

Wage Inequality in FDI Industries: Gini Coefficient Analysis A Case Study of Nepal

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Abstract

Foreign Direct Investment (FDI) is a component of an economic integration in the process of globalization towards the global village. Its possible significant role in developing country like Nepal makes it as an alternative source of foreign capital, in stead of foreign debt. Therefore, in Nepal, the structural adjustment adopting the philosophy of globalization, liberalization and privatization has been followed for attracting FDI in the South Asian regional competition.

Significantly smaller FDI inflow statistics in the South Asian context has made a issue related to its unknown outcomes, despite some empirical studies. Similar condition is found its effect on wage level and wage equality led poverty.

This paper empirically assesses to wage inequality and status in the operating FDI industries in Nepal through the Gini Coefficient measurement. This study is based on the primary data collected through the direct questionnaire and case study method from the sample FDI industries.

1. Background

The higher growth rate of FDI inflow in Nepal after the liberalization to all economic sectors to FDI, except few national important areas as defense, communication and environment through *Foreign Direct Investment and One Window Policy 1992* is observed. This is still significantly smaller in the South Asian Context. Therefore, its significant role isn't observed in labor market, commodity market and also capital market but it has received top policy priority addressing resource lag, international market access, unemployment issue and transfer of technology, management, knowledge, skill etc.

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Higher distribution and incident of FDI inflow in manufacturing sector in Nepal is found, although the policy priority in agriculture sector has been given. There is partially liberal Indo-Nepal Trade and Transit Treaty 1996 and also quota facility of USA and Germany behind it. The manufacturing sector alone has created 50 percent of employment out of 94119, that is smaller to address the growth rate and status of unemployment and also inadequate to affect in the labor market. Therefore, wage level and its determination not by market forces are found.

2.Objectives and Methodology

Objectives

Main objective of the study is to estimate wage inequality of Labor in the FDI industries for policy implication and recommendation.

Rationale of the study

This study would assess its impact on wage level and wage inequality, which would provide the valuable information about wage level of FDI industries and its impact. It would be good feedback for improving the impact of FDI on wage level and its equality at the policy level with uniformity and adequacy.

Data used and method

The data used in the study is quantitative and primary data based. They were collected from the primary data sources including the sample FDI industries in manufacturing sector of five district areas (Kathmandu, Nwalparashi, Chitwan, Hetuada and Bara). Data collection methods are Direct Interview Method and Key informant interview.

Direct Interview Method

Direct Interview method concerning above structure of primary data was set up as pre preparation of the field survey of FDI industries. In first stage, the initial questionnaire was pre-tested in Kathmandu. After then, drawbacks and errors were erased and modified for making final questionnaire. In the second stage, the final questionnaire was employed to conduct the survey of FDI industries in *Kathmandu, Nawalparashi, Chitwan, Hetuada and Bara*.

Key Informant Interview

In this study, it was used for investigating particular case of *Bhrikuti Pulp and Paper Public ltd, Choudhary Gram, Nepal Board Pvt Ltd, Lotus Energy Pvt Ltd* etc.

Selection of sector, areas and samples:

The selection of sector, areas and samples of FDI industries from manufacture sector of five district areas (Kathmandu, Nwalparashi, Chitwan, Hetuada and Bara) of Central Development Region, except FDI industries related to beer, alcohol and cigarettes was based on Stratified Purposive sampling method and cross sectional method.

The sample size was 18 FDI industries. The sample size for depth study was 5 was executed and made cross sectional representative from 5 districts, different tier of investment and types, nature and source of FDI.

Methodology

Explorative, analytical and descriptive methods are applied in this study by help of Gini Coefficient analysis model. Previous similar studies and methodologies followed by UNDP (1993) and also Bista (2004).

3.Theoretical Framework

Gini Coefficient has been calculated from the data received from 18 sample FDI industries located in 5 sample areas of the study to measure wage inequality among labor of same category and among the sample FDI industries. Formulae of Gini Coefficient (GC) is as follows:

$$\text{Gini Coefficient} = 1/100 (\sum X_i Y_{i+1} - \sum X_{i+1} Y_i) \%$$

Where X_i - ith labour of the sample FDI industries, Y_i is the wage of ith labour of the sample FDI industries, X_{i+1} - $i+1$ th labour of the sample FDI industries, Y_{i+1} . wage of $i+1$ th labour of the sample FDI industries

4.Empirical Findings

The gini-coefficient analysis explains the relationship between FDI and wage inequality of the FDI industries into five-labor categorization (*high skilled labor, skilled, semi skilled, unskilled and daily wages*) and Gini coefficient. It is presented in table no-1 below.

Table No-1: Gini Coefficient of wage

Production	Gini coefficient
High skilled	0.23
Skilled	0.46
Semi Skilled	0.44
Unskilled	0.25
Daily wage	0.09

Source: Derived from Annex 1.

Gini-coefficient of skilled labor of the FDI industries is highest of all that is 0.46 magnitude implying that there may be extremely higher wage inequality among skilled labor in the FDI industries. In the semi-skilled labor, its estimated gini coefficient is 0.44 implying that second higher wage inequality among the semi-skilled labor is found. Its magnitude is lower in the case of unskilled labor, although there is significant wage inequality. Its gini coefficient is estimated 0.25. Further, the gini coefficient of higher skilled labor is estimated at 0.23 implying to significant wage inequality among higher skilled labor in FDI industries. Least gini coefficient is found in daily wages labor in FDI industries is estimated at 0.09.

The analysis explains that the FDI industries in Nepal have brought significant wage inequality from 9 percent to 46 percent in different labor categorization. Wage inequality in skilled and semi skilled labor is extremely high that can lead inequality in the community. In reverse, daily wages labor 's wage inequality is 9 percent that is least one. In high skilled and unskilled, wage inequality lies between 23 percent and 25 percent. There is liberal labor policy and also liberty to the FDI management for determination of wage level. It may decrease if labor market forces work in the case of FDI industries. But it doesn't indicate positive in the equity and justice in the community. There may be suspicious and fear that the difference wage inequality among the skilled and semi-skilled labor and high skilled and unskilled would increase to the category of new inequality and the rich and the poor gap in the community. Thus, economic development and social harmony would be influenced, although contribution of FDI industries is positive to the community and also to the nation.

5. Conclusion

This paper estimates wage level and its inequality in FDI industries based on the primary data. Data collection methods are direct interview method and key informant interviews from the 18 sample FDI industries and 5 sample FDI industries respectively. The gini coefficient is used to find out wage inequality in FDI industries has resulted wage inequality among higher skilled, skilled, semi-skilled, unskilled and daily wages lying between 9 percent and 46 percent in the intra FDI industries. Its major reasons may be non-uniformity wage level and no standard wage level with respect to different categorical labor. Since FDI industries have fixed wage level according to the industry' s rule and regulation, there are found different categorical wage level to the same category of labor. It is a policy lapse. Therefore, its outcome would be good input to the planner and the policy maker to improve the policy lapse for minimizing wage inequality at same level of labor category.

The existence of wage inequality in the FDI industries may be a cause of income inequality of the community. There is a possibility of high contribution on rich-poor gap. So, the government should focus on the side effects in the policy formulation to reduce the inequality and also structure of employment.

Gini Coefficient of Wage of High skilled

wage (Y)	NO of Labour (X)	Cum Y	% Y	Cum X	% X	$X^i Y^{i+1}$	$X^{i+1} Y^i$
2910	2	2910	5.5	2	1.2	53.9
3255	15	6165	11.5	17	9.8	14.16	329.22
3539	31	9704	18.5	48	28.9	181.3	547.6
3981	3	13685	26.16	51	29.6	729.86	1185.04
4000	27	17685	33.8	78	45.3	1000.48	1649.44
6000	6	19685	37.6	84	48.8	1703.28	2052.96
6151.5	10	25836.5	49.4	94	54.6	2410.72	4826.38
6474	74	32310.5	61.7	168	97.7	3356.48	6170
16000	4	52310.5	100	172	100	9770
						19166.3	16814.54

Gini Coefficient of Wage of Daily wage

wage (Y)	NO of Labour (X)	Cum Y	% Y	Cum X	% X	$X^i Y^{i+1}$	$X^{i+1} Y^i$
2160	30	2160	20	30	31.25	889.8
2160	13	4320	40	43	44.79	1250	2124.8
2160	8	6480	60	51	53.12	2687.4	5687.4
2160	40	8640	80	91	94.79	4249.6	8000
2160	5	10800	100	96	100	9479
						17666	16702

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