



Original Article

Pages: 20-32

Analysing the Impact of Economic Strengthening on Economic Liberalization (A Resistive Economics Approach)

Azad Khanzadi¹ and Samira Heidari²

Received: 2018/02/23 Revised: 2018/04/15 Accepted: 2018/06/11

ABSTRACT: Resistive economics means recognizing the areas of pressure (At the present with many sanctions) and also refer to the consequent attempts to control and deactivate it, and in the ideal situation, to convert such pressures into opportunities. It is evident that the public confidence and participation and also the rational and prudent management are the preconditions for such a matter. Resistive economics reduces dependencies, increases the self-reliance and emphasizes the benefits of local production. The emphasis on self-reliance and advantages of using domestic production will provide the necessary infrastructure for economic liberalization.

Increasing the level of economic liberalization generally leads to increase the levels of total production, economic growth and investment rate, and also reduces unemployment and inflation rate. Therefore, according to the need of establishing requirements and infrastructures for resistive economics in the current situation of Iran, and also regarding the importance of economic liberalization in the economic growth, this paper aims at investigating the impact of economic strengthening on economic liberalization. Then, an econometric model is used in this study for estimating the impact of indices of resistant economy on economic liberalization over the period 1996-2013; the variables used in this model include unemployment rate, labour productivity, GDP growth as an indicator of economic growth, capital productivity and growth of export as indicators of a resistant economy. The results show that unemployment rate has a negative and significant effect on economic liberalization, and labour productivity and economic growth have a positive effect on economic liberalization. Also based on the results of the estimated model, the incremental capital output ratio (ICOR) and export growth have no significant effect on economic liberalization.

KEYWORDS: Resistive Economics, Resistant Economy, Economic Liberalization.

¹ Assistant Professor, Department of Economics, Razi University of Kermanshah, Iran.
E-mail: A.khanzadi@razi.ac.ir

² MSc in Economics, Tutor PNU, and author. *E-mail: Samiraheidari67@gmail.com*



1. INTRODUCTION

Economic studies show that an open economy has better performance than a highly controlled economy. Experiences of successful developed economics show that trade and economic liberalization have played an important role in economic growth (Sharifi Renani, 2013). Also under a more open trade regime, rising demand for unskilled labour could benefit to poor workers by increasing workers real wages, as well as could create more jobs in the formal economy, and reduce poverty in developing countries (Kis-Katos and Sparrow, 2013).

In fact, economic liberalization is a part of the structural adjustment policies that includes a series of measures to reduce state intervention in the financial markets, goods and services, jobs and commercial sectors, and ultimately leaving it to the market mechanism. Economic liberalization policies seek to achieve the goals such as economic growth, full employment of production factors, price stability, balance of payments equilibrium and the promotion of social welfare (Sharifi Renani, 2013). Therefore, economic liberalization is an important factor in increasing aggregate output, employment, welfare, total factor productivity and economic growth (Becker, 2014).

After the imposed war, the structural adjustment policies in Iran were included in the first development plan, and government adapts itself more or less in accordance with the program plans. There were some productions according to the development plan and structural adjustment policies in Iran, but because of duplicative and waste productive units with low technology, achieving an economic and acceptable measurement seemed impossible.

In this case, Sharma and Oczkowski (2000) in their study for Nepal found that although trade policy reform for productivity growth (in countries with the least degree of development) is a necessary condition, it is not sufficient for this matter and other factors such as proper investment and human capital policies should also be considered.

In fact, preparing the infrastructure structural adjustment policies and economic liberalization will not result in only favorable results; it may even have negative effects such as destruction of industries in the country. In this regard, the resistive economy can provide the necessary infrastructure for economic and trade liberalization.

Resistive economy is an economic –management model for resisting the national economy against threats and for making possible actions for breaking the sanctions, and for overcoming the dominated regime. It is progress oriented, productive, extraverted, endogenous, and brings about opportunities (the Commission on Macroeconomics and Trade System Office, 2013). An economy with the attribute of being resistive economy should try to play an effective role in the global economy; in such a way that, each political system wants to enforce sanctions against the country; as a result, the global economy faces the security risks (Tary and Kaviani, 2013).

Therefore, this study aimed to analyze the relationship between economic liberalization and the development of resistive economics.

2. Literature Review

Tayebi et al (2014) in their study have investigated the impact of trade liberalization on productivity, and put this idea that emphasis on trade liberalization has been the fundamental changes in economic policies of the countries in the past decade. However, trade liberalization should have destructive effects such as increasing dumping, but if this liberalization is associated with preparing the infrastructure and healthy competitive environment through improved access to foreign new technologies and by increasing the incentive for innovation, and also improving the quality coming into existence due to competition in world markets, it would result in increasing productivity increase. An important result of this study is the positive relationship between degrees of economic openness and total factor productivity.



Naserieh and Hosseinipour (2014) in their study show the factors of resistive economy in university and community. Factors including paying attention to entrepreneurship followed by relying on knowledge - based economy, paying attention to knowledge - based firms, consumption management and maximum use of time and resources, is in highest priority in setting this theory in comparison with other factors. Also comparing average degrees in setting resistive economy within society shows that factor of diplomacy system's motion followed by supporting economic actors, reforming educational system, fast reaction of economic system to enemy's attacks, crusade lifestyle, fulfilment of public economy, centralized command, economic observing and exact statistics, conservation and reforming publicity system is in highest priority in comparison with other factors.

Also Bajona et al (2010), analyzed the effects of trade liberalization on growth and productivity by using some of the most popular models of international trade, including static Hkchr Ohlin model, Ricardian model with a continuum of goods and new business models such as models of monopolistic competition. Their analysis over the period 1998-2008 for Mexico and 1990-2000 for China concluded that trade liberalization due to increasing product diversity and number of firms, leads to higher real GDP growth rate and increases productivity.

Njikam (2009) by using pre-and post-reform industry-level panel and aggregate national infrastructure data, examines the effect of infrastructures on industry productivity for Cameroon. The results suggested that infrastructure stock index contributed to output growth and boosted productivity in both sub periods, but the post-reform effects were stronger. Infrastructure quality index significantly affected productivity growth only in the post-reform era.

India has one of the most closed trade regimes in Asia, with high levels of tariff and non-tariff barriers respectively. India's Trade liberalization began in 1991 and extensive changes in its trade regime created consequently. Accordingly, Geng (2008) by using a model of endogenous growth explored effects of trade liberalization on total factor productivity in India. He mentioned that the response to trade reform does not occur immediately, and reforms are needed to react and affect approximately 4-8 years. He also expressed that small industries with low competitive power will not benefit from the liberalization of interest, and liberalization increases productivity in the large industries with high competitive power. As a result, trade liberalization has positive effect on economic performance based on suitable infrastructural and resistive economics is needed for this infrastructure.

3. Theoretical Framework

Emphasis on economic liberalization and the removal of barriers to the flow of goods, services and capital, and limiting the government intervention in the economy, and moving toward the order of market are the main changes in social and political systems of the countries in the past decade (Tayebi et al., 2014).

Therefore, in the late 1970's, a major turnaround in economic policies happened in most countries including developed industrial countries and under developed countries, which later known as an economic liberalization.

In fact, this turning point, in developed industrial countries, was a reaction to unintended and harmful consequences of welfare states with good intentions to overcome problems such as poverty, income inequality and lack of proper insurance coverage. It caused an unprecedented expansion of government intervention in the economic area. The situation was worse in under developed economies. In Newly independent countries after World War II, the government heavily was influenced by socialist ideology, and the focused government economy was a tool



for developing economy and fighting against the influence of foreign colonists. But, the historical fact show that governmental closed economics and government's support policies have no outcome but poor economic performance and the persistence of poverty and unemployment (Ghaninejad, 2012).

In this regard, a number of developing countries with efforts in the field of economic liberalization reforms aimed at increasing the role of market and, reducing the barriers to international trade and transferring the capital. In the 1980, the successful experience of South East Asian countries such as Korea, Taiwan and Singapore, in addition to encouraging the scholars and opinion-makers to further exploration of International Economics and Development Economics, led Policy makers and economic agents in other countries to be encouraged to follow and emulate them, and to reconsider their economic policies (Babazadeh, 2007)

The new economic policy (liberalization) includes a series of steps to reduce government control of the financial markets, goods and services, labour and eventually delegate them to the external sector and the market mechanism. These measures include deregulation, reduced government intervention in financial markets and determining the market as the price marker (supply and demand mechanism), removal of subsidies, moving towards a floating or independent currency system or supervised floating currency, and changes in the value of money, the movement towards trade liberalization and the elimination of tariff and nontariff restrictions, facilitating the movement of capital, participation of foreign investors and debt and bank deposit rate deregulation (Abdolkhany, 2007). That trade liberalization is one of the main pillars of economic liberalization (Babazadeh, 2007). Despite the fact that in economic theory, the role of trade openness as an effective means of improving welfare is already emphasized the emergence of new growth theories, mostly starts with the work of Romer (1986) and Lucas (1988). It argued that a country with a greater degree of openness can absorb new technology, which may be spread between the different countries is vulnerable and in the domestic and the external market confronted with the higher competition (Ghochy, 2003).

In fact, trade liberalization makes industrial productivity to be improved with more differentiated products and higher quality and lower prices. The welfare surplus of consumers and the level of intra-industry trade will increase in a considerable extent. (Mlytz, 2003, Falvy, 1981 and Balassa, 1996).

The overall increase in the level of economic liberalization leads to an increase in total production, economic growth and investment rates, and reduce the unemployment rate and inflation rate (Azarmand, 2004). For example, about the impact of trade liberalization on production growth, "Kawai & Wignaraja (2014)", "Khan & Qayyum (2006)" and "Cihan & Dutta (2005)" concluded that trade liberalization led to economic growth. And also "Binici et al (2012)" and "Jin Jang (2006)" showed that trade liberalization led to lower inflation.

However, the desired results of economic liberalization would not happen in developing countries without the infrastructure preparation, for example, in a country with unskilled labour or industry-based structure with low productivity, trade liberalization in the short-term increases wages and poverty, and will raise the unemployment and even destruct country's industries continuously.

Also for economic liberalization and trading efficiency, the government intervention must be reduced in the economy, and government should increase investment in infrastructure and manufacturing to provide a healthy competitive environment (Masood Ahmed, 2010)



In this regard, the resistive economy is a concept that can provide the necessary infrastructure for economic liberalization.

Briefly the economic resistance is a kind of economy that can be noted, in addition to its dynamic interaction with the outside world and the possibilities of free trade economic security is maintained, and fluctuations in the international economic environment and its threats, should have the least adverse effects on macroeconomic variables in long-term trend. Hence an economy certainly needs all of these abilities to make optimal use of its capacity (Tari and Kaviani, 2013).

In fact, the resistive economy is a kind of economy that provides the basis for economic growth and prosperity for a nation even under pressure and sanctions (Arabi, 2013).

There is a realistic look (not the extreme optimism of neoclassical models) to the external world in the resistive economics. Resistive economics doesn't assume that the economy can provide all its needs such advanced technologies from other countries. On the other hand, country by expressing its right positions in the international space doesn't ignore the useful relationships with the external world (Tari and Kaviani, 2013). Therefore the economy tries to diversify all the investments (including human, physical and social) to lessen the negative effects of hostile movements of enemies. Resistive economy in the long run is less dependent on a particular commodity like oil. Although diversification and freedom from an economy based on a sole commodity is a common feature of every developed economy, but the resistive economics accomplished this job more precisely and in a larger area (with regard to strategic industries). Similarly, the implementation of performance-enhancing policies, such as privatization of the economy is done in a precise way for preventing the enemies to use the unemployment in relation to their benefits (ibid).

3-1. Resistive Economics Characteristics for Establishing Economic Liberalization

Resistive Economics index is a parameter that is measured by the strength of an economy. This index is very important, and many countries try to identify their resistance as the main basis of this index (Commission on Macroeconomics and Trade Office, 2013).

The dimensions of this index are presented as follows:

3-1-1. Low unemployment rate

Unemployment is extremely costly. Unemployment reduces the actual output relative to potential output; and also it reduces savings and capital formation rate. A country with a high degree of unemployment cannot compete with other countries in the field of production. Job creation should be accomplished according to the realities of the global economy, future developments, according to assuming possible advantages for Iranian economy. Investing in activities using just the government subsidies with import monopolies, and narrowing the circle of importing could be a short-term sedation effects (S. Shokri, 2001).

Many developed countries in economic transition have experienced similar situations and different methods have been used to support employment; which means that, they allowed firms with low power of competition to have dissolved or restructured deal, At the same time after dissolving these firms, for solving the unemployment problems, they have participated in training the human resources and making new job opportunities.

Thus, in these countries, only highly competitive industries have grown because they have been able to adapt themselves with the technological progress and changes in business conditions (Jalali and Motiei Brothers, 2013).



In fact, depending on the degree of competitiveness of firms, trade liberalization can have two consequences as follows:

If a firm has a low competitive power, and has no infrastructure to support all of it, considering the intense international competition is likely to fail. But if the firm has an appropriate degree of competitiveness, through learning and innovation makes the development and increase in new jobs associated with increase efficiency and productivity. In this regard, Xu (2004) argues that, preparing the infrastructure, for example, by increasing internal revenues and declining internal consumption that is to increase investment certainly.

3-1-2. High efficiency, especially that of labor productivity

In recent decades, the overall strategy for economic growth is productivity increase. Productivity indexes are calculated and analyzed by the efficiency of different economic sectors in the use of resources (Mardani , 2004). The main issue enhances productivity in economic, social and political impact communities, such as inflation, increased levels of welfare, increased employment and increased economic competitiveness (Valizadeh Zenour, 2005).

On the other hand, increasing productivity increases the competitiveness of the economy through Productive use of resources and lower production costs, and reducing the level of prices will have a significant role in the economic liberalization.

3-1-3. Non-Bipolar Community

Being non-bipolar can be logical in so far it represents the differences of people, and can be a positive factor for more work and efforts.

When income inequality is very drastic that the society is divided into rich and poor groups, it causes serious danger to society.

Poverty will prevent full participation in public programs, and the disappointed and poor masses don't resist against the invasions (Tari and Kaviani, 2013).

3-1-4. High social capital

Strengthening social capital aims at attracting the public sympathy for raising the national resistance and efforts to promote social justice, equal opportunities, capabilities of the society, with the aim of attracting more people to participate in economic activities (Commission on Macroeconomics and Business Administration, 2013)

Also, an increase in social capital through increased skills and creativity and innovation improves competitive in an economic system.

The literature of Social capital empirically has shown the importance of this kind of investment in human capital education, access to financial development, government policy and action efficiency, innovation, information flow and increase in productivity and achieving the required economic growth (Iyer et al, 2005). The economy needs to increase the social capital of the resistance.

3-1-5. Diversifying the country's export earnings

Countries with high dependence on exports of one or more products are caught in a vicious cycle of being under developed. This Phenomenon can be considered extreme specialization.

Mineral resources, especially oil-exporting countries have great importance. Mineral products, as fluctuations in prices, especially crude oil, will greatly fluctuate on the country's foreign exchange earnings.

In such circumstances, with the loss of foreign exchange earnings, they have to get used to secure the loans and foreign aid; it causes severe dependence and disruption of the economy.

On the other hand, fluctuations in economic growth will be sustained, because experiences have shown that an increase in export earnings during the boom, does not compensate lower income for the decline (Shdyak et al, 2008)

Generally, if a country has various international markets, the producers have greater bargaining power, and reduce the risk of damage to the country's independence (Tari and Kaviani, 2013).

In our country variation in export earnings is meant to develop non-petroleum exports (ibid).

3-1-6. High economic growth

Economic growth has always been a concern of policymakers. Economic growth means producing more goods and services. Economic growth reduces poverty and may reduce the gap between the individual and society.

If a country satisfies above criteria, it is resistive against external pressure; and sanctions have little effect on the economy of that country. However, it is worth mentioning that the resistance of the economy in the short term does not conflict with economic liberalization.

For example, the increase and diversification of export earnings is an indicator of a resistive economy, because it frees the economy from being dependent on a single product for exporting. This matter can remove the fluctuations and risks of monoculture export. But in the long term, resistive economy by preparing the infrastructure for the liberalization trade and economy will play an important role in liberalization. It can use this liberalization without a risk that threatens the liberalization without prepared infrastructures. Then, the resistive economics can play a great role in universal market, and any threat to it brings about universal threat.

4. Introducing The Model And Estimation Method

In this study, for establishing the requirements of evaluating the effects of economic liberalization on resistive economics, the following model is used:

$$El_t = \alpha_0 + \alpha_1 UN_t + \alpha_2 Pr_t + \alpha_3 GDPg_t + \alpha_4 ICOR_t + \alpha_5 Eg_t + \varepsilon_t \quad (1)$$

In which, El (Economic liberalization) represents the index of economic liberalization, UN for unemployment rate, Pr for labor productivity index, GDPg represents growth of GDP (as an indicator of economic growth) in year t, ICOR is index of capital productivity, and Eg represents ε export growth reflects a disturbing model.

Measuring the degree of openness of the economy quantitatively requires the determination of indicators that are manifestation of the objective economic criteria. In this context, one of the most popular indicators of economic liberalization is the Heritage Foundation's index that is used in the study.

Incremental capital output ratio (ICOR) indicates the proportion of investment in previous periods related to the increased production in later periods. In fact, this index is a measure of the productivity of capital.

ICOR index is estimating investment that is necessary to achieve the target rate of economic growth. It is noteworthy that the rate of increase in capital investment has been calculated with a lag of one year from the assumption that has impacts on production.

To estimate the model, ordinary least squares OLS is used, the selection of variables is used in the model to test for omitted variables and additional done, and finally, because of auto-correlation in the model and for estimating the final model, the method of ARMA is used.

Then, to show structural changes in the pre-ban and post-ban breakpoint Chow test is used. In this test the null hypothesis of equality of functions in the two periods is studied.

5. Estimation of The Model And Interpretation of Results

Table (1) shows the results of estimating model (1). For model specification test, we have used Wald test, and the results of this test indicates that there is no specification error in our model.

F-statistics indicate that the function is significant, the coefficient of determination R - squares has a high percentage (0.89), and it is indicating that the independent variables are a good explanation model for the dependent variable

There are no problems due to anisotropy variance and autocorrelation models and Heteroscedasticity, and the F-statistics and statistics relating to the Durbin - Watson indicate the absence of autocorrelation that is the same variance.

Table 1: Results of model estimation according to ARMA method (1, 1)

Variable	Coefficient	T-computational	Critical value
C	42.09330	5.118	0.00
UN	-1.821871	-4.992	0.00
Pr	9.055692	4.938	0.00
GDPg	0.558395	3.156	0.01
ICOR	-0.022786	-0.460	0.65
Eg	-0.032869	-1.541	0.15
AR(1)	0.023884	0.066	0.94
MA(1)	-0.997324	-5.909	0.00
Test assumptions			
Type of test	Test statistic	Critical value	Result
Specified model	F = 34022.74	0.00	Corrected model
Overall significant function	F = 10.439	0.00	Significant
Explanation power	$R^2 = 0.89$	-	High explanation power
Heterogeneous variance	F = 0.431	0.87	Homogeneous variance
Autocorrelation	DW = 2.17	-	Non-auto correction
Normality of the residual	$\chi^2 = 3.794$	0.15	Normal

Source: research findings

Based on the results obtained from estimating the model in Table (1) we can conclude:

Raising the unemployment rate has negative and significant effect on economic liberalization. Increasing the production reduces unemployment and power of international competitiveness. Much unemployment reduces the security of occupation.



Also reduction in labor force productivity, reduces production and quality of products and hence reduce the competitive strength at the international level and it causes the country does not have a chance for economy liberalization. Increasing addiction, and mental illnesses, violence, irregularities are the after-effects of unemployment. It reduces the social capital, and power of resistive economics. In addition, the added-worker hypothesis refers to this point that when unemployment is increased, and the incomes of a family don't concord with the needs of members, the other members of family other than father and mother participate in a effort for supplying the required income. Even, many of them enter the market when are very young, and leave the school. This problem reduces the literacy, and job professionalism. The non-optimal labor force results less grade of production, products with a low quality, and decreasing the power of competition in an international field. Consequently, the country cannot be ready for liberating its economy.

The effect of labor on economic liberalization has been estimated, the results indicate a positive and significant effect on labor productivity and economic liberalization.

Despite of sanctions and pressure, the growth and prosperity would be possible, if the optimality of the labor and productivity would be increased.

Another result of this study is the effect of economic growth on economic liberalization, which according to the results economic growth has positive and significant effects on economic liberalization.

As noted before, economic growth has a significant role in developing and increasing resistive economy in country. Increasing the economic growth leads to higher levels of income and welfare of the community, and reduces the income gap between the populations. Economic growth is an important economic component that makes the economy resistive, and provides the necessary infrastructure for economic liberalization. Based on the results, ICOR has no significant effect on economic liberalization. A Comparison of this index in Iran with other countries shows that this index in Iran is often higher than other countries.

However, due to some problems including diversion of financial resources to unproductive activities, issues and problems in public sector investment decisions, delay in completion of the project and the quality of it, in spite of the magnitude of this, it seems that the volume of investment production does not grow relatively; and even reducing relative price of capital in relation to labor force (due to low real rate of interest of local currency in contrast to the real rate of wage on the one hand, and continuous growing direct and direct costs of people on the other hand) caused the increasing of capital in relation to the workforce without use of production capacity, and also caused the limitation of new opportunities for employment. Failure to complete unfinished project has aggravated this situation. This approach is incompatible with the current state of the economy regarding the scarcity of resources and the unemployment rate.

Based on the results, Iran growth of export did not show a significant effect on economic liberalization, which could be derived from the economic weakness in Iran and the economy's dependence product. The oil that could be a pressure tool for us against west turned to a west's pressure tool against Iran. Reducing the dependency on oil doesn't mean that the oil that should be removed from economics of Iran, but it means to prevent selling the crude oil and prevent the rent for those closely associated with the oil revenues.

Finally, the effect of sanctions is discussed by the Chow structural break test, and its results are stated in Table (2). For this test, we choose 2007 as break year, since the first sanctions in banking, insurance and freight Iran in this year.



Table 2: The Chow breakpoint test

Statistics	The statistics value	Probability
F-statistic	4.039	0.05
Log likelihood ratio	29.110	0.00

Source: research findings

According to the results of the breakpoint test in Table 2, both F and Log likelihood ratio statistic shows that, a structural break point occurs in 2007 due to sanctions. The sanctions have reduced foreign exchange through exports and imports of goods, services, technology and flows of foreign direct investment which destroyed profitable investment opportunities. Also, by reducing imports, the entry of production into the country decreases, and thus the country will be forced to produce goods, which have no comparative advantages and also have high costs of production.

Sanctions also reduce the exports of domestic industries with competitiveness power by increasing their production costs and consequent increasing inflation. The decline in exports reduces foreign market demands, productivity and increases unemployment. Also more sanctions will decrease innovation and high technologies usage, and so all of these reasons will slow economic growth. Also the sanctions decrease degree of openness of the economy and disrupt the process of economic liberalization. The resistive economics by strengthening the economy (productivity-increasing, reducing unemployment, increasing social capital, diversifying export products, etc.) against pressure and sanctions lessens these effects, and prepares the ground for economic liberalization, and develops opportunities and international economic relations in order to provide sustainable development.

Finally, after the development of domestic economic performance, liberalization can help to promote further economic growth. However, as previously mentioned, even in the short-term, resistive economics does not contradict with economic liberalization (through the increasing and diversification of export earnings).

6. Discussion

Regarding the results and literature review of this study, it can be claimed that there is a bilateral relationship between economic liberalization and productivity, growth, and other economic infrastructures. So resisting and promoting economic infrastructures do the best for economic liberalization, and hence the country can achieve good results and promote its competition power in international markets. The results of economic liberalization in a good condition are total products increasing, economic growth, high investment rate, high employment rate, and low inflation, and hence sustainable growth and development can be achieved.

In this research we analyze the role and effects of strengthening economic on economic liberalization. Most of later studies in this field show that economic liberalization is related to economic dependency, but the results of this study show that if we develop economic infrastructures, then economic liberalization will promote competition power in international markets, and long-run results of this process are sustainable growth and development.

Considering the resistive economic approach, a country can promote its infrastructures; consequently, economic liberalization will have good results in its economic performance and indices.



7. Conclusions and Recommendations

A few decades ago, economic liberalization was adopted in order to sustain competitive power in developed countries. In recent years, most of emerging and developing countries move toward economic liberalization to achieve sustainable economic growth. But economic liberalization in these countries should be provided by suitable infrastructures that could be achievable via resistive economics.

According to current economic situation of Iran brought about by economic sanctions, it is important to strength economy to reduce negative effects of sanctions. This model of strengthening economy is known as resistive economic model, and it is vital for economic liberalization.

Increasing the level of economic liberalization generally leads to increased levels of total production, economic growth, and investment rate, and also reduce unemployment and inflation rate. Therefore, according to the need of establishing requirements and infrastructures of resistive economics in the current situation of Iran, and also according to the importance of economic liberalization in economic growth, in this study we investigated the role and effects of economic strengthening on economic liberalization. Therefore, an econometric model was used in this study to estimate the impact of indices of resistant economy on economic liberalization over the period 1996-2013; and the variables used in this model were unemployment rate, labour productivity, GDP growth as an indicator of economic growth, capital productivity and growth of export as indicators of a resistant economy. The results showed that unemployment rate had a negative and significant effect on economic liberalization, and labour productivity and economic growth had a positive effect on economic liberalization. Also based on the results of the estimated model, the incremental capital output ratio (ICOR) and export growth had no significant effect on economic liberalization.

Consequently, we can say that, resistive economics can achieve positive results in long – term, and any country can achieve sustainable growth and development via this model.

ACKNOWLEDGMENTS

None.

ETHICAL CONSIDERATION

Authenticity of the texts, honesty and fidelity has been observed.

AUTHOR CONTRIBUTIONS

Planning and writing of the manuscript was done by the authors.

CONFLICT OF INTEREST

Author/s confirmed no conflict of interest.

COPYRIGHT

THIS IS AN OPEN ACCESS ARTICLE DISTRIBUTED UNDER THE TERMS OF THE CREATIVE COMMONS ATTRIBUTION (CC BY 4.0)



REFERENCES:

- Abdolkhany, A. (2007), "The concept of economic liberalization", General Department of Commerce of Arabic and African Countries, (In Persian).
- Arabi, H. (2013), "Resistive economics in Remarks by Supreme Leader", Macro Policy Quarterly, Vol. II, No. II, pages 9-25, (In Persian).
- Azarmand, H. (2004), "The relationship between economic liberalization and major macroeconomic indicators", Master's thesis, a guidance Ahmad Jafari Samimi, Mazandaran University of Science and Technology, (In Persian).
- Babazadeh, M., ghadimiDezaj, Kh. & RezaeiBakhtiar, A. (2007), "Trade liberalization and economic growth in Iran", Journal of humanities and social sciences (especially economics), Vol. VII, No. 26, pp. 13-44, (In Persian).
- Bajona, C. and Helpman, (2010). "Trade Liberalization, Growth, and Productivity", prepared for the conference new direction in international trade theory, University of Nottingham.
- Balassa, B. (1996), "Tariff Reductions and Trade in Manufactures among the Industrial countries", American Economic Review, pages 466-473.
- Beker, B. (2014), "Heterogeneous firms and informality: the effects of trade liberalization on labor markets", Cornell University Charles H. Dyson School of Applied Economics and Management Working Paper No. 2014-13.
- Binici, M., Cheung, Y. W. & Kon, S. (2012), "Trade openness, market competition and inflation: some sectoral evidence from OECD countries", Central Bank of the Republic of Turkey.
- Cihan, C. & Dutta, D. (2005), "Trade Liberalisation and Economic Growth in Turkey: An Empirical Model of Endogenous Growth Analysis", Paper provided by University of Sydney, School of Economics in its series Working Papers with number 7.
- Commission on Macroeconomics and Business Administration, (2013), "First draft of the General Policies of Resistive economics and Jihad-economic", Macro Policy Quarterly, Vol. II, No. II, pages 164-166, (In Persian).
- Commission on Macroeconomics and Business Administration, (2013), "The general principles governing the Resistive economics in general policy", Macro Policy Quarterly, Vol. II, No. II, pages 141-151, (In Persian).
- Falvey, R. E. (1981), "Commercial Policy and Intra-industry Trade", Journal of international economics, pages 495-511.
- Geng, N. (2008). "Trade Liberalization, Market Efficiency and Productivity Growth: A Smooth Transition Approach on Indian Firms", Department of Economics, UCSC, pages 87-105.
- Ghaninejad, M. (2012), "Liberalization and Economic Performance", Publishing world economy, first printing, (In Persian).
- Ghochy, R. (2003), "Thesis study of trade liberalization on productivity in the manufacturing industry with emphasis on customs tariff rates", to guidance Ebrahim Hosseini-Nasab, Master of Science Thesis, Tarbiat Modarres University, Department of Economics, (In Persian).
- Iyer, S. Kiston, M. & Toh, B. (2005), "Social Capital, Economic growth and regional development", regional studies, Vol. 39.8, pp. 1015-1040.
- Jalali, J. & Motiei Brothers, G. (2013), "Evaluation importance of economic liberalization", Economic Research Unit of Middle Eastern Bank, (In Persian).
- Jin Jang, C. (2006), "Openness growth and inflation: Evidence from South Korea before the economic crises", Journal of Asian Economic, vol. 17, pp 738-757.
- Kawai, M. & Wignaraja, G. (2014), "Trade Policy and Growth in Asia", ADBI Working Paper Series, No. 495.



- Khan, M. A. & Qayyum, A. (2006), "Trade Liberalization, Financial Sector Reforms and Growth", Forthcoming in: *Pakistan Development Review*, Vol. 45, No. 4.
- Kis-Katos, K. & Sparrow, R. (2013), "Poverty, Labour Markets and Trade Liberalization in Indonesia", Paper provided by Institute for the Study of Labor (IZA) in its series IZA Discussion Papers. NO. 7645.
- Mardani, V. (2004), "Estimate the productivity sectors in Iran's economy", MS Thesis, to guidance Ali Surrey, Bu-Ali Sina University, (In Persian).
- Masood ahmed, Q. and Helpman, (2010). "Trade liberalization and total factor trade productivity growth (1971-2007)", *Pakistan Economic and Social Review*, Volume 48, No. 1, pp. 61-84.
- Melitz, M. J. (2003), "The Impact of Trade on Intra-industry Reallocations and Aggregate Industry Productivity", *Econometrica*, pages 1695-1725.
- Naserieh, M. Y. & Hosseinipour, M. R. (2014), "Presenting Performance Sample of Resistive Economy in Islamic Azad Universities of Kerman Province in 2013", *International Journal of Academic Research in Business and Social Sciences*, Vol. 4, No. 6, PP. 325-347.
- Njikam, O. & Cockburn, J. (2007). "Trade Liberalization and Productivity Growth: Firm-level Evidence from Cameroon", Poverty and Economic Policy (PEP) Research Network, CIRPEE, Department of Economics, 458 pp.
- SharifiRenani, H., Shoaie, F., MirFatah, M. & TavakolNia, M. R. (2013), "Reviews of the effects of economic liberalization on macroeconomic indicators in Iran: with emphasis on trade liberalization", *Globalization Strategic Studies Quarterly*, Fourth year, No. 10, page 29, (In Persian).
- Sharma, K. Oczkowski, E. (2000). "Liberalisation and Productivity Growth: The Case of Manufacturing Industry in Nepal", *Oxford Development Studies*, Vol. 28, pp. 205-222.
- Shediak, R. Abouchakra, R. Moujaes, C. N. & Najjar, M. R. (2008), "Economic diversification: The Road to Sustainable Development", Booz and Company.
- S. Shokri, KH. (2001), "Factors contributing to job creation", National Conference on Evaluation of Scientific Strategies of Employment Creation, Islamic Azad University of Roodehen, (In Persian).
- Tary, F. & Kaviani, Z. (2013), "Resistive Economic and its components", *Macro Policy Quarterly*, Vol. II, No. II, pages 27-47, (In Persian).
- Tayebi, S. K., Yazdani, M. & Heidari, S. (2014), "An Analysis of Trade Liberalization on Productivity of Iran's Business Sector", *Economic Development Research Quarterly*, Volume 4, Issue 12, pp. 50-27, (In Persian).
- Valizadeh Zenour, P. (2005), "Evaluation of productivity in Iran's economy", Collection Economic Research, Central Bank of the Islamic Republic of Iran, Department of Economic Studies and Policies, (In Persian).
- Xu, Jian. (2004). "Will tariff protection induce productivity growth an optimal control model", international conference WTO, China and the Asian Economics, Beijing, China.