RELATIONSHIP BETWEEN UNEMPLOYMENT AND FOREIGN TRADE RATIO IN TURKEY (1992-2010)

TÜRKİYE'DE İŞSİZLİK İLE DIŞ TİCARET ORANI İLİŞKİSİ
(1992-2010)

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Abstract

The aim of this study is to analyze how trade periods in Turkish economy effects labor market. The aim of this study is to look for an answer to the fact that why the said Exchange trade didn't have an effect on unemployment rates right after the examining the sources of this Exchange trade with an historical perspective.

Key Words: Unemployment, foreign trade, Turkey, Economy

Öz

Bu çalışmanın amacı Türkiye ekonomisinde yaşanan ticaret dönemlerinin işgücü piyasasına etkilerinin incelenmesidir. Bu bağlamda son yaşanan ekonomik krizden sonra ortaya çıkan büyümenin kaynaklarını inceleyerek, bu büyümenin nedenine ve dış ticaret işsizlik rakamlarına tarihsel bir bakış açısıyla cevap aramaktır.

Anahtar Kelimeler: İşsizlik, Dış Ticaret, Türkiye Ekonomisi

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1. Introduction

The main objective of the stability programs, while solving the problems of the balance of payments and financial stability also provide sustainable growth. Because of the stability programs aimed the reduction of public deficits and sustainability of public dept, fiscal policies which will be implemented at the same time should enhance the long-term growth. Some studies about this subject showed that, IMF-supported stabilization programs are successful in ensuring macroeconomic stability in short-term, but not as successful as to ensure growth. This leads us to the subject of what it takes when designing a fiscal policy that ensures growth, while implementing the stabilization program. One of the fundamental rules of implementing growth promoting policies of public sector is to conduct their activities in a format of support without compete with the private sector. In this sense, to be focusing on human capital training (especially basic education), public health and physical infrastructure spending by public sector emerges as an issue to be a need to focus on. In the same way, it should not be out of sight that the resources also should be allocated for the justice system, public order and public administration. Because, a healthy legal system and public administration concepts are very important for the future investments of private sector. At the same time, the tax policies and system which will finance these activities, need to have a structure without adversely affecting the decision-making processes of economic agents and will not be an obstacle to the growth

In every economy, inputs such as physical capital, human capital (unskilled), labor and natural resources brought together within the framework of different technological information by entrepreneurs for produce output. Gross national product (GNP) is the monetary value of these outputs in a given period (generally one year) by labor and property supplied by the residents of a country. From these production factors, capital consists of accumulated stock of machines, tools and equipment, facilities, raw materials and other factors of durable production. These additions to the physical capital stock in a given period are defined as investment. The labor stock in an economy expands by the population growth and with the participation of a certain portion of the population (in the future) to labor supply. When the attribute or quality of the labor force is developed especially with the training programs in schools and workplaces, human capital of a country increase too. Human capital can be defined as sum of knowledge and skills contained by the labor. Sometimes, the workforce on health and nutritional well-being is considered to be a part of the human capital (Easterly Sc Wetzel, 1989: 4).

Economic growth implies the increases in real outputs of Quito per capita (i.e. purged from the changes in price). Because of these increases can occur only appear as a result of the expansion of the scale of production or the potential or the use of more productive for long-term, the economic growth problem is usually considered as a long-term problem. Therefore, growth is determined by the front of supply in a macro-economic sense.

In other words, the factors that shift a country's production possibilities curve to outward or shift the long-term total supply curve to the right constitute the subject of theories of economic growth. It is clear that, education and technology policies to increase the productivity of factors of production and infrastructure investments to increase the stock of physical capital are very important for these shifts (Kibritçioğlu, 1998:207).

Despite great advances in Turkish economy in terms of structural transformation and integration to international markets, development disparities between regions still continue. In Turkey, as well as income, there are disparities between the regions about population structure, physical and social infrastructure, entrepreneurship, human resources, education level, access to health care, environmental quality, employment and the role of woman. In the process, some policies created for the purpose of eliminating inter-regional disparities and some instruments used but not reached the desired goals, for this reason, inter-regional disparities continued to exist. The accelerating process of globalization in the 1990s has also affected the local and regional dynamics and this situation brought about changes in the concept of region. Today, the changing meaning of the concept and the growing importance of the region has been discussed. In addition, increased environmental problems at all levels such as local, national and global, increased the importance of the concept of participatory and balanced development. In this context, the concept of sustainability has taken place as another important dimension in detecting regional strategies. Regional development can be defined as eliminating the inequality that occur as a result of the collection of industrialization in certain regions to move the underdeveloped regions to the level of developed regions by industrialization and to ensure a fair distribution of wealth in the country. When the benefits of regional developments to the country's economy are considered, it is obvious that an effective formulation and implementation of regional development is necessary.

2. Empirical Studies

Some of the important phenomenon such as adapt to changing conditions with the process of globalization, competitiveness, human resource development and monitoring of the global market led to an increase of the importance of regional dynamics in the process of economic and regional development. In this process, the distribution of different densities of economic and social factors which has a dynamic structure and give direction to the process of development on the country's economy generated inter-regional development imbalances. As a result of this situation economic policies have started to be implemented to reduce economic and social imbalance. To provide a balanced development of the provinces in the various geographical areas of Turkey, an effective economic policy has to be performed throughout the country. The determination of current status with the help of the interactions between social and economic indicators of regions, in this direction defining the development stage and considering separately of the factors affecting the development levels of regions is important.

Berber, Sivri and Artan (2001) investigated the relationship between investment expenditures and rates of economic growth in Turkey with AK model. At this study, annual data covers the periof of 1968-1998. Total investment expenditures which investigated in this study composed of manufacturing, energy and transport. According to AK model, permanent changes in certain policy variables have permanent effect on the rate of economic growth. Empirically, the growth rates in Turkey show no large persistent changes. Therefore, the determinants of long-run growth highlighted by a specific growth model must similarly show no large persistent changes, or the persistent movement in these variables must be offsetting. This study concluded that AK style models of endogenous growth theory are inconsistent with Turkish economy.

Simsek (2003), analyzed the effects of public expenditures on private investments using co-integration and ECM techniques. At this study, Simsek used the data between the periods of 1970-2001. Simsek found that, in some cases public capital spending stimulates private investment while in others depresses it. Also the results indicated that, the marginal product of public capital is greater than the marginal product of private sector, so that the efficiency of public sector is higher.

Yılmaz and Susam (2001) studied the portion of the public expenditures in GNP in Turkey and compared the countries for the period of 1980-2000. As a result of the analysis they found that within the specified period, as well as the portion of the investment expenditure show a

tendency of gradually decreasing, the most effective expenditure for explaining GNP is investment expenditure, so that they have reached the conclusion that the most effective item in the increases is investment expenditure.

Polat and Uslu (2010) investigated the employment impact of foreign trade using Autoregressive Distributed Lag approach with manufacturing data of Turkey for the period of 1988:1-2007:3. They found that while trade had no significant impact on employment in the long-term, both exports and imports had positive and significant affect on employment in short-term for the period of analyzed.

At the studies that discussed of foreign trade policy, the main subject of the researches is the effect of trade on unemployment. According to those who oppose free trade, the foreign enterprises which lower production cost and enter domestic markets without any obstacle, take away of competition possibility of domestic manufacturers. The people who advocate free trade indicate that free trade expands the export markets, the demand for products of domestic enterprises and so that domestic production and employment opportunities will increase (Davidson and Matusz, 2010:60).

Krugman et al. (1995) conducted a study on the growth reasons of world trade and the consequences. At the end of this study, the researches found that the wages of unskilled employees work in America and England decrease depending on the foreign trade.

Revenga (1997) analyzed the effect of trade liberalization on employment and wages in the Mexican manufacturing sector. Revenga found that trade liberalization affected firm-level employment and wages by shifting down industry product and labor demand. This in itself may have accounted for a 3-4% decline in real wages on average.

Davis (1998) considered trade between a flexible-wage America and a rigid-wage Europe in his study. Davis emphasized that trade have asymmetric effects in the countries depend on the flexible or rigid wage properties. In a benchmark case, a move from autarky to free trade doubles European unemployment. The wages in America rise to European level and there is not any increase in the unemployment rate.

Milner and Wright (1998) investigated labor-market responses to trade liberalization in an industrializing country. Short and long-term responses of employment and wages were examined using specific factor trade model. Employment and wage equations are estimated using dynamic panel techniques for importable and exportable sectors in Mauritius. At the

end of the study they found that, foreign trade increase employment and wages in long-term but in short-term it reduce the wages.

Janiak (2006) implied that exporting firms are larger and more productive than non-exporting firms. Also Janiak indicated that, as trade is liberalized, large firms need more labor to produce and small firms exit, leading to a reallocation of labor from the former to the latter. As a result of the study Janiak found that, higher trade exposure is associated with a lower level of employment, suggesting that trade generates more job destruction than creation. Therefore, trade liberalization cause to increase of unemployment.

Lawrance and Slaughter (1993) found in their study that, foreign trade has a weak impact on wages and employment.

Sakurai (2004) investigated how increased trade has affected labor demand at different levels of skills in Japanese manufacturing since the 1980s using factor content method. First, the estimated loss of employment in aggregate manufacturing attributable to increased imports between 1980 and 1990 is 4.7% of the 1980 level of employment. Second, the rate of change in the relative wage of non-production to production workers attributable to the change in trade between 1980 and 1990 is 2.4% or less. As a result of these findings, Sakurai suggested that the effect of increased trade on Japanese manufacturing labor market in the 1980s is not yet very large.

Cortes et al. (1996) investigated the effects of France foreign trade on the employment. They indicated that foreign trade with low-income countries led to a trade deficit in unskilled labor-intensive sectors and leads to more trade in skilled labor-intensive sectors, and they emphasized that the comparative advantage model is current model.

Egger and Kreickemeier (2009) created a general equilibrium model in which firms are heterogeneous due to productivity differences and workers have fairness preferences and hence provide full effort only if their factor returns is sufficiently high. Egger and Kreickemeier concluded that, foreign trade liberalization cause to increase of unemployment. Similar to this result, Itskhoki and Helpman (2010) claimed that the elimination of barriers to foreign trade may increase unemployment. Itshoki and Helpman studied a two-country-two-sector model of foreign trade in which one sector produces homogeneous products and the other sector produces differentiated products. Both sectors are subjected to search and matching frictions in the labor market and wage bargaining. Countries are similar except for frictions in their labor markets. Itshoki and Helpman studied the interaction of labor market

rigidities and trade impediments in shaping welfare, productivity, trade flows and unemployment. They showed that both countries gained from trade and also they found that the opening to trade raises a country's rate of unemployment if its relative labor market frictions in the differentiated sector are low, and it decreases the rate of unemployment if its relative labor market frictions in the differentiated sector are high. Similar to Egger and Kreickemeir's study, they detected as a result of removing the barriers to foreign trade, exports will increase unemployment reason that the defense is not identical with the product market becomes more profitable to make exports more companies in this sector and as an increase in the demand for labor is explained.

Matusz (1996) merged a model of monopolistic competition in the production of intermediate goods with the Shapiro-Stiglitz model of efficiency wages to show that the introduction of foreign trade leads to increased employment in all countries. Similar to this study, Melitz et al. (2008) added "job search" model to their study. They investigated foreign trade in a market with non-identical firms. According to the model, foreign trade liberalization reduces unemployment.

In recent years, the currency crises in many countries have created serious effects on unemployment. At the countries exposed to crisis, the unemployment rate has risen to significant levels in a very short time. For example, in 1994, due to the crisis the real exchange rate and unemployment increased in Mexico (Bratsiotis and Robinson, 2002). Mexican crisis is a very good example of the devastating effects on the economy of the exchange rate policy of suppression policy. The capacity utilization rate fell, a decrease was observed in economic mobility and unemployment has increased in South Korea in the Asian Crisis of 1997. The unemployment rate increased from 2.8% to 7.3% in 1997. Exchange crisis both led to inflation and unemployment (Song, 2000). On the other hand EMS (The European Monetary System) crises have serious impacts on unemployment and trade deficits. Unemployment rate has increased in many countries (Andersen ve Chiriaeva, 2003).

3. Data and Results

In this study, the effects of economic policies in order to reduce the disparities among regions and how investment encouragements affects employment by sectors in the Southeastern Anatolia region has investigated. In this study, encourage investment and employment rates for the years 1992-2010 were used. The data were obtained from the database of State Planning Organization.

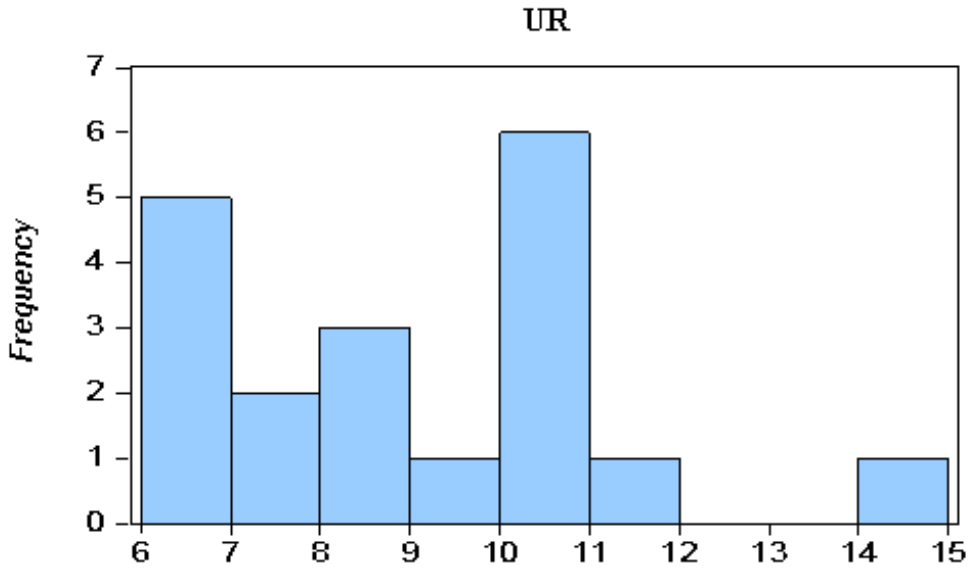

Figure 1: Unemployment rate

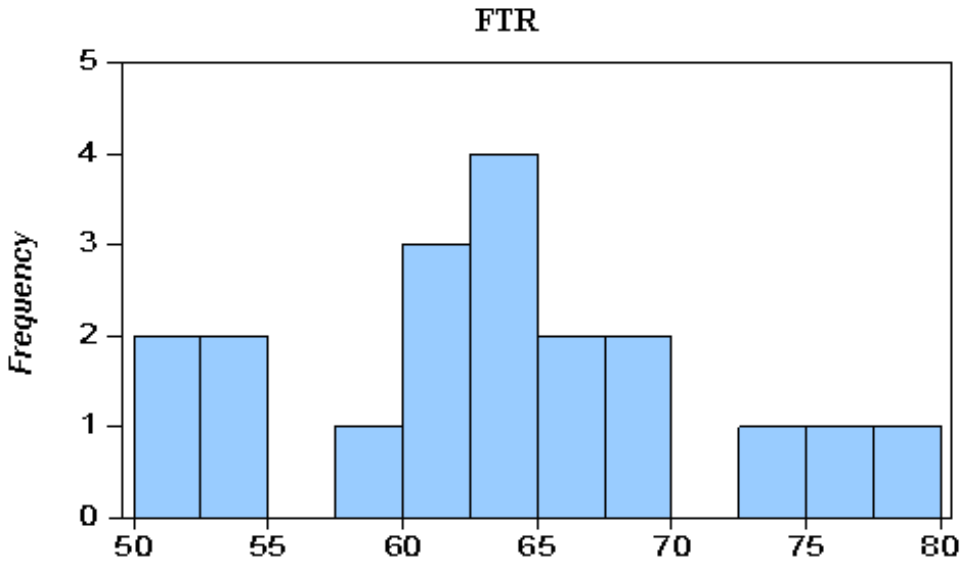

Figure 2: Foregin trade rate

In this study the effects of encourage investments on employment were investigated. So the model is as follows:

$$UR_t = a + bftr_t + \varepsilon_t \quad (1)$$

In the equation, UR = Unemployment rate, FTR = Foreign trade rate, t = time and ε_t = error term. However, it is not correct the direct transition to the solution of this model in the analysis that used time series. Firstly, you need to be tested whether stationary time series used in the model. If the average and variance of a time series does not change according to the time and the corporate variance between the two periods only depending of the distance between the two periods, this time series called static (Gujarati, 1999:713). Granger and

Newbold (1974:234) implied that in case of studied with the non-stationary time series, the problem of spurious regression may be encountered. In this case, the results obtained by regression analysis do not reflect the real relationship. Regression analysis used of non-stationary time series may reflect the correct relationship if only there is a co-integration relationship between these series (Gujarati, 1999: 726). The stationary analyses of time series in this study was made by using Augmented Dickey-Fuller (ADF) unit root test developed by Dickey and Fuller (1981:335). Schwarz information criterion is preferred in this study.

Table 1: Results of regression analysis.

Dependent variables: UR				
Method: Minimum Squares				
Sample: 1992- 2010				
Variables	**Coefficient**	**Standard Error**	**t-Test**	**Possibility**
FTR	0.141650	0.006334	22.36333	0.0000
R-Square	0.709265	Dependent VAR Method		8.960632
Adaptive R-Square	0. 709265	S.D. Dependent VAR		2.071766
Regression of S.E.	1.758849	Akaike info criteria		4.018392
Sum of Square	55.68387	Schwarz criteria		4.068099
Logarithmic Possibility	-37.17472	F-test		4.026804
Durbin-Watson Value	6.594898	Possibility (F test)		0.000047

Values of all variables are significant at 5% level and valid. From the analysis we found R^2 = 0,709265, this result indicates that the explanatory power of the equation is high. When the results of regression analysis are interpreted in economic terms, it is understood that there is a positive relationship between unemployment rate and foreign trade. The coefficient sign of the inflation variable is positive so that it indicates the relationship between the unemployment rate and foreign trade.

4. Conclusions

Investments have two types of effect as demand and production in short-and long-term. It is not possible to increase production capacity in the short term. Therefore, the expenditures related to investments in short-term will bring about an increase in the demand side of the economy. These expenditures give place to capacity and production rise in the long-term. This situation will affect economic growth positively in the long-term.

Parallel with the transformation in the world economy, labor market in Turkey become global by the neo-liberal policies, so that the labor market ruptured and become multi-layered. At this study, it was observed that the investments affect growth positively in medium- and long-term. This relationship shows that, each 1% increase in I/GDP will provide an increase of 0.3261% in growth in the medium- and long-term. The integration attempts of national labor market to other labor markets by the government coordinated with the establishment of labor supply that higher efficiency, lower wages and worse working conditions. Attempts to configure labor market on the basis of comparative advantages reveals remanufactured low wage levels and worsening working conditions. This situation does not create a developer effect on labor markets, contrary leads to a close-correct process to the lowest standard labor market. To increase the competitiveness takes place by pulling down of unit labor costs. At the conditions that the exchange rate policies increasingly disabled and there are no differences in production technology, the reduction in unit labor costs can be available when real costs and employment movements suppressed and labor productivity increased.

As a result, in spite of increases in production and productivity in developing countries, the real income of the employees remain under pressure, parallel with economic growth employment does not increase; unemployment rate is increasing

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