

SEmpirical Analysis of the Determinants of the Preferences for Public Sector Jobs in District Peshawar

Sajida Zareen, Zilakat Khan and Amjad Amin

University of Peshawar

People prefer public sector jobs as compared to private sector, which is a reason for high and rising unemployment duration. Many developing countries have experienced an appreciable rise in unemployment among educated youth, mostly those possessing university degrees. This unemployment arises as a result of job preferences, since the educated individuals prefer to remain unemployed rather than opt for a job in the private sector. This paper attempts to study the determinants of preferences for public sector job of the educated youth in district Peshawar. Primary data is collected from 210 respondents in district Peshawar. Data is analyzed using multiple regression analysis to estimate the relationship between job preferences and the factors affecting it. Age negatively affects preferences for public sector job while wage differences, gender, education and job insecurity effects positively job preferences for public sector jobs. It is concluded that more fringe benefits are given in public sector job and less in private sector jobs. To control unemployment, it is suggested that government must bring a balance between the public and private sector jobs. In private sector jobs working hours are large and wage per hour are less. There should be a proper job structure set by the government for private sector, so that the workers are not exploited for personal interests.

Keywords: job preferences, public sector, private sector, unemployment

Public sector organizations are directly under the control of government, while private sector organizations are run by individuals or group of individuals. Public sector organizations are responsible and controlled by central authority/government representative. However, private organizations are not liable to any other authority except the owners. The main investor in public sector is government. The primary aim of public sector organization is the promotion/improvement of social welfare. However, the main motive of private sector is earning profit. Public sector jobs are secured even in the times of economic and financial crises. Hourly wage rate in public sector jobs is higher than private sector jobs. Health benefits, pension, transport facility, accommodation facility and retirement packages are also given by the public sector. However, entry into the public sector for employment is comparatively difficult because these positions require high qualifications and experience. The unemployment of educated workers arises as a result of employment preferences, since the educated individuals prefer to remain unemployed rather than search job in the private sector. Private sector never provides the desirable hours of working and exploits the workers while

Correspondence concerning this article should be addressed to Ms. Sajida Zareen, MPhil scholar, Department of Economics, University of Peshawar, Email: hayakhan832@gmail.com

Contribution of Authors:

1. The principle author of the article as the article is extracted from her MPhil thesis
2. He was the supervisor of the principal author in MPhil and contributed throughout the whole thesis
3. As faculty member and teacher of the principle author he provided guidelines in data collection, data analysis, specification of the models and the estimation techniques. He also helped in extracting article from the thesis.

public sector gives full-employment strategy to the individuals (Mitchell, 2007). Workers feel more secure in public sector jobs as compared to private sector jobs (Clark & Vinay, 2005).

Private enterprises are either capital intensive or small so their impacts are limited on society and on economy (Khan, 2004). In public sector wages are not determined on productivity process it is determined by political and regular service bases (Gunderson, 1979). In private sector wages are determined by supply and demand of labor market, therefore in public sector employees enjoy higher wages as compared to private sector (Mueen, 2000). The main reason of differential between public sector jobs and private sector jobs are those rules which are using in public sector jobs and private sector jobs. In private sector jobs for more work time, wages were less than public sector jobs (Hyder & Reilly, 2005). More educated people prefer public sector job and hence their unemployment duration is maximum. A study found that from the total of one fifth was university degree holders in which 42% was unemployed from more than one year (Hyder, 2007). Hourly wages in public sector are more than private sector. In public sector employees earn 37% more hourly wages as compared to private sector job (Hyder, 2007). The mean age of unemployed group who prefer public sector job was 24 years (Hyder, 2002). The people who preferred public sector job were unmarried (Hyder & Reilly, 2005).

Around 90% of unemployed young women in which 71% women are those who are waiting for public sector job (Kabaani & Habsh, 2008). Unemployment among the young and educated individuals is increasing because of their preference for public sector jobs (Dell'Aringa, Lucifora, & Origo, 2007). Mostly, people prefer to work in urban areas because of more luxuries as compared to rural area; it is only public sector job in which transfer of job is possible from one place to another place (Nickell, 1990). In Labor Force Survey (2015), 32% of 25 year-age individuals are waiting for public sector job. Unemployment among the 25 years educated individuals prefer stable job even of low position (Mora, Garcia-Montalvo & Garcia-Aracil, 2000). In 1990, the existence of private sector was negligible and employment was in public sector except the agriculture employment (Jackman, & Rutkowski, 1994). But afterwards, private sector jobs increased rapidly. Then demand for public sector also increased because of more fringe benefits and stability of job (Adamchik & Bedi, 2000).

Preference for public sector job is one of the main causes of increasing unemployment in almost all developing countries. Unemployment is a big problem all over the world and especially in developing countries like Pakistan. There are different causes of unemployment. Due to unstable system of employment in Pakistan, many doctors, engineers, and other higher degree holders are mostly wasting the initial time of their career. Labor force is increasing every year due to the addition of new graduates, in which many graduates searching for a good job according to their level of qualification for a long period of time and a very small number of graduates get public sector jobs according to their level of qualification on time. The present study is an attempt to know the perspective of different professionals working in both public and private sectors and the factors affecting preferences of individuals for public sector jobs and the wait unemployment.

Literature Review

Acemoglu (1999) studied changes in unemployment and wage inequality of United State. The study examined that proportion of skilled labor force (i.e. college graduates) was increased over past 25 years. The marginal productivity of skilled labor is high. Due to this inequality system of wages unemployment were increased among skilled and unskilled labor. Among young people unemployment rates are higher than adults, as youth struggle to enter the labor market and find that type of job which is according to their level of qualification and interests (Willis & Rosen, 1979). The

difference between male and female earning is due to the change of work experience and objectives (Blinder; 1973). Job preferences of individuals change with working conditions. Private sector jobs are tougher, less geographically mobile, having less chance of promotion and increase in the wages (Carlo, Lucifora, & Origo, 2005). Many developing countries are facing an appreciable rise in unemployment among educated youth (Blaug, 1979). The rationale behind awaiting unemployment in the public sector is based on the fact that individuals try to maximize his or her discounted lifetime utility subject to his or her budget constraint (Boudarbat, 2005). Private enterprises are either capital intensive or small so their impacts are limited on society and on economy (khan, 2004). In public sector wages are not determined on productivity process it is determined by political and regular service bases (Gunderson, 1979). In private sector wages are determined by supply and demand of labor market, therefore in public sector employees enjoy higher wages as compared to private sector (Mueen, 2000). Public sector job is also more stable job than private sector and more educated people prefer to wait for public sector job if they are jobless (Boudarbat, 2004). Said (2004) analyzed the impact of age (years), marital status (married & unmarried), education (No. of years), gender differences, nature of job, job insecurity and fringe benefits analyze on wage differences between public and private sector jobs.

Pederson, Schmidt and Nielsen, (1990) studied wages differentials between the public and private sectors. Data was taken for this study from 1976-85 of Denmark's individuals. The estimated result of this study shows that in last 25 years, public sector employment increased very sharply as compared to private sector. Mueller (1998) explained public private wage differentials in Canada by using data from individuals and applying ordinary least square method and quantile regression analysis was used for the estimation of results. Estimated results of this study show that on average wages given to federal public sector employees were more than private sector employees. While wages which were given in provincial public sector employees were lower than private sector. For male employees preferences of this lower level public sector (provincial level) was negative due to lower wages but it was still high or positive in case of female for both federal and provincial level. Because of more job security mostly female were willingly waiting for a public sector job and not joined a private well paid job. Mueen (2000) explained the earning differentials between public and private sectors in Pakistan. The data for this study was collected from Labor Force Survey of 1996 to 1997 which was conducted by Federal Bureau of Statistics, taking more than 110,000 individuals. Semi log function was used in this study. There was wage exploitation of different sectors in Pakistan, wage rate structure which was not adequate according to their work condition. Wage rate in public sector jobs was high from informal private sector jobs but it was low from private formal sector jobs. Therefore mostly individuals enjoy work in public sector and mostly prefer public sector jobs than private sector jobs. Hyder (2002) explained public private wages differentials in Pakistan, for this study cross sectional data was used which was taken from the nationwide Labor Force Survey in 1996 and 1997. The sample size was taken from 9426 workers in which 5218 were from private sector, 3709 workers were from government sectors and 499 were from state owned enterprises. This study found that there was a large difference of wages between public and private sector jobs in Pakistan. In public sector jobs the wages were more than private sector jobs but in state own enterprises the wages were higher than public sector jobs. Adamchik and Bedi (2000) studied wage differentials between the public and private sector. The estimated result of this study shows that there was a great difference of wage between public and private sector. The impact of these differences was positive for female but it was negative for males. Educated female were attracted towards public sector because of having other benefits (i.e. job security, health benefits and pension facilities) which were not given by a private sectors. Said (2004) explored compensating differentials and the queue for public sector jobs by using Heckemans two step procedure and Maximum Likelihood methods.

This study shows male and female payments differential in private and public sector jobs, the results show that there is a significance earning and choice differences present in public and private sector job in Egypt. Due to this public sector job will be prefer in Egypt. Boudarbat (2004) explained employment sector choice in developing labor market of Morocco. The presence of wage differentials in both sectors individuals were migrated from low wage sector to high wage sector due to which unemployment continuously increased. Individuals prefer to remain unemployed rather than work in private sector with low wage rate. Hyder (2007) explained preferences for public sector jobs by using Ordinary Least Square method and Maximum Likelihood Method. This study concluded the presence of wage differences and the availability of fringe benefits. The educated individuals were more like to wait for public sector job rather than work in private sector, there is a queue of public sector jobs in Pakistan. The empirical results of this study show that preferences for public sector jobs are more than in urban areas as compared to rural areas because the availability of public sector jobs in urban areas are more than in rural areas. The estimated results of this study show that university degree holders have more preferences of public sector jobs than less educated individuals. Kabbani and Al-Habash (2008) explained raising awareness of alternatives to public sector employment among Syrian youth by used Logistic regression analysis. In Syria the most individuals were preferred public sector job because of good salary packages, with long term job security and other fringe benefits, while in private sectors there were no protection of job was given and also no fringe benefits were given, which were given in public sectors although salary were more but individuals still search for public sector jobs which creates long term unemployment in Syria.

Lagarde and Blaauw (2009) used choice preferences to investigate job preferences and migration patterns of South African Nurses. The policy makers of the country made four choices for the nurses and given the choices to choose one in private sector job, public rural sector job, public urban position and job overseas. The more beneficial was the public urban sector job with more salary and other fringe benefits, whereas the public rural position was also better than private sector jobs. The empirical result of this study show that when the choice was given to the nurses then 12 percent nurses were willing for overseas job while mostly were willing for public rural sector job and public urban sector job and very less were willing in private sector job due to their less salary packages. Schucher (2014) explained unemployed youth in China income inequality was the big problem of almost countries which created a big social and political controversy, these disparities of income and continuously presence of structural unemployment created youth unemployment in China.

Hypotheses

- Personal characteristics (i.e. Age, marital status, job insecurity, gender differences and education etc) significantly affect job preferences;
- Gender Wage differences exist between private and public sector jobs.

Method

This research depends on primary data which is collected from district Peshawar of the Khyber Pakhtunkhwa province of Pakistan. Peshawar is selected on the grounds that being a provincial capital, it contain mass of business and head offices of many public and private firms that is why the job opportunities in this city are more than any other areas of the province in both public and private sectors. The data is collected through questionnaire.

Sample size and Sampling Technique

The sample size is selected using the formula given below;

$$n = \frac{(z)^2 p(1-p)}{(\alpha)^2}$$

Where z = the normal distribution value = 1.96

P = percentage of the population which is selected as sample = 16% = 0.16

α = Significance level = 5% = 0.05

Putting these values in the above formula, we get the following value of the sample size;

$$n = \frac{(1.96)^2 0.16(1-0.16)}{(0.05)^2}$$

$$n = 206$$

In this research we used a sample size of 210. Primary data is collected from 210 respondents through survey. All respondents are workers of government, private sector and unemployed but educated individuals. Respondents are selected on the premise by using convenient sampling technique.

Data Analytical techniques

Multiple regression models are used to estimate the relationship between explanatory variables and explained variable. The various assumptions pertaining to regression analysis are also checked which increases the reliability of the results.

Models**To analyze the determinants of preferences for public sector jobs**

Binomial logistic model is used to analyze preference for public sector jobs. The impact of personal characteristics (age, education and gender differences), Job insecurity and Fringe benefits is checked on preferences of individuals for jobs (Hyder, 2007);

$$U_i = f(X_i, WgDiff, JIns, FrB)$$

$$U_i = \beta_0 + \beta_1 X_i + \beta_2 WgDiff + \beta_3 JIns + \beta_4 FrB + \mu_i \dots\dots (1)$$

Where

U_i = preference of individuals for public sector jobs (i.e. one for public sector job preferences and zero otherwise)

X_i = personal characteristics (age, education and gender differences)

WgDiff = Wage differences among public and private sector jobs (in hours i.e. weekly earning divided by the number of hours)

J.Ins = Job insecurity

FrB = Fringe benefits

To Analyze the Wage differences between Public and Private sector Jobs

In this model, the impact of Age, Marital Status, Education, Gender Differences, Nature of Job, Job Insecurity and Fringe Benefits is analyzed on wage differences between public and private sector jobs (Said, 2004):

$$W_{si} = f(A, MS, Edu, D_1, D_2, D_3, FrB, JIns)$$

$$\ln W_{si} = \beta_0 + \beta_1 A + \beta_2 MS + \beta_3 Edu + \alpha_1 D_1 + \alpha_2 D_2 + \alpha_3 D_3 + \beta_4 B + \beta_5 I + \mu_i \dots\dots\dots (ii)$$

Where

$s = p, r$ ($p =$ public and $r =$ private)

$\ln W_{si}$ = Monthly log wage in public or private sectors for individual i

A = Age (in years). Age is very important in the preferences for public sector jobs.

MS = Marital Status (1 for married and 0 for unmarried). Usually married people prefer more secured and public sector job. Looking to its importance it is added in the model.

Edu = Education (Number of years of education). Level of education does effects the preference of an individual to wait for a public sector job or not.

D_1 = Gender Differences (1 for women, 0 for men)

D_2 = Nature of Job (1 for public sector, 0 for private sector)

$JIns$ = Job Insecurity (1 for secure job and 0 for insecure job)

FrB = Fringe Benefits (include pension, health facilities etc)

Results and Discussion

(i) Measurement of determinants of Public Sector Job Preferences in district Peshawar

Binary logistic model is used to measure the public sector jobs preferences of the individuals. The results are given below:

Table 1

Determinants of preference of public sector jobs

Variable	Coefficient	St.Error	T	Sig-T Statistic
Constant	1.304	.274	4.756	.000
Age	-.002	.028	-.083	.934
Gender	.054	.045	1.207	.232
Education	.191	.061	3.131	.002
Wage Difference	.004	.023	.169	.866
Insecurity	.130	.023	5.588	.000
Fringe Benefits	-.442	-.030	14.641	.000
R^2	.810			
Adjusted R^2	.792			
F-Statistics	44.07			
Sig	.000			
Durbin Watson	2.073			

Source: Survey results 2016

In above table the value of R^2 is 0.810 which means that there is 81% variation in dependent variable due to independent variables and other are due to stochastic error term. The value of Durbin Watson is 2.073 which show that there is no auto correlation between those variables which are used in this model. The value of F is 44.07 and it is significant at .00 which means that the modal is good fit

or show all variables in this model are jointly significant. The value of Age has shows negative relationship with job preference (Ui) which means that individuals with less age are mostly dependent on other family members they prefer to wait for a public sector job, but with increasing age they become independent and this preference are decrease with time (Tansil, 1999; Gyourko, & Tracy, 1988). The value of Gender Differences shows positive relationship. In the given data the ratio of male are more than female and mostly male prefer public sector job because of more job security with less responsibilities than private sector job (Nunberg, 1985; Tansil, 1999; & Said, 2004). The value of Education (Edu) shows positive relation with dependent variable, preference of public (Ui) sectors are more with high level of education and less with low level of education (Khan & Hijazi, 2003; Hyder & Reilly, 2005). Wage Differences value shows positive relation with preference of public (Ui) sector jobs (Hyder, 2002 & Carlo et al., 2005). Job insecurity shows positive relationship. When job Insecurity (I) increases preference of public sector jobs increases and decrease with job insecurity in other sectors (Bellante & Link, 1981; Hyder 2007). Fringe Benefits (B) shows negative relationship when fringe benefits given less in other sectors, preferences of public (Ui) sector jobs increase because of more fringe benefits (Baily, 1978). The t value of Age, Gender Differences and Wage Differences show that these variables are individually statistically insignificant. The t value of Education and job, Insecurity and Fringe Benefits show that these variables are individually statistically significant. The value of VIF of all independent variables is less than 10% which means that there is no multicollinearity in all over the model.

(ii) The wage differences between public and private sector jobs

The table below shows the determinants of wage differences in the public and private sector jobs

Table 2

Determinants of wage per month of individuals

Variable	Coefficient	St.Error	T	Sig-
Constant	2.003	1.003	1.997	.048
Age	.731	.151	4.849	.000
Marital Status	-.551	.235	-2.349	.020
Education	.221	.013	17.00	.000
Gender	.070	.176	.395	.693
Current Occupation	-.285	.072	-3.975	.000
Insecurity	.042	.072	.587	.558
Fringe Benefits	.160	.085	1.868	.064
R ²	.236	0.236	F.Statistics	5.812
Adjusted R ²	.195	0.195	Sig	0.000
Durbin Watson	1.304	-	-	-

Source: Survey results 2016

The value of R² in above table is .236 shows 23% variation of independent variables in this model. The value of F is 5.812 and its significant value is .00 shows model is good fit and all variables in modal are jointly significant. Age has positive relationship with Wage per Month, which means that with increase in Age, Wage per Month is also increase (Kabbani & Al-Habash, 2008). Marital Status shows negative relation with wage per month, when Marital Status increase Wage per Month decrease because of increase in expenditure (Schultz, 1994; Waite, 1995; & Burki, 2000). Education shows positive relation with Wage per Month. It means that those individuals who are more educated their wages per month are more than those individuals who are less educated (Belman & Haywood, 1989; Said, 2004; Hyder & Reilly, 2005) of Gender Difference .070 shows positive relation

with Wage per Month. Male earn more than female and when Gender Difference increase Wage per Month also increase (Stewart, 1983; Hyder, 2007). Current Occupation has negative relation with Wage per Month. Mostly individuals did not get public sector job they temporary enter into private sector, as cost of production cannot be decrease then private sector owners decrease per month wage or private sector owners increase working hours of workers which indirectly decrease wages per month of workers (Shabbir, & Khan, Mincerian, 1991; & Danninger, 2016). The job Insecurity has positive relationship between job Insecurity and Wage per Month is positive. Some, time private sector offered more wages than public sector but private sector jobs are not secured as compared to public sector job and more chances of elimination. Therefore with more job insecurity wages per month more and with less job insecurity wages per month less (Bellante & Link, 1981). Fringe Benefits have positive relation with Wage per Month (Hyder, 2002; Said, 2004). The t-value of Age, Marital Status, Education and Current occupation shows that these variables are individually and statistically significant. The t value of Gender Difference, job Insecurity and Fringe benefits are individually statistically insignificant. The value of Durbin Watson is 1.304 shows that there is no auto correlation in all over the model.

Conclusions

In this research preference for public sector jobs in district Peshawar are studied. Primary data is used, which is collected from 210 respondents in district Peshawar. Descriptive analyses and multiple regression analyses are used to estimate the relationship between dependent variables and independent variables. Preference of individuals for public sector jobs (U_i), duration of unemployment (Y_i) and wages per months (W_i) are taken as dependent variables. Six variables Age, Gender differences, Education, Wage differences, job Insecurity and Fringe Benefits are analyzed. It is concluded that age, gender differences and wage differences are insignificant with preferences for public sector jobs. Age is insignificant. With passage of time rational individuals know the importance of job. Therefore age is not significant but it is important to preferences for public sector jobs. To know about the ratio of male and female, gender differences is important to preferences for public sector job although it is insignificant. To compare the wage of public sector job and private sector job the wage differences is important to preferences for public sector job. The other three variables Education, job insecurity and fringe benefits are significant and strong impact on preferences for public sector job. In private sector per working hour wage is less than per working hour wage in public sector. So it is concluded that as wage differences between public and private sector jobs increased, preference of individuals for public sector jobs is also increased.

Recommendations

It is recommended that if individuals join private sector jobs rather than wait for a public sector job their unemployment duration could be controlled to some extent as well as they get experience. It is suggested that the policy makers of private sector jobs make their policies as good as possible which attracts more educated workers due to which unemployment could be decreased. If private sector jobs become permanent and some facilities are given like public sector jobs then individuals will be joined private sector jobs and may save their time from waiting for a well secured public sector jobs. It is suggested that in government jobs the promotion should be given according to qualification not on experience. In private sector jobs working hours are more and wages per hours are less. It is suggested that private sectors owners may decrease per day working hour and increase wage per hour due to which more individuals may be attracted toward private sector jobs and unemployment will be decreased.

References

- Acemoglu, D. (1999). Changes in unemployment and wage inequality: An alternative theory and some evidence. *American Economic Association*, Vol.89, 1259-1278.
- Adamchik, V. A. & Bedi, A. S. (2000). Wage differentials between the public and the private sectors: Evidence from an economy in transition. *Labour economics* Vol.7 (2), 203-224.
- Belman, D. & J. S. Heywood. (1989). Government Wage Differentials: *A Sample Selection Approach*, *Applied Economics*, Vol.21, 427-438.
- Bellante, N & A Link. (1981). "Are Public Sector Workers More Risk Averse than Private Sector Workers?": *Industrial and Labour Relations Review*, Vol. 34, 408-412.
- Blaug, M. (1979). The Economics of Education in Developing Countries: Current Trends and new Priorities. *Third World Quarterly*, Vol.1, 73-83.
- Blinder, A. S. (1973). Wage discrimination reduced form and structural estimates: *Journal of Human resources*, Vol.8, 436-455.
- Boudarbat, B. (2005). Job-search strategies and the unemployment of university graduates in Morocco: In *IZA-EBRD international Conference on Labour Market Dynamics, University of Bologna, Italy*, Vol. 09, 05-08.
- Burki, S. J. (2000). Changing perceptions and altered reality: emerging economies in the 1990s (Vol. 428), 1-198 World Bank Publications..
- Carlo, D. A., Lucifora, C., & Origo, F. (2005). Public Sector Pay and Regional Competitiveness: A First Look at Regional Public-Private Wage Differentials in Italy. *Institute for the Study of Labor (IZA)*, Vol.75 (4) 445-478.
- Clark, A. & Vinay, F. P. (2005). Job security and job protection center for economic performance, *Journal of European Union*, Vol. 03, 65-89.
- Danninger, M. S. (2016). What's Up with US Wage Growth and Job Mobility?: *International Monetary Fund*, Vol.104, 1-26.
- Dell'Aringa, C., Lucifora, C., & Origo, F. (2007). Public sector pay and regional competitiveness: A first look at regional public-private wage differentials in Italy. *The Manchester School*, Vol.75 (4), 445-478.
- Gyourko, J., & Tracy, J. (1988). An Analysis of Public and Private Sector Wages Allowing for both Endogenous Choice of Government and Unions: *Journal of Labour Economics*, Vol.6, 229-253.
- Hyder, A. (2002). Public-Private Wage Differentials in Pakistan: *The Bangladesh Development Studies*, Vol.28 (4), 79-93.
- Hyder, A., & Reilly, B. (2005). The public and private sector pay gap in Pakistan: A quantile regression analysis. *The Pakistan Development Review*, Vol.44 (3), 271-306.
- Hyder, A. (2007). Preference for public sector jobs and wait unemployment: a micro data analysis. *Pakistan Development Review*. Vol. 20, 1-18.
- Jackman, R., & Rutkowski, M., (1994). Labour markets, wages and employment: In: Barr, N. _Ed., Labour Markets and Social Policy in Central and Eastern Europe. *Wages and Economics*, Vol.75, 121-159.
- Kabbani, N., & Al-Habash, L. (2008). Raising awareness of alternatives to public sector employment among Syrian youth. *Syria trust for development*. Vol.08, 1-27.
- Khan, I. A., & Hijazi, S. T. (2003). Impact of Privatisation on Employment and Output in Pakistan [with Comments]: *The Pakistan Development Review*, Vol.42, 513-536.
- Stewart, M. (1983). On Least Squares Estimation When the Dependent Variable is Grouped: *Review of Economic Studies*, Vol.50, 737-753.

- Lagarde, M., & Blaauw, D. (2009). Using stated choice preferences to investigate job preferences and migration patterns of South African. Nurses. *Center for Health Policy University of Witwatersand*, Vol. 05, 1-25.
- Mitchell, W. F. (2007). Why public sector job creation should be fashionable. *Centre of Full Employment and Equity, University of Newcastle*, Vol 7(3), 1-28.
- Mora, J. G., Garcia-Montalvo, J., & Garcia-Aracil, A. (2000). Higher education and graduate employment in Spain: *European Journal of Education*, Vol.35 (2), 229-237.
- Mueller, R. E. (1998). Public-private sector wage differentials in Canada: evidence from quantile regressions. *Economics Letters*, Vol.60 (2), 229-235.
- Nickell, S (1990). Unemployment: *The Economic Journal*, Vol. 100, 391-439
- Nunberg, B. 1985. Public Sector Pay and Employment Reform: World Bank Working Paper, *Public Sector Pay and Employment*, Vol.113, 1-41.
- Said, M. (2004). Compensating differentials and the queue for public sector jobs: evidence from Egyptian household survey data. *Journal of Economics development*, Vol.13, 1-57.
- Schultz, T. P. (1994). Marital status and fertility in the United States: Welfare and labor market effects. *Journal of Human Resources*, Vol. 637-669.
- Schucher, G. (2014). Loser or Rebels? Unemployed Youth in China. *In ECPR General Conference*, Vol.39, 3-6.
- Shabbir, T., Khan, A. H., & Mincerian (1991). "Earning Function for Pakistan: A Regional Analysis", *Pakistan Development Review*, 29(2): 99-112.
- Tansil, A. (1999). Public-Private Employment Choice, Wage Differentials and Gender in Turkey: *Economic development and culture changes*, Vol.52 (2), 453-477.
- Waite, L. J. (1995). Does marriage matter?: *Demography*, Vol.32 (4), 483-507.
- Willis, R.J., & Rosen. S. (1979). Education and Self-Selection: Education and Income Distribution. *The Journal of Political Economy*, Vol.87, 7-36.
- Pederson, P. J., Schmidt-Sørensen, J. B., Smith, N., & Westergård-Nielsen, N. (1990). Wage differentials between the public and private sectors: *Journal of Public Economics*, Vol.41 (1), 125-145.
- Tansil, A. (1999). Public-Private Employment Choice, Wage Differentials and Gender in Turkey: *Economic development and culture changes*, Vol.52 (2), 453-477.

Received: April 26, 2018

Revisions Received: August 13, 2019