



Determinants of Wages in an Emerging Economy: A Case of Bhutan

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ABSTRACT

This paper aims to examine the factors influencing wages in Bhutan, utilizing the Mincerian earnings framework with pooled regression models. The study uses six waves of Bhutan's labor force survey data spanning from 2010 to 2015, which was collected by Ministry of Industry, Commerce and Employment. The findings underscore the significance of educational level and work experience in determining wages in Bhutan. Specifically, each additional year of education corresponds to a roughly 9% increase in hourly real wages, while each extra year of work experience results in approximately a 5% rise. Additionally, factors such as gender, area, and marital status emerge as a significant determinant of wages alongside education and work experience in Bhutan.

KEYWORDS: Labor force survey, Mincerian earnings framework, Pooled regression, and Wages.

1. INTRODUCTION

Wages are central aspects of a job for most of the workers around the world. They allow workers to make a living from their labor and provide incentives to be more productive and trustworthy to an employer. Individual's lifestyles are closely associated with the amount of wages they earn; individuals who earn high wages can afford more expensive and luxurious lifestyles compared to those who earn lower wages. Furthermore, wages serve as a crucial mechanism for employers to attract and retain proficient workers, rewarding them in various ways. In a broader sense, wages play a significant role in boosting both individual economic prosperity and national economies worldwide.

With the goal of providing better lifestyle to people, the Government of Bhutan places significant emphasis on wages, implementing various strategies such as National workforce wage rate policy, Bhutan minimum wage policy, and the wage rate Act of Bhutan. Bhutan has already established a government-mandated minimum wage policy, with penalties in place for employers who fail to comply. In recent years, there has been a heightened sense of urgency regarding labor market success in Bhutan, with the government viewing wages as a crucial determinant. Consequently, considerable efforts have been made to establish an efficient wage structure. However, despite the government's considerable efforts in ensuring an efficient wage system, there have been no explicit studies carried out to examine the factors influencing wage disparities among Bhutanese workers. Thus, this study focuses on investigating the determinants of wages in Bhutan.

This study utilizes the Mincerian earnings framework, developed by Jacob Mincer (1974), as groundwork for the estimation. This model has been widely adopted by researchers to investigate wage disparities among individuals with varying levels of human capital, such as years of education and work experience. Many studies have demonstrated the significance of educational attainment and work experience in determining wages

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(Kavuma, 2014; Harmon, Oosterbeek, & Walker, 2000). In addition to these factors, this study incorporates other variables including gender, area, marital status, workers' skill level, nature of employments and industry of employments into the model. This is specifically done to examine which factors are the most influential determinants of wages in Bhutan.

The remaining sections of the paper are structured as follows: Section 2 examines relevant literature, whereas Section 3 delineates the empirical methodology utilized for analysis. Section 4 provides an overview of data and variables, while Section 5 discusses the main empirical findings. Lastly, Section 6 concludes with a summary.

2. RELATED LITERATURE

Exploring the factors determining wages has been a primary focus of researchers, primarily because wages constitute one of the most important aspects of a job for most of the workers around the world. Additionally, wages hold equal significance for employers, serving as a motivational tool to enhance organizational performance. The existing literatures have highlighted a broad spectrum of factors contributing to variations in wages among workers. For instance, Bowles, Gintis, & Osborne (2000) conducted a study to investigate the determinants of earnings, and their empirical estimations indicate that years of schooling, years of labor market experience, and parental economic status are important determinants of wages. Their findings suggest that parental success in the labor market is transmitted to their offspring through improved education, inheritance of wealth, and genetic inheritance of cognitive ability.

Some studies have delved into the regional and personal determinants of wages, examining specific factors within certain contexts rather than the entire country. For instance, Goschin (2014) investigated regional determinants of average wages in Romania, finding that economic performance, indicated by GDP per capita, significantly influences wages across regions, with higher GDP per capita regions correlating with higher wages. Additionally, researchers like Hamermesh & Biddle (1993) explored personal characteristic such as physical appearance's impact on wages in the United States and Canada. Their findings revealed that individuals perceived as above average in appearance tend to earn around 14% higher wages for men and approximately 9% higher wages for women compared to those perceived as below average appearance, although the effect appears slightly less pronounced for women than men in both countries.

Several studies have found variation in the unemployment rate as a potential determinant of wages. For instance, Blanchflower & Oswald (1995) tested the unemployment-wage relationship for twelve countries worldwide, and their empirical findings showed negative impact of unemployment on wages in all sampled countries. Similarly, numerous other studies have attempted to examine the relationship between unemployment and wages and reported a stable negative relation between unemployment and wages (Albæk et al., 2000; Bhalotra, 1993; Dyrstad & Johansen, 2000; Hoddinott, 1993; Winter-ebmer, 1996). The researchers, observing a consistent negative relationship between unemployment and wages across multiple countries regardless of their economic status, whether developed, developing, or underdeveloped, confirms the unemployment rate as an important determinant of the wages.

Over long periods of time, labor productivity has consistently been a crucial determinant of wages. Higher labor productivity typically correlates with higher wages, while lower productivity tends to result in lower wages. This positive relationship between labor productivity and wages is strongly supported by cross-country assessments, as depicted in Harris (1999), which illustrate a robust positive association between real wages and labor productivity across various nations. In addition to investigating the productivity-wage relationship globally, this study specifically examined the impact of Canadian productivity growth on real wages in the long term. Empirical findings indicated a consistent positive relationship between productivity growth and real wages for Canadian workers over time, affirming labor productivity as a key determinant of wages even in the long run.

3. METHODOLOGY

Using six waves of Bhutan's Labor Force Surveys, this study endeavors to explore the factors influencing wages in Bhutan through the application of Mincer's wage regression. Fundamentally, the Mincer's earnings function is stated as follows.

$$\ln w = \beta_0 + \beta_1 E + \beta_2 X + \beta_3 X^2 + u \quad (1)$$

Where, $\ln w$ is natural logarithm of earnings (i.e., hourly wage), E the years of education, X the years of work experience, and X^2 the experience squared. Within the framework of standard Mincerian earnings function, the other important variables of interest will be incorporated, and the study will estimate the determinants of wages for each survey years independently. Once the estimates for each survey years are obtained, we can pool all the samples which are collected randomly at different time periods and then estimate the determinants of wages using pooled regression model as follows.

$$\ln w_i = \beta_0 + \beta_1 \text{Edu}_i + \beta_2 \text{Exp}_i + \beta_3 \text{Exp}_i^2 + \beta_4 \text{male}_i + \beta_5 \text{rural}_i + \beta_6 \text{divorce_2}_i + \beta_7 \text{single_3}_i + \beta_8 \text{skill_1}_i + \beta_9 \text{skill_3}_i + \beta_{10} \text{skill_4}_i + \beta_{11} \text{reg_1}_i + \beta_{12} \text{fam_wrk3}_i + \beta_{13} \text{own_act4}_i + \beta_{14} \text{emplyr5}_i + \beta_{15} \text{agri_1}_i + \beta_{16} \text{inds_2}_i + \varepsilon_i \quad (2)$$

Where; i - represent different individuals, $\ln w_i$ - natural log of hourly real wage of individual i , Edu_i - completed years of education by individual i ², Exp_i - potential experience of individual i ³, Exp_i^2 - potential experience squared⁴, male_i - dummy for male gender (with female as a reference group), rural_i - dummy for rural area (with urban as a reference group), divorce_2_i and single_3_i - dummies for divorce and single marital status of individual i (with married as a reference group for marital status), skill_1_i ; skill_3_i ; skill_4_i - dummies for skill level-1, skill level-3, and skill level-4 (with skill level-2 as a reference group for skill levels)⁵, reg_1_i ; fam_wrk3_i ; own_act4_i ; emplyr5_i - dummies for regular paid employees, family workers, own account workers, and employers (with non-regular paid employees as a reference group for nature of employment)⁶, agri_1_i ; inds_2_i - dummies for agriculture and industries (with service as a reference group for major industry)⁷, ε_i - measures individual-specific errors, β_j - parameters that need to be estimated.

Education has been widely accepted as one most important determinant of the wages however, some researchers have argued that individual's education qualification as more influential in determining the wages compared to the number of years of education attained. So, to test for such non-linearity along the education profile, the returns to each level of education will be estimated as follows.

$$\ln w_i = \beta_0 + \beta_1 \text{Pry}_i + \beta_2 \text{Low_mid}_i + \beta_3 \text{deg}_i + \beta_4 \text{Exp}_i + \beta_5 \text{Exp}_i^2 + \beta_6 \text{male}_i + \beta_7 \text{rural}_i + \beta_8 \text{divorce_2}_i + \beta_9 \text{single_3}_i + \beta_{10} \text{skill_1}_i + \beta_{11} \text{skill_3}_i + \beta_{12} \text{skill_4}_i + \beta_{13} \text{reg_1}_i + \beta_{14} \text{fam_wrk3}_i + \beta_{15} \text{own_act4}_i + \beta_{16} \text{emplyr5}_i + \beta_{17} \text{agri_1}_i + \beta_{18} \text{inds_2}_i + \varepsilon_i \quad (3)$$

Where, Pry_i - refers to primary level education attained by individual i , Low_mid_i - lower and middle secondary level of education attained by individual i , and deg_i - degree and above level of education attained by individual i . The higher secondary level of education attained by individual i will be used as a reference group.

4. DATA AND VARIABLES

This study utilizes six waves of labor force survey data collected by Ministry of Industry, Commerce, and Employment, spanning all twenty districts in Bhutan from 2010 to 2015. Bhutan's labor force survey provides comprehensive nationwide statistics on the labor force, encompassing samples from both rural and urban areas across various demographic and economic characteristics. The primary objective of Bhutan's labor force survey is to establish a quantitative framework for developing national plans, programs, and policies that impact the country's labor market. Importantly, the survey adheres to the guidelines and standards set forth by the International Labor Organization (ILO).

Following the Mincer's earnings function, the log of hourly real wage is employed as dependent variable. The hourly wage is derived from monthly wage data, considering only primary occupation, and adjusting for reported work hours. Nominal wages are converted to real wages using Bhutan's Consumer Price Index for respective survey years. Explanatory variables include years of education, experience, gender, area, marital status, skill levels, nature of employment, and industry of employment. Descriptive statistics for key variables are provided in Table 4.1 and 4.2.

Table 4.1 Basic descriptive statistics of Key variables (2010 – 2012)

Variables	2010		2011		2012	
	Obs	Mean	Obs	Mean	Obs	Mean
yrs_edu	36,746	4.770	34,643	4.956	35,808	5.237
real_earnpry	10,887	9962	10,254	10074	15,496	10652
real_hrs wage	10,539	45.85	10,145	51.56	15,199	50.24
male	36,757	.4814	34,643	.4830	35,808	.4826
rural	36,757	.7285	34,643	.7254	35,808	.7142

² This study considers only formal education and disregards monastic education due to lack of data onto earnings made by religious practitioner.

³ If the data for actual experience is not available then Mincer suggested using potential experience of individuals which can be derived as; Potential experience = age of individual – years of schooling – 6 years (i.e., age before getting into school).

⁴ Potential experience squared is used as an indicator for an individual's experience over the lifetime.

⁵ Main occupation consists of 10 categories viz; 1. Legislators/Senior officials/Managers 2. Professionals 3. Technicians and Associate Professionals 4. Clerks 5. Service Workers and Shop and Market Sale Workers 6. Skilled Agricultural Workers 7. Craft and Related Workers 8. Plant and Machine Operators 9. Elementary Occupations and 10. Armed Forces. All categories of occupation were classified into four levels of skills based on International Standard Classification of Occupation (ISCO, vol-08).

⁶ Employment status consist of 5 categories viz; 1. Regular paid employee, 2. Non regular paid employee, 3. Own-account worker (Agriculture/Non-Agriculture) 4. Family worker (Agriculture/Non-Agriculture). 5. Employer.

⁷ All categories of industry are classified into 3 major industries based on International Standard Industrial Classification (ISIC, revision 4).

Variables	2010		2011		2012	
	Obs	Mean	Obs	Mean	Obs	Mean
married1	36,757	.4536	34,643	.4605	35,808	.4522
divorce2	36,757	.0323	34,643	.0303	35,808	.0348
single3	36,757	.5140	34,643	.5091	35,808	.5128
reg1	15,623	.4812	14,537	.4408	14,958	.4354
non_reg2	15,623	.0756	14,537	.0582	14,958	.0671
fam_wkr3	15,623	.2086	14,537	.1672	14,958	.2674
own_act4	15,623	.2324	14,537	.3301	14,958	.2289
emplyr5	15,623	.0019	14,537	.0035	14,958	.0010
skill1	15,630	.4150	14,537	.4451	14,958	.4894
skill2	15,630	.2978	14,537	.3196	14,958	.3069
skill3	15,630	.1106	14,537	.0840	14,958	.0663
skill4	15,630	.1764	14,537	.1511	14,958	.1372
agri1	15,628	.2787	14,536	.3061	14,958	.3531
inds2	15,628	.1236	14,536	.1381	14,958	.1322
serv3	15,628	.5975	14,536	.5557	14,958	.5146

Table 4.2 Basic descriptive statistics of Key variables (2013 – 2015)

Variables	2013		2014		2015	
	Obs	Mean	Obs	Mean	Obs	Mean
yrs_edu	17,208	5.679	16,427	6.083	15,736	5.957
real_earnpry	8,296	11053	7,415	11756	7,613	11962
real_hrs wage	8,200	52.36	7,266	59.89	7,496	61.04
male	17,208	.4829	16,943	.4843	16,469	.4724
rural	17,208	.7107	16,943	.7169	16,469	.7077
married1	17,208	.4578	12,209	.6493	11,832	.6521
divorce2	17,208	.0411	12,209	.0624	11,832	.0665
single3	17,208	.5009	12,209	.2881	11,832	.2813
reg1	7,121	.4558	6,759	.4524	6,823	.4330
non_reg2	7,121	.0609	6,759	.0557	6,823	.0523
fam_wkr3	7,121	.1693	6,759	.2126	6,823	.1931
own_act4	7,121	.3138	6,759	.2791	6,823	.3214
skill1	7,121	.4057	6,759	.4037	6,823	.4160
skill2	7,121	.3064	6,759	.3340	6,823	.3239
skill3	7,121	.0699	6,759	.0637	6,823	.0647
skill4	7,121	.2179	6,759	.1984	6,823	.1952
agri1	7,121	.2736	6,759	.2828	6,823	.2803
inds2	7,121	.1623	6,759	.1307	6,823	.1462
serv3	7,121	.5639	6,759	.5863	6,823	.5733

Table 4.1 and 4.2 illustrate a steady increase in the average real earnings of Bhutanese workers from 2010 to 2015, with the most significant rise occurring between 2013 and 2014. Education levels also show an upward trend over the same period, albeit with a slight decline from 2014 to 2015. Hourly real wages experienced a minor decline in 2012 but recovered and saw a sharp increase from 2013 to 2015. Regular paid workers consistently comprise the largest portion of the labor force, followed by own-account workers, family workers, and non-regular paid workers. Skill level-1 workers consistently dominated the labor force, with skill level-4 workers unexpectedly surpassing skill level-3 workers. The service sector consistently employs a higher percentage of workers compared to the industry sector throughout the surveyed years.

Table 4.3 Average monthly real earnings from Primary occupation by Education attainment

Education	2010	2011	2012	2013	2014	2015
No education	7218.22	6415.89	7776.48	7451.69	9392.30	9598.27
Primary	7205.87	7694.85	9153.92	9952.58	9330.05	9539.96
Lower and middle secondary	8344.35	8958.19	11243.0	11199.6	11036.6	11036.6
Higher secondary	11567.8	12201.0	15038.5	11937.2	10963.5	12325.2
Bachelor's degree and above	16165.7	16430.3	22062.2	19215.0	19775.6	19223.0

Table 4.3 shows the average monthly real earnings based on education attainment, revealing a consistent increase in earnings with higher levels of education across all six survey years. Bachelor's degree and above consistently yield the highest earnings compared to other education levels, with approximately 2.24 times

larger earnings than those with no education in 2010, and this trend remains relatively stable, ranging from 2.0 to 2.8 times throughout the years. Additionally, earnings from bachelor's degree and above are approximately 1.4 times larger than those from the higher secondary level in 2010, maintaining a gap of 1.3 to 1.8 times over the years.

Table 4.4 Average monthly real earnings from Primary occupation by Age group

Age group	2010	2011	2012	2013	2014	2015
15 – 24	6438.78	7530.84	7864.33	7565.04	7805.09	8562.23
25 – 34	9580.72	9632.71	10829.11	10667.57	11216.85	11861.53
35 – 44	10783.69	11176.81	11341.73	12175.56	12405.94	12122.56
45 – 54	12720.18	11703.25	11119.55	12448.12	13246.81	12345.09
55 – 64	14297.11	11882.24	11631.08	12250.39	12638.83	14930.75
65 +	8973.71	5947.19	8272.85	8930.11	11236.48	9481.67

Table 4.4 shows average monthly real earnings from primary occupation by age group. The statistics shows a general increasing trend of average monthly real earnings with the higher age group. Unlike for other years, for the year 2013 and 2014, the age group 45-54 have received highest average monthly real earning from primary occupation. As expected, the average monthly real earning decreases significantly for age group 65 and above for all past six years. In the year 2010, the average monthly real earnings for age group 65+ dropped approximately by 1.5 times and then around 1.9 times in 2011. Further, from year 2012 up until 2015, there is sharp drop in average monthly real earnings for age group 65+ and this difference is declining until 2014 and then increases again in year 2015.

5. RESULT AND DISCUSSION

(a) Estimates for individual survey year

The discussion of empirical results of this study begins with presenting estimates for years of education for each of the six survey years through OLS regression on individual data. Returns are detailed in Table 5.1, alongside thirteen dummy variables investigating earning disparities between genders, rural and urban workers, marital status, skill levels, nature of employment and industry of employment. Notably, return to education across all six years range from 9% to 10%, with the highest in 2011 at 10%. Returns from additional work experience range from 4% to 6%, with diminishing returns observed as experience accumulates. Gender discrepancies in earning persist, with rural workers earning more than urban counterparts, possibly attributed to differential government allowances. Divorced workers show higher earnings in the first three surveys, while no significant differences are observed thereafter. Surprisingly, skill levels, nature of employment, and industry types show no discernible impact on wages in Bhutan.

Table 5.1 Determinants of Wages (for each survey year)

VARIABLES	2010	2011	2012	2013	2014	2015
	lnhr_realw	lnhr_realw	lnhr_realw	lnhr_realw	lnhr_realw	lnhr_realw
yrs_edu	0.089*** (0.002)	0.098*** (0.003)	0.085*** (0.002)	0.089*** (0.003)	0.089*** (0.003)	0.091*** (0.003)
exp	0.058*** (0.003)	0.042*** (0.003)	0.037*** (0.003)	0.047*** (0.003)	0.040*** (0.004)	0.044*** (0.004)
exp_sq	-0.0007*** (5.77e-05)	-0.0005*** (6.13e-05)	-0.0005*** (5.38e-05)	-0.0006*** (6.27e-05)	-0.0003*** (7.01e-05)	-0.0005*** (6.59e-05)
male	-0.137*** (0.022)	0.109*** (0.024)	0.126*** (0.023)	0.093*** (0.030)	0.016 (0.030)	0.109*** (0.029)
rural	0.045 (0.056)	0.200*** (0.039)	0.781*** (0.035)	0.686*** (0.045)	0.414*** (0.044)	0.513*** (0.046)
divorce2	0.130*** (0.049)	0.099* (0.054)	0.138** (0.054)	0.088 (0.066)	-0.104 (0.066)	0.061 (0.055)
single3	-0.027 (0.026)	-0.050* (0.028)	-0.020 (0.029)	-0.067 (0.042)	-0.012 (0.041)	-0.009 (0.048)
skill1	0.0148 (0.031)	0.111*** (0.031)	0.016 (0.036)	-0.118** (0.051)	-0.048 (0.048)	-0.026 (0.046)
skill3	-0.004 (0.034)	0.066* (0.036)	-0.002 (0.044)	0.017 (0.057)	-0.026 (0.056)	-0.009 (0.055)
skill4	-0.022 (0.027)	0.042 (0.029)	0.024 (0.032)	-0.040 (0.037)	0.013 (0.036)	-0.014 (0.037)
reg1	0.002 (0.037)	0.059 (0.040)	-0.039 (0.041)	-0.008 (0.061)	-0.063 (0.059)	-0.024 (0.061)

fam_wkr3	0.020 (0.050)	0.117** (0.050)	-0.025 (0.053)	0.002 (0.072)	-0.128* (0.069)	-0.145** (0.073)
own_act4	0.004 (0.042)	0.068 (0.043)	-0.057 (0.046)	-0.010 (0.063)	-0.047 (0.062)	-0.074 (0.064)
emplyr5	-0.031 (0.139)	0.004 (0.137)	-0.533** (0.239)	-	-	-
agri1	-0.022 (0.039)	-0.111*** (0.037)	-0.056 (0.045)	0.059 (0.061)	-0.010 (0.055)	0.068 (0.058)
inds2	-0.019 (0.032)	-0.023 (0.030)	-0.010 (0.037)	-0.035 (0.047)	-0.035 (0.047)	-0.006 (0.045)
Constant	2.133*** (0.083)	1.954*** (0.074)	1.744*** (0.070)	1.690*** (0.094)	2.196*** (0.092)	1.982*** (0.104)
Observations	4,516	4,080	6,497	3,448	2,884	2,989
R-squared	0.257	0.330	0.333	0.337	0.276	0.326

Note: Robust standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

(b) Estimates for pooled survey year

Table 5.2 presents the returns to education for the pooled regression, revealing that each additional year of schooling boosts hourly real wage by approximately 9%, statistically significant at the 1% level, consistent with findings from Himaz & Aturupane (2012) for Sri Lanka. Moreover, experience contributes significantly to earnings, with each year of work experience correlating with a 5% increase in wages, aligning with common observations in Bhutan where workers with identical education but different experience level exhibit varied earnings. However, returns to lifetime experience (proxied by experience squared) show diminishing returns as experience accumulates. Gender disparities persist, with male workers earning 6% more than female counterparts, reflecting enduring low-paying cultural norms for women. Surprisingly, rural workers earn significantly more than urban workers, debunking assumptions that rural-to-urban migration is driven solely by earning differentials. Divorced workers earn 8% more than married individuals, while single workers earn 3% less. Notably, neither nature of employment nor skill levels significantly affects earning differences in Bhutan, and industry of employment similarly lacks influence on wages.

Table 5.2 Determinants of Wages (Pooled regression)

VARIABLES	Pooled regression
	lnhr_realw
yrs_edu	0.0921*** (0.00116)
exp	0.0458*** (0.00155)
exp_sq	-0.000516*** (2.73e-05)
male	0.0570*** (0.0111)
rural	0.535*** (0.0185)
divorce2	0.0848*** (0.0243)
single3	-0.0338** (0.0143)
skill1	-0.00750 (0.0164)
skill3	-0.00671 (0.0188)
skill4	0.00721 (0.0138)
reg1	0.000297 (0.0200)
fam_wkr3	0.00345 (0.0251)
own_act4	0.00154 (0.0215)

agri1	-0.0263 (0.0202)
inds2	-0.0183 (0.0164)
Constant	1.799*** (0.0346)
Observations	24,414
R-squared	0.299

Note: Robust standard errors in parentheses
 *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

(c) Estimates for levels of Education (pooled data)

Table 5.3 presents estimated earnings for various educational levels, revealing substantial differences. Earnings from primary education are significantly lower, by 81%, than those from higher secondary education, while lower secondary education yields earnings approximately 42% less than higher secondary. Bachelor's degree and above demonstrate notably higher earnings, surpassing higher secondary education by approximately 43%. Interestingly, returns to education in Bhutanese workers escalate exponentially with higher education attainment, indicating non-linear returns. For example, the difference in returns between primary school graduates and non-educated workers is 24.4%, suggesting a 4% increase in earnings for each year of primary schooling. Returns to lower secondary, higher secondary, and bachelor's degree education stand at 9.5%, 21.2%, and 14.3% per year respectively, with the highest returns observed at the higher secondary level, emphasizing the non-linearity of education returns across different levels.

Table 5.3 Estimates for levels of Education

VARIABLES	Pool regression Lnhr_realw
no_edu1	-1.049*** (0.0180)
pry_edu2	-0.805*** (0.0201)
low_edu3	-0.424*** (0.0139)
bac_abv5	0.431*** (0.0141)
Constant	2.908*** (0.0307)
Observations	24,414
R-squared	0.306

Note: Robust standard errors in parentheses
 *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

6. CONCLUSION

This paper explores wage determinants for Bhutanese workers through pooled regression models, highlighting education as a pivotal factor significantly impacting real earnings. The finding underscores the importance of higher education attainment for increased earnings, signaling a need for enhanced educational opportunities. Gender disparities persist, with male workers consistently earning more than females, suggesting some degree of discrimination against females. Unexpectedly, the earnings of rural workers exceed that of their urban counterparts, possibly owing to additional allowances offered to rural workers such as high-altitude allowance, difficulty allowance, and scarcity allowance. These results carry substantial policy implications, particularly in educational investment decisions and sector prioritization. Additionally, the study reveals that the factors such as nature of employment, skill levels, and industry of employment play negligible roles in determining wage differences in Bhutan.

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