Globalization and Youth Unemployment Paradox: Turkey Sample

Boran Toker1, Çiğdem Demir2

1Akdeniz University, Ayşe Sak School of Applied Sciences, Antalya, 07197, Turkey

2Akdeniz University, Faculty of Economics and Administrative Sciences, Antalya, 07058, Turkey

E-mails: *borantoker@akdeniz.edu.tr,demircigdem@akdeniz.edu.tr*

Abstract

Globalization process, which has developed with the application of neo-liberal policies in the world, is the primary and most discussed concept in terms of its positive and negative effects on developing and developed countries. Aforesaid process has caused power imbalance between the developed countries that have completed their industrializations and developing countries that have not completed their industrializations; and with the liberalization of capital and commerce, it has made the capital sovereign on labor. In this context, the most important disadvantage of globalization, which is a knife-edge situation for developing countries, is unemployment. Unemployment for a developing country like Turkey, which has large young population, is a serious problem that globalization causes in economic and social field. The reason that underlies this problem is that globalization causes unemployed growth in Turkey that has a young and dynamic population. The relative height of young unemployed in the rates of unemployment affects the Turkish nationality growing unemployed with its economic, social and psychological dimensions deeply.

In this study, it is aimed to determine the dynamic economic effects of globalization process exercising power over Turkey with 1980s onwards on youth unemployment. In this context, the relationship between youth unemployment and globalization was econometrically analyzed with VECM approach by using the annual data of 1980-2011 periods. With Johansen Co-integration Test, long term relationship between youth unemployment and globalization variables was researched and with error correction variable the time to adjust the deviation that may occur in long term balance was determined. Moreover, with the results of Impulse-Response Function and Variance Decomposition, solutions are offered for sustainable economic development and effective employment policy by revealing how youth unemployment reacts to globalization and how it has been affected from globalization.

Keywords: Globalization, Youth Unemployment, Sustainable Economic Development, Employment Policy, VECM.

1. INTRODUCTION

Globalization is a new world economic system, which prescribes and describes ways in which businesses, concepts and events are organized around the world. It is a phenomenon that has affected people differently in every sphere of life (Ukpere and Slabbert, 2009). Globalization is defined as the free movements of goods, services and capital across borders. It is a contentious process by which the western market economies have effectively spread across the globe

(Heshmati, 2003). Globalization also has been viewed as; it is a process of interaction and integration among the people, companies, and governments of different nations, a process driven by international trade and investment and aided by information technology. This process has effects on the environment, on culture, on political systems, on economic development and prosperity, and on human physical well-being in societies around the world (Globalisation101.org, 2012). Although it does not constitute a new phenomenon, it is viewed as an inexorable integration of markets, nations and technologies to a degree never witnessed before in a way that is enabling individuals, and corporations to reach around the world further, faster, deeper and more economically than ever before (Heshmati, 2003).

Globalization and technological advances have been changing labor markets around the world. Young workers are facing new challenges in making the transition from school to work. While for some the opening of national economies to international competition through trade and investment as well as information and communications has generated income and improved welfare, for others the process of globalization has been a source of persistent inequality and social exclusion (Morris, 2006).

Youth employment creation is a critical component of a country's long-term economic stability and growth. There are difficulties in Turkey in employment generation in general, in youth employment generation in particular (Ercan, 2007). The 15-24 years75 old composed 16% of the Turkish labor force in 2011. The unemployment rate for youth aged 15-24 is 18.4% in 2011 (832.000 unemployed). The unemployment rate among university educated youth is 30% (TURKSTAT Household Labour Force Survey, 2012). Employment remains a problem for this group and oddly enough more so for the educated youth group. Paradoxically, with such low average education levels and the demand by employers for better-qualified workers, educated young people (high school and above) have higher relative unemployment rates in urban Turkey. Turkey has a serious bottleneck in job creation for its young cohorts, especially for the educated portion (Ercan, 2007).

2. LITERATURE REVIEW

Meidani and Zabihi (2012) investigate the dynamic effect of globalization on unemployment rate in Iran during the period 1971 to 2006 using Johansen-Juselius co-integration test. In the study, the trade intensity index (ratio of total exports and imports to GDP) as a measure of globalization have used. Also in this model, gross domestic product, the consumer price index as well as other variables affecting the unemployment rate have considered. They show that the globalization has a significant and negative effect on unemployment rate. The value of error correction coefficient is equal to -0.46 implying that around 95% of the unemployment rate adjustment occurs after two years.

75 The United Nations defines youth as young women and young men aged 15–24 years. This group includes teenagers aged 15–19 and young adults aged 20–24. National definitions for youth do not necessarily correspond to this age group. These often depend on such factors as voting rights, land rights, the end of compulsory education and eligibility for military service, liability for criminal offences (Morris, 2006).

Ukpere (2011) posits that there is a strong linkage between globalization, unemployment, income inequality and poverty in Africa. He reveals that the current globalization seems to have aggravated the problem of unemployment, the corollary of which is endemic income inequality and mass poverty in Africa. He also maintains that capitalist globalization undeniably, created wealth but also intensified inequality and poverty, particularly in Africa. African countries need to develop comprehensive strategies to create jobs locally.

Aremo, et al. (2010) investigated the impact of globalization on labor force utilization in Nigeria was addressed with a view to assessing the extent to which globalization has influenced the structure of development in Nigeria. They showed that globalization practice could generate negative impact on employment in both short and long run periods suggesting that if globalization continues as being practiced, globalization could further worsen the extant decrepit state of unemployment in Nigeria other things being equal.

Yusof (2010) investigates the link between globalization and the Malaysian labor market by applying the autoregressive distributed lag approach, a relatively new-time series technique to the analysis. The findings of this study indicate that globalization does not significantly affect the labor variables in the long-run.

Dutt, et al. (2009) presents a model of trade and search-induced unemployment, where trade results from Heckscher-Ohlin (H-O) and/or Ricardian comparative advantage. Using cross-country data on trade policy, unemployment, and various controls, and controlling for endogeneity and measurement-error problems, they find fairly strong and robust evidence for the Ricardian prediction that unemployment and trade openness are negatively related. This effect dominates the positive H-O effect of trade openness on unemployment for capital-abundant countries, which turns negative for labor-abundant countries. Using panel data, they find an unemployment-increasing short-run impact of trade liberalization, followed by an unemployment-reducing effect leading to the new steady state.

Lee and Vivarelli (2009) use an ex-post measurable definition of globalization, namely increasing trade openness and Foreign Direct Investments (FDI). A general result is that the optimistic Heckscher-Ohlin/Stolper-Samuelson predictions do not apply, that is neither employment creation nor the decrease in within-country inequality are automatically assured by increasing trade and FDI.

Jenkins (2006) considers the impact of foreign direct investment on employment in Vietnam, a country that received considerable inflows of foreign capital in the 1990s as part of its increased integration with the global economy. Despite the significant share of foreign firms in industrial output and exports, the direct employment generated has been very limited because of the high labour productivity and low ratio of value added to output of much of this investment. In this study also shows that the indirect employment effects have been minimal and possibly even negative because of the limited linkages which foreign investors create and the possibility of "crowding out" of domestic investment.

Harms and Hefeker (2003) demonstrate that international portfolio diversification can help to reduce unemployment. If workers earn a capital income that is negatively correlated with domestic labor demand shocks, the wage set by a monopoly union may be lower and thus expected employment higher than in the case of a positive correlation.

Ghose (2000) reveals that in the case of industrialized economies, growth of manufactured imports from developing countries has had a small adverse effect on manufacturing employment but virtually no effect on wages. Thus unemployment and growing wage inequalities cannot really be attributed to trade. He maintains that in those developing economies which emerged as important exporters of manufactures to industrialized countries, growth of trade had a large positive effect on manufacturing employment and wages. In some of these economies, moreover, growth of trade was also associated with declining wage inequality. Thus, on balance, the global effects of trade liberalization on manufacturing employment and wages appear to have been significantly positive even though there have been job-losers in both industrialized and developing economies.

2. MATERIALS AND METHODS

In this section, the VECM approach which has been used to analyze the relationship between globalization in Turkey and young unemployment with 1988-2010 annual data has been introduced and the results have been presented.

2.1. DATA

In the model the young unemployment rates in Turkey (YI) are dependent variable and economical globalization (EG), sociological globalization (SG) and political globalization (PG) are explanatory variables. Furthermore, in order to find out the effects of economic instability together with globalization on young unemployment, the inflation rates have also been included. For the data of these variables, World Development Indicators (WDI) of The World Bank and the KOF Index of Globalization tables have been used.

2.2. VECM APPROACH

Starting point of this approach is an adequate statistical description of the linear relation between the k nonstationary variables. The usual way is the modelling as a vector autoregressive process of finite order p.

$$Y_t = \sum_{j=1}^{p} A_j Y_{t-j} + D_t + U_t \quad (1)$$

where U denotes a normally distributed k-dimensional white noise process, D represents the deterministic terms, and Aj, j = 1, 2, …, p, are kxk dimensional parameter matrices. The reparametrisation as a vector error correction model leads to

$$\Delta Y_t = -\prod Y_{t-1} + \sum_{j=1}^{p-1} A_j^* \Delta Y_{t-j} + D_t + U_t \quad (2)$$

$$\text{with } \prod = A(1) = I - \sum_{j=1}^{p} A_j \quad \text{and} \quad A_j^* = -\sum_{i=j+1}^{p} A_j, j = 1,2,\cdots,p-1.$$

The matrix Π represents the long-run relations between the variables. Since all components of Yt are I(1) variables, each component of ΠYt,…, ΠYt-p+1 is stationary and each component of Yt-1 is also integrated of order one. This makes relation (2) unbalanced as long as Π has a full rank of k. In this case the inverse matrix Π^{-1} exists and we could solve equation (2) for Yt-1 as a linear combination of stationary variables. However, this would be a contradiction. Therefore, Π must have a reduced rank of r < k. Then, the following decomposition exists:

$$\underset{(k\times k)}{\prod} = \underset{(k\times r)}{\Gamma}\underset{(r\times k)}{B'} \quad (3)$$

where all matrices have rank r. B'Yt-1 are r stationary linear combinations which guarantee that the equations of system (2) are balanced. The columns of B contain the r linearly independent cointegration vectors and the matrix Γ contains the so-called loading coefficients which measure the contributions of the r long-run relations in the different equations of the system. The adjustment processes to the equilibria can be derived from these coefficients. (Kirchgässner & Wolters, 2007:219)

It can be shown that for a given r, the maximum likelihood estimator of β defines the combination of y_{t-1} that yields the r largest canonical correlations of Δy_t with y_{t-1} after correcting for lagged differences and deterministic variables when present. Johansen proposes two different likelihood ratio tests of the significance of these canonical correlations and thereby the reduced rank of the Π matrix: the trace test and maximum

eigenvalue test, shown in equations (4) and (5) respectively.

$$J_{Trace} = -T\sum_{i=r+1}^{n} \ln(1-\hat{\lambda}_i) \quad (4)$$

$$J_{Max} = -T\ln(1-\hat{\lambda}_{r+1}) \quad (5)$$

Here T is the sample size and $\hat{\lambda}_i$ is the i:th largest canonical correlation. The trace test tests the null hypothesis of r cointegrating vectors against the alternative hypothesis of n cointegrating vectors. The maximum eigenvalue test, on the other hand, tests the null hypothesis of r cointegrating vectors against the alternative hypothesis of r +1 cointegrating vectors. Neither of these test statistics follows a chi square distribution in general; asymptotic critical values can be found in Johansen and Juselius (1990) and are also given by most econometric software packages. (Hjalmarsson & Österholm, 2007:4

In the study, in order to analyze the stationary of the variables used, "Augmented Dickey-Fuller" (ADF) developed by Dickey and Fuller (1979) and Phillips-Perron (PP) unit root tests have been used and the obtained results have been presented in Table 1.

Table 1. Unit Root Test Results

VARIABLES	ADF (constant)	ADF (constant trend)	PP (constant)	PP (constant trend)
YI (Lag Lenght)	-1.0134 (0)	-2.2697 (0)	-1.0760 (1)	-2.2697 (0)
SG (Lag Lenght)	-2.2656 (5)	-5.0074 (4)	-1.5182 (0)	-2.5918 (0)
PG (Lag Lenght)	-2.9232 (5)	-2.2288*** (1)	-1.3754 (3)	-1.8523 (1)
EG (Lag Lenght)	-2.0258 (0)	-1.3735 (0)	-2.0195 (4)	-1.0593 (3)
Δ YI (Lag Lenght)	-4.2456*** (0)	-4.2343*** (0)	-4.2380*** (1)	-4.1946*** (2)

Δ SG (Lag Lenght)	-2.9120* (5)	-2.9179 (5)	-5.5809*** (0)	-5.4989*** (0)
Δ PG (Lag Lenght)	-5.1870*** (0)	-5.4243*** (0)	-5.2272*** (1)	-5.5823*** (1)
Δ EG (Lag Lenght)	-4.4412*** (0)	-4.8041*** (0)	-4.4412*** (0)	-4.9752*** (5)
*Note: ***, ** and* indicate statistical significance at 1% ,5% and 10% levels, respectively.* Lag lengths, determined by AIC, are in parenthesis. Critical values are from MacKinnon (1996).				

Johansen Cointegration Test results which reveal the long term relationships between the I(1) variables have been shown in Table 2.

Table 2. Cointegration Tests based on the Johansen Approach

H_0	H_A	Eigenvalue	λ_{Trace} value	% 5 critic value	λ_{max} value	% 5 critic value
$r = 0$	$r > 0$	0.874759	99.9679***	69.8188	43.6277***	33.8768
$r \leq 1$	$r > 1$	0.740981	56.3402***	47.8561	28.3679**	27.5843
$r \leq 2$	$r \geq 2$	0.576180	27.9723*	29.7970	18.0273	21.1316
*Note: ***, ** and* indicate statistical significance at 1% ,5% and 10% levels, respectively.*						

In both trace and the max test results, three cointegration relationships among young unemployment, economical-social-political globalization and the inflation rates have been determined. It has been found that there is a power balance which these variables will move together.

$$YI_{t-1} = -0.848 + 0.645SG_{t-1} - 1.718PG_{t-1} + 0.895EG_{t-1} + 0.028INF_{t-1}$$

(0.099) (0.370) (0.311) (0.022)

3. CONCLUSION

In the study, the effects of globalization on young unemployment in Turkey have been modelled with 1988-2012 annual data by using VECM method. Although several studies assessing the relationship between unemployment and globalization in Turkey theoretically are available in the

literature, an empirical study has not been found. Another difference of this study comes at this point.

The paradox between young unemployment and globalization has been presented by using econometric analysis which has been conducted to find out how globalization with its economical, social and political dimensions together with the instability in the country affect young unemployment. It has been found that social globalization and the inflation rate increases young unemployment significantly in the long term, and this result shows consistency with economical expectations.

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