



TRADE LIBERALIZATION IMPACTS ON LABOR MARKET IN IRAN

ABDOLLAH MAHMOUDI

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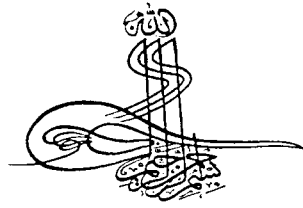
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By

ABDOLLAH MAHMOUDI

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

October 2011



Dedicated to:

My dear parents and their moral supports,

My wonderful family,

Particularly to my Understanding and Patient Wife

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

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By

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October 2011

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Faculty: Economics and Management

For more than three decades Iran's labor market faced high unemployment rates and wage system problems. Economic inefficiency, social crisis, and wide income gaps are highly related to unemployment and labor wages. Giving export-led sectors an opportunity to enter the world markets can be an effective way to increase labor demand and labor wage in various export oriented sectors, which are generally quite labor intensive.

In the recent decades, Iran's labor market has faced many challenges such as high unemployment and problems in wage system. The problems can lead to other problems such as crime, violence, and other social and political crises.

This study is aimed at looking at the relationship between trade liberalization and labor market components i.e. the impact of free international trade (reduction in import tariffs and export subsidies) on export-led sectors, unemployment and wages in Iran.

A large number of economists believe that trade liberalization could increase the demand for labor in developing countries. The Heckscher-Ohlin and Stolper-Samuelson theorems are the fundamentals for debates on the impacts of free trade on labor market components. There is a broad consensus that trade liberalization contributes to increase in labor wages compared to other production factor prices (Hill et al (2008); Green et al. (2002); Carneiro (2003); and Krueger (1983).

A useful branch of CGE models namely GTAP, was used to simulate free trade policies with different scenarios to embody the gradual trade liberalization process in order to clarify the impacts of Iran joining the world's economy on its labor market.

The post-simulation (percentages reduction in import tariffs and export subsidies) data showed that free trade increased the demand for labor in most of production sectors, and decreased in some sectors for all simulations.

In short, study finds that the import tariff and export subsidy cuts simulation could lead higher employment rate in Iran in the long run. Furthermore, trade liberalization could lead to lower prices of overall goods and services and finally, trade liberalization seems to have positive impacts on the income distribution.

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

KESAN LIBERALISASI PERDAGANGAN KE ATAS PASARAN BURUH DI IRAN

Oleh

ABDOLLAH MAHMOODI

October 2011

Pengerusi: Profesor Madya Zulkornain Yusop, PhD

Fakulti: Ekonomi dan Pengurusan

Lebih daripada tiga dekad, pasaran buruh Iran menghadapi kadar pengangguran yang tinggi dan masalah di dalam sistem upah. Ekonomi yang tidak efisien, krisis social, dan jurang pendapatan yang besar adalah berkait rapat dengan masalah pengangguran dan upah buruh. Memberikan sektor eksport peluang untuk memasuki pasaran dunia adalah satu cara yang berkesan untuk meningkatkan permintaan buruh dan upah sektor eksport bagi negara sedang membangun yang mana secara amnya adalah intensif buruh.

Lebih penawaran pasaran buruh di Iran adalah sangat tinggi dan masalah ini boleh menjurus kepada jenayah, keganasan, dan lain-lain krisis sosial. Matlamat kajian ini adalah untuk melihat hubungan antara liberalisasi perdagangan dan pasaran tenaga kerja

iaitu adakah pengurangan dalam tarif import dan subsidi eksport, dapat mengurangkan kadar pengangguran serta peningkatan upah buruh di Iran.

Sejumlah besar pakar ekonomi antarabangsa percaya bahawa liberalisasi perdagangan dapat meningkatkan permintaan tenaga buruh di negara-negara sedang membangun. Teori Heckscher-Ohlin dan Stoper Samuelson adalah asas kepada perdebatan yang menyatakan bahawa terdapat kesan liberalisasi perdagangan terhadap komponen-komponen pasaran buruh. Mereka setuju bahawa liberalisasi perdagangan mampu memberikan impak yang besar dalam meningkatkan kadar upah buruh berbanding faktor-faktor lain (Hill et al. 2008, Green et al. 2002; Carneiro (2003) dan Krueger (1983).

Dalam kajian ini, salah satu cabang CGE, iaitu model-GTAP yang baru, berguna dan berkesan, digunakan untuk membuat simulasi dasar perdagangan bebas dengan beberapa senario berbeza untuk mewujudkan proses liberalisasi perdagangan secara berperingkat bagi melihat kesan-kesan kemasukan ke pasaran ekonomi dunia ke atas pasaran buruh Iran. Hasil simulasi telah menunjukkan bahawa umumnya perdagangan bebas mampu meningkatkan permintaan buruh di kebanyakan sektor pengeluaran.

Secara ringkasnya, hasil kajian mendapati simulasi pengurangan tariff import dan subsidi eksport boleh mengurangkan kadar pengangguran di Iran dalam tempoh jangka panjang. Liberalisasi perdagangan juga boleh membawa kepada pengurangan keseluruhan harga barangan dan perkhidmatan, dan akhir sekali, liberalisasi perdagangan juga dijangka dapat memberi kesan positif kepada agihan pendapatan Negara.

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LIST OF ABBREVIATIONS

AGE	Applied General Equilibrium
CDE	Consumer Demand System
CEEC	Central and Eastern European Countries
CGE	Computable General Equilibrium
CIS	Commonwealth of Independent States
CPC	Central Product Classification
EFI	Economic Freedom Indexes
ERS	Economic Research Service
FDI	Foreign Direct Investment
GAMS	General Algebraic Modeling System
GEMPACK	General Equilibrium Modeling Package
GTAP	Global Trade Analyzing Project
HOS	Heckscher-Ohlin and Stopler-Samuelson Theorems
IMF	International Monetary Found
IO	Input Output Data Base
ISIC	International Standard Industry Classification
LP	Liner Planning
MCP	Mixed Complementary Problems
MENA	Meddle East and North Of Africa
MPSGE	Mixed Complementarities Problem in General Equilibrium
NCR	National Capital Region
OIETAI	Organization for Investment, Economic and Technical Assistant of Iran
OPEC	Oil and Petroleum Exporter Countries
PGE	Partial General Equilibrium
ROW	Rest of the World
SAM	Social Accounting Matrix
UNCTAD	United Nation Conference on Trade and Development
USDA	United States Department of Agriculture
WTO	World Trade Organization

CHAPTER 1

INTRODUCTION

1. 1 Introduction

The Heckscher-Ohlin and Stolper-Samuelson (HOS) theorems are the foundations for debates on the effects of trade liberalization on labor market components. The Heckscher-Ohlin theory states that a country has comparative advantage in the production of goods when it has relatively abundant factor of production which are reasonably cheaper (Carneiro, 2003). Therefore, it is advantageous for countries with abundant labor supply to produce labor-intensive goods. The Stolper-Samuelson's theorem explains the impact of free trade on income distribution among the production factors. It concludes that free trade increases the return of the country's abundant production factors, whereby in developed countries, capital is plentiful while in developing countries, labor is abundant.

Trade liberalization is a system of trade policy, which allows traders to execute without much interference of the government. In general, free trade persist in the absence of restrictions on goods and services of price of exchanged commodities such as trade barriers, import duties, export licenses, export bounties, domestic production subsidies, quota, non-tariff barriers, voluntary export restraints, trade sanctions and embargos on the goods and services or the price of exchanged

commodities¹. Trade liberalization refers to any form of governmental or operational activity or restriction that renders free imports and exports of goods in and out of a country. Theoretically, free trade involves the elimination of certain barriers, except those considered necessary for health, and national security².

Traditional economic theories claim that international trade has multifarious effects on economic variables, markets, and life of masses residing in the country. In general, nations trade to improve welfare, broaden the choices for consumers, and maximize net social benefits through the efficient allocation of resources by increasing domestic production. Trade causes specialization by enhancing the productivity of resources to provide larger outputs on the verge to be self-sustainable. Successful achievement of the planned outcomes brings better living standard to the people of the country. Both advanced international trade theories and majority of international trade economists accepted the hypothesis (Mahdavi, 2005). Previous studies have shown that free trade has an important role in the economic growth and development (Ramezanzpour, 2004; Abrishami, et al., 2009). In addition, international trade can increase the GDP of many countries and consequently it will improve the welfare of people around the world (Saqeb, et al., 2006; Abrishami, et al., 2009).

Besides the economic impacts, international trade could also affect the market of production factors. Factor market in each economy is one of the four main economic markets, which is systematically related to money market, commodity market, and the rest of the world. Based on factor endowment, abundance of labor, capital and land,

¹ . <http://www.answers.com/topic/non-tariff-barriers-to-trade>

² .http://en.wikipedia.org/wiki/Free_trade

and the price of factors in countries involved in international trade, the effects of international trade on individual country's factor market could be different.

The most important component of factor market is labor force that enters the production function as added value. Labor force has some components, based on trade theories, which may be affected by trade liberalization process, and changes in these components are important in socio economy context. Wage or scaling income of labor force services by households to economic firms, is an equilibrator factor of labor demand and supply that has direct effects on household consumption, government taxes on income, income distribution, poverty and inequality. Almost all elements of labor market could be affected by the trade liberalization process.

Free trade increases the production of economic sectors, which have comparative and competitive advantages. It drives the production activities to special sectors of economy and due to raising production, it increases labor demand and wages in these sectors. In developing countries, international trade shifts the production towards more labor-abundant industries, thus it increases the demand for labor in these sectors and as a result, labor inputs in export sectors tend to increase (Carneiro, 2003). International trade also determines how the affected wages are related to which subcategory of labor market. Therefore, it may affect labor force market, household income, wage and salary, income distribution, and inequality.

How free trade prevails especially in developing countries, is an empirical question.

With regards to trade liberalization policies, quota and tariff regime, unemployment rates, workers' skills, wage system, and other elements in labor market, Iran has a special situation. There is a need to evaluate the relationship between international

trade and labor market. In this dissertation, the impacts of trade liberalization on labor market in Iran, especially on employment and wage levels is discussed in depth. There are many approaches available to investigate this relationship but the Computable General Equilibrium model (i.e. in this study, Global Trade Analysis Project -GTAP) is the most comprehensive and acceptable method.

1. 2 The Issues

Iran is the world's third largest petroleum reserves, the second largest gas reserves, the Middle East and North Africa- MENA, the region with second largest economy and population. Despite being rich in mineral resources, Iran faces a number of significant economic challenges such as high permanent unemployment rates, low level of wages, and income inequality. Besides these, the Iranian closed economy through rigid government controls on resources allocation, intensive exchange and trade restrictions suggest that Iran provides a good illustration of its bad economic planning and management in the world.

When Iran's regime changed to Islamic republic in 1979, Iran's population was about 37 million. The population has grown rapidly, such that by 2011, the country has had more than 75 million people (Statistical center of Iran, 2011). Due to this rapid population growth, Iranian labor force (labor supply) too grew to about 23.9 million in 2011. A continuing strong labor force growth unparalleled with proportionate real economic growth is driving up the unemployment to a higher level than the official

estimation of 14%. Unemployment is an old age problem in Iran's economy, which during three decades after revolution its rate has been more than ten percent. Iran's economy has not been successful in reducing unemployment rate. According to the experts, annual economic growth above 5% is needed to keep pace with the above one million new labor force entrants each year (Ilias, 2008).

Sector's distribution of labor demand in 2007 (Table 1.1) showed that roughly 23% of Iran's labor force was engaged in agriculture. About 32% of that was engaged in manufacturing and construction, and the remainder (45%), was divided in other sectors of services, transportation and communication, and finance. The labor education level as a proxy for labor skill was recorded that 44% had primary or no formal education, 42% had secondary education, and 14% were in third levels of education. There was a minimum national wage applicable to each sector of activities fixed by the Supreme Labor Council. In 2011, the minimum wage was about \$300 per month (Labor and Social Affair Ministry of Iran, 2011).

Table 1.1: Labor Force Statistics in Iran

year	Unemployment rate	Sectors distribution			skill distribution (based on education level)		
		Agriculture	Manufacturing	Services	UnSk	SemSk	Skilled
2001	14.2	26.1	30.6	43.3	47.6	41.6	10.8
2003	11.8	21.9	30.7	47.4	40.4	47.3	12.3
2004	10.3	22.9	30.1	47	41.5	46.4	12.1
2005	11.5	24.7	30.3	44.9	45.7	40.6	13.8
2006	11.3	23.2	31.7	45.1	44.9	41	14.1
2007	10.5	22.8	32	45.1	44.1	41.5	14.4

Source: Statistical centre of Iran (2008)

In addition, inequality is the biggest well-known problem for policy makers and the government, which causes Iranians to suffer from a very big income gap between the social classes, inequality and income distribution, before and after revolution. Despite Islamic government promised to improve this situation, Gini coefficient in three decades highlights Iran's failure to improve its income distribution. Figure 1.1 shows that despite the Gini coefficient has perked up since 1988 from 0.46 to 0.39 in 2009, the inequality problem is still prevalent. It is worth mentioning that, distribution of income among factors of production such as wage for example can be an effective variable in income inequality.

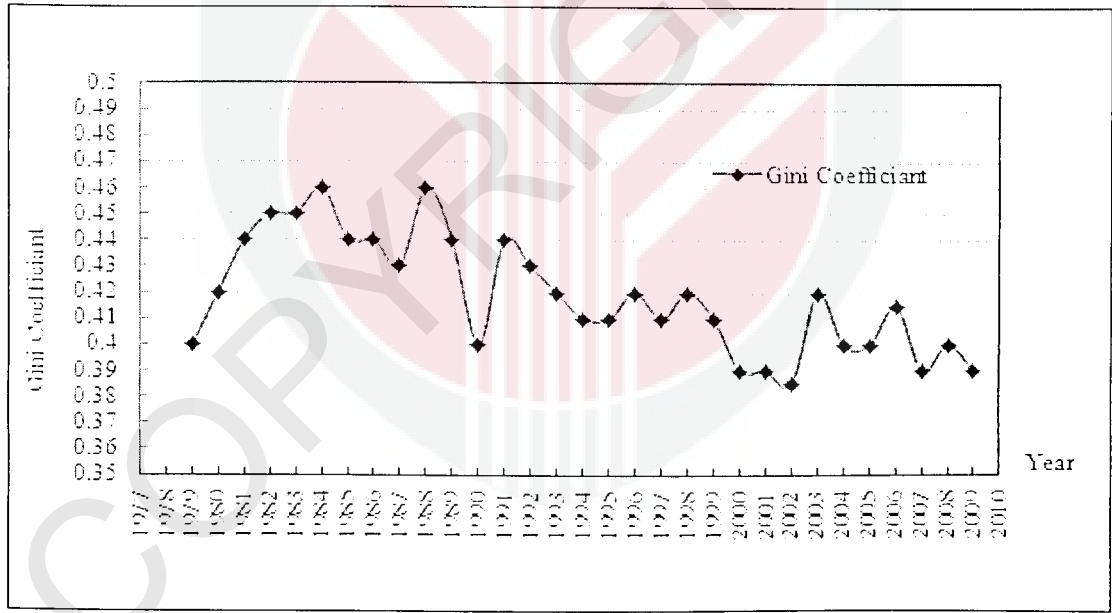


Figure 1.1: GINI Coefficient in Iran

Source: statistical center of Iran (different year books), World Bank (WDI)

Historically, Iran has been a society of trade merchants, and the international trade has contributed to the economy of Iran (e. g. increasing in exports and demand for labor).

Nonetheless, if oil exports are ignored and in comparison to other countries, it is clear that today, Iran economy is strictly a closed economy. In Iran, the exports of goods and services grew during the period of 1960-70 from 31.7% to 45% of GDP, but decreased after 1980. The ratio of exports and imports of goods and services to GDP rose from 49.6% in 1960 to 94% in 1975 but consequently, it decreased in the three last decades.

Table 1.2: Exports and Imports of Goods and Services, Iran, 1960-2007

Year	Imports* (M)	%(M/GDP)	Export* (X)	%(X/GDP)	(M+X)*	% ((X+M)/GDP)	GDP at purchasers' value*
1960	9189	17.9	16273	31.7	25462	49.6	51314
1965	12353	16.1	29758	38.7	42111	54.7	76962
1970	25228	19.2	59253	45.2	84481	64.4	131171
1975	120909	57.5	78036	37.1	198945	94.6	210386
1980	71825	39.4	15327	8.4	87152	47.8	182278
1985	53889	24.4	23190	10.5	77079	34.9	220810
1990	69743	31.2	44290	19.8	114033	51.0	223664
1995	40953	15.5	52266	19.8	93219	35.3	264327
2000	46047	14.3	58479	18.1	104526	32.4	322278
2005	95834	22.6	73221	17.3	169055	39.9	423208
2006	102676	22.9	76967	17.2	179643	40.1	447961
2007	107700	22.3	79103	16.4	186803	38.7	483014

Source of data: Central Bank of IRAN (2008)

* Rial Billion

In comparison, the average ratio of exports plus imports between Iran and the MENA-Meddle East and North Africa, region is about 49.7% of MENA's total exports and imports. Iran's economy is more closed from 2005 to 2007. However, once we exclude petroleum, Iran's export ratio to GDP is only about 4%, the fourth least amount of export after Libya (0%), Yemen (2%), and Kuwait (3%), among all 17 countries located in MENA region (Behar, 2011). The values of non oil exports and imports in 2005 were about \$ 10.5 billion and \$ 39.6 billion, respectively. Some of the important countries that import from Iran are United Arab Emirates (20%), Iraq

(10%), India (7%), Japan (5%), China (5%), and Kuwait and Afghanistan (each 4%), while the countries that export to Iran are United Arab Emirates (20%), Germany (13%), France (7%), Italy (6%), China (6%), and South Korea (5%). According to Tables 1.1 and 1.2, despite the increases in GDP, the ratio of Iran's exports to GDP decreased and the unemployment was high. This implicitly showed that an increase in demand for labor in Iran occurred only after increases in GDP for domestic markets following the import substitution trade strategy. Therefore, the reduction in degree of openness was accomplished with increases in unemployment rates.

The trend of foreign direct investment which is an important element in economy showed that, after 1978, Iran has a weak experience in this area (Figure 1.2). In some years, the foreign investors left Iran. Foreign investors will employ country's resources (e. g. labor) and increase and distribute the income among the population (wage).

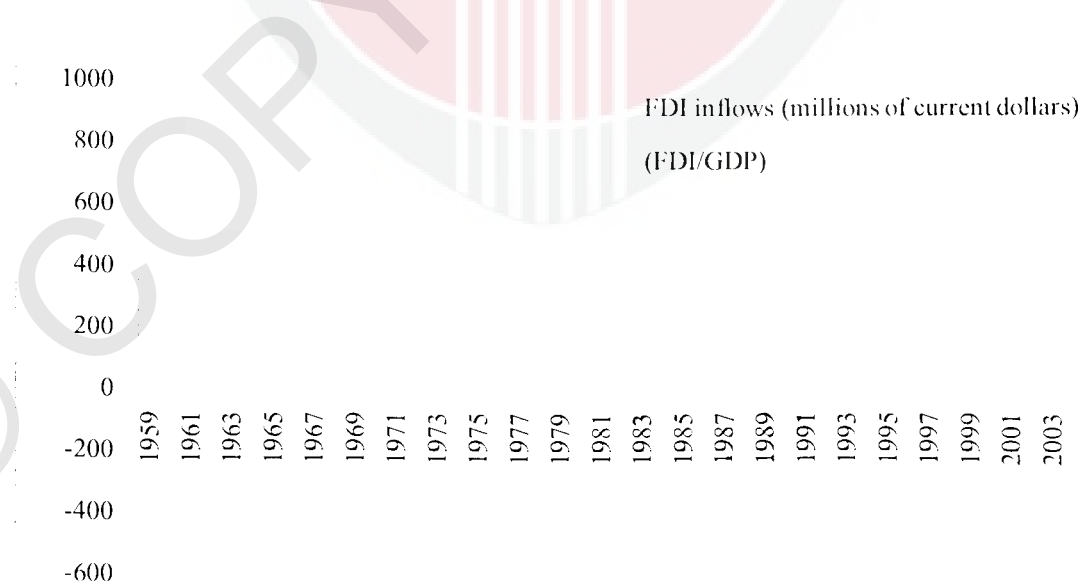


Figure 1.2: Foreign Direct Investment Inflow in Iran

Source: FDI from World Development Indicators & (FDI/GDP) from Mahmoodi (2006)

The Economic Cooperation Organization (ECO) is the only regional non-oil trade agreement in which Iran is one of the first three founders in 1985. ECO aims for a closer integration among the global economies, and the basic agreements are about the reduction in trade barriers to improve the living standard and eliminate poverty among the ECO members. The ECO area has a market size of about 380 million people (about 5.97% of the world population), including ten countries, who agreed to reduce trade tariffs and remove other trade barriers. Despite ECO being the most important non oil trade agreement in which Iran is a member and after two decades, the value of intra-ECO exports in 2005 was only about 7.1% (\$ 30 billion) of all the members' exports to the world economy (ECO Report, 2007). The ECO members' economic situations are the same and they produce the same commodities and have same comparative advantages in international trade. Moreover, most of the ECO members did not have political stability during the previous two decades, leading to fewer opportunities to increase intra-trades between the ECO members.

Moreover, Iran established about seven free trade zones (FTZs) and three free trade-industrial zones (FTIZs) in the recent decades. The performance of FTZs and FTIZs in Iran shows that the imports are several times more than the exports, and the amount of non-oil exports in these areas is very low- about \$ 192 million per year (Iran's government report, 2008). According to the definition, the FTZs are those parts of the Iranian territories that are managed according to special laws and are excluded from the laws governing the motherland; however, these laws are still insufficient and unclear in its territorial governance.

Today, Iran's economy is not free in many ways, and it has an unacceptable situation in the world. Business, trade, and financial freedom, property rights, and freedom

from corruption are all weak. High tariff rates and non-tariff barriers impede trade and foreign investment alike (Economic Freedom Index, 2007). According to 2007's index of economic freedom (EFI) assessment, the economy of Iran was 43.1, which made it the world's 150th freest economy. Iran was ranked 16th out of 17 countries in the MENA region, and its overall score was extremely low, almost one-third below the regional average (Figure 1.3).

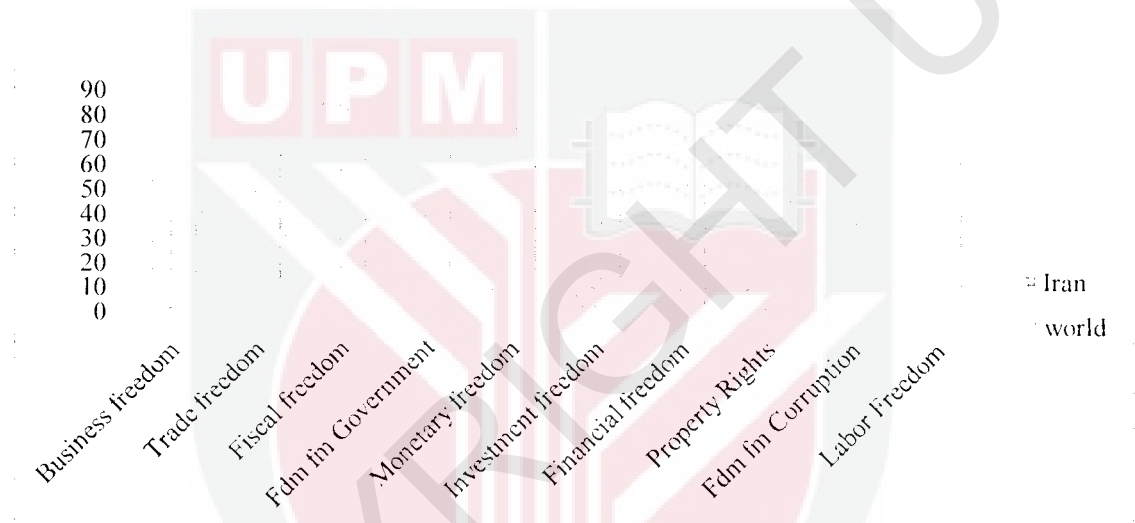


Figure 1.3: Iranian Economic Freedom 2007

The global average is based on data for 145 countries that are graded by both the Index of Economic Freedom and the 2007 edition of the World Bank's Doing Business, 100 = most free

In fact, due to rich resources, Iran is capable of solving its economic problems. However, due to certain factors such as backward and relatively more closed economy, problems of high unemployment and other undesirable labor market's phenomena emerged.

Theoretically, each country has its own comparative advantages to produce some commodities more efficiently than others and export them to world markets.

International trade economists believe that developing countries are labor abundant and they have capability to produce labor intensive commodities more efficiently than others and export their cheap labor used products to world markets. Majority of trade economists believe that trade liberalization has positive impacts on labor demand and wages. Besides, Dutt et al, (2009)'s study showed that trade liberalization has negative effect on unemployment in countries that are labor abundant, and this was confirmed by Felbermayr (for India, 2011). In addition, Ramezanpour (2004) believed that the rate of economic growth of countries with open economy is higher than those with closed economy by three percent on average.

Iran has been a developing country and quite abundant in labor –especially unskilled labor. Iran's economy is one of the most closed economies in the world (UNDO, 2006 and EFI, 2007) and Iran has not done any important move in term of removing trade barriers and creating free trade facilities. By opening the locked doors of world market to Iran, the country will produce more labor intensive commodities and it will increase its output and exports. Excess output for domestic and foreign markets, increases the demand for factors among them labor force (decrease unemployment), consequently the wages will increase. The free international trade in Iran is predicted to increase workers income (i.e. wages), and decrease the income inequality gap.

As mentioned above, the Iranian economy is closed and it does not have acceptable interactions with the world, in other side the supply surplus of labor market, wages system and income inequality are the long run Iran's socio-economic problems, which must be solved. Therefore, it is important to assess the effects of trade liberalization on the labor market structure, wages, and income distribution in Iran.

1.3 Problem Statement

For more than three decades Iran's labor market faces high unemployment rates, wage system problems, and closed economy. Economic inefficiency, social crisis, and wide income gaps are strongly related to unemployment and labor wage. Prudent economic policies are necessary to decrease labor market problems. Promoting export-led production sectors can be an effective way to increase output and demand for labor in Iran.

Looking at Iran's labor market performance in recent decades, we can generally see that it has faced many challenges such as high unemployment rates and wages system problems. Iranian's total labor force or supply of labor in 2010 was about 23.9 million (statistical center of Iran, 2011), of which about 3.2 million (13.5%) of them were searching for a job but could not find any. In other words the demand for labor is less than labor supply significantly and there is a big supply surplus in labor market. Furthermore, more than one million young Iranians enter the labor market for the first time each year. The official time series data of labor force and employment in Iran shows that the phenomenon of unemployment is a chronic and ongoing problem (figure 1.4). Since after Iranian's 1979 revolution, the rate of unemployment in Iran has generally been above ten percents. Figure 1.4 shows that the unemployment rate has increased to 15% from 1980 to 1988 (the end of the war), and decreased to 9% in 1995 which in this year the inflation rate was more than 49%. After 1998, the unemployment rate was about 14% in average.

Unemployment Rate

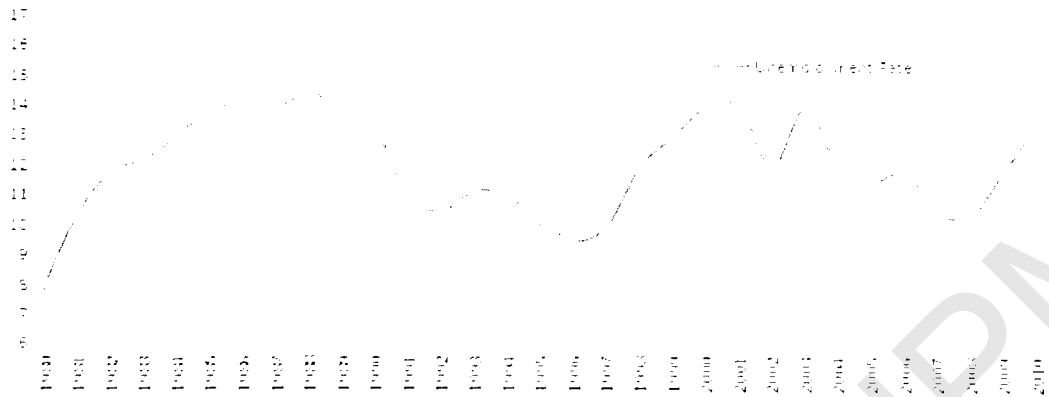


Figure 1.4: Unemployment Rate in Iran

Source: statistical center of Iran (different year books), World Bank (WDI) and IMF Country Report No, 08/284, August 2008.

The high rate of unemployment is one of the real signs of illness and inefficiency in the economy, meaning that there is a huge amount of unutilized economic resources. Therefore the economy is operating inside the production possibilities frontier. Besides, unemployment could be an important source of crime, violence, and other social problems. Moreover, Iran has the highest brain drain rate in the world, which is possibly due to high unemployment rates. The increase in unemployment rate and the emigration of young, skilled, and educated citizens continue to pose problems for Iran. Finally, unemployment causes the unemployed people putting pressure the government to create new jobs. In fact, the chronic high unemployment rate and other permanent problems in Iranian's economy will be judged as economic mismanagement and political inability of the Iranian's government; therefore, the policy makers are finding ways to increase labor demand. In this study, we investigated whether trade liberalization could cover the huge supply surplus in labor market and decrease unemployment rate in Iran.

Wage is an important variable in labor market. Income inequality index (GINI) shows that there is a relatively large income gap between social classes in Iran, and the country has relatively high GINI index among other countries, thus income distribution is problematic. It is clear that this problem is mostly related to distribution of income among the production factors in which labor is the most important. Wage literally explains the labor income, households' life situation, and income distribution. In contrast to other factors' rents the level of wage in Iran is very low, meaning that the majority of people which are labor, benefiting from a low level of income and there will be a social income gap. The high permanent GINI coefficient during more than three decades (Figure 1.1) shows that Iran faces a critical situation in this area. The large social income gap causes political and socio-economic problems. Therefore, wage causes social income gaps and this shows the importance of investigation on this socio-economic variable. Thus, it is important to conduct a study to recognize the impacts of free trade policies on labor wages in Iranian labor market.

Theoretically, the role of export-led sectors in international trade is deterministic. It is supposed that the LDCs are labor abundant, and export-led sectors will produce and export labor intensive commodities. Iran's import substitution strategy in the previous decades has suppressed some sectors which have natural comparative advantages and encouraged others artificially. It is predicted that open economy in Iran will increase Iranian export-led sectors production. Consequently, if export-led sectors in Iran are labor intensive, free trade policy will increase labor demand and wages in Iran effectively. However, it is questionable whether international trade could predict that export-led sectors will employ more workers in the future. Therefore, it is important to know which sectors are export-lead and are the labor or capital intensive.

Labor market in Iran has some chronic main challenges. The economists, policy makers, and political parties are wary about the future of this big unemployed population, new entrances to labor market, and the wage system and income distribution in Iran. Therefore, they are attempting to find the ways to solve these labor market problems. Iranian's government having performed some economic policies as monetary policies with high inflation rates and increasing the government expenditures (e.g. distribution of money among households to reduce GINI index) to solve the problem, but these policies have not had effective impacts on labor unemployment rates and wages. The government is attempting to expand the economy to showing its ability to govern the country's economy, and to guarantee the future situation of the government against the Iranians' protests.

The free trade policy based on the reduction in tariffs and export subsidies, and relative elimination of trade barriers is one of the economic policies in Iran, which could engage domestic firms in international trade and change their production strategy to increase their export, consequently influence labor market components. Therefore, a thorough investigation on the labor market as per trade liberalization in Iran would provide a very interesting insight especially along the following key questions:

- Which sectors are likely to be leaders in export?
- What are the impacts on labor demand?
- Can trade liberalization raise the levels of wages and improve income distribution in Iran?

1.4 General and Specific Objectives of the Study

The general objective of this study is to examine the impacts of trade liberalization on the labor market in Iran.

The specific objectives are:

- I. To recognize the export-lead sectors, and determine whether these sectors are labor or capital intensive.
- II. To investigate the impact of free trade on labor demand in Iran.
- III. To assess whether trade liberalization can increase wages in Iran's labor market.

1.5 Significance of Study

In spite of the abundant literature on the effects of trade liberalization on labor market variables, there have been a few comprehensive studies that had attempted to examine the impacts of trade liberalization on labor market elements in Iran. By conducting this study we would extend the literature of effects of trade liberalization on an important sector of economy which is labor market. This study would make several important contributions.

Firstly, the impacts of trade liberalization on production sectors which are the leaders in export growth strategy. The international trade theories and empirical studies have

acknowledged that international free trade could increase the production of goods and services the sectors which have comparative advantages in the world economy; this study recognizes these sectors in Iran's economy.

Secondly, the economic theories acknowledged that free trade in developing countries which are labor abundant could increase demand for labor force (carneiro, 2003. Dutt, 2009) and reduce unemployment rate (Dutt et al, 2009; Hasan et al, 2011; Felbermayr, 2011). This study focuses on capability of free trade strategy in increasing demand for labor and reduction of unemployment rates in Iran.

Thirdly, as international trade theories mentioned and empirical studies confirmed, free trade has impacts on labor wage in countries which involved in international trade. This study specifies increased wages derived from increased demand for labor force by sectors that are export growth leaders, has any impacts on income distribution in Iran. We attempt to find the increased wages in Iran's production sectors could improve income inequality gap in this country.

Finally, there are many models to assess the impacts of trade liberalization on labor market, but the Global Trade Analysis Project (GTAP) model and data is the comprehensive, and appropriate to international trade related issues, which has never been used in the Iranian economy studies. It provides the necessary data for all of the world economies. We attempt to present actual results to support trade theories and to determine whether the policy of trade liberalization could be an effective factor in the labor market of Iran.

1.6 Organization of Study

This study organized as follow: after this introduction, the headline of chapter two is literature review that includes the theoretical and empirical international trade studies and its relationship to labor market. It contains some important empirical evidence of the impacts of trade liberalization on labor market and income distribution. Chapter three is the thesis methodology which contains a short definition and specification of CGE (computable General Equilibrium) and Global Trade Analysis Project (GTAP) models, and description of their relationship and their application in international trade, particularly in terms of trade effects on labor market. In contentious the variables, the parameters and the model simulation will be discussed. In chapter four the model would be carried out. Also the empirical results of the analysis will be presented. Finally, in chapter five contains the interpretation of the results as conclusion headline, and it contains some policy suggestion and recommendation, some existents studying difficulties and limitations in this area, and it provides some direction for future works.

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