



Determinants of Unemployment in Pakistan

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Abstract: *The unemployment environment in Pakistan is improving day by day because of the lack of interest of Govt. of Pakistan by not introducing investments friendly policies, rule of law and good governance; due to which foreign and local investors are not interested in making investments in Pakistan specially investors from Middle East multinationals playing an important role in uplifting the socio-economic condition of the labor class, the most vulnerable segment of our society by providing pensioner benefits. The dominant role in this regard is of Government, it's to encourage the domestic investors for the domestic production of goods.*

For this purpose, the unemployment rate is regarded as dependent variable, and independent variables are population growth rate foreign direct investment and inflation rate. The unemployment rate in Pakistan showed increase since 2002 to 2015, which is strongly depended on population growth rate foreign direct investment.

The results analyzed that the coefficient correlation of unemployment rate is negative affected from the changes in population growth. According to the above results, we can conclude that a one-unit increase in annual growth rate will decrease unemployment rate by 1.704 units.

The foreign direct investment also shows negative trait with unemployment. According to the results, a one-unit increase in foreign direct investment will decrease unemployment rate by 0.002 units.

Inflation has also negative relation with unemployment rate as through the results, we can see that a one-unit increase in inflation (CPI) will decrease unemployment rate by 0.25 units.

The R square value shows that the model is good at explaining the variables. Because the value of R square is close to one, it means that dependent variables has a perfect correlation with independent variables.

Keywords: *unemployment rate, population growth rate, foreign direct investment, inflation rate*

INTRODUCTION

Unemployment is one of the major problems in any country. It has been the most consistent problem which is difficult to manage and is faced by all industrial as well as countries which are under developed. Unemployment is defined as the condition of having no job and is generally referred as unemployed or being out of work or the unemployed proportion of people in the working and educated population. Simply put, we can define it as an individual unemployed if he or she is searching for a work who in return of some privileged salaries, is available or willing to do work, but is not able to find one.

Every Man's dictionary of economics defines unemployment as 'involuntary idleness of a person willing to work at the prevailing rate of pay but unable to find it'. It indicates that those persons only, are to be considered as unemployed, who are ready to work at the prevailing pay rate but they don't have a job.

Unemployment happens when production factors like land, capital, entrepreneurship and labor are not employed well in goods and services production. Unemployment happens when the labor, which is one of

the factor of production, is not utilized fully because no suitable job is available According to the IMF report (1998) 'unemployment is measured annually as percentage of labor force that can't find a job'.

According to the international labor organization (ILO) (2001), definition of unemployment:

- People aged 16 and over are unemployed if they are
- Out of work, want a job, have actively sought in the last four weeks and are available to start work in the next two weeks or
- Out of work, have found a job and are waiting to start in the next two weeks

Searching jobs through passive methods, fails to result in job finding; therefore, making unemployment rate classification difficult. Searching job includes the following criteria:

- Attendance of Job training program or
- Course or
- Merely reading through job advertisements.

People who are voluntarily unemployed like the rich people like to be idle are not referred as unemployed. Full time students are also not included in Unemployed category, likewise the children, and retired people.

Unemployment level is increasing dramatically in different parts of the world. The growth of unemployment, gives rise to a number of social problems. When the workers get unemployed, they and their family along with the country taking as a whole suffer as country lose workers and in the meantime their families lose income.

Unemployment presents wasted production capabilities. Lacking a job give rise to number of problems including emotional, for the workers as well as for their family. It may result in mental stress, lowered self-esteem, bad health and last but not the least the inability to fulfill both the necessities as well as luxuries and bills payments. The standard of living of these workers falls.

The unemployment environment in Pakistan is improving day by day because of the lack of interest of Govt. of Pakistan by not introducing investments friendly policies, rule of law and good governance; due to which, foreign and local investors are not taking interests in making investments in Pakistan specially investors from Middle East.

Multinationals are playing a significant role in uplifting the social and economic condition of the labor class, the most vulnerable segment of our society by providing pensioner benefits. The dominant role in this regard is of government, it's to encourage the domestic investors for the domestic production of goods.

PURPOSE OF THE STUDY

The objectives of the study are;

- To analyze the main factors of unemployment
- To provide proper suggestions and recommendations based on the results

RESEARCH METHODOLOGY

To study an organization, one needs to have reliable and relevant data and information. The study makes use of kinds of data, gathered through different sources, which can be grouped as a secondary data. The

secondary data sources which were consulted during the study are the operational manual, journals, newsletter, the website of the Federal Bureau of Statistics, etc.

SCOPE OF THE STUDY

The scope of this particular study is confined to unemployment, particularly to the impact on Pakistan economy. The objective is to identify the cause of unemployment in order to highlight the government policies towards unemployment.

LIMITATION OF THE STUDY

Unemployment, being the largest field, is difficult to be studied all over the world in a short period of time. Thus, the time factors become a limitation of this study. Another limitation of this study is the secrete nature of data. However, the determination of the unemployment as a whole was based on some reports, observation and interviews. In spite of the above mentioned problems, attempt have been made to overcome all these limitation and shortcomings and provide unbiased information of the determination & causes of unemployment and make the research academically significant.

REVIEW OF LITERATURE

Latif Ozturk and Ismail Aktar (2009) used VAR technique of “variance decomposition and impulse response function analysis” to study various interrelationships among foreign direct investment (FDI), exports (EX), unemployment (UR) and gross domestic product (GDP) for the period 2000:1 to 2007:4 in Turkey. They found two counteracting vectors in the system, showing that there is long run relationship. They found that FDI did not have any role on reducing the unemployment rate in Turkey. Variations in EX have a positive impact on GDP but they are insignificant. Therefore, this study does not support the export led economic growth model. Variation in GDP does not reduce the unemployment rate.

Marika Karanassou et al. (2007), took a new analysis of dynamics of labor market and showed that capital growth plays an important role in giving rise to unemployment environment. This role has been studied generally by taking into account the indirect transmission channels of the effects of capital stock that is using the variables, for instance interest rates and investment ratios in order to estimate the single-equation unemployment rate models. They introduced a different approach. They estimated directly by applying the “employment theory of chain response” the effects of capital stock on the labor market, and they found that capital stock is a major determinant of unemployment in the countries. In particular, the different unemployment experiences of these economies derive from the temporary (albeit prolonged) negative shocks to capital stock growth in Denmark and Sweden, and the permanent “reduction in growth of capital stock in Finland. Therefore, it enables to explain the reasons of crisis in early 1990s which had a large serious impact in Finland than in its economy.

Aleksander et al. (2009) studied the relation in long-run between money, interest rates and unemployment. The first conclusion from the data was that, there is a positive relation at low frequencies between these variables. They established a framework where money and unemployment were modeled by using micro details based on “search and bargaining theory”, and provide a unified theory for the analysis of goods and labor markets. According to the calibrated model, the sizable fraction of money trends can be accounted in unemployment. They said that it, whether to use monetary theory which is based on search and bargaining, or to use an alternative ad hoc plan, all matters are in qualitative as well as quantitative manner.

An analysis was made by Mark C. Foley (1997), using the information by nationally representative Russian people’s longitudinal survey, in the early stages of economic transition of the determinants of unemployment. A discrete-time waiting model, competing-risk, rise in incorporating heterogeneity (unobserved), was employed for analyzing whether the evidence is available for duration as dependence in unemployment, and demographic characteristics roles, income support in contrast, and conditions of local demand in discussing unemployment duration for individuals engaged in working. It has been found that

married women experience longer unemployment period spells as compared to married men. Younger individuals are found to have less period of unemployment than older workers. Persons with lower education have significantly longer unemployment spells than those having high. No effect has been found on the duration of unemployment regarding the children. However, children do play a role to inspire women to leave the labor force. Demand condition of local labor market has a large effect on duration. Finally, in Russia, the evidence of duration dependence in the hazard of re-employment, with first 7 months of period with positive duration dependence was found, followed by a down lifting hazard until eighteen months approximately. These results gave the introduction to unobserved heterogeneity.

Eran Yashiv (2000) took the investigation and employed the matching model of the labor market in aggregate data. He tested the model's validity in empirical terms and induced structural approximation in order to generate and classify workers and optimal behavior affirms. This model is then applied data of Israeli that suited uniquely for this type of empirical search. He used structural estimates in order to quantify the frictions included in the model, adding the search cost, the trading externality effects and congestion, and the process of matching. A study of many key variables' effects on equilibrium unemployment was analyzed by calibration- simulation analysis.

First Evidence was presented by Kupets O.V. (2005) on the determinants of unemployment between 1997 and 2003 in Ukraine, using data on individual level from Ukrainian Longitudinal Monitoring Survey (ULMS-2003). He made an investigation on individual's conditional probability regarding leaving unemployment to employment or inactivity in economic terms in any specific month, he remained out of work by making an estimation of its discrete time independence with gamma-distributed unobserved heterogeneity and flexible baseline hazard rates competing risks framework. The results in all sample showed no material effect on receipt of unemployment benefits but a negative effect significantly noticed on income from subsidiary farming, casual activities, pension on the hazard of re-employment or household income. It is also suggested by the Multivariate analysis that the policies to decrease long-term unemployment should put focus on less educated individuals, older workers, residents of rural area as well as small towns in the regions having high unemployment rates relatively.

Elmeskov et al. (1998) made investigation on unemployment and rigidities of labour market in OECD countries during the period of 1983–1994. The core issue is the relationship between taxation and unemployment and was exogenous or determined simultaneously. Hausman specification tests showed that the taxation impact on unemployment in short term is exogenous and positive whereas the relationship is simultaneously determined between long-term unemployment and taxation. Making correction in this simultaneity results in significant, much higher and positive regression coefficient for the effects of taxation. Thus, high taxation considered as one of the significant determinants of unemployment in long term.

Mary J. Keeney¹. (2008) relates observed unemployment with wage inflation to represent the structural unemployment. It is shown by an estimated series for the NAWRU (non-accelerating wage rate of unemployment) that the gap of unemployment between structural rate and observed unemployment provides an evidence of existing aggregate conditions of demand over the period 1980- 2005 within the economy of Ireland. This shows that the estimated NAWRU series measures the structural unemployment in Irish over the period in good manner. Throughout the 1980s, the estimated NAWRU was considered at a high level and came down over time in such a manner that by the mid-1990s, any labor slack in excess was dissipated. He observed during the period 1994- 2001 that the estimated NAWRU was above unemployment rate which shows that on wages the pressure due to substantial inflation for the period was justified. From that time the gap that is between the observed rates of unemployment and the estimate of the structural rate was not that significant which reflects a healthy pressure of inflation.

Andrea Bassanini and Romain Duval. (2006) observed the impact on aggregate unemployment with respect to structural institutions and policies. They depend on econometric techniques and cross-country/time-series, which extensively have been used over recent years in the empirical literature. The main distinguishing feature is particularly and carefully assessed throughout the study. The main focus is on

labour market institutions and policies and recently emerged other issues which include the interactions among structural policies, role of regulations of product market and the impact of policies and institutions on macroeconomic shocks.

In order to analyse relationship among economic growth, trade, foreign direct investment (FDI) and unemployment in Taiwan, the vector auto regression (VAR) method of variance decomposition and impulse response function analysis was applied by Shu-Chen Chang et al. (2006). They showed that exports and economic growth have impacts in positive manners on the inflow of FDI; however, negative impact has been noticed on FDI outflow due to export expansion. An obvious positive impact on exports and economic performance has been found by FDI inflows. The evidence obtained from the study also indicated that there was not any relationship between unemployment and FDI inflow. Besides, a positive relationship found to exist between exports and economic growth; whereas, a negative relationship found to exist between economic growth and unemployment.

Thomas L. Bogacz. (2004) took examination of U.S. Foreign direct Investment (FDI) determinants in Europe. Included in set of panel data, was the observations made from 22 European countries during the period of 1980-2003. This model tested the rate of response to variables of host country by U.S FDI, for instance R& D spending, the rate unemployment, conditions of market demand and demographics. Results of Regression showed conditions of domestic demand. Population aging and Unemployment played a role of disincentives to investment as shown by negative relationships to the U.S. FDI.

Okun's Law Equation:

Okun's Law equation is defined as:

“The Percentage change in real GDP to the unemployment rate changes”.

Percentage change in real GDP = 3% - 2x (change in unemployment rate).

Basically this equation tells that the growth in real GDP is about 3% per annum when unemployment rate is at normal range. Growth in GDP falls by 2% for every single point above normal unemployment and vice versa, this equation does not provide good basis of estimation upon output.

ANALYSIS OF DATA

SPECIFICATION OF THE MODEL

In this part of the research, we discuss the specification of the model. Selecting relevant explanatory and dependent variables is the first step in the specification of the model. Irrelevant variable is excluded and only relevant variables are taken into consideration. Some time it is not possible to consider each and every variable with respect to the dependent variable. In this model, we have considered unemployment rate as the dependent variable whereas the and population growth and based on CPI foreign direct investment inflation rate are taken as explanatory variable which affects the dependent variable (unemployment). Development of the theoretical model has been made by taking the relationship between the unemployment rate, population growth, foreign direct investment and inflation rate into account.

The Model

In this model, population growth foreign direct investment and inflation are independent variables and unemployment rate is dependent variables. This means that an unemployment rate depends on the population growth foreign direct investment and inflation.

The model is given as;

$$UR = a + b_1PG + b_2FDI + b_3 INR + U_i$$

Where

UR = Unemployment Rate

PG = Population Growth

FDI = Foreign Direct Investment

INR = Inflation Rate

a = Y-intercept / constant

b₁b₂b₃ = Slope, which shows relation between dependent and independent

ANALYSIS OF THE DATA

Table No 1: Data for model

Years	(PG)	(UR)	(INR)	(FDI)
2002	2.2	5.85	12.66	442.4
2003	2.4	4.73	10.58	1101.7
2004	2.65	4.84	9.83	682.1
2005	2.59	5.37	11.27	601.3
2006	2.45	5.37	13.02	376
2007	2.6	5.37	10.79	469.9
2008	2.59	6.1	11.8	322.4
2009	2.6	6.1	7.81	484.7
2010	2.69	6.1	5.74	798
2011	2.73	6.15	3.58	949.6
2012	2.77	6.15	4.41	891.5

Source: Economic survey 2000-2012 Govt. of Pakistan

REGRESSION ANALYSIS

Table No: 2

Model	Unstandardized coefficients		standardized coefficients	T – value	Sig
	B	Standard error	Beta		

Constant	13.862	2.775		4.931	.002
PG	-1.704	.873	-.521	-1.951	.092
FDI	-.002	.000	-.995	-4.332	.003
INR	.250	.053	-1.552	-4.707	.002

R² = 0.806

Adjusted R square = .722

F = 9.674

Sig = .007

Regression interpretation

$$UR = 13.682 - 1.704PG - 0.002FDI - 0.250INR$$

The above analysis shows the impact of variables on unemployment rate.

According to the above results, we can conclude that a one-unit increase in annual growth rate will decrease unemployment rate by 1.704 units.

The foreign direct investment also shows negative trait with unemployment according to the results a one-unit increase in foreign direct investment will decrease unemployment rate by 0.002 units.

Inflation also has negative relation with unemployment rate as through the results, we can see that a one-unit increase in inflation (CPI) will decrease unemployment rate by 0.25 units.

The above analysis is important regarding decreasing the unemployment as we can see that all the three variables can be used to decrease unemployment as they negatively move with unemployment.

The R square value shows that the model is good explaining the variables. Because the value of R square is close to one, which means that dependent variables has perfect correlation with independent variables

CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

Unemployment is one of the major problems in any country. It has been the most consistent problem which is difficult to manage and is facing by all industrial as well as countries which are under developed. Unemployment is defined as the condition of having no job and is generally referred as unemployed or being out of work or the unemployed proportion of people in the working and educated population. Level of unemployment is dramatically rising in many parts of the world. When the workers get unemployed, they and their family along with the country taking as a whole suffer as country lose workers and in the meantime their families lose income.

Unemployment presents wasted production capabilities. Lacking a job gives rise to number of problems including emotional, for the workers as well as for their family. It may result in mental stress, lowered self-esteem, bad health and last but not the least the inability to fulfill both the necessities as well as luxuries and bills payments. The standard of living of these workers falls. The results of the study showed that the high rate of unemployment was due to population growth, low foreign direct investment, poverty, lack of skill, low education, and lack of technical and vocational training, lack of credit facility and high rate of corruption in the society. About 96% of the unemployed people were literate among them 14% were unskilled and about 44% have no approach to get a job showing a high rate of corruption and social injustice. The effect of unemployment on the individual and on the society as a whole was worst. Unemployment has affected the social life of everybody in the society which caused tensions and frustrations. It shows that

unemployment is a worst situation that can afflict the life of a nation. It includes the analysis of the main factors of unemployment and socio economic impacts of unemployment on the life of unemployed person. Then proper suggestions & recommendations were provided. For this purpose, secondary data sources which were consulted during my study were the operational manual, journals, newsletter and the website of the Federal Bureau of Statistics.

RECOMMENDATIONS

The following recommendations for the reduction of unemployment are made, based on the findings of the study.

- The growth rate of population needs to be effectively checked so, as to reduce the burden of unlimited labor force on the economy. Steps such as female education, family planning and rational thinking should be adopted to reduce the high birth rate.
- There should be rapid industrialization in the country, as it will easily absorb the unemployed persons of the other sectors.
- Technical and vocational institutes must be set up in public and private sectors for the improvement in the employability. In this way, unemployed people will get the chance to enhance the skills and become able to earn reasonable income.
- Creative self-employment scheme ought to be introduced. More funds should be made available in the form of loans to qualified and skilled people. Multiple shifts should be introduced at the work place so that more workers can be employed. Government must offer incentives and recognition to the private sectors for decreasing reliance on public sector jobs.
- The banks and other financial institutions should provide loans to unemployed youth on easy and soft conditions, so that they can start business on small scale and play vital role in the development of the country.
- It is imperative that cultural change be brought about where work can be viewed as work and not as a status symbol. There are many jobs lying vacant but, the unemployed don't take them up as it is considered below their status to take up add jobs.
- It is utmost important that political and economic stability in the country should be ensured. Law and order situation must be improved. Infrastructure should be enhanced and be comparable to the international standards.
- Quality education at low cost should be introduced. Besides, academic training, multiple skills must be imparted so that the students can be more productive. Moreover, the practice of cheating in educational institutions must be checked. The educational institutions should produce quality graduates according to the demand of professional job markets. Stringent controls will not only

result in production of quality graduates, but will also limit the influx of work force in the job market.

- Corruption in both public and private sectors should be discouraged by the government. And the criterion for employment or jobs should be on merit basis.
- Serious efforts must be made by the government to place greater number of unemployed labors in foreign countries. This will not only increase job opportunities but, also foreign exchange for the country.
- The environment must be made conducive for foreign investors to invest in the country. It will result in increase of employment opportunities. They must be encouraged to invest in all fields with certain conditions of providing job opportunities for local people. The government should exercise caution while, negotiating with foreign investors as it is important to secure concessions for the maximum utilization of natural resources and equipment input within the host country.

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