



UNIVERSITI PUTRA MALAYSIA

***EFFECTS OF TRADE ON EMPLOYMENT CREATION AND HUMAN
DEVELOPMENT IN DEVELOPED AND DEVELOPING COUNTRIES***

MAWAR MURNI YUNUS

FEP 2013 17



**EFFECTS OF TRADE ON EMPLOYMENT CREATION AND HUMAN
DEVELOPMENT IN DEVELOPED AND DEVELOPING COUNTRIES**

By

MAWAR MURNI YUNUS

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

May 2013

All material contained within the thesis, including without limitation text, logos, icons, photographs and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



DEDICATION

This thesis is dedicated to my loving husband, my sons; Akram and Adham, and my dearest daughter; Sarah. Without their patience, understanding, support, love and most of all their prayers, the completion of this thesis would not have been possible.



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirement for the Degree of Doctor of Philosophy

EFFECTS OF TRADE ON EMPLOYMENT CREATION AND HUMAN DEVELOPMENT IN DEVELOPED AND DEVELOPING COUNTRIES

By

MAWAR MURNI BINTI YUNUS

May 2013

Chair : Associate Professor Law Siong Hook, PhD
Faculty : Economics and Management

Trade, employment creation, and human development are the three major areas in the economic growth, wealth and prosperity of a country. Trade has played an increasing role in the world economy over the past decades. In both developed and developing countries, trade has created employment and higher incomes for millions. Simultaneously, many people have yet to benefit. According to UNDP (2006), trade can definitely enhance human development. Human development is a process of enlarging people's choices. It puts the importance on the three essentials for people; to lead a long and healthy life, to obtain knowledge, and to have right to use resources needed for a decent standard of living and their environment. If these essential choices are not offered, many other opportunities remain inaccessible. The Human Development Index (HDI) has become a standard for measuring human development. Its component indices measure life expectancy, literacy and education, and GDP per capita.

The purpose of this study is to examine the effect of trade on employment creation, human development, health, and education in developed and developing countries. Firstly, for the effect of trade on employment creation, this study explores whether improvement in trade in developed and developing countries can create or destroy employments. Secondly, for the impact of trade on human development, this study seeks to address does trade affect human development or not. Moreover, this study attempts to evaluate which channels such as, income, employment, or institutional quality, might influence human development. Furthermore, in studying the effect of trade on health and education, this study examines whether the improvement in trade has a good or bad effect on health and education. A systematic empirical study based on the Generalized Method of Moments (GMM) has been undertaken by this study. In the first issue, this study concentrates on the time frame from year 1980 to 2009 of 81 countries; 30 developed countries and 51 developing countries. In the other two issues, this study focuses on the time frame from year 1980 to 2007 with 90 countries; 32 and 58 countries from developed and developing countries, respectively.

The results in the first issue clearly indicate that total trade which consists of exports and imports is insignificant in promoting employment creation for developing

countries. However, the export equation found a positive effect of export on employment creation in developing countries. Nevertheless, the import equation suggests a negative effect of import on employment creation in developed countries. On the other hand, the empirical results for the effect of trade on human development demonstrate that total trade does not affect human development. The employment channel results found a positive role in influencing the effect of total trade on human development in developed countries. Overall, for the three channels such as income, employment, and institutions, improvement in total trade does not influence human development for developing countries. The results for the last issue evidently indicate that total trade has a negative effect on health in developing countries. Furthermore, the trade and education results indicate that total trade does not influence education.

The empirical result states that export is statistically a significant determinant for the employment creation in developing countries, whereas import is statistically a significant determinant of employment creation in developed countries. Furthermore, the empirical result also shows that employment channel is statistically a significant determinant for the human development in developed countries. Hence, trade should be emphasized if employment creation and human development are to be considered as valid policy objective. Specifically, to create employment, the main policy should focus on both the improvement of exports in developing countries. At the same time, the developed countries need to produce and remain goods and services for the domestic purposes particularly for the industries which have comparative advantage in their productions. As to improve the human development, the policy should concentrate on both formal and informal education such as learning and upgrading skills respectively.

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

KESAN PERDAGANGAN KE ATAS PENCIPTAAN PEKERJAAN DAN PEMBANGUNAN INSAN DI NEGARA MAJU DAN MEMBANGUN

Oleh

MAWAR MURNI BINTI YUNUS

Mei 2013

Pengerusi : Profesor Madya Law Siong Hook, PhD
Fakulti : Ekonomi dan Pengurusan

Perdagangan, penciptaan pekerjaan, dan pembangunan insan adalah tiga aspek yang amat penting untuk pertumbuhan ekonomi, kekayaan, dan kemakmuran sesebuah negara. Perdagangan memainkan peranan yang semakin meningkat dalam ekonomi dunia melangkaui dekad lepas. Di kedua-dua negara maju dan membangun, perdagangan dijangkakan mencipta pekerjaan dan meningkatkan pendapatan untuk berjuta-juta penduduk. Pada masa yang sama, kebanyakan penduduk masih belum mendapat manfaat. Menurut UNDP (2006), perdagangan pasti dapat meningkatkan pembangunan insan. Pembangunan insan adalah proses memperluaskan pilihan seseorang. Ia meletakkan kepentingan terhadap tiga keperluan untuk manusia; untuk menikmati kehidupan yang sihat dan berpanjangan, untuk memperoleh pengetahuan, dan mempunyai hak untuk menggunakan sumber yang diperlukan untuk taraf hidup yang beradab dan persekitaran mereka. Sekiranya pilihan penting ini tidak ditawarkan, banyak peluang lain menjadi tidak dapat dicapai. Indeks Pembangunan Insan (HDI) menjadi piawai bagi mengukur pembangunan insan. Indeks-indeks komponennya mengukur jangkaan hayat, celik huruf dan pendidikan, dan Keluaran Dalam Negara Kasar (GDP) per kapita.

Tujuan kajian ini adalah untuk menyelidik kesan perdagangan terhadap penciptaan pekerjaan, pembangunan insan, kesihatan, dan pendidikan di negara maju dan membangun. Pertama, untuk kesan perdagangan terhadap penciptaan pekerjaan, kajian ini meninjau samada peningkatan dalam perdagangan di negara maju dan membangun boleh mencipta atau memusnahkan pekerjaan. Kedua, untuk kesan perdagangan terhadap pembangunan insan, kajian ini cuba untuk membincangkan adakah perdagangan mempengaruhi atau tidak pembangunan insan. Selanjutnya, kajian ini cuba untuk menilai saluran mana; pendapatan, pekerjaan, atau kualiti institusi, boleh mempengaruhi pembangunan insan. Seterusnya, untuk mengkaji kesan perdagangan terhadap kesihatan dan pendidikan, kajian ini berusaha untuk melihat samada peningkatan dalam perdagangan mempunyai kesan yang baik atau sebaliknya terhadap kesihatan dan pendidikan. Kajian empirikal yang sistematik berdasarkan kepada *Generalized Method of Moments* (GMM) telah dilakukan oleh kajian ini. Bagi isu yang pertama, kajian ini menumpukan kepada tempoh masa dari 1980 hingga 2009 untuk 81 negara; 30 negara maju dan 51 negara membangun. Bagi dua isu yang lain, kajian ini

memfokuskan kepada tempoh masa dari 1980 hingga 2007 untuk 90 negara; masing-masing 32 dan 58 dari negara maju dan membangun.

Dapatan dari isu pertama secara jelas menunjukkan jumlah perdagangan yang terdiri daripada eksport dan import adalah tidak signifikan terhadap penciptaan pekerjaan untuk negara membangun. Namun, persamaan eksport mendapati kesan positif eksport terhadap penciptaan pekerjaan pada negara membangun. Sebaliknya, persamaan import menunjukkan kesan negatif terhadap penciptaan pekerjaan di negara maju. Bagaimanapun, dapatan untuk kesan perdagangan terhadap pembangunan insan menunjukkan jumlah perdagangan tidak mempunyai kesan terhadap pembangunan insan. Dapatan saluran pekerjaan menunjukkan kesan positif dalam mempengaruhi kesan jumlah perdagangan terhadap pembangunan insan di negara maju. Secara keseluruhan, untuk ketiga-tiga saluran; pendapatan, pekerjaan, dan institusi, peningkatan dalam jumlah perdagangan tidak mempengaruhi pembangunan insan untuk negara membangun. Dapatan bagi isu terakhir jelas menunjukkan jumlah perdagangan mempunyai kesan negatif terhadap kesihatan di negara membangun. Seterusnya, dapatan perdagangan dan pendidikan menunjukkan jumlah perdagangan tidak mempengaruhi pendidikan.

Dapatan empirikal mendapati bahawa eksport adalah penentu yang signifikan secara statistik bagi penciptaan pekerjaan pada negara membangun, manakala import adalah penentu yang signifikan secara statistik bagi penciptaan pekerjaan di negara maju. Seterusnya, dapatan empirikal juga menunjukkan bahawa saluran pekerjaan adalah penentu yang signifikan secara statistik bagi pembangunan insan di negara maju. Oleh yang demikian, perdagangan harus dititikberatkan jika penciptaan pekerjaan dan pembangunan insan akan diambilkira sebagai objektif dasar yang sesuai. Secara khusus, untuk mencipta pekerjaan, dasar utama harus fokus terhadap kedua-duanya melalui peningkatan eksport di negara membangun. Pada masa yang sama negara maju perlu menghasilkan serta meninggalkan barang-barang dan perkhidmatan untuk kegunaan dalam negara terutamanya bagi industri yang mempunyai faedah berbanding dalam pengeluarannya. Bagi meningkatkan pembangunan insan, dasar harus fokus terhadap kedua-duanya melalui pendidikan formal dan meningkatkan kemahiran.

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation to the Chairman of my Thesis Supervisory Committee, Associate Professor Dr. Law Siong Hook for his continuous support and valuable suggestions throughout my period of study. My appreciation also goes to my Supervisory Committee Members, Professor Dr. Zulkornain Yusop and Associate Professor Dr. Normaz Wana Ismail.

I would like to thank the Kolej Universiti Islam Antarabangsa Selangor (KUIS) for providing financial support and granting me the study leave. I would also like to express my sincere gratitude to Professor Dr. Ahmad Zubaidi Baharumshah, Professor Dr. Mansor H. Ibrahim, Dr. Lee Chin, Dr. Shivee Ranjane Kaliappan, Dr. Rusmawati Said, and Associate Professor Dr. Wan Azman Saini Wan Ngah for their endless support and advice.

My sincere appreciation also goes to Associate Professor Dr. Md Zyadi Md Tahir, Associate Professor Dr. Noor Aini Khalifah, and Associate Professor Dr. Shahida Shahimi for their assistance throughout my period of study. I also would like to thank Dr. Jamilah Mohd Mahyideen, Ruhaida Saidon, Dr. Zunika Mohamed, Dr. Rubayah Yacob, Dr. Norlaila Abdullah Chik, Nooraza Tukiran, Muhammad Ridhuan Bos Abdullah, Rizaudin Sahlan, NurNaddia Nordin, NurHaiza Nordin, Zurina Zulkeflee, Sa'diah Abdul Karim, Muna Sulaiman, Mokthar Hj. Ismail, Dr. Normazaini Saleh, Dr. Sarifah Ismail, and Dr. Nor Hakimah Hj. Mohd Nor for their sharing their knowledge and happiness through my journey of study.

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

Law Siong Hook, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Zulkornain Yusop, PhD

Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

Normaz Wana Ismail, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

BUJANG KIM HUAT, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

Declaration by graduate student

I hereby confirm that:

- this thesis is my original work;
- quotations, illustrations and citations have been duly referenced;
- this thesis has not been submitted previously or concurrently for any other degree at any other institutions;
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012;
- written permission must be obtained from supervisor and the office of Deputy Vice-Chancellor (Research and Innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the Universiti Putra Malaysia (Research) Rules 2012;
- there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software.

Signature: _____ Date: _____

Name and Matric No.: Mawar Murni Yunus , GS21579

Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

Signature:		
Name of Chairman of Supervisory Committee:	Associate Professor Law Siong Hook, PhD	
Signature:		
Name of Member of Supervisory Committee:	Professor Zulkornain Yusop, PhD	

Signature:		
Name of Member of Supervisory Committee:	Associate Professor Normaz Wana Ismail, PhD	

TABLE OF CONTENTS

	Page
ABSTRACT	i
ABSTRAK	iii
ACKNOWLEDGEMENTS	v
APPROVAL	vi
DECLARATION	viii
LIST OF TABLES	xiii
LIST OF FIGURES	xv
LIST OF ABBREVIATIONS	xvi
 CHAPTER	
 1 INTRODUCTION	 1
1.1 Background of the Study	1
1.1.1 Export, Import, and Total Trade in Developed and Developing Countries	3
1.1.2 Employment in Developed and Developing Countries	4
1.1.3 Human Development, Health, and Education in Developed and Developing Countries	6
1.2 Problem Statements	8
1.3 Objectives of the Study	10
1.4 Significance of the Study	11
1.5 Scope of the Study	11
1.6 Organization of the Study	12
 2 LITERATURE REVIEW	 13
2.1 Introduction	13
2.2 Theoretical Review	13
2.2.1 Trade and Employment Creation	13
2.2.2 Trade, Human Development, Health, and Education	16
2.3 Empirical Review	19
2.3.1 Trade and Employment Creation	19
2.3.1.1 Factor Content Approach	19
2.3.1.2 Growth Accounting Approach	22
2.3.1.3 Econometric Approach	23
2.3.2 Trade, Human Development, Health, and Education	25
2.4 Conclusion	32
 3 METHODOLOGY	 35
3.1 Introduction	35
3.2 Theoretical Framework for Effect of Trade on Employment Creation and Human Development	35
3.3 The Models Description	37

3.3.1	Models of Trade and Employment Creation	37
3.3.2	Models of Trade and Human Development	39
3.3.2.1	Channels of the Impact of Trade on Human	40
3.3.3	Models of Trade and Health	41
3.3.4	Models of Trade and Education	42
3.4	The Generalized Method of Moments (GMM)	42
3.5	Data and Sources	47
3.5.1	Trade and Employment Creation	47
3.5.2	Trade, Human Development, Health, and Education	48
3.5.3	Variables Definition	49
3.6	Chapter Summary	50
4	RESULTS AND DISCUSSION	51
4.1	Introduction	51
4.2	Total Trade, Export, Import, and Employment Creation	52
4.2.1	Descriptive Statistics and Correlations: Total Trade, Export, Import, and Employment Creation	52
4.2.2	Empirical Results and Discussion: Total Trade and Employment Creation	53
4.2.3	Empirical Results and Discussion: Export and Employment Creation	56
4.2.4	Empirical Results and Discussion: Import and Employment Creation	56
4.3	Trade and Human Development	59
4.3.1	Descriptive Statistics and Correlations: Trade and Human Development	59
4.3.2	Empirical Results and Discussion: Trade and Human Development	61
4.3.3	Empirical Results and Discussion: Role of Income in Influencing the Effect of Trade on Human Development	63
4.3.4	Empirical Results and Discussion: Role of Employment in Influencing the Effect of Trade on Human Development	65
4.3.5	Empirical Results and Discussion: Role of Institutions in Influencing the Effect of Trade on Human Development	67
4.4	Trade, Health, and Education	69
4.4.1	Descriptive Statistics and Correlations: Trade, Health, and Education	69
4.4.2	Empirical Results and Discussion: Trade and Health	70
4.4.3	Empirical Results and Discussion: Trade and Education	72
4.5	Summary of Empirical Results	74

5	CONCLUSION AND POLICY IMPLICATIONS	77
5.1	Introduction	77
5.2	Summary of the Study	77
5.3	The Major Findings	77
5.3.1	Trade, Export, Import, and Employment Creation	78
5.3.2	Trade and Human Development	79
5.3.3	Trade and Human Development through Three Different Channels	79
5.3.4	Trade, Health, and Education	81
5.4	Policy Implications	82
5.5	Limitations of the Study	84
5.6	Suggestions for Further Studies	85
	REFERENCES	87
	APPENDICES	97
	BIODATA OF STUDENT	99
	LIST OF PUBLICATIONS	100

LIST OF TABLES

Table		Page
1.1	Indices in Developed and Developing Countries (1980 - 2011)	7
3.1	Sources of Trade and Employment Creation Data	47
3.2	Sources of Trade, Human Development, Health, and Education Data	48
4.1a	Summary Statistics: Total Trade, Export, Import, and Employment Creation	52
4.1b	Correlations Matrix: Total Trade, Export, Import, and Employment Creation	53
4.1c	Result of Panel Estimation: Total Trade and Employment Creation	54
4.1d	Result of Panel Estimation: Export and Employment Creation	57
4.1e	Result of Panel Estimation: Import and Employment Creation	58
4.2a	Summary Statistics: Trade and Human Development	60
4.2b	Correlations Matrix: Trade and Human Development	61
4.2c	Result of Panel Estimation: Trade and Human Development	62
4.2d	Result of Panel Estimation: Trade and Human Development through Income Channel (<i>TRGDPC</i>)	64
4.2e	Result of Panel Estimation: Trade and Human Development through Employment Channel (<i>TL</i>)	66
4.2f	Result of Panel Estimation: Trade and Human Development through Institutions Channel (<i>TINS</i>)	68
4.3a	Summary Statistics: Trade, Health, and Education	69
4.3b	Correlations Matrix: Trade, Health, and Education	70
4.3c	Result of Panel Estimation: Trade and Health	71
4.3d	Result of Panel Estimation: Trade and Education	73
5.1a	Summary of Panel Estimation: Total Trade and Employment Creation	78
5.1b	Summary of Panel Estimation: Export and Employment Creation	78
5.1c	Summary of Panel Estimation: Import and Employment Creation	78
5.2	Summary of Panel Estimation: Trade and Human Development	79
5.3a	Summary of Panel Estimation: Trade and Human Development (Income Channel, <i>TRGDPC</i>)	80
5.3b	Summary of Panel Estimation: Trade and Human Development (Employment Channel, <i>TL</i>)	80
5.3c	Summary of Panel Estimation: Trade and Human Development (Institutions Channel, <i>TINS</i>)	80
5.4a	Summary of Panel Estimation: Trade and Health	81
5.4b	Summary of Panel Estimation: Trade and Education	81

A.1	Employment: List of Countries	97
A.2	Human Development, Health, and Education: List of Countries	98



LIST OF FIGURES

Figure		Page
1.1	Total Trade (Million Dollars) in Developed and Developing Countries (1998-2010)	3
1.2	Annual Growth Rate (%) of Export, Import, and Total Trade in Developed and Developing Countries (1998-2010)	4
1.3	Total Employment (Number of Persons in Thousands) in Developed and Developing Countries (1985 - 2010)	5
1.4	Annual Growth Rate (%) of Employment in Developed and Developing Countries (1985-2010)	5
3.1	Linkages among Trade, Employment Creation, and Human Development	36

LIST OF ABBREVIATIONS

2SLS	Two Stage Least Squares
AR(2)	Autoregressive Process of Order 2
ASEAN	Association of South East Asian Nations
CGE	Computable General Equilibrium
CPI	Consumer Price Index
DIF-GMM	Differenced Generalized Method of Moment
DV	Dependent Variable
EC	Economic Community
EDI	Education Index
EKC	Environmental Kuznets Curve
EU	European Union
FDI	Foreign Direct Investment
FGLS	Feasible Generalized Least Squares
GDP	Gross Domestic Product
GMM	Generalized Method of Moment
HDI	Human Development Index
HDR	Human Development Report
H-O	Heckscher-Ohlin
H-O-S	Heckscher-Ohlin-Samuelson
ICRG	International Country Risk Guide
IFS	International Financial Statistics
IIT	Intra-Industry Trade
ILO	International Labour Organization
IMF	International Monetary Fund
IRIS	Integrated Risk Information System
ISIC	International Standard Industrial Classification
IT	Information Technology
ITS	International Trade Statistics
ITU	Indirect Trade Utility
IV	Instrumental Variables
LEI	Life Expectancy Index
MDG	Millennium Development Goals
MENA	Middle East and North Africa
NAFTA	North American Free Trade Agreement
NIC	Newly Industrializing Countries
OECD	Organization for Economic Cooperation and Development
OIC	Organization of Islamic Conference
OLS	Ordinary Least Squares

PCA	Principal Component Analysis
PPP	Purchasing Power Parity
R&D	Research and Development
RCH	Resource Curse Hypothesis
RER	Real Exchange Rate
SHD	Sustainable Human Development
SITC	Standard International Trade Classification
SMEs	Small and Medium Enterprises
S-S	Stolper-Samuelson
SYS-GMM	System Generalized Method of Moment
TDR	Trade Development Report
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UK	United Kingdom
UNDP	United Nations Development Programme
US	United States of America
WDI	World Development Indicators
WTO	World Trade Organization

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Trade has played an increasing role in the world economy over the past decades as proven by the fact that the growth of real trade has exceeded the world output. World exports of goods and services nearly tripled in the year between 1990 and 2007, which is a 7.0 per cent annual average growth rate. Additionally, foreign direct investment (FDI) increased 9 folds between 1990 and 2008.¹ More people are moving abroad,² more investors are buying foreign stocks, and more companies are expanding to overseas markets. However, the volume of world merchandise trade grew 5.0 per cent in 2011, accompanied by global output growth of 2.4 per cent. This marks a significant slowdown growth rate from 2010, when trade advanced 13.8 per cent and output expanded by 3.8 per cent.³ In fact, a slower growth in both trade and output was expected in year 2011, and multiple economic shocks held back their economic activity and trade during that year.⁴

In both developed and developing countries, trade has seemingly created employment and better earnings for millions of people. However, countless of individuals, comprising poor farmers were marginalizing by trade barriers⁵ and unclear prices of agricultural. Moreover, employees, who misplace employments in domestic industries because of tariffs⁶ reduction on challenging imports and women, who earn higher earnings and better working environments. They although face the possibility of dislocation succeeding the pulling out of textile quotas; as well as abroad employees, who head off their family lagging behind also face inequity as well as misuse seeking employments that be able to direct towards improve survives back home.

Trade openness is able to produce a further incentive that will help create employment opportunities for the world. Therefore, the role of trade on employment is clear. Gaining from trade in general is more important than the costs connected with the labor rearrangement plus capital, for the well-organized uses. The challenge for both developed and developing countries is to create more employment. Enormous studies have been carried out attempting to give explanation on why some countries have

¹ World Bank, 2010.

² They are moving temporarily or permanently.

³ UNCTAD, 2011 and WTO, 2012.

⁴ The nuclear incident, tsunami, and earthquake that beat Japan in March 2011 suddenly lower the country's exports in the second quarter, whereas flooding in Thailand decrease the supply of key parts and components in the fourth quarter as well as further distort networks of global production. Turmoil in North African countries takes a toll on the region's exports, particularly in Libya, where oil production and exports plunge. Lastly, negative gross domestic product (GDP) growth in the European Union diminish demand for imported goods in the fourth quarter as the euro sovereign debt crisis came to a head (WTO, 2012).

⁵ Trade barriers are tariff and quota; nontariff barriers are quantitative restrictions, price and earnings restrictions, and trade-restricting regulations.

⁶ The declining of tariffs has given to a fast development in trade.

comparatively higher unemployment rates than others, but less attention has been focus to countries' relative performance in employment creation, or net employment growth.

According to UNDP (2006), trade can definitely enhance human development. That mainly concerns on expanding individual's opportunities as well as preferences. In particular, the poor community and the progressing are necessary to human freedoms and human rights (UNDP, 1990). In fact, trade can contribute to human development using two approaches; the family and the national level. Initially, employment-led has increased average household earnings along with expenditure. Typically, the extra earnings are used for their children's education, to improve nutrition and health care and on enhancing skills, which helps improve the human capabilities level. Subsequently, trade can influence government's decision on policies as well as expenses. Indeed, human development is able to gain from an increase in government income when directed towards reducing income gap, gender inequality and improving education and health care systems at the national level.

Congruently, the linkages between trade, health, and education have drawn attention nowadays. To be specific, the relations involving trade, trade agreements as well as health have been the focus of extreme international discussion in current years as resulted in the signing of the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The TRIPS have produced a new global system of patent protection that could inflate prices of pharmaceutical and decrease the rights to use demanded vaccines and medicines.⁷ One should be concern that the trade agreement accompanied by bilateral and regional trade agreements states that additional support patent protection presumably might shrink entrance to pharmaceutical drugs particularly within the poorest households in developing countries. On the same ground, the discussion about trade and health in addition reveal fears regarding the effect of international trade on health systems. For example, further liberalization and trade flows in products of agricultural possibly will raise risks connected with food safety and the international spread of infection.

Likewise, trade is likely to advance standards of education through providing individuals with better encouragements to develop their expertise. One of the obvious direct effects of trade on education can be observe in better specialty. Such as, a potential increase in the demand for outsourcing personnel in India and in most developing countries has led the information technology (IT) training institutions to grow rapidly. At the same time, other groups have better admittance to education; this can indirectly get better health and life expectancy. It is not simply due to better knowledge of hygiene but due to better life achievement and empowerment resulting from being capable to connect individual abilities. Our hypothesis is that openness to trade will help raise the levels of education and the index of education rate of adult literacy as well as gross enrolment ratio. This is because education facilitates individual to achieve employments and better living. It will also contribute to the whole development and achieve a higher income per capita.

⁷ Smith et al. (2009).

1.1.1 Sub Export, Import, and Total Trade in Developed and Developing Countries

Obviously, nations that are involve in trade for goods and services are competitive. This will create a comparatively lesser cost and can be in substitute for goods and services. If a nation is involved in international trade, then its households' real purchasing power increases. Their earnings enlarge further since they are able to find imported goods and services at a lower cost than they have been obtaining domestically. The country as a whole benefit, too. Comparatively, it can produce higher GDP from its land, labor and capital since it is not utilizing them to create things that other nations can create at lower resource cost. When a nation releases its boundaries to free movement in and out of goods and services, the market then offers the encouragement to move the nation's resources into their highest-value uses, thus supporting economic growth.

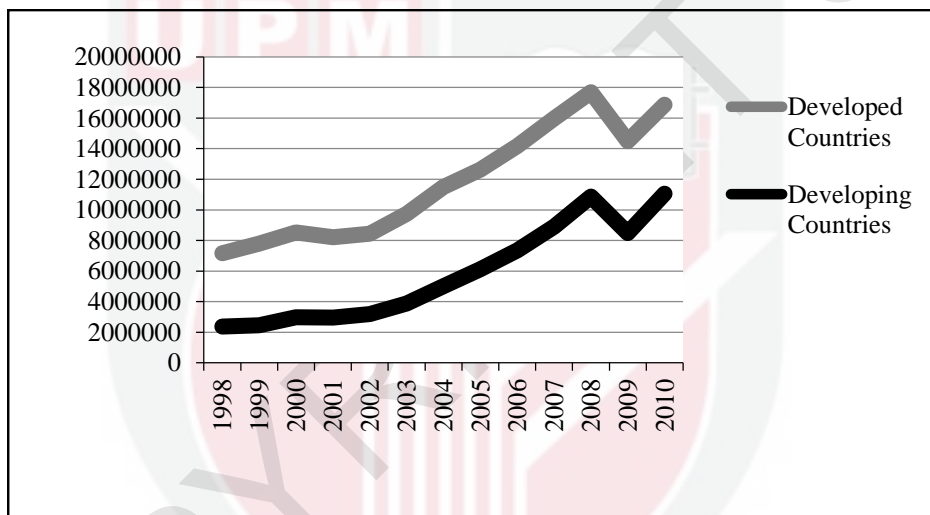


Figure 1.1. Total Trade (Million Dollars) in Developed and Developing Countries (1998-2010)

(Source: WTO, International Trade Statistics, 2009 & 2011. Download the data: www.wto.org/statistics)

Empirically, expanding trade has been an important determinant of economic growth and wealth for developed and developing countries. Figure 1.1 refers to the total trade in developed and developing countries from 1998 to 2010. It exhibits an increasing pattern for the year 2008 and previous years. Figure 1.2 refers to the annual growth rate (%) of export, import and total trade in developed and developing countries from 1998 to 2010. During that period, the export increased 130 per cent, import raised 142 per cent and total trade increased 136 per cent for developed countries. While, for developing countries, the export increased 404 per cent, import raised 335 per cent and total trade increased 370 per cent during the same duration. In contrast, export, import and total trade for developing countries have increased more than three times compared to developed countries.

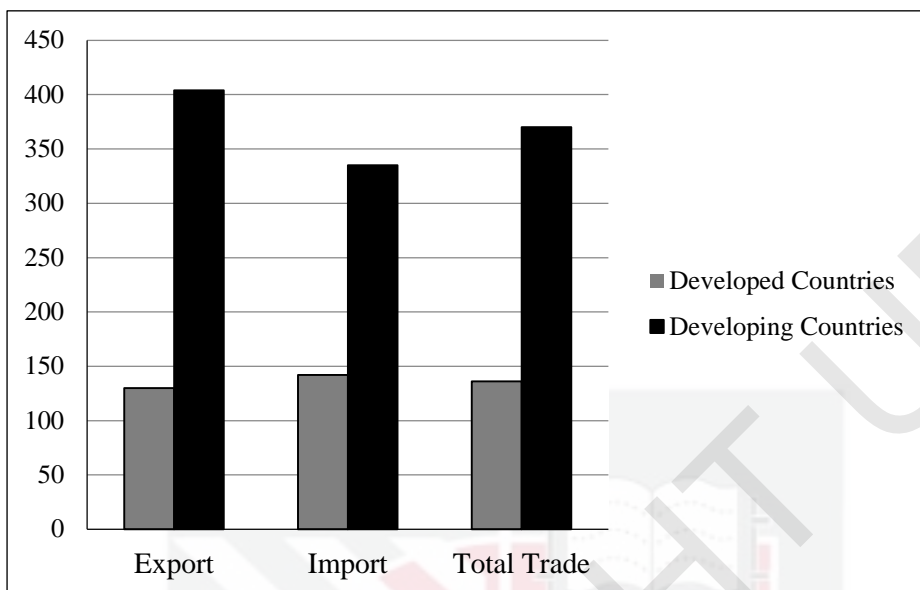


Figure 1.2. Annual Growth Rate (%) of Export, Import, and Total Trade in Developed and Developing Countries (1998-2010)

(Source: WTO, International Trade Statistics, 2009 & 2011. Download the data: www.wto.org/statistics)

1.1.2 Employment in Developed and Developing Countries

Developed and developing countries are very much dependent on internal and external demand in creating employment for their increasing labor force.⁸ Unemployment is mainly a serious economic and social problem for now, since directly connected to poverty, especially in developing countries. On serious note, the effect of the global crisis has worsened the existing slow labor markets in the majority nations much earlier than the crisis contradicted. In year 2008, the overall employment-to-population ratio has been demonstrating a quick turn down whereby a big number of nations are now facing the maximum unemployment rates of the previous 40 years.⁹ Most importantly, employment creation should be given the main concern particularly in developing economic policy.

From this perspective, it is essential that a specific macroeconomic policy framework is built up to support employment creation in developed and developing countries. Historical practice as well as hypothetical thoughts proposed that a sustainable growth approach needs a larger dependence on internal demand, as has been the case in several nations more than the past 30 years. In such strategy, employment creation for attracting surplus labor would effect from a good circle of high investment in fixed capital guiding to more rapidly productivity growth with corresponding wage raises

⁸ Generally, the labor force in a nation includes each person of working age (normally higher than a certain age-about 14 to 16, also under retirement-about 65) who is contributing workers, that is individual actively employed or looking for job. Individual exclude students, retired individual, stay-at-home parents, individual in prisons or identical organizations, individual employed in jobs or professions with not reported earnings, and discouraged workers who cannot get work.

⁹ UNCTAD, 2010.

that facilitate a stable growth of domestic demand. Particularly in developing countries, this possibly will require for a rethinking for a paradigm of export-led development based on keeping labor costs low.

Figure 1.3 shows the total employment from 1985 to 2010 in developed and developing countries. Total employment in developed countries exhibits an increasing pattern. Whereas, total employment in developing countries shows an increasing pattern for the first 10 years and decrease for the following years. Figure 1.4 refers to the annual growth rate (%) of employment in developed and developing countries between 1985 and 2010. The employment for developed countries has increased around 48.98 per cent per annum for that period.

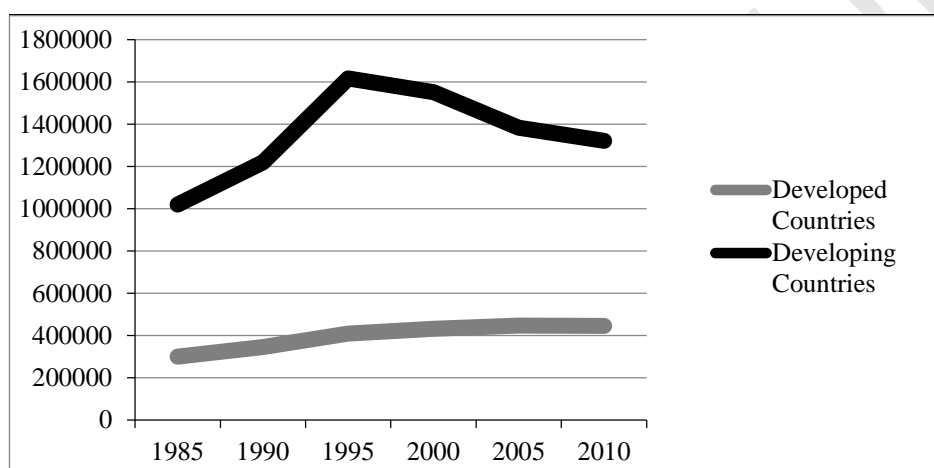


Figure 1.3. Total Employment (Number of Persons in Thousands) in Developed and Developing Countries (1985 - 2010)

(Source: IMF, International Financial Statistics, 2011).

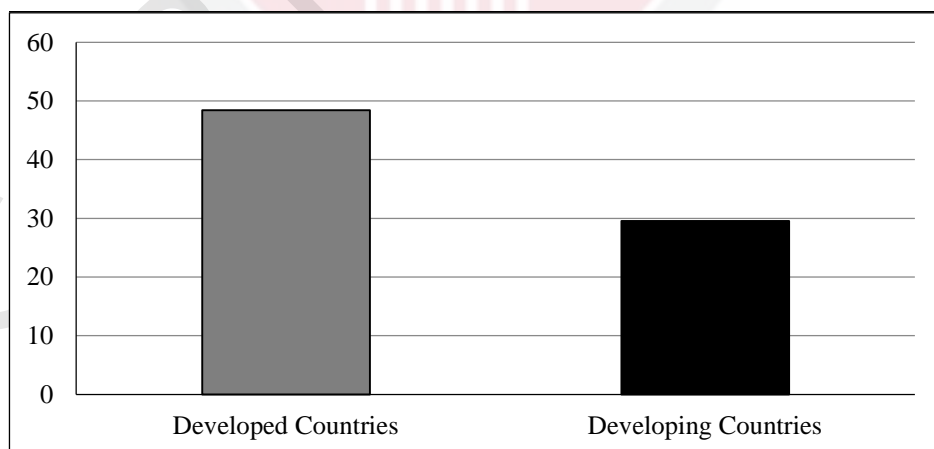


Figure 1.4. Annual Growth Rate (%) of Employment in Developed and Developing Countries (1985-2010)

(Source: IMF, International Financial Statistics, 2011).

Likewise, for developing countries, the employment showed a similar pattern, during the duration from 1985 to 2010, it has increased about 29.52 per cent per annum. Comparatively, the employment for developed countries had increased more rapidly as than developing countries.

1.1.3 Human Development, Health, and Education in Developed and Developing Countries

Human development is a development of expanding individual's options. It puts the importance on the three essentials for individual; to lead a lengthy and well life, to obtain knowledge, as well as to have rights to use resources required for a respectable living standard. Once these important options are not offered, a lot of other chances stay unreachable. The Human Development Index (HDI) has become a standard for measuring human development. Its element indices assess life expectancy, literacy and education, as well as GDP per capita. The HDI is a statistical tool used to measure a country's overall achievement in its social and economic dimensions. The social and economic dimensions of a country are based on the health of people, their level of education obtained and their standard of living.

What has influence the fast growth in trade on human development, both in developed and developing countries? It is difficult to evaluate such an enormous area, which reports for almost 60 per cent of the population in the world. This is also very various as there are differences in wealth as seen in the per-capita income in the wealthiest nation is above 30 times more than in the poorest. Among the nations as well, there are remarkable differences among the wealthiest and the poorest, together in wages and the quality of life.

Economic growth links trade to human development in which it could directly benefit human development through economic growth. All at once, trade could broaden individual's options through enlarging markets for goods and services and through offering steady income for families. Likewise, trade is able to enhance individual's economic participation in presenting employment, access to credit and markets for goods. Such developments allow individuals to be able to promote contribution in political. Additionally, higher employment directs to better earnings that, if use on health and education will enlarge individual's competencies. Moreover, governments are able to exploit trade's economic benefits to enhance equity¹⁰ within dissimilar groups of people or nations.

For instance, the countries displayed here are selected from developed and developing countries showed the pattern of the HDI, life expectancy index (LEI), and education index (EDI). The distributions of those countries from 1980 to 2011 are revealed in Table 1.1. The initial column reveals the HDI rank for that particular country. For developed countries, the dataset selects from 32 countries. All these countries are high in human development. During that period, the indices are increasing for

¹⁰ If earliest situations of earnings, assets, and work allocation, also access to credit, trainings/education and health care services are unbalanced, a transform in trade policy could not offer improved effects to the disadvantages groups.

Table 1.1. Indices in Developed and Developing Countries (1980 – 2011)

HDI Rank	Developed Countries; High HD	1980			1990			2000			2010			2011		
		HDI	LEI	EDI	HDI	LEI	EDI	HDI	LEI	EDI	HDI	LEI	EDI	HDI	LEI	EDI
1	Iceland	0.762	0.893	0.644	0.807	0.917	0.727	0.863	0.942	0.839	0.896	0.973	0.912	0.898	0.975	0.912
2	Norway	0.796	0.877	0.725	0.844	0.891	0.820	0.913	0.926	0.946	0.941	0.961	0.985	0.943	0.964	0.985
3	Canada	0.817	0.868	0.811	0.857	0.904	0.875	0.879	0.932	0.883	0.907	0.960	0.927	0.908	0.962	0.927
12	Finland	0.759	0.844	0.699	0.794	0.871	0.740	0.837	0.910	0.803	0.880	0.943	0.877	0.882	0.946	0.877
13	Denmark	0.783	0.857	0.732	0.809	0.866	0.774	0.861	0.892	0.872	0.893	0.925	0.924	0.895	0.928	0.924
14	Austria	0.740	0.829	0.640	0.790	0.875	0.709	0.839	0.916	0.785	0.883	0.957	0.858	0.885	0.960	0.858
15	United States	0.837	0.851	0.868	0.870	0.871	0.917	0.897	0.896	0.937	0.908	0.921	0.939	0.910	0.923	0.939
21	United Kingdom	0.744	0.844	0.656	0.778	0.877	0.688	0.833	0.910	0.778	0.862	0.947	0.815	0.863	0.949	0.815
23	Germany	0.730	0.839	0.608	0.795	0.874	0.721	0.864	0.916	0.860	0.903	0.951	0.928	0.905	0.953	0.928
33	Portugal	0.639	0.809	0.472	0.708	0.856	0.568	0.778	0.892	0.691	0.808	0.935	0.739	0.809	0.938	0.739
Developing Countries; High HD																
46	Argentina	0.669	0.779	0.583	0.697	0.813	0.681	0.749	0.848	0.751	0.794	0.879	0.806	0.797	0.882	0.806
47	Uruguay	0.658	0.792	0.581	0.686	0.828	0.640	0.736	0.863	0.707	0.780	0.896	0.763	0.783	0.899	0.763
51	Mexico	0.593	0.735	0.429	0.649	0.802	0.518	0.718	0.857	0.631	0.767	0.895	0.726	0.770	0.898	0.726
63	Malaysia	0.559	0.747	0.423	0.631	0.789	0.534	0.705	0.822	0.654	0.758	0.851	0.730	0.761	0.855	0.730
70	Brazil	0.549	0.670	0.402	0.600	0.730	0.486	0.665	0.791	0.599	0.715	0.838	0.663	0.718	0.844	0.663
Developing Countries; Medium HD																
76	Turkey	0.463	0.576	0.298	0.558	0.679	0.410	0.634	0.780	0.503	0.696	0.847	0.583	0.699	0.851	0.583
81	Thailand	0.486	0.718	0.361	0.566	0.828	0.417	0.626	0.828	0.516	0.680	0.851	0.597	0.682	0.854	0.597
84	Iran	0.437	0.490	0.279	0.534	0.659	0.390	0.636	0.785	0.528	0.707	0.832	0.640	0.707	0.836	0.640
102	Philippines	0.550	0.681	0.525	0.571	0.712	0.578	0.602	0.738	0.636	0.641	0.764	0.684	0.644	0.769	0.684
109	Indonesia	0.423	0.593	0.346	0.481	0.664	0.390	0.543	0.721	0.484	0.613	0.772	0.584	0.617	0.779	0.584

Notes: The indices values in this table were calculated using a consistent methodology and data series. They are not strictly comparable with those in earlier Human Development Reports. The acronyms are defined as follows: HDI = Human Development Index; LEI = Life Expectancy Index; EDI = Education Index.

(Source: UNDP, International Human Development Indicators, 2011). Download the data: <http://hdrstats.undp.org/en/indicators/default.html>

each country. Meanwhile, for developing countries, the dataset is selected from 58 countries, which consists of high and medium human development countries. Obviously, the indices showed an increasing pattern throughout that period. In a comparative sense, the HDI, LEI, and EDI indices in developed countries are relatively higher than developing countries. The other nations are not included in the calculations because their data were missing for a year and some more than few years of the indices.

1.2 Problem Statements

This section presents the problem statements associated with the current situations being discussed above. This study focused on developed and developing countries to see the comparison between countries with different basis of economy, living standards, per capita income, literacy rate, technological infrastructure etc. According to WTO (2008), trade in developed and developing countries has increased till date. Specifically, trade for developing countries had increased more than developed countries. Increasing in trade might bring both opportunities and challenges for developed and developing countries' economies. One of the main challenges is employment creation; moreover, the impact of trade on employment creation is uncertain. The effect depends on the amount of employment created within foreign firms as well as the effect of trade on employment creation in domestic firms. Their labor force is still increasing quickly, requesting the continuous generation of additional employments for the new entrants.

The first important issue to be considered would be impact of trade on employment is the possible link between increasing in trade and employment. The growth in trade trend will certainly affect employment creation. Many formal employments will be created in the modern sector¹¹, while some employments may be eliminated especially those noncompetitive in the traditional sector¹². The process of economic development in common and of employment creation for the increasing population specifically, needs an extension of modern activities and the rearrangement for labor from the traditional to the modern sectors. Indeed, such processes require an enhancement in labor productivity in the entire economic sectors.

The theory of Heckscher-Ohlin-Samuelson (H-O-S) supports the process of labor reallocation from the traditional to the modern sectors. This theory gives an obvious forecast concerning the impact of trade on employment. When trade blockades are decreased, the import substitution sector shrinks whereas the export oriented sector enlarges; *ceteris paribus* employment in the previous refuses, at the same time employment in the latter enlarges. This specifies that the declining of trade barriers have a fast development in trade. The simple theory of H-O-S meaning that trade consequences in a rearrangement of employment vanished from the import substitution sector to the export oriented sector.

¹¹ Modern sector means production takes place in structured units with suitable income employments, likes industry (including mining, manufacturing, construction, and power), services, also a few innovative agricultural activities.

¹² Traditional sector means low productivity also a majority of returns to scale of production activity likes traditional agricultural sector.

The second important issue considers the effect of trade on human development, which has two main issues. The first issue is on measurement of human development and the second issue is the channel to show the effect of trade on human development. Pro-trade disputes commonly deliberate on a positive linkage relating trade and per-capita income. As discussed before, this study suggests spreading out the discussion in concentrating on the effect of trade on a wider social development. Regarding the measurement of human development, the previous measurement is still inadequate because they limited their focus on per-capita income; it is a narrow definition to measure human development.

The HDI represents a wider meaning of well-being also offers a complex measure of three fundamental elements of human development; income, health, and education. HDI consists of two main targets that are economics and welfare. Economy targets on income, whereas welfare targets on health and education. To improve the human life, the countries must focus on both economics as well as on welfare. Indeed, focusing solely on economy will lessen the problem of poverty and income disparity. However, if welfare is neglected, the country will face social disparity problem.

The second issue is the channel in which to show the effect of trade on human development. The UNDP (2006) suggested that trade impact on human development through both direct and indirect effect. For the indirect effect, trade leads to improved human development through two channels; income and employment. Their study exhibits that the employment is the most important channel for these impacts of trade on human development. However, these two channels are insufficient. According to Kaufmann and Kraay (2008) and Acemoglu et al. (2004), institutional quality is also an important channel need to be considered. Therefore, this study also takes into account the institutional quality channel. We study the effect of trade on human development specifically, which will incorporate trade and human development simultaneously by inclusion institutions channel. We attempt to evaluate which channel might influence to promote human development in developed and developing countries.

The third important issue to be considered is the impact of trade on two components of HDI; health and education indices. The essential issue in considering the impact of trade on health as well as education is the possible link involving trade and non-income components of the HDI. An enormous of study on the topic reported that there is a positive relationship among international trade and income,¹³ yet there are controversial issues about their impact, in particular. Studies revealed the positive connection involving trade and income are frequently condemned with the dispute that “developments have to define more than just rising incomes”. Income is a crucial element of HDI as well as it is commonly received that there is a positive connection linking trade and income. Therefore, this study aims to deal with this controversy in investigating the effect of trade on nations’ social developments as considered by the HDI.

Our hypothesis is that improvement in trade will facilitate the expansion on health and education indices. Trade may be expecting to get better health via rising income and employment. Additionally, trade have supposed to increase standards of education with providing individuals better encouragements to develop their abilities. Since health and

¹³ For instances Frankel and Romer (1999), Irwin and Terviö (2002), Dollar and Craay (2004), and Davies and Quinlivan (2006).

education improved, they should also contribute to overall improvement in HDI. Nevertheless, even if there is an improvement in trade and income, the HDI is not improving. Due to this situation; when trade and income improves, the HDI does not improve. This study attempts to focus on the composition of HDI, which is health and education separately.

In conclusion, we can improve our economy through trade since trade positively offers employment opportunities to millions of people. However, improvements in trade will create trade distortion. Specifically, the world trade in agricultural and textiles are greatly distorted. This trade distortion will definitely destroy the employment in those countries. Therefore, the effect of trade on employment creation is indecisive. Thus, this study attempts to explore whether improvement in trade in developed and developing countries can create or destroy employment.

Additionally, there is a positive connection between trade and human development. Furthermore, trade advance a better living standard, which, sequentially, leads to better health care and higher spending on education. Specifically, the trade's manipulation on income is direct, whereas trade's manipulation on non-income is indirect. Hence, other than to investigate the effect of trade on human development, this study attempts to explore the HDI components. Thus, we can improve our economy through human development. Particularly, whether improvement in trade in developed and developing countries contain a positive or negative impact on health and education.

In other words, this study attempts to respond to the below questions:

- (i) Does international trade significantly influence employment creation, human development, health, and education in developed and developing countries?
- (ii) If international trade is significant, is the relationship positive or negative?
- (iii) What impact has the fast enlarge in trade had on human development in developed and developing countries through three channels; whether employment, income, or institutional quality channels influence to promote human development?

1.3 Objectives of the Study

The general objective of the study is to examine the linkages between trade, employment creation, human development, health, and education in selected developed and developing countries.

The specific objectives are:

- (1) To investigate the impact of trade on employment creation in developed and developing economies
- (2) To examine the impact of trade on human development in developed and developing economies through direct and indirect effect; whether income, employment, or institutional quality channels have influence on human development
- (3) To determine the effect of trade on health and education in developed and developing economies

1.4 Significance of the Study

The present study provides several important contributions to the existing literature in several aspects, such as knowledge, methodology, and policy. First, to our knowledge, this study provides comprehensive study that incorporates developed and developing countries altogether. An early study in this issue previously was carried out in a multi-country case study. However, this study focuses on the case of developed and developing countries. The findings of our study can provide an assessment of the magnitude of the problems associated with trade, employment creation, human development, health, and education, respectively.

Second, the findings of this study can provide a substantial input for the government in its policy formulation with regard to trade, employment creation, human development, health, and education. For example, in the human development perspective, trade can definitely improve human development. However, it can bring new risks.¹⁴ The challenge for the government and policy maker towards creating a trading regime is specifically not only extra stability and equitability but aggressively encourages human development, whether through employment, income, or institutional quality channels. Third, policy makers, social partners and other relevant institutions can apply the results of this study. This is to assess the effect of trade and to design effective yet rational policies that can respond to the adjustment challenge and promote trade, employment creation, human development, health, and education. This is helpful since it provides more comprehensive features on the severity of the problems. Fourth, in addition, this study contributes to the literature on trade, employment creation, human development, health, and education. Specifically, it provides the empirical evidence on the significant role of trade on employment creation, human development, health, and education, respectively.

1.5 Scope of the Study

This study focused on developed and developing countries. In choosing the respective countries, the World Bank¹⁵ classification of developed and developing countries has been referred to. The rationale behind the specified samples is to compare the effect of trade in two groups. Specifically, how the trade in developed and developing countries will affect each other. Therefore, as to examine the effects of trade on employment creation, this study focuses on the period from the year 1980 to 2009. The dataset consisted of 81 countries; including 30 countries from developed and 51 countries from developing countries.¹⁶ Furthermore, to investigate the effects of trade on human development, health, and education, this study focuses on the period from year 1980 to 2007. The dataset consisted of 90 countries; including 32 and 58 countries from

¹⁴ Trade has supposed that it can create employment and better earnings. However, a lot of individual thus far to gain, poor farmers; marginalized by trade restrictions and unclear agricultural prices, employees; misplace employments in domestic industries, women; earn better earnings and working environments although face the possibility of dislocation succeeding the pulling out of textile quotas, as well as abroad employees; head off their family lagging at the back also face inequity and misuse in seek for employments that be able to direct to improve survives back home.

¹⁵ World Bank, July 2008 (<http://web.worldbank.org/>).

¹⁶ Turn to Appendix on Table A.1 for a list of countries.

developed and developing countries, respectively.¹⁷ The others countries are excluded in this study due to the difficulty in obtaining data.

1.6 Organization of the Study

This study consists of five chapters. The chapters are organized as follows. Chapter One is the Introduction which comprises research background, problem statements, objectives, significance, theoretical framework, and scope of the study. Chapter Two discusses the theory and the empirical evidence on trade, employment creation, human development, health and education. Chapter Three presents the models, methodology, data and their sources, and variable definitions. Chapter Four discusses the results based on the empirical analyses. The final chapter provides summary, major findings, policy implications based on the findings, constraints of the study, also some recommendations for further study.

¹⁷ Turn to Appendix on Table A.2 for a list of countries.

REFERENCES

- Abraham, F. & Brock, E. (2003). Sectoral employment effects of trade and productivity in Europe. *Applied Economics*, 23: 223–238.
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91: 1369–1401.
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2004). Institutions as the fundamental cause of long-run growth. In Aghion, P. & Durlauf, S. (Ed.), *Handbook of Economic Growth*, 1(6), (pp. 405–472). Elsevier North Holland, New York.
- Alatas, V. & Cameron, L. (2003). The impact of minimum wages on employment in a low income country: An evaluation using the difference-in-differences approach. *World Bank Policy Research, Working Paper*, 2985.
- Alonso, J. A. & Garcimartín, C. (2004). The determinants of institutional quality. More on the Debate. *CREDIT Research Paper*, 09/04.
- Anand, S. & Sen, A. K. (2000). The income component of the human development index. *Journal of Human Development*, 1(1): 83–106.
- Apergis, N. & Theodosiou, I. (2008). The employment–wage relationship: Was Keynes right after all? *American Review of Political Economy*, 6(1): 40–50.
- Arellano, M. & Bover, O. (1995). Another look at the instrumental variable estimation of error components models. *Journal of Econometrics*, 68: 29–51.
- Arellano, M. & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58(2): 277–297.
- Atkinson, G., Dubourg, R., Hamilton, K., Munasinghe, M., Paerce, D. & Young, C. (1997). Measuring sustainable development. *Macroeconomics and the environment*, Edward Elgar, London.
- Aw, B. Y., Chung, D. & Roberts, M. (2000). Productivity and turnover in the export market: micro-level evidence from the republic of Korea and Taiwan (China), *World Bank Economic Review*, 14: 65–90.
- Bakhtiari, S., Azarbaeijani, K., & Farzaneh, M. (2011). Analyzing impacts of productivity and trade on employment of manufacturing industries in Iran. *Interdisciplinary Journal of Contemporary Research in Business*, 3(5).
- Baldwin, R. E. (1995). The effects of trade and foreign direct investment on employment and relative wages. *OECD Economic Studies*, 23: 7–53.
- Baltagi, B. H. (2005). *Econometric analysis of panel data*. 3rd Edition. West Sussex: John Wiley & Sons.
- Baltagi, B. H., Panicos O. D., & Law, S. H. (2009). Financial development and openness: Evidence from panel data. *Journal of Development Economics*, 89: 285–296.
- Bardhan, P. (2005). Institutions matter, but which ones? *Economics of Transition*, 13(3): 499–532.
- Batuo, M. E. & Fabro, G. (2009). Economic development, institutional quality and regional integration: Evidence from Africa countries. *MPRA Paper*, 19069.
- Baum, C. F., Schaffer, M. E., & Stillman, S. (2002). Instrumental variables and GMM: Estimation and Testing. *Boston College Economics Working Paper*, 545.
- Bénassy-Quéré, A., Coupet, M., & Mayer, T. (2007). Institutional determinants of foreign direct investment. *The World Economy*, 30(5): 764–782.

- Berman, E., Bound, J., & Griliches, Z. (1994). Changes in the demand for skilled labor within US manufacturing: evidence from the annual survey of manufacturers. *Quarterly Journal of Economics*, 109: 367–397.
- Bernard, A. B. & Jensen, J. B. (1999). Exceptional exporter performance: cause, effect or both? *Journal of International Economics*, 47(1): 1–25.
- Bhagwati, J. N. & Srinivasan, T. N. (1983). *Lectures on International Trade*, MIT Press.
- Binder, M. & Georgiadis, G. (2010). Determinants of human development: Insights from state-dependent panel models. United Nations Development Programme, *Human Development Reports Research Paper*, 2010/24
- Blundell, R. & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1): 115–143.
- Blundell, R., Bond, S., & Windmeijer, F. (2000). Estimation in dynamic panel data models: Improving in the performance of the standard GMM estimators. *The Institute for Fiscal Studies' Working Paper*, WP00/12.
- Bond, S. (2002). Dynamic panel data models: A guide to micro data methods and practice. *Centre for Microdata Methods and Practice (CEMMAP) Working Paper*, CWP09/02.
- Bond, S. R., Anke, H., & Jonathan, T. (2001). GMM estimation of empirical growth models. *CEPR Discussion Paper*, 3048. London: Center for Economic Policy Research
- Bowen, H. P., Leamer, E. E., & Sveikauskas, L. (1987). Multicountry, multifactor tests of the factor abundance theory. *American Economic Review*, 77(5): 791–809.
- Brander, J. A. & Spencer, B. (1988). Unionized oligopoly and international trade policy. *Journal of International Economics*, 24(3–4): 217–234.
- Busse, M. & Groizard, J. L. (2008). Foreign direct investment, regulations and growth. *The World Economy*, 31(7): 861–886.
- Butkiewicz, J. L. & Yanikkaya, H. (2006). Institutional quality and economic growth: Maintenance of the rule of law or democratic institutions, or both? *Economic Modelling*, 23: 648–661.
- Chong, A. & Gradstein, M. (2007). Institutional quality and government efficiency. *Inter-American Development Bank, Working Paper*, 606.
- Clarke, G. R. G. (2001). How the quality of institutions affects technological deepening in developing countries? *Policy Research Working Paper Series*, 2603, World Bank, Washington DC.
- Conceição, P., Namsuk, K., & Yanchun, Z. (2009). Economic shocks and human development: A review of empirical findings. *UNDP/ODS Working Paper*. United Nations Development Programme.
- Cortes, O., Jean, S., & Pisani-Ferry, J. (1996). Trade with emerging countries and the labour market: The French case. *Document de travail*, 96-04, CEPII, Paris.
- Costantini, V. & Monni, S. (2008). Environment, human development and economic growth. *Ecological Economics*, 64: 867–880.
- Currie, J. & Harrison, A. (1997). Sharing the costs: The impact of trade reform on capital and labor in Morocco. *Journal of Labor Economics*, 15(3): 44–71.
- Daniele, V. & Marani, U. (2006). Do institutions matter for FDI? A comparative analysis of the MENA countries. *MPRA Paper*, 2426.
- Dasgupta, P. & Weale, M. (1992). On measuring the quality of life. *World Development*, 20: 119–131.
- Davidson, C., Martin, L. & Matusz, S. (1999). Trade and search generated unemployment. *Journal of International Economics*, 48: 271–299.

- Davies, A. & Quinlivan, G. (2006). A panel data analysis of the impact of trade on human development. *The Journal of Socio-Economics*, 35: 868–876.
- Davis, M. A. & Palumbo, M. G. (2001). A primer on the economics and time series econometrics of wealth effects. *FEDS Working Paper*, 9, Board of Governors.
- Desai, M. (1991). Human development, concepts and measurement. *European Economic Review*, 35: 350–357.
- Desai, M. (1995). Greening the HDI? In A. McGillivray (Ed.), *Accounting for change*, The New Economics Foundation, London.
- Dollar, D. & Craay, A. (2004). Trade, growth, and poverty. *The Economic Journal*, 114: 22–49.
- Dong, X-Y. (1998). Employment and wage determination in China's rural industry: Investigation using 1984–90 panel data. *Journal of Comparative Economics*, 26: 485–501.
- Doyle, E. & Martínez-Zarzoso, I. (2005). The productivity, trade, and institutional quality nexus: A panel analysis. *Research Projects*, GV04B-030, SEJ 2005-01163 and ACOMP06/047, Fundación Caja Castellón-Bancaja, Generalitat Valenciana and the Spanish Ministry of Education.
- Easterly, W. & Levine, R. (2002). Tropics, germs, and crops: How endowments influence economic development. *Working Papers*, 15, Center for Global Development.
- Ernst, C. (2005). Trade liberalisation, exports orientation and employment in Argentina, Brazil and Mexico. *ILO Employment Strategy Papers*, 2005/15. Geneva: International Labour Organization.
- Felbermayr, G., Prat, J. & Schmerer, H. J. (2009). Trade and unemployment: What do the data say? *IZA Discussion Papers*, 4184. Institute for the Study of Labour.
- Flam, H. & Flanders, M. J. (Eds.). (1991). *Heckscher-Ohlin trade theory*. Cambridge, Massachusetts: MIT Press.
- Foa, R. (2008). Social institutions and human development. *Social Development Working Papers*, 006.
- Frankel, J. A. & Romer, D. (1999). Does trade cause growth. *The American Economic Review*, 89(3): 379–399.
- Freeman, R. & Revenga, A. (1999). How much has LDC trade affected western job markets? In Mathias Dewatripont, André Sapir, & Khalid Sekkat, (Ed.), *Trade and jobs in Europe: Much ado about nothing?* Oxford: Oxford University Press.
- Fu, X. & Balasubramanyam, V. N. (2004). Exports, FDI, growth of small rural enterprises and employment in China. *ESRC Centre for Business Research Working Paper*, 286. Cambridge: University of Cambridge.
- Fu, X. & Balasubramanyam, V. N. (2005). Exports, foreign direct investment and employment: The case of China. *World Economy*, 28(4): 607–625.
- Fuwa, N. & Vishwanath, T. (1998). Intrahousehold analysis using consumption data: A survey of policy issues, analytical methodologies, and data requirements. Mimeographed. Washington, D.C: *Poverty Reduction and Economic Management Network*, World Bank.
- Gaston, N. & Trefler, D. (1995). Union wage sensitivity to trade and protection: Theory and evidence. *Journal of International Economics*, 39(1–2): 1–25.
- Gaston, N. & Trefler, D. (1997). The labour market consequences of the Canada-U.S. free trade agreement. *Canadian Journal of Economics*, 30: 18–41.
- Gaston, N. (1998). The impact of international trade and protection on Australian manufacturing employment. *Australian Economic Papers*, 37(2): 119–136.

- Ghosh, I. (2007). The relation between trade and FDI in developing countries – A panel data approach. *Global Economy Journal*, 7(3): 1–32.
- Goklany, I. M. (2002). The globalization of human well-being. *Policy Analysis*, 447(22): 1–20.
- Goodwin, N. R. (1997). *Overview essay. Human well-being and economic goals*. Washington, D.C. & Covelo, California. Island Press.
- Gourinchas, P-O. (1999). Exchange Rates and jobs: What do we learn from job flows? *NBER Macroeconomics Annual 1998*, 13: 153–222. National Bureau of Economic Research, Inc.
- Greenaway, D., Robert, C. H., & Peter W. (1999). An empirical assessment of the impact of trade on employment in the United Kingdom. *European Journal of Political Economy*, 15(3): 485–500.
- Gregory, M. & Greenhalgh, C. (1997). International trade, de-industrialisation and labour demand - an input-output study for the UK 1979–1990. In Borkakoti, J. & Milner, C. R. (Ed.), *International Trade and Labour Markets*. Macmillan, London.
- Grossman, G. (2003). Trade and the environment: friends or foe? In Quinlivan, G. & Herr, H. (Ed.), *Economic Directions*, 13(3). Center for Economic and Policy Education.
- Gunduz, U., Hisarciklilar, M., & Kaya, T. (2009). The impact of trade on social development. *World Academy of Science, Engineering and Technology*, 1648–1651.
- Hall, R. & Jones, C. I. (1999). Why do some countries produce so much more output per worker than others? *Quarterly Journal of Economics*, 114.
- Haltiwanger, J., Kugler, A., Kugler, M., Micco, A., & Pagés, C. (2004). Effects of tariffs and real exchange rates on job reallocation: Evidence from Latin America. *Journal of Policy Reform*, 7(4): 191–208.
- Hamid, Z. & Amin, R. M. (2011). Trade and human development in OIC countries: A panel data analysis. Paper presented at: 8th *International Conference on Islamic Economics and Finance*, Qatar, 18th-20th December 2011. Development from an Islamic Center for Islamic Economics and Finance, Qatar Faculty of Islamic Studies, Qatar Foundation. Available at <http://conference.qfis.edu.qa>.
- Hansen, B. E. (2005). *Econometrics*. Econometrics2005.pdf. [<http://www.ssc.wisc.edu/~bhansen/econometrics/>]
- Haq, M. (1995). *Reflections on human development*. Oxford University Press, New York.
- Haq, M. (2005). The birth of the human development index. In Fukuda-Parr, S. & Shiva Kumar, A.K. (Ed.), *Readings in human development: Concepts, measures and policies for a development paradigm*. (2nd ed.), (pp. 127–137). United States: Oxford University Press.
- Harrison, A. & Hanson, G. (1999). Who gains from trade reform? Some remaining puzzles. *Journal of Development Economics*, 59: 125–154.
- Harris, M. N. & Mátyás, L. (2004). A comparative analysis of different IV and GMM estimators of dynamic panel data models. *International Statistical Review*, 72(3): 397–408.
- Hasan, R. (2001). The impact of trade and labor market regulations on employment and wages: Evidence from developing countries. *East-West Center Working Papers. Economics Series*, 32.

- Hashemzadeh, N. (1997). The impact of NAFTA on US employment: A preliminary assessment of job gains and losses from expanded trade with Mexico. *International Journal of Social Economics*, 24(10): 1080–1093.
- Heckscher, E. F. (1949). The effect of foreign trade on the distribution of income. In A. E. Association (Ed.), *Readings in the Theory of International Trade*, (pp. 272–300). Homewood, Illinois: Richard D. Irwin, Inc.
- Heintz, J. (2007). Human development and clothing manufacturing in Cambodia: Challenges and strategies for the garment industry. *Political Economy Research Institute*.
- Heo, Y. & Park, M. (2008). Import competition and job displacement: A case study of Korean manufacturing industries. *Social Science Journal*, 45(1): 182–193.
- Hicks, D. A. (1997). The inequality-adjusted human development index: A constructive proposal. *World Development*, 25(8): 1283–1298.
- Hine, R. & Wright, P. (1998). Trade with low wage economies, employment and productivity in UK manufacturing. *Economic Journal*, 108: 1500–1510.
- Hinterberger, F., Joachim, H. S., & Ines, O. (1999). *Sustainable human development index. A suggestion for greening the UN indicator of social and economic welfare*. Wuppertal Institute, Wuppertal.
- Hoekman, B. & Winters, L. A. (2005). Trade and employment: Stylized facts and research findings. *World Bank Policy Research Working Paper*, 3676. Washington, D.C., World Bank.
- Hoekman, B. & Winters, L. A. (2007). Trade and employment: Stylized facts and research findings. In Ocampo, A., Jomo, K. S., & Khan, S. (Ed.), *Policy matters: Economic and social policies to sustain equitable development*. London and Opus, New Delhi, Zed Books.
- Holtz-Eakin, D. (1988). Testing for individual effects in autoregressive models. *Journal of Econometrics*, 39(3): 297–307.
- Hopkins, M. (1991). Human development revisited: A new UNDP report. *World Development*, 19(10): 1469–1473.
- Huizinga, H. (1993). International market integration and union bargaining. *Scandinavian Journal of Economics*, 95(2): 249–255.
- International Labour Organization (ILO) (2005). Labor and social trends in Asia and the Pacific 2005. Bangkok: ILO Regional Office of Asia and the Pacific.
- Irwin, D. A. & Terviö, M. (2002). Does trade raise income? Evidence from the twentieth century. *Journal of International Economics*, 58: 1–18.
- Jansen, M. & Turrini, A. (2004). Job creation, job destruction, and the international division of labor. *Review of International Economics*, 12(3): 476–494.
- Jenkins, R. O. & Sen, K. (2006). International trade and manufacturing employment in the South: Four country case-studies. *Oxford Development Studies*, 34(3): 299–322.
- Jenkins, R. O. (2004). Why has employment not grown faster in Vietnam? *Journal of the Asia Pacific Economy*, 9(2): 191–208.
- Kaufmann, D. & Kraay, A. (2008). Governance indicators: where are we, where should we be going? *The World Bank Research Observer*, 23(1): 1–30.
- Kaufmann, D. & Kraay, A. (2002). *Growth without governance*. The World Bank. [<http://www.worldbank.org/wbi/governance/wp-governance.html>].
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2005). *Governance matters IV: Governance Indicators for 1996–2004*. World Bank.
- Khan, A. H. (1991). Employment creation effects of Pakistan's exports. *The Pakistan Development Review*, 30(4): 865–877.

- Khodabakhshi, A. (2011). Relationship between GDP and human development indices in India. *International Journal of Trade, Economics and Finance*, 2(3): 251–253.
- Kien, T. N., & Heo, Y. (2009). Impacts of trade liberalization on employment in Vietnam: A system generalized method of moments estimation. *The Developing Economies*, 47(1): 81–103.
- Knack, S. & Keefer, P. (1995). Institutions and economic performance: Cross-country tests using alternative institutional measures. *Economics and Politics*, 7: 207–227.
- Knack, S. & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *The Quarterly Journal of Economics*, 112(4): 1251–1288.
- Kostevc, Č., Redek, T., & Sušjan, A. (2007). Foreign direct investment and institutional environment in transition economies. *Transition Studies Review*, 14(1): 40–54.
- Krause, L. B. (1982). *US economic policy towards the Association of Southeast Asian Nations: Meeting the Japanese challenge*. Washington DC: The Brookings Institution.
- Krugman, P. R. & Obstfeld, M. (2009). *International economics: Theory and policy*. (8th Ed.). Pearson International Edition.
- Krugman, P. R. (1995). Growing world trade: Causes and consequences. *Brookings Papers on Economic Activity*, 1: 327–377.
- Law, S. H. (2007). Openness and financial development: Panel data evidence from various stages of economic development. *Journal of Emerging Market Finance*, 6(2): 145–165.
- Law, S. H. (2008). Does a country's openness to trade and capital accounts lead to financial development? Evidence from Malaysia. *Asian Economic Journal*, 22(2): 161–177.
- Law, S. H. (2009). Trade openness, capital flows and financial development in developing economies. *International Economic Journal*, 23(3): 409–426.
- Leamer, E. E. (1984). *Sources of international comparative advantage: Theory and evidence*. Cambridge: MIT Press.
- Lee, S. (2007). Trade policy and productivity: Micro-evidence from Korean manufacturing. In *The Korean economy in the era of globalization: Issues and Policy Implications*, (Ed.), Moon Joong Tcha. Seoul: Korea Development Institute.
- Leontief, W. (1954). Domestic production and foreign trade: The American capital position re-examined. *Economia Internazionale*.
- Lettau, M. & Ludvigson, S. (2004). Understanding trend and cycle in asset values: Reevaluating the wealth effect on consumption. *American Economic Review*.
- Liberman, J. & Mitchell, A. (2010). In search of coherence between trade and health: Inter-institutional opportunities. *Maryland Journal of International Law*, 25: 143–186.
- Majid, N. (2000). Pakistan: Employment, output and productivity international labour. *Issues in Development Discussion Paper*, 33.
- Masron, T. A. & Abdullah, H. (2010). Institutional quality as a determinant for FDI inflows: Evidence from ASEAN. *World Journal of Management*, 2(3): 115–128.
- Matusz, S. (1994). International trade policy in a model of unemployment and wage differentials. *Canadian Journal of Economics*, 939–949.

- Matusz, S. (1996). International trade, the division of labor, and unemployment. *International Economic Review*, 37: 71–84.
- McGillivray, M. (1991). The human development index: Yet another redundant composite development indicator? *World Development*, 19(10): 1461–1468.
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W.W. (1972). *The limits to growth*. Universe Books, New York.
- Mekong Economics* (2002). A study of trade, foreign direct investment and labour in Vietnam. An Input to the DFID, ESCOR Funded Project on Globalisation, Production and Poverty: Macro, Meso, and Micro Level Studies. Hanoi: Mekong Economics.
- Mezzetti, C. & Dinopoulos, E. (1991). Domestic unionization and import competition. *Journal of International Economics*, 31(1–2): 79–100.
- Milner, C. & Wright, P. (1998). Modelling labour market adjustment to trade liberalization in an industrializing economy. *Economic Journal*, 108(447): 509–528.
- Mishra, S. K. (2007). A note on human development indices with income equalities. *MPRA Paper*, 3793.
- Mouelhi, R. B. A. (2007). Impact of trade liberalization on firm's labour demand by skill: The case of Tunisian manufacturing. *Labour Economics*, 14(3): 539–563.
- Myint, H. (1958). The “Classical Theory” of international trade and the underdeveloped countries. *Economic Journal*, 68(270): 317–337.
- Nickell, S. (1981). Biases in dynamic models with fixed effects. *Econometrica*, 49(6): 1417–1426.
- Noorbakhsh, F. (1996). Some reflections on the UNDP's human development index. *CDS Occasional Paper*, 17, University of Glasgow, UK.
- Noorbakhsh, F. (1998a). A modified human development index. *World Development*, 26(3): 517–528.
- Noorbakhsh, F. (1998b). The human development index: Some technical issues and alternative indices. *Journal of International Development*, 10(5): 589–605.
- North, D. C. (1981). *Structure and change in economic history*. New York: Norton.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge, MA: Cambridge University Press, New York.
- Nussbaum, M. A. & Sen, A. (1993). *Quality of life*. Clarendon Press, Oxford.
- Ocampo, J. A. & Taylor, L. (1998). Trade liberalization in developing economies: Modest benefits but problems with productivity growth, macro prices, and income distribution. *The Economic Journal*, 108(450): 1523–1546.
- Ohlin, B. (1933). *Interregional and international trade*. Cambridge: Harvard University Press (Published in 1957).
- Olson M., Sarna, N., & Swamy, A. (1998). Governance and growth: A simple hypothesis explaining cross-countries differences in productivity growth. *Center for Institutional Reform and the Informal Sector, Working Paper*, 218, University of Maryland at College Park.
- Organisation for Economic Co-operation and Development* (1992). Structural change and industrial performance: A seven country growth decomposition study. OECD, Paris.
- Organisation for Economic Co-operation and Development* (2005). Education at a glance 2005. Paris: OECD.
- Organisation for Economic Co-operation and Development* (2003). Quantifying the benefits of liberalizing trade in services. Paris: OECD.

- Pavcnik, N. (2002). Trade liberalization, exit and productivity improvements: evidence from Chilean plants. *Review of Economic Studies*, 69(1): 245–276.
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, Princeton University Press.
- Rabbane, F. K., Haque, M. M., & Hasan, F. (2010). Globalization and human development – Realities and recommendations for developing countries. *Asian Affairs*, 30(1): 32–49.
- Rama, M. (1994). The labor market and trade reform in manufacturing. In M. Connolly & J. de Melo (Eds.), *The effects of protectionism on a small country: The case of Uruguay*. World Bank Regional and Sectoral Studies, Washington, DC.
- Ranis, G., Frances, S., & Alejandro, R. (2000). Economic growth and human development. *World Development*, 28(2): 197–219.
- Revenge, A. (1994). Employment and wage effects of trade liberalization: The case of Mexican manufacturing. *World Bank Labor Markets Workshop*.
- Rodrik, D. & Subramanian, A. (2003). The primacy of institutions (and what this does and does not mean). *Finance & Development*, 40(2): 31–34.
- Rodrik, D. (1997). The controversies, institutions, and economic performance in East Asia. *NBER Working Paper Series*, 5914.
- Rodrik, D. (1999). Where did all the growth go? External shocks, social conflict and growth collapses. *Journal of Economic Growth*, 4: 385–412.
- Rodrik, D., Subramanian, A., & Trebbi, F. (2004). Institutions rule: The primacy of institutions over geography and integration in economic development. *Journal of Economic Growth*, 9.
- Roodman, D. (2009). A note on the theme of too many instruments. *Oxford Bulletin of Economics and Statistics*, 71(1): 135–158.
- Sagar, A. D. & Najam, A. (1998). The human development index: A critical review. *Ecological Economics*, 25: 249–264.
- Sakurai, K. (2004). How does trade affect the labor market? Evidence from Japanese manufacturing. *Japan and the World Economy*, 16(2): 139–161.
- Sapir, A. & Schumacher, D. (1985). *The employment impact of shifts in the composition of commodity and services trade. In employment growth and structural change*. OECD, Paris.
- Sarker, S., Biswas, B., & Sounders, P. J. (2006). *Distribution-augmented human development index: A principal component analysis*. GSP, College of Business, Utah State Univ., USA.
- Scott, R. E. (2011). Growing U.S. trade deficit with China cost 2.8 million jobs between 2001 and 2010: Hundreds to thousands of jobs displaced in every U.S. congressional district. *Economic Policy Institute, Briefing Paper*, 323. Washington, D.C.: Epi.
- Sen, A. K. (1970). The impossibility of a Paretian liberal. *Journal of Political Economy*, 78(1): 152–157.
- Sen, A. K. (1979). Personal utilities and public judgments: Or what's wrong with the welfare economics. *The Economic Journal*, 89(335): 537–558.
- Sen, A. K. (1980). The welfare basis of real income comparisons: A reply. *Journal of Economic Literature*, American Economic Association, 18(4): 1547–1552.
- Sen, A. K. (1982). *Choice welfare and measurement*. MIT Press, Cambridge.
- Sen, A. K. (1984). *Resources, values and development*. Blackwell Publisher, Oxford.
- Sen, A. K. (1985). *Commodities and capabilities*. North Holland, Amsterdam.
- Sen, A. K. (1987). *The standard of living*. Cambridge University Press, Cambridge.
- Sen, A. K. (1999). *Development as freedom*. Anchor Books.

- Sen, A. K. (2000). The ends and means of sustainability. *Keynote address at the international conference on transition to sustainability*, Tokyo.
- Sen, A. K. (2005). Development as capability expansion. In Fukuda-Parr, S. & Shiva Kumar, A. K. (Ed.), *Readings in human development: Concepts, measures and policies for a development paradigm*. (2nd Ed.), pp. 3–16. United States: Oxford University Press.
- Sen, K. (2002). Globalisation and employment in Bangladesh and Kenya. *Globalisation, Production and Poverty Discussion Paper*, 7. Norwich, School of Development Studies, University of East Anglia.
- Sevestre, P. & Trognon, A. (1985). A note on autoregressive error component models. *Journal of Econometrics*, 28(2): 231–245.
- Shepherd, B. & Pasadilla, G. (2011). Trade in services and human development: A first look at the links. *Asian Development Bank Institute, Working Paper Series*, 268.
- Shoham, A., Shoham, S., & Malul, M. (2011). Society's level of literacy: A cross cultural study. *Issues in Informing Science and Information Technology*, 8.
- Shome, S. & Tondon, S. (2010). Balancing human development with economic growth: A study of ASEAN 5. *Annals of the University of Petroşani, Economics*, 10(1): 335–348.
- Siddiqui, D. A. & Ahmed, M. Q. (2009). Institutions and economic growth: A cross country evidence. *MPRA Paper*, 19747.
- Smith, A. (1790). *The theory of moral sentiments*. Revised edition, section IV.2.4. In D. D. Raphael & A. L. Macfie (Ed.), Clarendon Press, Oxford, 1975.
- Smith, R. D., Correa, C., & Oh, C. (2009). Trade, TRIPS, and pharmaceuticals. *Lancet* 2009, 373(9664): 684–691. Published Online January 22, 2009.
- Spiezia, V. (2004). Trade, FDI and employment: Some empirical evidence. In Lee, E. & Vivarelli, M. (Ed.), *Understanding Globalization, Employment and Poverty Reduction*, Palgrave Macmillan, New York.
- Streeten, P. (1981). *First things first: Meeting basic human needs in developing countries*. Oxford University Press, Oxford.
- Tabellini, G. (2005). Culture and institutions: Economic development in the regions of Europe. *CESIFO Working Paper*, 1492.
- Turrini, A. (2002). International trade and labor market performance: major findings and open questions. *Study Series*, 20. New York; Geneva: United Nation.
- United Nations Conference on Trade and Development (UNCTAD) (2010). Trade and Development Report 2010. Employment, globalization and development. United Nations Publications, New York and Geneva.
- United Nations Conference on Trade and Development (UNCTAD) (2011). Trade and Development Report 2011. Post-crisis policy challenges in the world economy. United Nations Publications, New York and Geneva.
- United Nations Development Programme (1996). Economic growth and human development. Oxford University Press, New York.
- United Nations Development Programme (2001). Making new technologies work for human development. Oxford University Press, New York.
- United Nations Development Programme (2006). Asia-Pacific Human Development Report 2006. Trade on human terms. Transforming trade for human development in Asia and the Pacific. Oxford University Press, New York.
- United Nations Development Programme (1990). Human Development Report 1990. Concept and measurement of human development. Oxford University Press, New York.

- United Nations Development Programme* (various years). Human Development Report, Oxford University Press, New York.
- Viner, J. (1950). *Customs Union Theory*. New York: Carnegie Endowment for International Peace.
- Vollmer, S. & Ziegler, M. (2009). Political institutions and human development. Does democracy fulfil its 'constructive' and 'instrumental' role? *Policy Research Working Paper*, 4818. The World Bank.
- Welzel, C., Inglehart, R., & Klingemann, H. (2003). The theory of human development: A cross-cultural analysis. *European Journal of Political Research*, 42: 341–379.
- Windmeijer, F. (2000). A finite sample correction for the variance of linear two-step GMM estimators. *The Institute for Fiscal Studies Working Paper*, WP00/19.
- Windmeijer, F. (2005). A finite sample correction for the variance of linear efficient two-step GMM estimators. *Journal of Econometrics*, 126: 25–51.
- Wood, A. (1991). The factor content of North–South trade in manufactures reconsidered. *Weltwirtschaftliches Archiv*, 127: 719–743.
- Wood, A. (1994). *North–South trade, employment and inequality: Changing fortunes in a skill-driven world*. Clarendon Press, Oxford.
- Wood, A. (1995). How trade hurt unskilled workers. *Journal of Economic Perspectives*, 9(3): 15–32.
- Wood, A. (1996a). Openness and wage inequality in developing countries: The Latin American challenge to East Asian conventional wisdom. *World Bank Economic Review*.
- Wood, A. (1996b). *Trade and employment creation: Possibilities and limitations*. In OECD.
- Wood, A. (2003). Could Africa be like America? *Annual Bank Conference on Development Economics*, Washington, D.C: World Bank.
- Woodward, D., Drager, N., Beaglehole, R., & Lipson, D. (2001). Globalization and health: A framework for analysis and action. *Bulletin of the World Health Organization*, 79: 875–881.
- World Bank (2002). Global economic prospects. Washington, DC: World Bank.
- World Bank (2010). World Development Indicators 2010. Washington, D.C., World Bank.
- World Trade Organization (2008). Trade in a globalizing world. World Trade Report. Geneva, Switzerland: WTO.
- World Trade Organization (2012). Trade and public policies: A closer look at non-tariff measures in the 21st century. World Trade Report. Geneva, Switzerland: WTO.