



UNIVERSITI PUTRA MALAYSIA

IMPACT OF TRADE COST, MARKET SIZE AND FOREIGN DIRECT INVESTMENT ON EXPORT QUALITY IN TRADE BETWEEN CHINA AND DEVELOPING ECONOMIES

MASTOOREH ESHRAGHI

FEP 2013 2

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INVESTMENT ON EXPORT QUALITY IN TRADE BETWEEN CHINA AND
DEVELOPING ECONOMIES**



By

MASTOOREH ESHRAGHI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

January 2013

DEDICATIONS

My family is the most important thing of my life. I would not have been able to finish this study without the permanent and systematic support of my lovable mother, and my sister Khatereh. I thank each of them not only for the invaluable comprehension and dedication but also for their eternal love. I dedicate this document to my mother and to the memory of my lovely father, who taught me to be perseverant in this world.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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Chairman: Associate Professor Normaz Wana, PhD

Faculty: Economics and Management

Recently, the issue of the quality in international trade attracts many attentions of the researchers. In fast world economy, the patterns of trade are not only determined by the differences in technology and factor endowments of the countries but also additional determinant, such as quality has a significant effect on trade. The aim of this study is to investigate the role of the export quality in trade between China and developing economies.

The first objective of this research is to measure the product quality improvement for trade between China and developing countries. Using bilateral trade relationships during 2000 to 2008, this study applies a method measuring the share of product quality in vertical and horizontal intra-industry trade to present evidence on product export quality. For China, intra-industry trade with South Africa is more profitable than the other

selected countries. The percentage of high quality products related to South Africa is significantly high in both periods making China a high quality exporter. The highest positive growth of high quality products belongs to the Russian Federation. Thailand and Malaysia are in second and third place. These results suggest that China should involve more in trade relation with the Russian Federation, Thailand and Malaysia focusing more on improving their product quality rather than product quantity.

The second objective of this study is to examine the effects of trade costs and market size on export quality. The gravity equation with multilateral resistance terms using the Heckman selection method is applied. The trade data are from 2005 to 2009 by the SITC 5-8. Results represent a significant positive relationship between market size of trade partners and export quality. There is also a significant positive relationship between trade costs and export quality showing the higher trade costs lead to more export of high quality products. Therefore, the policy of trade in China should be toward changing their quality trade's partner to more distance countries resulting in gaining more benefit.

The third objective of this study is to examine the relationships between FDI inflow and export quality. The ARDL approach is applied to estimate the long and short run effects of FDI on export quality. The data for total trade between China and the world in 1980-2010 are used. The FDI coefficients are significantly positive implying a complementary relationship between FDI and the export quality. China has focused on attracting FDI to increase their export. It is worth for China to concentrate more on export quality not only to developing countries but also to developed countries. There is also a positive relationship between the size of the economy and export quality. High population rate

makes China a huge market that exports high quality goods since high rate of FDI creates an opportunity for China to improve their technology. The relationship between exchange rate and export quality is insignificantly positive. With recent instability in some currencies such as Euro and U.S. Dollar, exporting the high quality goods is more profitable for China.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**KESAN KOS PERDAGANGAN, SAIZ PASARAN DAN PELABURAN ASING
KE ATAS KUALITI EKSPORT DALAM PERDAGANGAN ANTARA CINA
DAN NEGARA SEDANG MEMBANGUN**

Oleh

MASTOOREH ESHRAGHI

Januari 2013

Pengerusi: Profesor Madya Normaz Wana, PhD

Fakulti: Ekonomi Dan Pengurusan

Kebelakangan ini isu mengenai kualiti dalam perdagangan antarabangsa telah mendapat perhatian lebih ramai penyelidik. Corak perdagangan dalam ekonomi dunia yang pantas bukan sahaja ditentukan oleh perbezaan dalam teknologi dan faktor anugerah sesebuah negara. Penentu tambahan seperti kualiti diperlukan untuk menerangkan penyebab di sebalik perdagangan antara negara. Matlamat kajian ini ialah untuk menyelidik peranan kualiti eksport dalam perdagangan antara Cina dan negara-negara membangun.

Objektif pertama kajian ini ialah untuk mengukur peningkatan kualiti produk bagi perdagangan antara Cina dan negara membangun. Perdagangan dua hala untuk produk bagi tahun 2000-2004 dan 2004-2008 adalah digunakan. Satu kaedah digunakan untuk mengukur sumbangan produk kualiti dalam perdagangan antara industri secara menegak dan melintang untuk memberi bukti mengenai kualiti produk yang dieksport.

Perdagangan antara industri dengan Afrika Selatan adalah lebih sesuai berbanding negara-negara lain untuk Cina memandangkan peratusan produk berkualiti tinggi adalah secara signifikannya tinggi untuk kedua-dua tempoh. Ini meletakkan Cina sebagai negara pengeksport kualiti yang tinggi. Pertumbuhan paling tinggi bagi produk berkualiti tinggi ialah Persekutuan Rusia yang mempunyai pertumbuhan positif. Thailand dan Malaysia adalah di tempat kedua dan ketiga. Ini menunjukkan Thailand dan Malaysia mencapai peningkatan kualiti eksport lebih daripada Afrika Selatan. Penemuan ini mencadangkan supaya Cina memberi tumpuan kepada perdagangan dengan Persekutuan Rusia, Thailand dan Malaysia berbanding dengan Afrika Selatan.

Objektif kedua kajian ini ialah untuk mengkaji kesan kos perdagangan dan saiz pasaran ke atas kualiti eksport. Dalam hubungan ini persamaan graviti dengan terma tindakbalas perbagai hala menggunakan kaedah pemilihan *Heckman* adalah digunakan. Data perdagangan adalah daripada bagi tahun 2005-2009 mengikut kod SITC 5-8. Hasil kajian menunjukkan bahawa terdapat perhubungan positif yang signifikan antara saiz pasaran rakan perdagangan dan kualiti eksport. Terdapat perhubungan yang positif dan signifikan antara kos perdagangan dan eksport kualiti. Ini menjelaskan bahawa peningkatan kos perdagangan menyebabkan peningkatan ekport produk yang berkualiti tinggi. Ia adalah penting bagi negara membangun yang mempunyai kos perdagangan yang tinggi berbanding negara-negara lain. Dari itu, untuk mendapatkan keberkesanan dalam perdagangan berkualiti tinggi, polisi perdagangan di Cina sepatutnya menumpukan juga kepada rakan perdagangan yang jauh jaraknya.

Objektif ketiga kajian ini adalah untuk menyiasat perhubungan antara aliran masuk FDI dan kualiti eksport. Pendekatan ARDL digunakan untuk mengunjurkan kesan jangka panjang dan jangka pendek FDI ke atas kualiti eksport. Data yang digunakan ialah jumlah perdagangan antara Cina dan dunia bagi tempoh 1980-2010. Koefisyen untuk FDI adalah positif dan signifikan. Ini bermakna terdapat perhubungan secara komplimantariti antara aliran masuk FDI dan kualiti eksport. Cina telah memberi tumpuan ke atas tarikan FDI sebagai laluan untuk meningkatkan eksport. Ia adalah berfaedah kepada Cina untuk memberi lebih perhatian kepada kualiti eksport bukan sahaja antara negara sedang membangun tetapi juga negara maju. Terdapat juga perhubungan yang positif antara saiz ekonomi dan kualiti eksport. Kadar penduduk yang tinggi menjadikan Cina sebagai pasaran yang besar yang dapat mengeksport barangan berkualiti tinggi memandangkan kadar FDI yang tinggi mewujudkan peluang untuk Cina mempertingkatkan teknologi. Perhubungan antara tukaran asing dan eksport kualiti adalah positif walaupun tidak signifikan. Dengan ketidakstabilan tukaran asing berpengaruh seperti US Dollar dan Euro yang memberi kesan kepada pasaran dunia, penumpuan kepada pengeksportan barangan berkualiti tinggi adalah sangat sesuai untuk Cina.

ACKNOWLEDGEMENTS

In the name of Allah, Most Gracious, Most Merciful, all praise and thanks are due to Allah, and peace and blessing be upon His Messenger. I am deeply indebted to my supervisor, Associated Professor Dr, Normaz Wana for her invaluable guidance, dedicated effort, supervision and support throughout the study. I would like also to express my sincere thanks and gratitude to my committee members Associated Professor Dr, Zulkornain Yusop and Dr, Saifuzzaman Ibrahim for their support. And finally deepest thanks go to University Putra Malaysia (UPM) management and staff for creating a collegial environment in which to work and Malaysia kind people.

I certify that a thesis Examination Committee has met on 11 January 2013 to conduct the final examination of Mastroeh Eshraghi on her thesis entitled "Impact of Trade Cost, Market Size and Foreign Direct Investment on Export Quality in Trade between China and Developing Economies" in accordance with the Universities and College Act 1971 and the constitution of the University Putra Malaysia [P.U.(A) 106] 15 March 1998. The committee recommends that the student be awarded the doctor of philosophy.

Members of the Thesis Examination Committee were as follows:

Muzafar Shah Habibullah, PhD

Professor
Economics and Management
University Putra Malaysia
(Chairman)

Lee Chin, PhD

Economics and Management
University Putra Malaysia
(Internal Examiner)

Shivee Ranjane a/p Kaliappan, PhD

Economics and Management
University Putra Malaysia
(Internal Examiner)

Shi Young Lee, PhD

Professor
Division of Business
College of Business and Economics, Chung Ang University
Ansung Kyung Ki
Korea, Republic Of
(External Examiner)

BUJANG KIM HUAT, PhD

Professor and Dean
School of Graduate Studies
University Putra Malaysia

Date:

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Normaz Wana, PhD

Associate Professor
Economics and Management
Universiti Putra Malaysia
(Chairman)

Zulkornain Yusop, PhD

Associate Professor
Economics and Management
Universiti Putra Malaysia
(Member)

Saifuzzaman Ibrahim, PhD

Senior Lecturer
Economics and Management
Universiti Putra Malaysia
(Member)

BUJANG BIN KIM HUAT, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

DECLARATION

I declare that the thesis is my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously, and is not currently, submitted for any other degree at Universiti Putra Malaysia or any other institution.



MASTOOREH ESHRAGHI

Date: 11 January 2013



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