Globalization effect on employment: an evidence from Islamic countries

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Abstract
The main aim of this paper is studying of globalization effects on job level. The data set used cover 10 countries over the period 1980-2009. Before proceeding to estimate panel data, we carry out unit root tests to examine whether the variables are stationary. Empirical studies show that the globalization has both increased and decreased the employment. Decrease or increase of employment and its relationship with globalization is studies in this paper. In the present study, using the method of estimating the function of labor demand and the dynamic theory of labor market through four main criteria of globalization namely trade liberalization, employment, FDI, financial market effect (Islamic banking) and the theoretical foundations of the relationship between globalization and market of labor has been studied. The employment with respect to the gross domestic product, the degree of economy openness and Islamic banking is positive but the employment with respect to the government size is negative. The foreign direct investment has had a slight positive effect on the employment growth.

Introduction
The globalization has defined in the different way. O'Rourke and Williamson (2000) have defined globalization to mean" the integration of international commodity markets". Because the globalization have a relationship with the commodity and production could also affect on employment, but the existences theories on trade don't clearly determent globalization impact on employment. Determination of relationship between globalization and employment is difficult in case of definition and measurement (Ghose 2000). Because the globalization is a phenomenon with multi aspects and may be each aspect has the different impact on employment (economic, social, political, cultural and ...). Therefore, we can not deduce a whole relationship between globalization and employment in the globalization acceptor countries. Thus the aim of this article is the survey of globalization effect on employment in the Islamic selected countries.
International trade extend over the 6 recent decades has result economic efficiency promotion, but the concept of income distribution and situation of workers is a discussion yet. This study is important because the studied countries could apply the better policies for protection of labor force and employment with the better perception of problem. Since in macroeconomics, inflation and unemployment are the countries essential issues. Of course, it must consider that there are the problems about of survey of globalization influence on employment: labor forces in home and host countries constantly are about to move, in the other hand, a high percent of the payment to the labors in host countries is settled in the account of workers who spend their money in the home country.

Globalization in the economic aspect affect on employment in two ways: first through increasing in the trade of final goods and services, second increasing in the trade of inputs such as labor, capital and technology.

There are the empirical studies in this case: Kletzer (2001), with a sample for the period 1979-1999 have shown that increasing in import competition results the employment. Baldwin (1995), have surveyed trade liberalization effect on employment in the OECD countries. He has presented that trade variations don’t have significant effect on production and employment. Rama (1994), revealed that 1% decreasing in the trade protection rate decrease 0.4% employment and Ravenge (1994), have shown that in Mexico decreasing in tariffs don’t have any impact on employment.

Globalization influence on labor force
As we said above globalization affect employment in two ways: transformation of commodity and transformation of labor and capital. Although globalization is multi aspects and the countries conditions is different, and therefore final effect on employment isn’t clear but we survey globalization effect in these two sections.

Trade effects on employment
Trade effect usually is more attractive than foreign direct investment. Globalization effect on employment is indirect; it means trade first augments economic growth then increasing in the economic growth results increasing in employment. With globalization economic structure of countries lead to comparative advantage; namely the countries according to natural and human resources, technology capabilities and their infrastructures find a place in international competition (I LO 1996).

Aniceto C. Orbeta J.r (2002) believe that globalization means decline government control and intervention in economic activates and means development of private sectors. It expect that globalization motivate private economic activities that means an increasing in international trade and even in short long employment increase.
Gerefli and Kaplinsky (2001), believe that global outsourcing have received to an important and new set of economic structure in the world that we name it the global value chain. Extension of global value chain has received to a new level of the fluidity in international economics that have an effect on quality and quantity of the labor in the world. (Alfred Chandler 1977).

Globalization in the developing countries results increasing of efficiency and export in the industries which protect with the high tariffs. Thus, international trade contributions in national income increase. On the other hand, income increasing causes increasing in employment. In the most of developing countries, globalization decreases capital output ratio. Because the wage in the developing countries is low, foreign firms constitute a labor intensive structure therefore employment level increase.

The opposite of above, Aniceto .C Orbeta(2002), discuss that globalization could decrease employment: trade liberalization usually involve macroeconomics stabilization with external and internal balances for deliverance from inflationary pressure and creation of sustainable growth. Stabilization measure results decreasing in aggregate demand and have a recession effect on employment. On the other hand, with competition pressure the firms must increase their productivities, but if the firms could not augment their productivities may be dismiss the labor forces.

**Foreign direct investment effects on employment**

Here, we study the composition of foreign direct investment. Nowadays, in economy sale and production is global. The firms of home countries for reduction of cost production, set aside of right work, search of capabilities and search of countries' human and natural resources transfer production to the elsewhere. For industrial economy such as U.S.A, Europe and Japan border sites reduce the production cost. While, border assemblage first have done with the multi national firms subsidies but nowadays, firm capabilities have depended developing countries to these firms (Hamilton et all 2004).

Economic discussions show that FDI have a negative and positive effect on employment. Foreign direct investment complete domestic investments and involve the creation of new plants (the type of Greenfield) thus this case create new employment. If FDI focus on labor intensive industries, employment increasing will be highlight. FDI with creation of backward and forward linkages also can increase employment in local firms. With long run investment, employment creation will be stable.

We also can consider the negative effect of FDI on employment: foreign firms in which are under home country pressures transfer high standard labor force in the host country with themselves. In this case, employment, in the host countries, doesn't increase very much. This investment may be displacing local firms. In the other hand, if foreign investment focus on capital intensive industries employment will don't be
very significant. And if investor can transfer their capital, thus employment isn't very stable. The host country may be don't the labor force for attracting FDI.

**Methodology**

For studying the effects of globalization on employment, we use panel data. This model considers globalization variable effect on employment for Islamic countries with the time dimension. In order to avoid from spurious regression, we apply the unite root tests and with Hausman test we choose the type of model: fixed effect, random effect.

**Unit Root test**

Before estimation of the model, we should be ensured of the stationarity of variables. Dickey-Fuller, Augmented Dickey and Phillips-Perron tests are used to measure the stationarity of time-series variables, however, for panel data which have higher power compared with time-series, other tests are applied. These tests are: Im, Pesaran and Shin (1997, 2002), Levin, Lin and Chu (1992). Among different unit root tests in econometrics literature, the LLC and IPS are more famous than others. Both of these tests have been made based on ADF.

Assuming that data are homogeneous, LLC test has been made for dynamics of autoregressive coefficients for all panel parts. However, IPS more generally considers heterogeneity of this dynamics.

The benchmark model of autoregressive is as follows:

\[ Y_{it} = \rho_i Y_{i,t-1} + \delta_i X_{it} + \varepsilon_{it} \quad (1) \]

where shows \( i = 1,2,\ldots,N \) of the countries from the times of \( t=1,2,\ldots,T \). \( X_{it} \) are exogenous variables in the model. \( \rho_i \) is the autoregressive coefficient and \( \varepsilon_{it} \) is the static process. If \( \rho_i <1 \), \( Y_i \) is weakly stationary and if \( \rho_i =1 \), then \( Y_i \) has a unit root. In this paper, IPS test was used for the unit root, because the economic structures of the respective countries are different.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Unit root test and Panel data</th>
</tr>
</thead>
<tbody>
<tr>
<td>ΔGDP</td>
<td>ΔG</td>
</tr>
<tr>
<td>-2.24*</td>
<td>-1.35**</td>
</tr>
</tbody>
</table>

(*, **) denotes rejection of null hypothesis: Panel series has a unit root at the (5%, 10%) level of significance, respectively.

As defined in Table 1, all the variables were significant in 5% and 10% level in the first different. It means the variables are stationary in first different, and so, spurious regression is avoided. The Husman test shows that we must apply random effect.
Data and Methods

The main variables for study of globalization effect on employment in this study include foreign direct investment, GDP per capita, openness, employment, real wage, Islamic banking, size of government. This paper applies the panel data model for estimation of the parameters for Islamic countries. The basic specification for the model is

\[ E_t = \beta_0 + \beta_1 OPN_t + \beta_2 GDP_t + \beta_3 G_t + \beta_4 IBF_t + \beta_5 FDI_t + \beta_6 W_t + \epsilon_t \]

where GDP is the real GDP per capita growth of country i, OPN is openness and IBF is credits of Islamic bank in the host economy (we apply this variable following Aniceto C. Orbeta Jr (2004)). FDI is the foreign direct investment and G is the size of government in economy. E is employment and W is real wage.

The data set used covers 9 countries over the period 1980-2009. The sources of variables are UNdata, the World Bank Group, UNCTAD and Growth Data Resources. Data source for IBF is Bankscope database compiled by IFIS (Islamic Finance Information Service) dataset. The countries are: Bahrain, Iran, Malaysia, United Arab Emirates, Pakistan, Kuwait, Saudi Arabia, Qatar, and Turkey.

Results

Table 2
Panel analysis, country random-effects, 1980-2009

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.13**</td>
<td>-1.16</td>
<td>1.23</td>
</tr>
<tr>
<td>(2.11)</td>
<td>(-1.24)</td>
<td>(0.06)</td>
<td></td>
</tr>
<tr>
<td>FDI</td>
<td>0.01**</td>
<td>0.05*</td>
<td>0.04**</td>
</tr>
<tr>
<td>(2.21)</td>
<td>(1.90)</td>
<td>(2.22)</td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>0.013*</td>
<td>0.052*</td>
<td>0.035</td>
</tr>
<tr>
<td>(1.98)</td>
<td>(1.95)</td>
<td>(1.32)</td>
<td></td>
</tr>
<tr>
<td>OPE</td>
<td>0.012**</td>
<td>0.021**</td>
<td>-0.034*</td>
</tr>
<tr>
<td>(2.22)</td>
<td>(2.14)</td>
<td>(-1.93)</td>
<td></td>
</tr>
<tr>
<td>IBF</td>
<td>0.02*</td>
<td>0.04*</td>
<td></td>
</tr>
<tr>
<td>(1.86)</td>
<td>(1.93)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>0.03*</td>
<td>0.001*</td>
<td></td>
</tr>
<tr>
<td>(1.99)</td>
<td>(1.91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>-0.01*</td>
<td></td>
<td>(-1.92)</td>
</tr>
</tbody>
</table>

Note: t-statistics are provided in parentheses. *, ** and *** represent significance at the 10%, 5% and 1% respectively.
In the table 2 we present the results for the benchmark model specification. The results in first column show that foreign direct investment, gross domestic production and globalization (openness) have a positive impact on employment. These results correspond to the results for Aniceto C. Orbeta Jr (2004). They reveal that these variables are also a positive effect on employment. Evidence from country studies in Ghose (2000) suggests that “trade increases the employment elasticity of manufacturing” after liberalization. Fitzgerald and Perosino (1995) note, once skills, quality, product differentiation are introduced, the employment consequences of liberalization become very confused. But Baldwin (1995) has presented that trade variations don’t have significant effect on production and employment. Rama (1994), revealed that 1% decreasing in the trade protection rate decrease 0.4% employment.

In the second column we add the proxy of Islamic banking (credits of Islamic bank in the host economy). This model shows that the variables also are positive. When the credits augment investment increase then the output and employment increase therefore Islamic banking has a positive effect on employment. Aniceto C. Orbeta Jr (2004) show also that this effect is positive.

The wage level has a positive effect on employment but the most of studies reveal that this effect is negative. Finally government expenditures have a negative effect on employment. This results isn't very smart because with government expenditures economic capacity increase thus employment must augment.

Discussion

The aim of this article is survey of globalization effect on employment. After applying unit root test we have estimated our model in random effect.

The results above show that the globalization is positive effect on employment. Here import and export are proxy for globalization effect. Globalization in the developing countries results increasing of efficiency and export in the industries which protect with the high tariffs. Thus, international trade contributions in national income increase. On the other hand, income increasing causes increasing in employment. Other variable for globalization is foreign direct investment. This variable also has positive effect on employment because when investment augment the capacity of economy will increase then output and employment increase.

The other variable in our model is Islamic banking. In these countries Islamic banking is current therefore we have chosen the credits of Islamic banks as a proxy for Islamic banking. When the banks pay credits investment and economic capacity will increase then output augment and because employment is a function of production, thus employment will increase.
When the wage level increases, the labor force has the motivation for working but entrepreneur isn’t motivated for recruitment because of production costs. In our model, the result is positive perhaps, production costs were covered with increasing in output.

The government expenditures in Islamic countries have a negative effect on employment. But we expect a positive effect for this variable.

References
