

## EFFECT OF GLOBALIZATION ON EMPLOYMENT IN PAKISTAN

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### ABSTRACT

This paper investigates the effect of globalization on employment level in context of economy of Pakistan. Different dimensions of globalization i.e political globalization, economic globalization and social globalization used to capture the effect of globalization. Foreign direct investment (FDI) and trade openness are also used as proxies of globalization. Remittances include as independent variables. Period of the study is 1976 to 2011. Co integration technique Engle Granger is used to estimate the results of variables. Error correction mechanism applies for finding short run analysis. Results indicate that foreign direct investment, worker remittances, social, political and economical globalization has positively affected employed labor force in long run. For the purpose of appropriate lag length Akaike Information criterion (AIC) and Schwartz criterion (SC) are used.

**KEYWORDS:** Globalization, Employed Labor Force and Co-Integration

### INTRODUCTION

Globalization already became quite popular which indicate an increase in economic integration among different nations. It is a process in which an economic activity or any type of undertaking becomes world-wide. One of the important components of globalization is the rapid increase in the portion of national output which devotes to exports and imports (M A Jalil (2000).

Globalization helps the economy to boost up economic activities like FDI, Technological and Telecommunication Developments, cross border trade activities. Rapid increase in activities of all these sectors results in increasing the productivity which can be seen in the China and Japan. All these developments of the nation which we get from globalization effect truly depend on the foreign and domestic policies. So strong policies ultimately benefit the globalization process (Bertucci & Alberti 2001).

Developing economy may suffer due to Globalization as it has to face the problem of brain drain, foreign debts and no access to foreign markets etc. We may blame that the developed countries are the cause of these problems face by developing nations. Rich enjoy the benefits and developed nations suffer due to it. According to this concept globalization divide the whole world into two categories one is rich economies and other is poor (Suzuki & Ghayur, 2002).

Objective of the study is to check the impact of globalization on employed labor force of Pakistan and to explore that how different proxies of globalization make changes in labor market. In this study recent data on all variables is used for analysis from 1976-2011. Engle granger technique is used for analysis.

### REVIEW OF LITERATURE

There is a lot of research carried out on globalization and its impact on employment generation. Some significant studies are reviewed in this paper.

Trade liberalization policy have positive and significantly effect on real GDP is analyzed by Khan & Kayyum (2006). The reason behind is the liberalization of trade allocate market forces toward productive sector and ultimate results is to enhance the efficiency level, provide way for new products in market and also improve economies of scale.

Liberalization effect of growth for Pakistan economy is explored by Afzal M. (2006). Usual trade openness measure by the sum of exports (X) and imports (M) and divided by GDP. This represents international interdependence. And second measure which introduce in the model is the ratio of sum of capital inflow and capital outflow to the GDP. This measure show financial integration. Study use proxy for capital outflow is debt servicing due to unavailability of data. Official aid and foreign direct investment added to make capital inflow. By using Johenson co integration approach results show that both measures of globalization (trade Openness and financial integration) have long-run relationship with GDP. And have no impact on the Pakistan economy in short time period.

Effect of bad governance on globalization is investigated by Ahmed. N (2005). Study uses trade as percent of GDP, Portfolio Investment and FDI as percent of GDP as economic integration. Study also takes total international tourism to show the impact of globalization.

The study of Peric (2005) provide information that globalization opened a new world for nations. In the year of 2002 about 715 million people travel to the other country. And it is expected that in coming 2020 numbers of travelers would be increased by 1.6 million.

Tourism industry enhance economic growth by improving job opportunities is explored by Jean (2011) and Hjalager (2006) In modern age of globalization tourism is consider a tool for developing economies. Tourism has positive impact on foreign exchange, employment, tax revenues and also raises the quality of life for local population.

If Pakistan want to increase its exports and economic growth should move further for trade liberalization is revealed by (Cuadros et al. (2004), Greenway et al. (2002), Khan (1998), Siddique et al. (2003)).

Global trade and investment gives advantage to capital intensive companies which can move quickly and easily across the borders but global trade show shortcoming in case of labor side specifically for lower-skilled workers who cannot migrate easily around the globe (Rodrik, 1997).

Negative impact of trade openness on employed labor force in case of Pakistan is proved by M. Shahnawaz and Ch. Sharif (2000). And they give the justification as due to reduction of import tariff and remove trade barrier importable commodity become cheap for domestic consumer and this will destroy our domestic economy as well as adverse effect on employment situation. Also the impact of reduction of tariff causes depletion of Government revenue.

Reduction in tariff rates nation face the significant loss of revenue is investigated by (Anwar, 2002). This extreme decline in revenues become cause of decreases the government expenditure on social services and in result it reduces the employment opportunities.

While, Iqbal.Z and Abdus.S (2005) conducted a study and makes relationship between GDP and worker remittance. They developed a hypothesis that higher rate of remittances cause increase in growth rate. In case of Pakistan more remittance reduces the current account deficit. Multiple regressions are used for estimation. And results proved that higher growth is positively related with remittances till 1972-2003 in Pakistan economy.

The debate on tourism is more job creating sector in turkey is illustrated by Onder and durgun (2007) and they make a relationship of tourism and employment for the period 1980-2007. By using Johnson co integration test and VAR they found that there is a positive effect of tourism on employment in long run in turkey.

## THEORETICAL BACKGROUND

Mercantilists were the first school of thought who explores the advantages of international trade. They emphasis on accumulation of gold to make the economy powerful. They encourage exports and discourage imports with other nation. In 1776 Adam Smith developed theory of absolute advantage which emphasis on trade with other nation. Most important development in international trade is carried out by Ricardo who gives theory of comparative advantage which indicates that even if a nation is less efficient as compared to other nation there is still chance to get benefit from trade for both nations (Silvator (2011)).

New growth theory model introduced by Romer (1986) and Lucas (1988), the study indicates that trade openness effect economy through various channels.

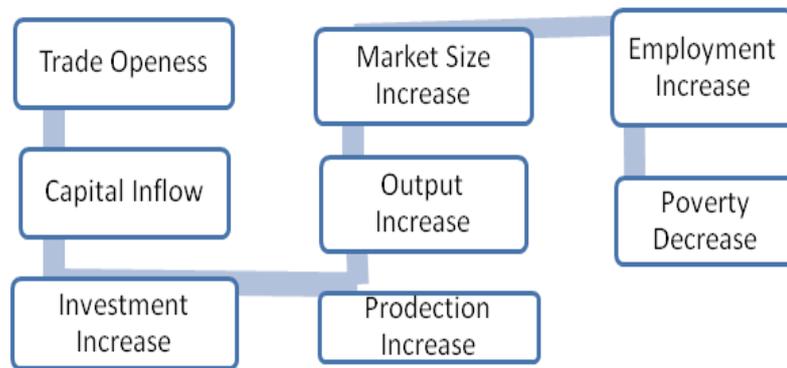


Figure 1

## DATA AND METHODOLOGY

Major concern of study is to capture the effect of globalization on employment level of Pakistan. For the purpose of analysis study uses time series data from 1976-2011. Employed labor force take as dependent variable and it is affected by foreign direct investment (fdi), trade openness (top) which is calculated by (exports + imports)/GDP, social globalization (sgl), economic globalization (egl), Political Globalization (pgl), remittances (rem).

Study takes data from world development indicator on foreign direct investment, exports and imports, gross domestic product, remittances and labor force of Pakistan is taken from international Labor Organization (ILO).

For the proxies of globalization, use Social Globalization, Political Globalization and Economic Globalization and get data of these three proxies from KOF index by Swiss Economic Institute. The KOF index introduced in 2002 (Dreher, 2006).

### Model Specification

The present study is based on the following models:

$$\ln \text{elf}_t = \alpha_0 + \alpha_1 \ln \text{fdi}_t + \alpha_2 \ln \text{to}_t + \alpha_3 \ln \text{sg}_t + \alpha_4 \ln \text{pg}_t + \alpha_5 \ln \text{eg}_t + \alpha_6 \ln \text{rem}_t + \mu \quad (1)$$

### Variables

- ELF = Employed labor force
- FDI = Foreign Direct Investment
- TO = Trade Openness (Exports + Imports/GDP)

- EG = Economic Globalization
- SG = Social Globalization
- PG = Political Globalization
- REM= Remittances

### **Description of Variables**

#### **Employed Labor Force**

The employed labor force comprises all persons of working age who, during a specified brief period, were in one of the following categories:

- Paid employment (whether at work or with a job but not at work)
- Self-employment (whether at work or with an enterprise but not at work).

#### **Foreign Direct Investment (FDI)**

It is a major source of capital inflow. FDI includes all capital transaction between two units or between joined enterprises which may be incorporated or not incorporated.

#### **Trade Openness**

Trade openness is used as proxy of trade liberalization. It is computed as:

$$TO = \frac{(\text{export} + \text{import})}{\text{GDP}} \times 100$$

#### **Economic Globalization**

Economic Globalization includes data on actual flows i.e trade (percent of GDP), foreign direct investment, stocks (percent of GDP), portfolio investment (percent of GDP), and income payments to foreign nationals (percent of GDP). Data on restrictions hidden import barriers i.e data on restrictions hidden import barriers, mean tariff rate, taxes on international trade (percent of current revenue), capital account restrictions.

#### **Social Globalization**

Social Globalization comprises data on telephone average cost of call to US, Internet Users (per 1000 people), internet hosts (per capita), television (per 1000 people), trade in books (percent of GDP), foreign population (percent of total population), international tourism.

#### **Political Globalization**

It includes embassies in country, membership in international organizations, participation in U.N. Security council missions, international treaties.

#### **Worker Remittances**

It comprises personal transfers and compensation of employees. Personal transfers include all current transfers between resident and nonresident individuals and compensation of employees refers to the income of border, seasonal, and other short-term workers who are employed in an economy where they are not resident and of residents employed by nonresident entities.

**Method of Research**

For time series data there is need to check the stationary of all the variables. If variables are not stationery and apply OLS then results are spurious. So for obtaining accurate results first step is to check either the variables of study are integrated of order 0, 1 or 2. Unit root test uses for checking the stationary of the variables. This study apply ADF augmented dickey fuller test to check stationary of variables. After checking the stationery we move further to econometric technique. All variables in this study are integration of I (1). So we apply co integration technique of Engle Granger.

For the purpose of appropriate lag length Akaike Information criterion (AIC) and Schwartz criterion (SC) are used. Error correction mechanism use to detect short run analysis.

**RESULTS AND DISCUSSIONS**

**Table 1: ADF Augmented Dickey Fuller Test to Check Stationary of Variables**

Variables	Level		1 <sup>st</sup> Difference	
	Test Statistic	Probability	Test Statistic	Probability
Lelf	-0.418053	0.89527	-6.059747	0.0000
Leg	-0.734637	0.8248	-6.878509	0.0000
Lsg	-0.555618	0.8675	-3.837069	0.0061
Lto	-2.682435	0.0872	-5.844986	0.0000
IFDI	-2.903271	0.0551	-4.488816	0.0011
Lrem	-1.104172	0.7032	-4.812409	0.0004

Table 1 show that all variables are integrated of order 1. Null hypothesis of unit root is accepted at level when probability greater than 0.05. So here we cannot use usual OLS as variables are not integrated at level.

Next step is to check either co integration exists or not. The prerequisite of co integration is that all the variables are at I (1) and for long run relationship error term must be at I (0) as shown in table 2.

**Table 2**

	T test	Prob.
Ecm(-1)	-3.462455	0.0152

Table 1 and 2 shows that all the prerequisites of co integration are fulfill. Therefore most appropriate technique is Engle Granger to analyze short run relationship by using error correction mechanism and apply lag length criteria which shown in table 3.

**Long Run Analysis**

$$\begin{aligned}
 \ln \text{elf}_t &= \alpha_0 + \alpha_1 \ln \text{fdi}_t + \alpha_2 \ln \text{to}_t + \alpha_3 \ln \text{sg}_t + \alpha_4 \ln \text{pg}_t + \alpha_5 \ln \text{eg}_t + \alpha_6 \ln \text{rem}_t + \mu_t \\
 &= 6.017 + 0.046 \ln \text{fdi}_t - 0.29 \ln \text{to}_t + 0.186 \ln \text{sg}_t + 0.243 \ln \text{pg}_t + 0.617 \ln \text{eg}_t + 0.065 \ln \text{rem}_t \\
 &= (0.019) (0.109) (0.067) (0.136) (0.205) (0.027) \\
 &= [2.386] [-2.684] [2.77] [1.787] [3.014] [2.361]
 \end{aligned}$$

**Note:** ( ) show standard error and [ ] indicate t value.

Results indicate foreign direct investment, trade openness, social globalization, political globalization, economic globalization and worker remittances significantly affect employed labor force. And all variables except trade openness are positively effect to labor force of Pakistan.

Trade openness has negative impact on the employment of Pakistan. By reducing tariff and import barriers, importable commodities become cheaper in domestic market. Lower prices of imported goods increase the demand of that imported commodities by consumers which badly effect the production of domestic industry as well as negative impact on the employment level of Pakistan.

### Error Correction Mechanism

$$d\text{llf}_t = \alpha_0 + \alpha_1 d\text{ldfdi}_t + \alpha_2 d\text{lto}_{t-1} + \alpha_3 d\text{leg}_t + \alpha_4 d\text{lsg}_t + \alpha_5 d\text{lrem}_{t-1} + \alpha_6 d\text{lpg}_t + \alpha_7 \text{ecm}(-1)$$

$$d\text{llf}_t = 0.0209 + 0.021 d\text{ldfdi}_t + 0.085d\text{lto}_{t-1} + 0.000482 d\text{leg}_t + 0.1115d\text{lsg}_t - 0.024 d\text{lrem}_{t-1} - 0.077 d\text{lpg}_t - 0.218 \text{ecm}(-1)$$

$$= (0.0088) (0.045) (0.089) (0.047) (0.018) (0.078) (0.102)$$

$$= [2.42] [1.897] [0.0054] [2.3777] [-1.328] [-0.987] [-2.160]$$

**Note:** () show standard error and [ ] indicate t value ecm shows that short run relationship exists between the variables. And in above equation negative sign of ecm (-1) indicate that in long run variables are converge towards equilibrium. Coefficient of ecm is 22 which shows that 22 ‘percentage points’ adjustment will be taken place each year towards long run equilibrium in case of any disturbance occurs in the short run. Remittances has negatively affect with employed labor force in short run analysis.

Histogram normality test give results that prob. = 0.1140 that is greater than 5 and indicate normality of data.

By applying Breusch-Godfery serial correlation LM test in table 4 Prob. of F is greater than 0.05 shows that there is no serial correlation.

Heteroskedasticity test (ARCH) show prob. F test = 0.3100 in table 5 indicate no heteroskedasticity in data.

### CONCLUSIONS AND RECOMMENDATION

This study throws light on the contribution of globalization in generating the employment opportunities in Pakistan. It analyzes the impact of trade openness, foreign direct investment, worker’s remittances, social globalization, political globalization and economic globalization on employment using time-series data and econometric techniques.

Empirical results shows in long run only trade openness negatively affect employed labor force and all other variables are positively contribute to employed labor force of Pakistan.

Overall impact of globalization differs from country to country it’s depending upon government policies regarding international trade as well as level of social, economic and political developments. Less developed countries have gained as well as suffered from globalization (Malik, 2011). As Pakistan is less developed country and may suffer from globalization if enter in international market without preparation i.e poor human capital, low literacy rate, unstable economic condition and worse technological advancement.

Based on empirical results, if Pakistan wants to enjoy benefits of globalization there is need to make proper policies regarding trade and macro side of economy.

For improvement in labor market Pakistan has to pay attention to improve the situation of law and order and control terrorism to make sure the inflow of capital in form of remittances or foreign direct investment (fdi).

Government should create healthy atmosphere and infrastructure for domestic as well as foreign investors for

improving employment ratio and also make arrangement for creating jobs for our skilled and trained workers in the foreign labor markets in order to raise workers' remittances (Malik, 2011).

Globalizations policies not only improve the economic growth but also help in poverty reduction policies. The task of the policymaker is to coordinate policies affecting the two areas to optimize the contribution of Globalization to reduce poverty in Pakistan.

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## APPENDICES

**Table 3**

Lags	AIC	SC
0	-3.648666	-3.419644
1	-9.757973	-8.383845*
2	-9.816519	-7.297286
3	-9.651463	-5.987124
4	-10.35273*	-5.543285

**Table 4: Breusch-Godfrey Serial Correlation LM Test**

Prob. F	0.4266
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**Table 5: Heteroskedasticity Test: ARCH**

Prob. F	0.3110
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