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Social Protection Analysis on Labor Market of Pakistan

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PAPER INFO	ABSTRACT
	Social security is seen as a fundamental human right. The aim of this study is to explore the effect of social protection on the labor market dynamic. This study is based on the HIES data set from 2018-19. Binary logistic regression is used to estimate the parameters of the labor force participation model. This study found that beneficiaries of social protection programs have a negative trend toward labor force participation in Pakistan. In addition, it is observed that some social indicators like age, the rural living region, and male household head significantly effect on labor force participation. This study also attempts to fill the gap by examining the effect that LFP on educational attainments. The study attempts to highlight the effect of social protection on LFP at the provincial level. The results explore the positive effect on labor force participation of beneficiaries by different age categories. Female labor force participation of grant receivers in Pakistan is still below as compared to males. The results show that the impacts of higher educated people on the labor force are low as compared to uneducated. The study concludes by lying out some recommendations.

1   Introduction

Social protection includes social services, social safety, and public work programs. Transfer payments contribute to achieving several goals including poverty reduction, health and nutrition improvement, raising education levels, minimizing child labor, and reducing female unemployment. Pakistan's government started Benazir Income Support Program (BISP) in 2008 to mitigate poverty. BISP provides a shed for the vulnerable poor and help them to sustain a basic slandered of living. (Waqas, et al., 2017). Pakistan has undertaken various social protection initiatives. The three major programs are BISP, Zakat Program, and the Pakistan Bait-ul-Mal (PBM) (Khan & Qutub, 2010). Other schemes include the Provincial Employee's Social Security Scheme (PESSI), the Employees' Old-age Benefits Institution (EOBI); the Government Servants Pension Fund, the Public Sector Benevolent Funds, Group Insurance, the Worker's Welfare Fund, and the Worker's Children (Education) Ordinance. Social transfer programs have an impact on consumption, investment, and the labor markets. According to the Pakistan Bureau of Statistics, the unemployment rate of men was 4.9% and the unemployment rate of women was 8.5% during 2017-18 (Pakistan Employment Trend, 2018). In Pakistan, the labor force participation rate of males was 81% and females were only 22% in 2017-18 (Pakistan Bureau of Statistics, 2017-18).

Social protection has also substantial impacts on educational outcomes. Education is a human investment. The level of education is categorized as matric comprises ten years of schooling; intermediate encompasses eleven-twelve years of education; bachelor and master's comprise fourteen to sixteen years of education (Ministry of Finance, 2018). In Pakistan, BISP is trying to promote education through Waseela-e-Taleem program. BISP provides RS.750 to every student, which increased up to RS.1000 quarterly. Due to BISP benefits, 2.7 million children enrolled in 2018-19 (BISP, 28 August 2019). Social protection payment increases savings, capital formation, and investment. Individuals' self-esteem is boosted by transfer payment.

1.1 *BISP: An Introduction*

The real thrust on social protection started in 2000. In 2008, the government launched the BISP. The BISP is a cash award initiative for poor and needy. The BISP offers a shed to underprivileged and vulnerable to maintain basic necessities of life (Waqas et al., 2017). To control poverty the government of Pakistan increased social protection spending. An additional PKR 80 billion was added to social protection spending (2019-20) and in the next budget (2020-21) there would be a further increase of PKR 120 billion (BISP, 2019). Eligibility for BISP support is contingent upon the fulfillment of two criteria. The household must be the poorest and the other recipient must be a woman (Tahir, et al., 2018). BISP's wing is Waseela-e-Haq. This is a microfinance program, which offers household soft loans of up to Rs 300,000 to established small business (BISP, 10 October 2019). Waseela-e-Rozgar program selects one member from the households for technical and vocational training (BISP program, 10 October 2019).

Labor force participation also affects by the different age categories, which is discussed in this study. This study explores the effect of regional and provincial background on the participation of labor. It assesses and evaluates the educational level of labor force participation. This study analyzes the role of social protection programs in the labor force in Pakistan. Earlier studies have examined the influence of age on labor force participation. While the study addresses the gap by examine the effect on labor force participation of men and women by different age categories. This study is unique in nature, because it is trying to examine the effectiveness of social indicators on labor force participation. Moreover, the research covers information on labor force participation in different provinces of the Pakistan. Specifically, this study identifies the important determinants of LFP in Pakistan by using a new survey data set and by more comprehensive model.

2 Background of Literature

2.1 *Literatures Explaining the Effect of Social Transfer on Education*

In literature, Totouom, et al. (2018) explored the impact of education on female labor force participation in 2018. There were negative relationships between women and their participation in the labor force. This study analyzed that education decreased the gender gap in labor force participation. Especially primary education rate of schooling has remained relatively low. This study showed the different types of schooling (technical or general) effects on gender equality in labor force participation. Yildirim & Dal (2016) worked on social transfer and labor force participation in Turkey by using a household budget survey in 2011. HBS (Household budget survey) collected this survey from a Turkish statistical institution. Results indicated that single–adult families rely on social transfer and big families try to find employment. LFP is low in rural areas as urban. According to this study, the 14-17 years old children supported their families by employment, not from social aid. Sayeed (2014) worked on social protection in Pakistan. The study investigated the effect of enrolment and cash transfer on labor force participation in Pakistan. This study used data from HIES, PSLM, and the World Bank for the period 2005-06, and 2010-11. The labor force participation of people decreased due to those currently enrolled in education. Stated that those people were getting an education at the same time they have low participation in the labor force. Through the social transfer of BISP child labor is expected to decrease. Social transfer decreased the labor force participation of

child laborers, especially girls. Social transfer has no impact on reservation wages. There was a statistical and negative relation between two independents (Current enrollment and social transfer grant). In this context, Nabi in 2013 presented his study about two social protection programs of the Pakistan. These two programs were the BISP and the PSDF Punjab skill development fund in Pakistan. Findings were that PSDF encouraged to work. BISP encouraged enrollment in schools. In this study data set used 2015-16 which compared to 2011-12. According to this study, PSDF can increase economic growth through skill training shortly. This would create incentives for both employers and workers if this program had worked properly. Esfahani & Shajari in 2012 studied education, gender, family structure, and allocation of labor. This work discovered that around 60% increase in LFP rate of female which is due to a decline in fertility. There was a 10% increase in education due to decline in fertility. Results showed a positive relationship between men's labor force participation and education. Comprehensive estimations shown the impacts of conditional cash transfer programs on educational outcomes in developing countries. It has been done by Saavedra & García (2012). In this work, Brazil, Cambodia, Costarice, Pakistan, Colombia, ecuda, Honduras, Indonesia, Mexico, Malvi, Turkey, Uruguay, and Jamaica were included. This study wanted to find the conditional cash transfer impact on the school enrollment, attendance and dropout rate separately for primary to secondary levels. According to findings the average effect of secondary enrollment and dropout was high as compared to primary. CCT has a more positively affected on secondary schools than private. The results suggested that bimonthly or quarterly payment was good as compared to monthly. Miller, et al. (2009) led the social cash transfer scheme on education and labor in Malawi's Ultra Poor Households. All the results showed that 75% of children pass primary school. CCT decreased one-day absence and child labor. CCT was also very helpful in reproductive health and HIV prevention. This study showed labor force participation in girls decreased. Chaudhury and Parajuli (2006) analyzed the effect of the female school stipend program on the Punjab's public-school enrollment. Data from the census 1998, PIHS 2001-02, PSLM 2004- 05, and PMIU 2003-2005 were used for this study. The enrollment increased especially in grades 6-8 due to FSP. There was negative growth of 7% of girls and 13% of boys by the school stipend. Private schools have positive shared. These programs increased 6% in females per school and 9% increase in females per enrollment. Palaz, et al. (2006) presented their work on effect of education on labor force participation rate in case of Turkey. The educational variables disaggregate to see the effect of gender. The results showed significant results on the labor force participation of males and females at every level of educational attainment.

2.2 *Literature on Effectiveness of Poverty and Economic Growth*

Afzal, et al. (2019) observed the poverty demographics in Pakistan through cash transfers. CCT increased the health by checkups of mothers and increased the education system of children through school attendance. This study suggested that financial aid should have given temporarily to unemployed people. CCT increased empowerment. According to the results CCT should have reduced poverty by helping widows and the disabled. This work suggested that conditional cash transfers should have done regular checkups for the mother. CCT has done mandatory school attendance. This study suggested that CCT should have increased the payment and provided short-term relief to mitigate poverty. Hoynes & Rothstein in 2019 wanted to start a Universal Basic Income Policy (UBI) in developed countries.

This study said that UBI was more affected by labor supply, income, and family welfare. This study could not show the long-term impact on human capital and labor supply. Mumtaz & Whiteford (2017) worked on the effect of BISP on welfare development in Pakistan. This research is based on researcher's field survey, Chema's work, World Bank, ILO, and PSLM in 2011-14. BISP reduced consumption poverty, improved the child's education especially the age of 5-12 years old, health the wasting and stunting among children under the age of 5 years. According to this study, BISP was essential for the good welfare system in the Pakistan from Bureau of Statistics. BISP proves helpful in

smoothing consumption. BISP has a positive impact on health. Social transfer payment was very necessary for combating poverty, especially in lower-middle-income countries like Pakistan. Ahmad, et al. (2017) worked on effectiveness of BISP for reduce poverty in Swat. Two villages Madyan and Bahrain included in this research. The BISP reduced the poverty of women by 100% according to this study. They concluded that 73.5% women were satisfied from BISP and 26.5% women did not satisfy. Gazdar & Zuberi (2014) studied social protection in Pakistan. According to this study, Bait-ul-mal focused on the household not individual women like BISP. People received a financial grant from FSP and Sasti roti. This study discussed the impact of all social protection programs in Pakistan. BISP is largest program in this context because it covered 7% of all households. A large literature explored social and economic policies in developing countries with special reference to India. This study has been done by (Justino, 2007). According to this study, the economic and social securities were much necessary for the reduction of poverty. Social protection played important role in sustainable development. This work used 14 rural and urban states of India. The findings reveal that policies improve the social and economic security of India's population. It has been a key endogenous determinant in both sustainable development and economic growth. It increased efficiency of public resources rather than feasibility of social protection systems in developing nations. Waqas et al. (2017) worked on inequality, poverty, and social protection. Social protection programs reduced poverty and inequality and increased economic development. GDP is used as proxy of economic growth. The Gini coefficient is used as proxy of inequality. Headcount ratio is used as proxy of poverty.

2.3   *Literature of Measuring the Effect on LFP and Women Empowerment*

Fruttero, et al. (2020) worked on social programs and formal employment in Brazil. This work has taken the data set from these three programs, the first was Single Registry for Social Programs other was the Bolsa Familia program and the last one was RAIS. This work showed the positive impact of social transfer on the formal labor market for adult men and women from the age group of 24-45. According to empirical findings, social payment increased labor force participation but only in formal sector of economy. This study proved that due to social transfer payment the labor force participation increased in the younger cohorts. Ambler & De Brauw (2019) investigated the supply of domestic labor and social protection BISP. This study explored household employment and the types of work options accessible, both of which could have an impact on the program's outcomes. This study looked at how financial payment effect on labor supply at individual and household levels. According to study, men's employment was more important for household income in Pakistan than women's employment. According to empirical evidence, they had a favorable impact on number of working hours per male at the household level. Salehi-Isfahani & Mostafavi-Dehzooei (2018) have focused on large-scale program effects on labor supply in Iran. People become lazy and jobless due to cash transfers. Empirically this program does not affect labor supply. This program harms the working hourly labor supply at 20-29 years old. There was a positive effect on labor force participation and individual working hours only in service sector. Results showed the LFP of youth decreased with the social grant. ShuHong, et al. (2017) have focused on Social Protection Schemes in Pakistan. The study discussed these programs with the previous condition of Pakistan. The social protection programs were working on reduction of poverty. According to this work, women's vote rights increased in Pakistan due to BISP. Microcredit and microfinance programs have not been easy to convince due to the high rate of interest in Pakistan. The work suggested that Pakistan should have changed the structural position of these programs, especially in its effect, access to the poor and their delivery system. In the recent era, the businesses that started from BISP (Livestock, General Store/Shop, and Others) increased the family income. Men were eligible to start a business but in fewer cases, women could start a business under a female-male partnership. BISP did not increase women empowerment, especially in the Multan Khanewal, Lodhran, and Vehari according to the BISP interview in 2017. These were the main findings of Tahir (2018). They worked on Individually-led' or 'female-male partnership' models for entrepreneurship in BISP. This work showed negative relationship between social aid and domestic violence on women. BISP grants increased the family income not increased

the social women empowerment. According to this work, the program allowed the beneficiaries' women to start up their businesses individually. Women could start a business with men under a female-male partnership. Afridi, et al. (2012) evaluated the impact of the National Rural Employment Guarantee Program effect on women's labor force participation in India. According to the study if mother would have increased her participation in the labor market, then her bargaining power would have also increased. Akbulut (2016) studies on gender disparity, labor force participation, and social transfer. The study showed relationship between labor force participation and social transfer payment in 34 countries. The study finds the significant effect of social transfer on labor force participation. Data imply that women's working decisions are influenced more by transfer payments. In a similar study De- -Hoop & Rosati in 2014 performed work on cash transfers and child labor. Cash transfers decreased the girl's participation in household chores and reduced the boy's participation in economic activity. Cash transfers also increased child welfare. Hussain et al. (2015) explored their point of view on the social capital effect on the employment strategy and equitable growth in the case of KPK in Pakistan. Due to structural problem employment remained low from its potential level. Demand side gap and supply side gap discussed in the study. Employer-related gaps or demand side gaps included the lack of formal knowledge system, public-private disconnect, and public-private credibility gaps. This study showed that a proper job network was very necessary for increasing the level of the labor force. Imbert & Papp in 2015 worked on the labor market effect of social programs with special evidence of India's Employment Guarantee. The fiscal cost of program was high for the welfare gains of the rural household. Public work employment increased by 1.17% in the dry season and increased by 0.48% in the rainy season. Alzúa, et al. (2013) pointed out the welfare programs and labor supply in developing countries. This study focused on the rural areas of Mexico Nicaragua's Honduras' in 1997, 2000-2002. Three programs were evaluated in this study Mexico's Programa Nacional de Educaci´on, Salud Alimentaci´on (PROGRESA), Nicaragua's Red de Protecci´on Social, and Honduras' Programa de Asignaci´on Familiar. Conclusion was these programs have negative adult labor supply participation. Progresa has a small influence on number of female beneficiaries working hours. Progresa has significant rose in salaries of male beneficiaries, which increases household income. This rose in the intensive margin of working women's labor supply. They Novella, Ripani, & Vazquez in 2021 viewed conditional cash transfer, female bargaining power, and parental labor supply. The study based on data set in rural areas of Honduras, Mexico, and Nicaragua. According to this study, the World Bank increased the labor supply it depends on women's preferences. The conditional cash transfer programs reduced the maternal labor supply and increased parental labor supply. Faridi et al. (2012) have examined their views on how human capital formation affected the labor force participation? Experienced and trained workers had more chances to get a good job in the labor force. Among them, 3% of increase in job by 1 unit increase in experience. 4.8% increase in employment by 1 unit increase in the educational level. Ejaz (2011), showed the determinant of female labor force participation in Pakistan. Women LFP was low due to low wage rates and low demand for females in market. According to this study married female participation was low as compared to unmarried due to household chores. In comparison to non-agriculture, the agriculture sector has a higher female participation rate. There was a U-inverse relation between female age and participation. As people become older their association with FLFP turns negative after reaching a certain ideal level. Females with 12 years of schooling (intermediate) were more likely to have FLFP. Females with less education (matriculation or less) were discouraged from entering the job market. Borraz & González (2009) researched on impact of Uruguayan Conditional Cash Transfer Program. There was negative effect on child female laborers in the capital. Montevideo program had no impact on the attendance for 12-14 years old. This program has negative effect on the working hours of women. There was negative effect of CCT on the labor market of urban. Mastrobuoni (2009) worked on effectiveness of social security benefits on labor supply in different cohorts. This study explored that retirement age increased by half as compared to NRA. In other words, there was a positive relationship between the normal retirement age and labor supply. One month increase in

average age retirement led to an increase the 40% in NRA. Gassmann & Trindade in 2019 analyzed the social transfer effect on labor supply in case of the Kyrgyz Republic. Household heads of the beneficiaries' families were more active as compared to non-beneficiary's families. By empirical evaluation, the study found that household head has low participation either the received social transfer as compared to the spouse.

3   Data

HIES survey data for 2018-2019 Pakistan (Pbs, 2018) used for estimation. The study focused only those people who were receiving social assistance from Pakistan's social programs. Further the study developed four age categories of age bracket (18-60). The study developed seven educational categories.

4   Methodology

4.1   *Binary logistic regression*

Binary logistic regression used when dependent variables are in dummy form. Current study based on logit model. Logit model is used for log-odd scale value. The logit model depends upon odd value and relative odd value. Odd value has a range of 0 to infinity. When the odd exceeds 1, the occurrence is more likely to happen than not. When the odds are between 0.99 and 0, the occurrence is less likely to happen. Relative odd value shows the comparable association between two variables (Tranmer & Elliot, 2008).

Logit model is defined in general term:

$Logit(P) = Log(P/(1 - P))$

General form of logit regression can be written as: (Norton & Dowd, 2018)

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \cdots + \beta_k X_{ki} + \varepsilon_i$$

$$Y_i = \begin{cases} 1 & if\ Y_i > 0 \\ 0 & otherwise \end{cases}$$

To find the effect of social protection on labor market following models are estimated.

- Econometric relation between LFP and general indicators can be written as:

$$LFP\left[p\left(\frac{p}{1-p}\right)\right] = \alpha + \beta_1 AGE + \beta_2 BISP + \beta_3 HHHG + \beta_4 RG + \beta_5 EDU + \mu \quad (4.1.1)$$

Equation (4.1.1) measures the overall labor force participation as compared to non-participation of social transfer receivers.

- The second model shows the effectiveness of the educational category to predict the participation of the labor force:

$$LFP\left[p\left(\frac{p}{1-p}\right)\right] = \alpha + \beta_1 AGE + \beta_2 BISP + \beta_3 HHHG + \beta_4 RG + \beta_5 Uneducated +$$
$$\beta_6 Primary + \beta_7 Middle + \beta_8 Secondary + \beta_9 Intermediate +$$
$$\beta_{10} Bachelor + \beta_{11} Masters/Above + \mu \quad\quad\quad (4.1.2)$$

Equation (4.1.2) shows the effect of educational categories on labor force participation or non-participation in labor market. In this model, education is converted into different educational categories.

- The third model shows the age categories in labor force participation:

$$LFP\left[p\left(\frac{p}{1-p}\right)\right] = \alpha + \beta_1 AgeX_i + \beta_2 BISP + \beta_3 HHHG + \beta_4 RG + \beta_5 Edu + \mu \quad (4.1.3)$$

Equation (4.1.3) shows the effect of age categories on the labor force participation of men and women. X_i represents the age *n* number of household members.

- The last model shows the provincial wise impact on participation of the labor force:

$$LFP[p\left(\frac{p}{1-p}\right)] = \alpha + \beta_1 Age + \beta_2 BISP + \beta_3 HHHG + \beta_4 RG + \beta_5 Edu + \qquad \beta_6 Punjab +$$
$$\beta_7 Sindh + \beta_8 KPK + \beta_9 Baluchistan +$$
$$\mu \qquad\qquad (4.1.4)$$

Equation (4.1.4) defines the provincial effect on labor force participation or not a participation in the labor market. It shows the labor force participation in all provinces of the Pakistan.

Whereas, LFP indicates labor force participation which defines Did/Do any work for pay, profit, or family gain during the last Month at least for one hour on any day? The variable takes a value of 1 if an individual is part of the labor force and a value of 0 if they are not. Another variable EDU variables categorized into uneducated are equal to 0, primary includes class 1, class 2, class 3, class 4, and class 5. The middle level includes class 6, class 7, and class 8 and the secondary includes class 9 and class 10. Intermediate level of education based on a Polytechnic diploma, FA/F.SC/ I.Com. Bachelor's involves a BA/B.SC/ B.com/B.ED. Master/Above based on MA, MSc/M. ED, Degree in Engineering, Degree in Medicine, Degree in Agriculture, Degree in Law, M-Phil, and Ph.D. All these values show the educated category which indicates the value 1. HHHD variable takes value 1 if a participant is male and value 0 if female. In addition, social transfer shows the value of 1 if household members receive payment from BISP and the value of 0 if they receive from other programs. RG shows the urban 1 and rural 0. Provinces show that the participants live in Khyber Pakhtunkhwa, Punjab, Sind, and Baluchistan.

5 Results and Discussions

Logit model used for measure the effectiveness of social protection on labor force participation.

Table 1

Bivariate Logit Model for the Labor Force Participation

Variables	Standardize Coefficients	Unstandardized Coefficients		Sig.	95% of C. I
	B	Exp (β)	St. Error		Lower-upper
Constant	-0.203	0.812	0.103	0.440	-
Age	0.018	1.018	0.001	0.000	1.015-1.021
BISP	-0.023	0.977	0.073	0.750	0.846-1.128
HHHG	0.418	1.520	0.084	0.000	1.290-1.790
RG	-0.547	0.578	0.033	0.000	0.541-0.618
EDU	-0.700	0.497	0.003	0.000	0.465-0.530
N	16903				
-2 log Likelihood	22513.073				
Cox and Snell R²	0.050				
NagelkerkeR²	0.067				

Table 1 shows that labor force participation increased by approximately 1.0 times. BISP receiver's labor force participation is less as compared to other social transfer receivers. With the P-value of (0.75) is insignificant and weak link between LFP and social transfer receiver. There is higher LFP for male headed household as compare to female headed household. The labor force participation decreased in rural as compared to urban. By the increase in level of education decreased labor force participation.

Table 2

Bivariate Logit Model of Labor Force Participation by Educational Attainments

Variable	Standardize coefficients	Unstandardized coefficients		Sig.	95% of C. I
	B	Exp (β)	St. Error		Lower-upper
Constant	-0.18	0.821	0.219	0.056	_
Age	0.018	1.018	0.002	0.000	1.015-1.021
BISP	-0.035	0.966	0.073	0.638	0.837-1.115
HHHG	0.433	1.541	0.084	0.000	1.308-1.817
RG	-0.585	0.557	0.034	0.000	0.521-0.596
Primary	-0.417	0.659	0.050	0.000	0.598-0.726
Middle	-0.888	0.412	0.057	0.000	0.368-0.460
Secondary	-0.706	0.494	0.052	0.000	0.446-0.547
Intermediate	-0.696	0.499	0.068	0.000	0.437-0.570
Bachelor	-0.863	0.422	0.081	0.000	0.360-0.494
Master & above	-1.205	0.300	0.098	0.000	0.247-0.363
N	16903				
-2 log Likelihood	22425.770				
Cox and Snell R²	0.055				
Nagelkerke R²	0.073				

The study expects a 1-time increase in labor force participation in Table 2. Labor force participation of BISP payment receivers reduced as compare to the LFP of other social transfer receivers. P-value 0.63>0.05 shows the weak link between LFP and the transfer receiver. It indicates that male-headed participation in the workforce is more than female household heads. The labor force participation reduced the rural residence than the LFP of urban residences. The labor force participation of primary passed people, middle-passed level of educated people, secondary, intermediate-passed, bachelor and master/above decreased their employment than the uneducated people's employment.

Table 3

Bivariate Logit Model of Labor Force Participation by Age Level

Variables	Standardize coefficients	Unstandardized coefficients		Sig.	95% of C. I
	B	Exp (β)	St. Error		Lower-upper
Constant	0.212	1.236	0.094	0.025	-
Age (18-28)	0.160	1.173	0.037	0.000	1.092-1.262
Age (40-50)	0.385	0.470	0.049	0.000	1.334-1.619
Age (51-60)	0.675	0.964	0.065	0.000	1.730-2.229
BISP	-0.022	0.978	0.073	0.759	0.847-1.129
HHHG	0.404	1.504	0.084	0.000	1.277-1.772
RG	-0.547	0.579	0.034	0.000	0.524-0.619
EDU	-0.693	0.500	0.033	0.000	0.462-0.534
N	16903				
-2 log Likelihood	22510.081				
Cox and Snell R²	0.050				
Nagelkerke R²	0.067				

In these results the Table 3 shows that labor force participation increased for those people who lie in the age group of 29-39, 40-50 and 51-60 as the age group of 18-28. There are increased in labor force participation of men-headed households as compare to the women headed household. There is

decreased in the labor force participation of those individuals who are living in the rural region as compare to urban. An increased in education level reduces the labor force participation.

Table 4

Bivariate Logit Model of Labor Force Participation by Provinces

Variables	Standardize Coefficients	Unstandardized coefficients		Sig.	95% of C. I
	B	Exp (β)	St. Error		Lower-upper
Constant	-0.024	0.976	0.108	0.823	-
Age	0.017	1.017	0.002	0.000	1.014-1.020
BISP	-0.029	0.972	0.074	0.700	0.840-1.124
HHHG	0.371	1.449	0.084	0.000	1.229-1.708
RG	-0.576	0.562	0.034	0.000	0.526-0.601
EDU	-0.704	0.447	0.034	0.000	0.447-0.510
Sindh	-0.227	0.797	0.039	0.000	0.738-0.859
KPK	0.233	1.262	0.046	0.000	1.153-1.382
Baluchistan	-0.351	0.704	0.056	0.000	0.631-0.786
N	16903				
-2 log Likelihood	22391.065				
Cox and Snell R2	0.057				
Nagelkerke R²	0.076				

Table 4 discusses that with the increase of age LFP increased by 1.0 times approximately. Labor force participation decreased in Sind transfer receiver as to Punjab labor force participation. Labor force participation of KPK increased as Punjab's employment. Labor force participation in Baluchistan decreased as the Punjab's labor force participation. All provinces show a strong link with LFP at a P-value of 0.00<0.05.

6   Conclusion

This study uses binary logistic regression to estimate the effect of social transfer payment on labor force participation in case of Pakistan. The study based on HIES 2018-19 survey by collected the data from households. The sample was between the ages of 18 and 60. The research was carried out in four provinces of Pakistan. Labor force participation decreased by 10% with social assistance. According to the study, the likelihood of 8% female and male labor force involvement rises with the incremental of age. This study proves that, 50% LFP of social receivers decreased in rural areas as compare to urban. LFP of higher educated people is decreased by 60% as compare to uneducated. The results are different from the studies in the past (Sayeed, 2014).

At a policy level, it is recommended that government may decide the maximum period for the grant. Coverage of social protection grants must be equal across provinces. Educational based social protection should be the prime focus. Developing a rural non-farm economy can be one of the options.

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