

**RELATIONSHIP BETWEEN INCOTERMS CHOICES, SELECTION
FACTORS AND EXPORT PERFORMANCE: A CASE OF
MANUFACTURING COMPANIES IN MALAYSIA**



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MASTER OF SCIENCE

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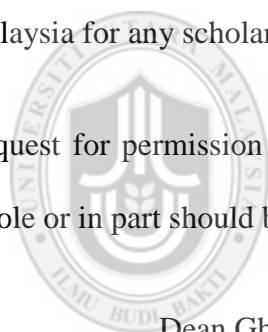
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ABSTRACT

The present study has three major objectives: (1) To determine the most frequently used Incoterms 2010 among manufacturers in Malaysia. (2) To identify the factors that influence the Incoterms selection by the manufacturers. (3) To examine the relationship between the selection factors, Incoterms choice and export performance. This study is a quantitative research and was conducted in Malaysia and the sample was selected from the Federation of Malaysian Manufacturers (FMM). A total of 335 questionnaires were distributed and 60 questionnaires were returned with complete answer. The valid response is 17.91%. The collected data was analyzed through reliability analysis, which is Cronbach's Alpha, descriptive analysis and correlation analysis. EXPERF tools developed by Zou in 1998 uses three dimensions to evaluate the export performance, which is through financial performance, strategic performance and export performance which is a perceived performance. The results showed that (1) FOB is the most frequently used Incoterms in Malaysia. (2) There are factors influencing the Incoterms selection including new added factors. (3) There are significant relationships between selection factors with Incoterms selection, and selection factors with export performance. In conclusion, this study focuses on factors influencing the choices of Incoterms and its impact on the export performance. The possible neglected factors such as intangible units, employee behaviours, conducted study overseas and et cetera.

Keywords: Incoterms 2010, International Trade Terms, Export Performance, Incoterms Selection, Logistics, Supply Chain Management

ABSTRAK

Kajian ini mempunyai tiga objektif utama: (1) Untuk menentukan Incoterms 2010 yang paling kerap digunakan di kalangan pengeluar di Malaysia. (2) Untuk mengenal pasti factor-faktor yang mempengaruhi pemilihan Incoterms oleh pengeluar. (3) Untuk mengkaji hubungan antara faktor-faktor pemilihan, pilihan Incoterms dan prestasi eksport. Kajian ini merupakan kajian kuantitatif dan telah dijalankan di Malaysia dan sampel dipilih daripada Persekutuan Pekilang-Pekilang Malaysia (FMM). Sebanyak 335 soal selidik telah diedarkan dan 60 soal selidik telah dikembalikan dengan jawapan lengkap. Sah soal selidik yang didapati adalah 17.91%. Data yang diperolehi dianalisis melalui analisis kebolehpercayaan, iaitu Alpha Cronbach ini, analisis deskriptif dan analisis korelasi. Alat EXPERF dikemukakan oleh Zou pada tahun 1998 menggunakan tiga dimensi untuk menilai prestasi eksport, iaitu melalui prestasi kewangan, prestasi strategik dan prestasi eksport yang merupakan prestasi yang dilihat. Hasil kajian menunjukkan bahawa (1) FOB adalah Incoterms paling kerap digunakan di Malaysia. (2) Terdapat faktor-faktor yang mempengaruhi pemilihan Incoterms termasuk faktor baru ditambah. (3) Terdapat hubungan yang signifikan antara faktor-faktor pemilihan dengan pilihan Incoterms, dan faktor-faktor pemilihan dengan prestasi eksport. Kesimpulannya, kajian ini memberi tumpuan kepada faktor-faktor yang mempengaruhi pilihan Incoterms dan kesannya terhadap prestasi eksport. Faktor-faktor yang mungkin diabaikan seperti unit tidak ketara, tingkah laku pekerja, menjalankan kajian di luar negara dan lain-lain.

Kata Kunci: Incoterms 2010, Terma Perdagangan Antarabangsa, Prestasi Syarikat, Pemilihan Incoterms, Logistik, Pengurusan Rantaian Bekalan

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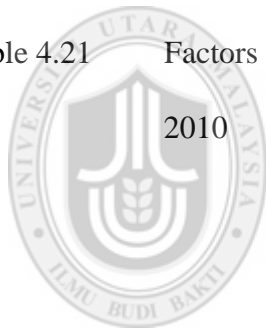
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LIST OF ABBREVIATIONS

3PL	Third Party Logistics
CFR	Cost and Freight
CIF	Cost, Insurance and Freight
CIP	Carriage and Insurance Paid To
CPT	Carriage Paid To
CSCMP	Council of Supply Chain Management Professionals
DAP	Delivered at Place
DAT	Delivered at Terminals
DDP	Delivered Duty Paid
EXW	Ex Works
FAS	Free Alongside
FCA	Free Carrier
FMM	Federation of Malaysian Manufacturers
FOB	Free On Board
ICC	International Chamber of Commerce
Incoterms	International Commercial Terms
SPSS	Social Packages for Social Science
THC	Terminal Handling Charge

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The role of global logistics as a common key terms of international and domestic trade has become prominent in the modern era of globalisation. Manufacturers are concerned about the effectiveness of supply chain, and main players within the supply chain are applying a certain code of conduct in their daily business practices. Regardless of domestic or international trade, supply chain is the procurement of goods or provides services in businesses that go through a series of processes to reach the buyer from the seller.

The Incoterms rules are standard trade terms used in international and domestic sales contracts to allocate certain costs and risks between the seller and the buyer (ICC, 2013, p. 4). On a wider concept, global supply chain, which is a further step that crosses the border, in every part of the world to conduct their international businesses. International business literally means that businesses that across countries where the businessman uses every conceivable means to gain the core target which are profiting through the international transaction.

To conduct the business, especially cross-border business, it is impossible for the manufacturers to perform their business activities without a set of standard operating procedure. International Chamber of Commerce (ICC) stated that by choosing an Incoterms rule, the parties allocate transport costs and risks as well as

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REFERENCES

- Andersson, A. (2010). Incoterms 2010: An Essential Revision or a Pointless Custom? *Jonkoping International Business School*. Retrieved from <http://project.mmanagement6.com/download.php?id=11404>
- Bergami, R. (2006). The Link between Incoterms 2000 and Letter of Credit Document ation Requirement and Payment Risk. *School of Economics, Institute for Log istics and Supply Chain Management*.
- Bergami, R. (2012). Incoterms 2010: The Newest Revision of Delivery Terms. *Acia Univ. Bohem. Merid.* 15 (2), 33-40, ISSN: 1212-3285.
- Caruntu, C. & Lapadusi, M.L. (2010). Complex Issues regarding the Role and Importance of Internationally Codified Rules and Incoterms. *Economic Sciences Series, Vol I.XII No. 1/2010*.
- David, P. & Stewart, R. (2010). International Logistics: The Management of International Trade Operations (Third Edition). *Cengage Learning*.
- Dugan, S. & Talmaciu, I. (2012). Influence of the Changes Brought by Incoterms 2010 to International Trade. *“Ovidius” University Annals, Econo mic Sciences Series, Volume XII, Issue 1/2012*.
- Federation of Malaysian Manufacturers. (2013). Malaysian Industries 44th Edition: Globally Competitive Companies World-Class Products & Services. Federation of Malaysian Manufacturer, Malaysia.
- Fogarty, M. (2006). The Handbook of Logistics and Distribution Management. *Logistics & Transport Focus*, 8(10), 65.
- Gingerich, E.F.R. (2013). *Drafting the International Commerce Agreement*. Proceedings of 8th Annual London Business Research Conference Imperial College, London, UK, 8-9 July, 2013, ISBNL 978-1-922069-28-3.
- Hemmings, R. (2005). Is the Ship’s Rail Really Significant? *Nordic Journal of Commercial Law*, issue 2005 #2.
- Hien, N. & Laporte, G. & Roy, J. (2009). Business Environments Factors, Incoterms Selection and Export Performance. *Operations and Supp ly Chain Management*. Vol. 2, No. 2, May 2009, pp. 63-78. ISSN 1979-3561 | EISSN 1979-3871

- International Chamber of Commerce. (2013). *Incoterms 2010 Q&A: Questions and expert ICC guidance on the Incoterms 2010 rules*. ICC Services, Paris.
- Jacquet, L. (2000). Connaitre et employer les Incoterms. In *Incoterms 2000: Tous les mecanismes, MOCI*. Hors serie. 50 pages. Paris.
- Lucia Paliu – Popa. (2012). Development of the International Trade in Terms of Incoterms 2010 Rules. *Annals of ‘Dunarea de Jos’ University of Galati fasci cle 1. Economics and Applied Informatics*. Years XVIII – no 1/2012, ISSN: 1584-0409.
- Maja Zaman. (2004). The Role of Financial and Non-Financial Evaluation Measures in the Process of Management Control Over Foreign Subsidiaries-Empirical Evidence in Slovene Multinational Companies. *Management*, Vol.9, 2004,2,pp.53-73
- Mentzer, J.T. et. al. (2001). Defining Supply Chain Management. *Journal of Business Logistics*, Vol.22, No.2.
- Porter, M.E. (1990). The Competitive Advantage of Nations. (cover story). *Havard Business Review*, 68(2), 73-93.
- Ramberg, J. (2008). CISG and Incoterms 2000: in Connection with International Commercial Transactions. *Sharing International Commercial Law across National Boundaries*.
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach* (4th ed.). New Jersey: John Wiley and Sons.
- Supply Chain Consortium. (2011). International Shipping and Incoterms: What the New International Freight Shipping Terms Mean to You. Retrieved from www.supplychainconsortium.com.
- Transplace Highlights Changes to Incoterms and its Effect on International Shippers. (2010). *Press Release*. Retrieved from <http://www.logisticsmatter.com/2010/12/16/transplace-highlights-changes-to-incoterms-and-its-effect-on-international-shippers-2/>
- UNDP Practice Series. (2008). Shipping and Incoterms: Practice Guide. Retrieved from [http://log.logcluster.org/response/transport/LOG-2-3TRANS PORT-UNDP- Shipping-Guide.pdf](http://log.logcluster.org/response/transport/LOG-2-3TRANS%20PORT-UNDP-Shipping-Guide.pdf)
- Zikmund, W. G. & Babin, B. J. & Carr, J. C. & Griffin, M. (2013). *Business Research Methods* (9th edition). *South-Western Cengage Learning*.

Zou, S. & Taylor, C. & Osland, G. (1998). The EXPERF Scale: A Cross-national Generalized Export Performance Measure. *Journal of International Marketing* 6, pp.37.58.

