1) Regarding the impact of export performance on firm-level TFP, different from the evidence of the whole manufacturing firms in China, exporters of food industry have superior productivity than non-exporters. Both quantity and intensity of export show a time-lag in enhancing firm-level TFP, yet this enhancement will weaken in the long run. (2) Regarding the product quality of food exporters, the export quality of food manufacturing

firms, firms located in eastern China, privately owned firms, and small and medium-sized firms are relatively higher than their benchmarks. The growth in aggregate export quality in the food industry is prominently driven by resource mobility across firms rather than quality changes within firms and entrants. Furtherly, the TFP, export intensity, trade type, and foreign direct investment could facilitate the export quality, particularly in the beverage industry. (3) Regarding the impact of food standards on firm-level TFP and export quality, first, food standards can promote the improvement of both TFP and export quality. Besides, the TFP partially mediated the relationship between the food standards and export quality. Compare with mandatory standards, voluntary standards play a more significant role in enhancing the TFP and export quality for Chinese food industry. Second, the stimulating effect of food standards on TFP is documented more obviously appears in the agri-food processing firms, non-state-owned enterprises (non-SOEs), and the firms not engaged in processing trade. Third, the non-SOEs demonstrate a significant positive effect of food standards on export quality through the mediating role of TFP, while state-owned enterprises (SOEs) do not. Moreover, food standards obviously enhance the export quality through TFP for high-income export destinations rather than that for middle-and low-income destinations.

In light of the conclusions of this research, main policy implications are suggested as follows: First, appropriate export-oriented policies should be implemented for encouraging Chinese food firms to participate the international trade and accumulate knowledge and technology from their activities in foreign markets. Second, government should utilize incentive mechanism and preferential policies, to encourage and accelerate the product quality upgrading of the food exporters. Third, government should increase their efforts to strengthen and optimize the promulgation of national-level food standards. Chinese authorities should increase voluntary standards and set up incentive mechanisms to encourage food exporters to adopt suitable standards on their own initiative, so as to effectively mitigate the cost pressure mandatory standards exert on firms.