

A COMPETITIVENESS ANALYSIS OF THAI CHICKEN EGGS
IN THE HONG KONG MARKET

A thesis submitted to the College of Arts and Sciences in full fulfillment of the
requirement for the degree of Doctor of Philosophy,

University Utara Malaysia

By

Wichai Taechawattananan

© Wichai Taechawattananan, 2008. All rights reserved.

HD
9252
W6390
2008

A COMPETITIVENESS ANALYSIS OF THAI CHICKEN EGGS
IN THE HONG KONG MARKET

By

WICHAI TAECHAWATTANANAN

Doctor of Philosophy

Universiti Utara Malaysia

April 2008

PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a post graduate degree from Universiti Utara Malaysia, I agree that the University Library may make it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor or, in their absence, by the Dean of the Graduate Studies, College of Arts and Sciences. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:

**Dean of Graduate Studies
College of Arts and Sciences
Universiti Utara Malaysia
06010 UUM Sintok
Kedah Darul Aman**

ABSTRAK

Industri telur ayam merupakan satu komponen utama industri ternakan di Thailand, dengan hampir 80 peratus keluarannya adalah untuk kegunaan dalam negara. Walaupun eksport telur ayam cuma lebih kurang dua peratus daripada keluaran Negara Thailand, tetapi ia terbukti telah dapat menyelesaikan masalah ketidakseimbangan di antara penawaran dan permintaan yang mencetuskan ketidakseimbangan harga serta pendapatan petani. Thailand mengeksport telur ayam ke beberapa buah negara, tetapi Hong Kong adalah negara pengimport terbesar dengan syer pasaran hampir 80 peratus daripada keseluruhan eksport telur Thailand. Ternyata Hong Kong merupakan pasaran telur ayam yang penting bagi Thailand. Bagaimana pun, jika diukur dari segi nilai dan kuantiti, ianya mengalami situasi turun naik akibat persaingan sengit daripada pesaing-pesaing utama seperti China, Jerman, dan Amerika Syarikat. Ketiga-tiga buah negara ini adalah pengeksport utama telur ayam ke Hong Kong.

Oleh itu, objektif utama kajian ini ialah: pertama, mengukur *faedah bandingan ternyata* dan daya saingan telur ayam Thailand di pasaran Hong Kong, berbanding ketiga-tiga pesaing utama tersebut. Kedua, menganalisis harga import telur ayam Thailand ke pasaran Hong Kong berbanding ketiga-tiga negara pesaing. Ketiga, membina kaedah strategik untuk memperbaiki kedudukan persaingan telur ayam Thailand di pasaran Hong Kong. Keempat, membekalkan maklumat dan statistik semasa yang diperlukan oleh pengeluar dan pembuat dasar, dan kelima, meneliti isu-isu yang timbul kesan daripada polisi kerajaan dan strategi industri, ke arah meningkatkan daya saingan telur ayam yang di eksport.

Bagi mencapai objektif kajian, kaedah *indek faedah bandingan ternyata*, *analisis peralihan jenama*, dan *analisis harga* digunakan untuk mengukur dan melihat faedah bandingan ternyata bagi telur ayam Thailand di pasaran Hong Kong, untuk menilai kedudukan persaingannya di pasaran Hong Kong, serta menganalisis harga import telur ayam di pasaran Hong Kong.

Dapatan kajian merumuskan bahawa bagi tempoh 1995 – 2005, keluaran telur ayam Thailand mampu bersaing di pasaran Hong Kong, tetapi secara bandingannya China memiliki daya saingan pasaran tertinggi, diikuti oleh Amerika Syarikat, Jerman, dan seterusnya Thailand.

ABSTRACT

Today, the chicken egg industry in Thailand has become one of the major livestock components and been mainly produced for domestic consumption, accounting for nearly 98 percent of the country's production. Although the quantity of chicken egg exports has been approximately two percent of the country's production, it has been significantly proven to solve the problem of the imbalance between the supply and demand, which causes price and farmers' income instability. Thailand has exported chicken eggs to many countries, but Hong Kong has been the highest importing country that shares nearly 80 percent of the country's exports with the annual growth of more than 50 percent. Thus, it is not exaggeration to say that Hong Kong is the most important market for Thai chicken egg exports. Thailand has become an increasingly important exporter in the Hong Kong market and value and quantity of chicken egg exports to this market have been continuously increasing, but both value and quantity have fluctuated due to facing some fundamental challenges of a strong competition from the other three competitors; i.e. China, Germany and USA who are the top three exporting countries and attempt to assume a more active role as major players of the egg market in the Hong Kong market.

Thus, the main objectives of this study focused on: first, the measurement of revealed comparative advantage and the evaluation of competitive position of Thai chicken eggs in the Hong Kong market as compared to those of the other three competitors; second, an analysis of the import prices of Thai chicken eggs in the Hong Kong market as compared to those of the other three competitors; third, providing the policymakers and producers with the current background information and statistics required; fourth, developing the strategic approaches to improve the competitiveness of Thai chicken eggs in the Hong Kong market; lastly, addressing the issues arising from government policies and industry strategies for the competitive performance of the Thai chicken egg exports.

In order to achieve the objectives of the study, the methods of reveal comparative advantage index, brand switch analysis, and qualitative and quantitative price analysis were used to measure and examine the reveal comparative advantage of Thai chicken eggs in the Hong Kong market, to evaluate the competitive position of Thai chicken eggs in the Hong Kong market, and to analyze the import price of Thai chicken eggs in the Hong Kong market, respectively.

The results of the study can be concluded that from 1995 to 2005, Thai chicken eggs were still competitive in the Hong Kong market, but China chicken eggs had the highest competitiveness in the market, followed by USA's, Germany's and Thailand's.

ACKNOWLEDGEMENTS

I would like to take this opportunity to cordially express my gratitude to the following persons:

First, my supervisor Lt. Col. Associate Professor Dr. Abdul Razak Chik who gave valuable comments, directions and suggestions for my research work;

Second, during presentation for the research proposal, the chairperson Associate Professor Dr. Mohd. Dan Bin Jantan who was an important motivator and gave encouragement and sympathy. Particularly, I am deeply appreciative of the thesis proposal committee members namely Associate Professor Dr. Barudin Muhamad and Associate Professor Dr. Mohd. Zaini Abdul Karim, whose viewpoints were helpful and informative for my research work;

Third, during oral examination for the thesis defense, the chairperson Associate Professor Dr. Juzhar Jusoh who conducted examination professionally and gave advice together with assistance. In particular, Associate Professor Dr. Mohd. Dan Bin Jantan as the internal examiner and Associate Professor Dr. Somsak Priebprom as the external examiner, whose perspectives and suggestions were very valuable and improvable for the completion of my research work.

Any errors that may remain in the thesis are solely responsibility of the author.

Finally, the careful and professional work of Mrs. Ubonrat Khlaisang, who is my secretary, in preparing PowerPoint presentation is gratefully acknowledged.

TABLE OF CONTENTS

	Page
PERMISSION TO USE	i
ABSTRAK (BAHASA MALAYSIA)	ii
ABSTRACT (ENGLISH)	iii
ACKNOWLEDGMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vi
LIST OF FIGURES	ix
CHAPTER ONE: INTRODUCTION	1
1.0 Objectives of the Study	4
1.1 Significance of the Study	5
1.2 Scope of the Study	6
1.3 Layout of the Chapters	6
CHAPTER TWO: LITERATURE REVIEW	7
2.0 Background	7
2.1 Hong Kong and Thailand Bilateral Economic Relations	13
2.1.1 Hong Kong's General Trade Policy	15
2.1.2 Hong Kong and Thailand Trade Relation	16
2.1.3 Hong Kong and Thailand Investment and Tourists	18
2.2 Competitive Factors in the Thailand's Chicken Egg Industry	18
CHAPTER THREE: RESEARCH METHODOLOGY	26
3.0 Methods	26
3.0.1 Revealed Comparative Advantage Index	26

3.0.2	Brand Switch Analysis	39
3.0.3	Price Analysis	43
3.1	Data Collection	45

CHAPTER FOUR: THE COMPETITIVENESS OF THAI

	CHICKEN EGGS IN HONG KONG	47
4.0	The World Egg Market	47
4.1	The Industry Performance in the World Egg Market	51
4.1.1	Feed Price and One Day-Old Chick Price	51
4.1.2	Growth in Production	53
4.1.3	Growth in Exports	55
4.1.4	Growth in Export Prices	58
4.1.5	Growth in Competition	60
4.2	The Determinants of Competitiveness for Thailand's Chicken Egg Industry	64
4.2.1	Overview	65
4.2.2	Imports	77
4.2.3	Exports	79
4.2.4	Consumption	81
4.2.5	The Determinants of Competitiveness	82
4.3	The Position of Thai Chicken Eggs in Hong Kong	89
4.3.1	Hong Kong's Value of Imports	89
4.3.2	Hong Kong's Value and Quantity of Chicken Egg Imports	91
4.3.3	Hong Kong's Price of Chicken Egg Imports	95

CHAPTER FIVE: RESEARCH FINDINGS 101

5.0	The Revealed Comparative Advantage of Thai Chicken Eggs in Hong Kong	101
-----	---	-----

5.1	The Competitive Position of Thai Chicken Eggs in Hong Kong	105
5.1.1	Market Share from 1995 to 2005	105
5.1.2	Market Growth from 1995 to 2005	107
5.1.3	Retention (Loyalty) and Switch Rates in 2005	108
5.1.4	Market-Share Forecast from 2006 to 2015	110
5.1.5	Sales Gain or Loss in 2005	117
5.2	Price Analysis	129
5.2.1	Qualitative Analysis	129
5.2.2	Quantitative Analysis	135
CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS		139
6.0	Conclusions	139
6.1	Recommendations	147
BIBIOGRAPHY		153
APPENDICES		161

LIST OF TABLES

Table	Page
1.1: Thailand's Chicken Egg Production, Export, and Farm-Gate Price From 1995 to 2005	2
1.2: Thailand's Quantity and Value of Chicken Egg Exports to Hong Kong from 1995 to 2005	3
2.1: Hong Kong' Trade with Thailand from 2004 to 2005	17
3.1: Monthly Sales Values from January to March, 2005	32
3.2: Market Share from January to March, 2005	33
3.3: Percentage Matrix in March, 2005	35
3.4: Market-Share Forecast at Time t+1 (April), 2005	37
3.5: Value Matrix in March, 2005	40
4.1: World Top 10 Chicken Egg Exporting Countries in 2004	49
4.2: World Top 10 Chicken Egg Importing Countries in 2004	50
4.3: Current Status on Egg Trade in the World Egg Market of China, Germany, Thailand and USA in 2004	51
4.4: Feed Price and One Day-Old Chick Price Reported on July 1, 2004	53
4.5: Egg Production of China, Germany, Thailand and USA in the World Market from 1995 to 2005	54

4.6:	Egg Exports of China, Germany, Thailand, and USA in the World Market from 1995 to 2004	57
4.7:	Egg Export Prices of China, Germany, Thailand and USA in the World Market from 1995 to 2004	59
4.8:	Egg Market-Share (Competition) of China, Germany, Thailand and USA in the World Market from 1995 to 2004	62
4.9:	Current Status on Egg Trade in the World Egg Market and Industry Performance in the World Egg Market of China, Germany, Thailand and USA from 1995 to 2005	63
4.10:	Thailand's Number of Hens for Chicken Egg Production from 1995 to 2005	68
4.11:	Thailand's Gross Value of Chicken Egg Production from 1997 to 2005	70
4.12:	Thailand's Production Cost of Chicken Eggs in 2005	74
4.13:	Thailand's Production Cost and Export Price of Chicken Eggs from 1997 to 2005	76
4.14:	Thailand's Number of Layer Parent-Stock (One-Day Chicks) Imports, Quantity of Corn and Soybean Meal Imports from 1995 to 2005	78
4.15:	Thailand's Chicken Egg Production, Exports, and Consumption from 1995 to 2005	80
4.16:	Hong Kong's Value of Imports of China, Germany, Thailand and USA from 1995 to 2005	90
4.17:	Hong Kong's Value of Chicken Egg Imports of China, Germany, Thailand and USA from 1995 to 2005	92

4.18:	Hong Kong's Quantity of Chicken Egg Imports of China, Germany, Thailand and USA from 1995 to 2005	94
4.19:	Hong Kong's Price of Chicken Egg Imports of China, Germany, Thailand and USA from 1995 to 2005	97
4.20:	Value of Imports, Value and Quantity of Chicken Egg Imports, and Price of Chicken Egg Imports of China, Germany, Thailand and USA in Hong Kong from 1995 to 2005	99
5.1:	Revealed Comparative Advantage Index of Chicken Egg Imports of China, Germany, Thailand and USA in Hong Kong from 1995 to 2005	104
5.2:	Market Share of Chicken Egg Imports of China, Germany, Thailand and USA in Hong Kong from 1995 to 2005	106
5.3:	Percentage Matrix of Chicken Egg Imports of China, Germany, Thailand and USA in Hong Kong in 2005	110
5.4:	Market-Share Forecast of Chicken Egg Imports of China, Germany, Thailand and USA in Hong Kong from 2006 (t+1) to 2015 (t+10)	116
5.5:	Value Matrix of Chicken Egg Imports of China, Germany, Thailand and USA in Hong Kong in 2005	122
5.6:	Revealed Comparative Advantage, Competitive Position, and Import Price of Chicken Egg Imports of China, Germany, Thailand and USA in Hong Kong from 1995 to 2005	138

LIST OF FIGURES

Figure	Page
3.1: Sales Gain or Loss for Thailand in March, 2005	41
3.2: Sales Gain or Loss for China in March, 2005	42
3.3: Sales Gain or Loss for USA in March, 2005	43
4.1: Channel of Distribution for Thailand's Chicken Egg Industry	71
5.1: Market Growth of Chicken Egg Imports in Hong Kong from 1996 to 2005	108
5.2: Sales Gain or Loss for China Chicken Eggs in Hong Kong in 2005	124
5.3: Sales Gain or Loss for Germany Chicken Eggs in Hong Kong in 2005	125
5.4: Sales Gain or Loss for Thai Chicken Eggs in Hong Kong in 2005	126
5.5: Sales Gain or Loss for USA Chicken Eggs in Hong Kong in 2005	127
5.6: Sales Gain or Loss for the Other Countries' Chicken Eggs in Hong Kong in 2005	128
5.7: Relation between Import Prices and Import Quantities of China Chicken Eggs in Hong Kong from 1995 to 2005	130
5.8: Relation between Import Prices and Import Quantities of Germany Chicken Eggs in Hong Kong from 1995 to 2005	131

5.9:	Relation between Import Prices and Import Quantities of Thai Chicken Eggs in Hong Kong from 1995 to 2005	133
5.10:	Relation between Import Prices and Import Quantities of USA Chicken Eggs in Hong Kong from 1995 to 2005	134

CHAPTER ONE

INTRODUCTION

Chicken eggs (also referred to after this as table eggs or hen eggs) weighing about 60 grams, of which consisting of 10 percent of shell, 60 percent of white, and 30 percent of yolk, are one of a group of important protein foods. They provide not only all essential amino acids, but also a significant number of vitamins and minerals. Taking the points of tasty, affordable, speedy, and convenient as well as nutritious benefits of chicken eggs into account, it is not an exaggeration to say that chicken eggs (recently accepted as a high protein source with a low price) are playing an increasingly crucial role in the world political, economic and social situations, especially to developing countries and less-developed countries.

This has been the case with the chicken egg industry in Thailand, which has been one of the major livestock components of the nation's economy. Chicken eggs have been mainly produced for domestic consumption, accounting for nearly 98 percent of the country's production. Although the quantity of chicken egg exports has been approximately 2 percent of the country's production, it has been significantly proven to solve the problem of imbalance between supply and demand for chicken eggs that has not only caused the price instability, but also directly affected the farmers' income instability.

The exporting of Thai chicken eggs has been helpful not only for stabilizing, but also avoiding further reduction in domestic prices: For instance, the egg price stayed stable from 1.40 baht per egg in 2002 to 1.42 baht per egg in 2003 due to enormous exports from 38.51 million eggs to 203.40 million eggs. On the other hand, the chicken egg exporting helps in gaining better prices: For instance, the domestic prices greatly

The contents of
the thesis is for
internal user
only

BIBIOGRAPHY

- Adams, C. J. and Josephine, D. (1995). **Animals and Women: Feminist Theoretical Explorations**. Durham, NC: Duke University Press.
- Balassa, B. (1989). **Comparative Advantage, Trade Policy and Economic Development**. New York: New York University Press.
- Balassa, B. (1965). **Trade Liberalization and Revealed Comparative Advantage**. The Manchester School of Economics and Social Studies 33: pp. 99-123.
- Bodensteiner, C. (2006, June 20). **Succeeding When Environmental Activists Oppose You**. Public Relations Quarterly, 48(2): pp. 14.
- Brewer, T. L. and Alan M. R. (Eds) (2001). **The Oxford Handbook of International Business**. New York: Oxford University Press.
- Brink, L., Oxley, J., McCarthy, M., Hobbs, J. E., Kerr, W. A., and Klein K.K. (1997). **The Hog and Pork Industries of Denmark and The Netherlands: A Competitiveness Analysis**. Policy Branch, Agriculture and Agri-Food Canada.
- Browne, W. P. and Allan J. C. (1990). **U.S. Agricultural Groups: Institutional Profiles**. New York: Greenwood Press.
- Bude, S. (2006, June 20). **Crack Down on Salmonella Abroad, Says Egg Watchdog**. Western Mail 5.

- Caballero-Anthony, M. (2006). **Combating Infectious Diseases in East Asia: Securitization and Global Public Goods for Health and Human Security.** Journal of International Affairs, 59(2): pp. 105.
- Carr, B. (2002, April). **Looking to the North: Carr Talks Asia New South Wales' Trade Future Lies in Asia, with Exports to the Region Now Worth US\$13 Billion.** Business Asia, 10(3): pp. 10.
- COMTRADE of the United Nations. (2001). **Revealed Comparative Advantage (RCA) of: TURKEY.**
- COMTRADE of the United Nations (2001). **Revealed Comparative Advantage (RCA) of: VIETNAM.**
- Davidova, S., Matthew G. and Tomas R. (2000). **The Competitiveness of Agriculture in Bulgaria and the Czech Republic vis-a-vis the European Union.** Comparative Economic Studies, 42(1): pp. 59.
- Department of Livestock Development, (2004). **Bird-Flu Epidemic in Thailand.** Ministry of Agriculture and Cooperatives, Thailand.
- Dixon, C. (1999). **The Thai Economy: Uneven Development and Internationalisation.** London: Routledge.
- Fanelli, J. M. and Rohinton, M. **Finance and Competitiveness in Developing Countries.** London: Routledge.
- Foster Your Strategic Thinking. (2007). **Marketing Stat.** Online Available: <http://MarketingStat.com>.

- Fox, K. A. **Intermediate Economic Statistics.** Wiley Eastern Private Limited, New York.
- Fureng, D. and Peter N. (2003). **Sustaining China's Economic Growth in the Twenty-First Century.** New York: Routledge Curzon.
- Garrigus, W. P. (2006). **Poultry Farming in Encyclopedia Britannica 2006.** Encyclopedia Britannica Online. 28 December 2006. Online Available: <http://www.britannica.com/eb/article-67985>.
- Gillin, E. (2000). **World Egg Production, Trade, and Supply at Present and Perspectives.** Food and Agriculture Organization, the United Nations.
- Haddad, M. (1998). **Export Competitiveness: Where Does the Middle East and North Africa Region Stand?** Economic and Social Commission for Western Asia, Working Paper 2030.
- Hafner, J. A. (2006). **Thailand in Encyclopedia Britannica.** Retrieved December 29, 2006, from Encyclopedia Britannica. Online Available: <http://www.britannica.com/eb/article-52671>.
- Hoen, A. R. and Oosterhaven, J. **On the Measurement of Comparative Advantage.** Netherlands Bureau for Economics Policy Analysis (CPB), The Hague, and Department of Economics, University of Groningen, The Netherlands.
- Hong Kong. (2006). **U.S. Government: CIA World Factbook.** Online Available: [https:// www.cia.gov/cia/publications/factbook/geos/hk.html](https://www.cia.gov/cia/publications/factbook/geos/hk.html).

- Hormel Foods. **Types of Eggs – Knowledge.** Online Available:
<http://www.hormel.com/templates/knowledge>.
- Huang, R., Perloff, J. M. and Villas-Boas, S. B. (2006). **Effect of Sales and Brand Loyalty.** Department of Agricultural and Resource Economics, UC Berkeley.
- Husain, I. (2003). **Pakistan's Export Competitiveness in Global Markets.** Seminar on Export-Led Growth Strategy, The Export Promotion Bureau, A Paper Presented.
- Huyakorn, R. (1996). **An Analysis of Export Market of Thai Dog and Cat Food.** M.S. Thesis, Kasetsart University.
- Institute for Management Education for Thailand Foundation. (2002). **Competitiveness of Thailand's Black Tiger Shrimp Industry.**
- International Monetary Fund. (2002). **Improving Jamaica's International Competitiveness.**
- Iowa State University of Science and Technology. (2003). **Economic Importance of the Iowa Egg Industry.**
- Kmenta, J. **Elements of Econometrics.** Macmillan Publishing Co., Inc., New York.
- Kummer, C. (2000, October). **Food - A Better Egg.** The Atlantic Monthly, 286(4): pp. 118.
- Light, J. and Thomas S. (1998). **The 1996 Grain Price Shock: How Did It Affect Food Inflation?** Monthly Labor Review, 121(8): pp. 3.

- Masviriyakul, S. (2004). **Sino-Thai Strategic Economic Development in the Greater Mekong Subregion**. Contemporary Southeast Asia, 26(2): pp. 302.
- Marketing Manager for Excel (MM4XL) Full Edition. (2007). **Aptrio**. Online Available: <http://www.aptrio.com/Business/Spreadsheets/mm-xl-marketing-manager-for-excel-full-edition-1478.html>.
- Meister, K. (2002). **The Role of Eggs in Diet**. Special Report by the American Council on Science and Health.
- Norton, R. D. and Balcazar, A. V. (2003). **A Study of Colombia's Agricultural and Rural Competitiveness**. United Nations Food and Agriculture Organization, the World Bank, and United States Agency for International Development.
- Nussbaum, M. C. and Cass, R. S. (2004). **Animal Rights: Current Debates and New Directions**. New York: Oxford University Press.
- Office of Agricultural Economics. (1996). **Thailand's Chicken Egg Data and Trend in 1996**. Ministry of Agriculture and Cooperatives, Thailand.
- Office of Agricultural Economics. (1999). **Thailand's Livestock Data and Trend in 1999**. Ministry of Agriculture and Cooperatives, Thailand.
- Office of Agricultural Economics. (2000). **Thailand's Livestock Data and Trend in 2000**. Ministry of Agriculture and Cooperatives, Thailand.
- Office of Agricultural Economics. (2005). **Thailand's Raw Materials Situation for Animal Feed in 2004**. Ministry of Agriculture and Cooperatives, Thailand.

Office of Agricultural Economics. (2006). **Thailand's Chicken Egg and Trend in 2006**. Ministry of Agriculture and Cooperatives, Thailand.

Office of Agricultural Economics (2006). **Thailand's Raw Materials Situation for Animal Feed in 2005 and Trend in 2006**. Ministry of Agriculture and Cooperatives, Thailand.

Panagariya, A. (2003, November-December). **International Trade**. Foreign Policy, 139: pp. 20.

Paopongsakorn, N. (1985). **The Commercial Broiler and Swine Industries in Thailand in Food Policy Analysis in Thailand**. Edited by Theodore Panayotou. Bangkok: Agricultural Development Council.

Prasad, S. (2000). **Determinants of Exports in Fiji**. Department of Economics, Reserve Bank of Fiji, Working Paper 4.

Promptak, D. (2000). **An Analysis of Competitiveness of Thailand's Dog and Cat Food Industry**. M.S. Thesis, Kasetsart University.

Samlephan, P. (2003). **Marketing Analysis of Thai Chicken Eggs**. Office of Commerce, Nakornnayok, Central Province of Thailand.

Sanderson, F. H. (1990). **Agricultural Protectionism in the Industrialized World**. Washington, DC: Resources for the Future.

Shepherd, G. S. **Agricultural Price Analysis**. The Iowa state College Press, Ames Iowa, U.S.A.

- Stafford, L. W. T. **Mathematics for Economists**. The English Language Book Society and Macdonald and Evans Ltd., London.
- Teitel, M. (1996, January-February). **Endangered Dinner**. *Sierra*, 81(1): pp. 12.
- The Association of Hen-Egg Farmers, Traders and Exporters (2006, May-June). **Cost of An Egg Production**. *Egg News*, Vol. 50.
- The Canadian Poultry and Egg Processors Council. (2002). **Partnership for Competitiveness in the Canadian Poultry and Egg Industry**. A Discussion Paper.
- Theil, H. and Rey, G. (1966, May). **A Quadratic Programming Approach to the Estimation of Transition Probabilities**. *Management Science*, Vol. 12, No. 9.
- Tinwattanakul, C. (2003). **Guide for Layer Farming Development and Future Exports of Thai Chicken Eggs**. Office of Import and Export for General Goods, Department of Foreign Trade, Ministry of Foreign Trade, Thailand.
- Trade and Industry Department (2006, July). **Hong Kong – Thailand Trade Relations**. The Government of the Hong Kong Special Administrative Region.
- Uslu, A and Cam, T. **Analysis of Brand Loyalty with Markov Chains**. School of Economics and Administrative Science, Marmara University, Turkey. Online Available: <http://www.opf.slu.cz/vvr/akce/turecko/pdf/Obsah.pdf>
- Utkulu, U. and Seymen, D. (2004, September). **Revealed Comparative Advantage and Competitiveness: Evidence for Turkey vis-a-vis the EU/15**. European Trade Study Group 6th Annual Conference, ETSG 2004, Nottingham.

- White, L. H. (1999). **Hayek's Monetary Theory and Policy: A Critical Reconstruction.** Journal of Money, Credit & Banking ,31(1): pp. 109.
- Wilkinson, E. (2001). **Chinese Culinary History.** China Review International, 8(2): pp. 285.
- World Investment Report. (2002). **World's Export Winners for the Improvement in Its Export Performance from 1985-2000.** United Nations Conference on Trade and Development.