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INFORMAL SECTOR ECONOMY, CHILD LABOR AND ECONOMIC GROWTH IN DEVELOPING ECONOMIES: EXPLORING THE INTERLINKAGES

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ABSTRACT

The study explores the interlinkages among informal sector, child labor and economic growth covering 50 developing economies for the time period 2001-2015 through 3SLS approach. The results show that informal sector positively influences child labor and child labor positively influences informal sector. It creates a vicious cycle of underdevelopment and poverty. Similarly child labor positively contributes in economic growth and economic growth enhances child labor in developing economies. However, informal sector increases economic growth but economic growth decreases informal sector. So there emerged a complex and discoursing interlinkage among informal sector, child labor and economic growth in developing economies. The informal sector is positively influenced by population growth. Child labor is also positively influenced by population growth and age dependency but negatively by globalization. Economic growth is positively influenced by capital formation, globalization and governance. A multidimensional approach is required for decreasing the size of informal sector economy and eliminating the child labor along with having good economic growth. Control of population growth is emerged one of them which may slide down informal sector economy and child labor. The capital formation and governance may be a part of the policy framework for economic growth.

Contribution/ Originality: The study contributes to existing literature by estimating of relationship among informal sector, child labor and economic growth for a panel of developing economies. In the literature the simultaneous linkage among these variables was non-existent and the directions of relationship were varying between any of the two variables.

1. INTRODUCTION

The informal economy is referred by a variety of names like subterranean economy, irregular economy, underground economy, black economy and shadow economy. A number of factors such as burden of tax and social security contributions, intensity of regulations, public sector services and official economy have been identified in the literature for causing informal sector economy (Schneider, Buehn, & Montenegro, 2010).

One of the basic realities of the informal economy is the presence of the child labor. Generally, children are not described as part of the official labor force. Even if formal firms hire children, they are not recorded as part of their formal workers by the state agencies. There is positive association between informality and child labor. Child labor

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is most likely to occur in poor families working in the informal sector. The capital constrained families rely on the income from their child labor. These children remain unable to go to school and therefore lower the chances of evading poverty (Docquier, Müller, & Naval, 2014). Informal sector provides employment to the large number of people particularly in developing economies so it is wide spread phenomenon. The informal economy has low productivity and it causes slow growth rate of the economies. Informal enterprises are less efficient and low productive than the formal enterprises. In developing economies a significant share of GDP is produced by the informal sector. When informal sector increases it hamper the growth of GDP. Informal sector uses most of the resources and the human capital that can be used in the formal sector. Overall picture of the informal sector show that it is not beneficial for the economy (Buehn & Farzanegan, 2013; Buehn & Schneider, 2008; Loayza, 1996; Schneider et al., 2010). The last decade show an immense growth in the research on macroeconomic indicators and child labor. For instance, globalization (Cigno, Rosati, & Guarcello, 2002) financial development and income variability (Dehejia & Gatti, 2005), trade liberalization (Edmonds & Pavcnik, 2005) trade openness and foreign direct investment (Neumayer & De Soysa, 2005) international trade (Edmonds & Pavcnik, 2006) economic growth (Abdullahi & Noor, 2015; Kambhampati & Rajan, 2006) social globalization (Fors, 2014) foreign direct investment (Doytch, Thelen, & Mendoza, 2014) and poverty (Abdullahi, Noor, Said, & Baharumshah, 2016) have been discussed as the determinants of child labor. The simultaneous analysis of the informal sector economy, child labor and economic growth is non-existent in the literature. For the robust results the developing economies investigation is more significant. Similarly for policy making to tackle the problems of spreading informal sector and prevalence of child labor which hinders the economic growth rate, it is necessary to investigate the troika of these indicators simultaneously. So the current study aims to see the interdependence of the informal sector economy, child labor and economic growth in developing countries.

2. LITERATURE REVIEW

The informal sector and child labor in the perspective of economic growth are widely discussed in the literature. Rosser, Rosser, and Ahmed (2000) found positive relationship between income inequality and informal economy. Kadonya, Madihi, and Mtwana (2020) conducted a study on the worst forms of child labor in informal sector of Tanzania and concluded that there is high prevalence of worst form of child labor in the informal activities. Docquier et al. (2014) found that informality increases the child labor.

Kambhampati and Rajan (2006) attempted to analyze the relationship between economic growth and child labor. The study found that growth increases rather than decrease child labor. It is argued that growth may decrease child labor when growth is persistent that might help to decrease the supply of child labor sufficiently to offset the impact of increased demand. The result leads to child labor Kuznets curve. Abdullahi and Noor (2015) also analyzed the impact of economic growth on child labor in developing countries. They argued that economic growth initially increases child labor but as growth is sustained over time child labor tends to decline[1].

Numerous studies have attempted to ensure the relationship between economic growth and child labor Kambhampati and Rajan (2006); Abdullahi and Noor (2015). Similarly, a number of studies tried to investigate the relationship between informal economy and economic growth (Buehn & Schneider, 2008; Docquier et al., 2014; Elgin & Birinci, 2016; Loayza, 1996; Schneider et al., 2010). We shall investigate the interrelationship between informal sector economy, child labor and economic growth in developing countries that is lacking in the existing literature.

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[1] At the household level analysis a number of studies have evidenced an inverse relationship between household income and child labor (Khan, 2003, 2008; Siddiqi, 2013; Webbink, Smits, & De Jong, 2013).

3. METHODOLOGY

To see the interdependence of informal sector, child labor and economic growth in developing economies[2], the functions have been framed and given in Equations 1, 2, 3,..

$$INFORM = f\,(CHLABOR,\ GDPPC,\ CORRP,\ POP) \qquad (1)$$
$$CHLABOR= f\,(INFORM,\ GDPPC,\ GLOB,\ POP,\ AGEDEP) \qquad (2)$$
$$GDPPC= f\,(INFORM,\ CHLABOR,\ GFCF,\ GLOB,\ GOVER) \qquad (3)$$

The descriptions of the variables are given in Table 1.

Table-1. Variables and their Description.

Variable	Definition	Measurement	Source of data	Expected relation
INFORM (Informal Economy)	The informal economy includes all economic activities that are deliberately hidden from official authorities for various reasons. These vary from being monetary, regulatory to institutional reasons.	Informal economy as percentage of GDP	(Hassan & Schneider, 2016)	It is expected to be positively influenced by child labor and negatively influenced by economic growth.
CHLABOR (Child Labor)	Child labor comprises the following groups: a) all children in economic activity, in the 5-11 years age range, b) children in non-light economic activity in the 12-14 years age range, "Light work operationally defined as economic activity that does not exceed 14 hours per week". c) children engaged in hazardous work.	Child labor as percentage of children in 5-14 years age group	Understanding children's Work (Uuderstanding Children Work, 2018)	It is expected to be positively influenced by informal economy and negatively by economic growth
GDPPC (Economic growth	Economic growth is the annual growth rate of GDP per capita.	Annual growth rate of Gross Domestic Product per capita	World Development Indicator (World Bank, 2018a)	It is expected to be negatively influenced by child labor and negatively influenced by informal economy.
CORRP (Corruption)	It is the abuse of entrusted power for private gain. Corruption refers to the any fraudulent, dishonest and unethical work or activity conducted by any person who is in authority or position for his personal gain and profit.	Index ranges 0-10, where 0 indicates lowest corruption and 10 indicates highest corruption.[3]	Corruption Perception Index (Transparency International, 2018)	It is expected to positively influence the informal economy.
POP (Population growth rate)	Annual population growth rate.	Annual population growth rate	World Development Indicator (World Bank, 2018a)	It is expected to positively influence the child labor and informal economy.
GLOB (Globalization)	It is conceptualized as a process that erodes national boundaries, integrates national economies, cultures, technologies and governance and produces complex relation of mutual interdependence.	KOF globalization index. Index ranges from 1-100. one indicates lowest globalization and 100 indicates highest globalization	(Dreher, 2006)	It is expected to negatively influence the child labor and positively influence the economic

[2]Argentina, Belarus, Benin, Bhutan, Bolivia, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Colombia, Congo DR, Congo, Rep., Costa Rica, Côte d'Ivoire, Ecuador, Egypt, El Salvador, Ghana, Guatemala, Haiti, Honduras, India, Indonesia, Jamaica, Macedonia, Malawi, Mali, Mauritania, Mexico, Mongolia, Nicaragua, Nigeria, Pakistan, Paraguay, Peru, Rwanda, Senegal, Sierra Leone, Suriname, Tanzania, Timor, Togo, Uganda, Venezuela, Vietnam, Yemen.

[3] Corruption perception index ranges from 0 to 10, where 0 indicates high corruption and 10 indicates low corruption. In this study we rescaled the corruption perception index. After rescaling the index 0 represents the lowest corruption and 10 indicates highest corruption.

				growth.
AGEDEP (Age dependency ratio)	Age dependency ratio is the ratio of dependents (people younger than 15 or older than 64) to the working-age population of 15-64 years.	Proportion of dependents per 100 working population	World Development Indicator (World Bank, 2018a)	It is expected to positively influence the child labor.
GFCF (Gross Fixed Capital Formation)	Gross fixed capital formation includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings.	Gross fixed capital formation as percentage of GDP	World Development Indicators (World Bank, 2018a)	It is expected to positively influence the economic growth
GOVER (Governance)	A complex system of interaction among structures, traditions, functions, and processes characterized by values of accountability, transparency and participation.	Governance index ranges from -2.5 to +2.5, where -2.5 indicates weak governance and +2.5 indicates strong governance	Worldwide Governance Indicators (World Bank, 2018b)	It is expected to positively influence the economic growth

The dataset covers the time period of 2001 to 2015 for 50 developing countries. Countries are selected on the basis of the availability of data. Data have been gathered from World Development Indicator (World Bank, 2018a), Worldwide Governance Indicators World Bank (2018b), Transparency International (2018), Hassan and Schneider (2016) and Understanding Children's Work Project (Uuderstanding Children Work, 2018). Child Labor data was having missing values that is adjusted by Linear Interpolation.

To examine the three way linkages between informal sector economy, child labor and economic growth in developing economies, we applied the Three Stage Least Square (3SLS) technique. As informal sector economy, child labor and economic growth have interdependence. When the variables have interdependence the system equations and simultaneous equations model may be used.

We applied LLC (Levin, Lin, & Chu, 2002) IPS (Im, Pesaran, & Shin, 2003) tests for stationarirty. Hausman test also called as the Hausman Specification test (Hausman, 1978) detects endogenous regressors in a regression model. It is applied to detect the endogeneity problem.

We used panel data to analyze the relationship among informal sector economy, child labor and economic growth. As the variables have interdependence, so we use system of equations. The econometric model is as follows:

$$INFORM_{it} = \alpha_0 + \alpha_1 CHLABOR_{it} + \alpha_2 GDPPC_{it} + \alpha_3 CORRP_{it} + \alpha_4 POP_{it} + \mu_{it} \qquad (4)$$

$$CHLABOR_{it} = \gamma_0 + \gamma_1 INFORM_{it} + \gamma_2 GDPPC_{it} + \gamma_3 GLOB_{it} + \gamma_4 POP_{it} + \gamma_5 AGEDEP_{it} + \mu_{it} \qquad (5)$$

$$GDPPC_{it} = \beta_0 + \beta_1 INFORM_{it} + \beta_2 CHLABOR_{it} + \beta_3 GFCF_{it} + \beta_4 GLOB_{it} + \beta_5 GOVER_{it} + \mu_{it} \qquad (6)$$

Where, i is for each country and t is for time series. The INFORM, CHLABOR and GDPPC are endogenous variables and CORRP, POP, GLOB, AGEDEP, GFCF, GOVER are explanatory variables.

4. RESULTS AND DISCUSSION

4.1. Descriptive Statistics

The descriptive statistics of the variables are shown in Table 2.

Table 2 shows the descriptive statistics of the variables. The minimum value of informal sector is 13.3 percent. In the sample it belongs to Chad in 2010. It means this is the part of the economy that is not recorded in GDP. Similarly, 89.2 percent of the national economy is hidden in Congo Democratic Republic in 2013 (Hassan & Schneider, 2016) that is the maximum value in the sample. However, on average in the developing economies 41.86 percent of the national economies remained hidden during the last one and half decade. It represent that our sample of 50 countries has a significant part of the informal economy.

Table-2. Summary of descriptive statistics.

Variable	Observation	Mean	Standard Deviation	Minimum	Maximum
INFORM (Informal sector economy)	750	41.86276	14.7826	13.3	89.2
CHLABOR (Child labor)	750	11.4965	10.0060	0.3	47.9
GDPPC (GDP per capita growth rate)	750	2.549693	4.408488	-36.8299	30.35658
CORRP (Corruption)	750	6.936722	.8307377	3.5	9
POP (Population growth rate)	750	1.969054	.9313173	-.6998092	4.77276
GLOB (Globalization)	750	48.62169	9.459953	25.38535	66.57934
AGEDEP (Age dependency ratio)	750	72.49431	18.32681	40.45638	109.46
GFCF (Gross fixed capital formation)	750	22.71346	9.847225	1.778934	70.66011
GOVER (Governance)	750	-.6200188	.4733082	-1.617292	.9625471

The average growth rate of the developing economies in the sample has remained 2.45 percent annually during 2001-2015. The highest growth rate of gross domestic product per capita in the sample is observed 30.35 percent that is of Nigeria in 2004. Prudence in fiscal management in Nigeria has led to the surplus in 2004. The lowest growth rate of gross domestic product per capita is observed in Central African Republic in 2013. It may be due to political instability and civil war in Central African Republic in 2013.

The situation of child labor in the developing world is still very disappointing. In the time period of 2001-2015, the mean occurrence of child labor in the age group of 5-14 years in the sample remained 11.49 percent. The highest child labor prevailed in Sierra Leone in 2005 that is 47.9 percent (Uuderstanding Children Work, 2018). The country has made minimal advancement in the elimination of the child labor. It is a source, transit, and destination country for trafficking in children. Within Sierra Leone, children are trafficked to urban areas, where they work in domestic service, petty trading, or are engaged in prostitution. The lowest child labor prevailed in Costa Rica in 2015 that is 0.3 percent (Uuderstanding Children Work, 2018). Costa Rica has made significant advancement in reducing the child labor. It is the country where the situation of the children remained best.

4.2. Panel Unit Root test

To check the stationary level of given series we applied the LLC panel unit root test (Levin et al., 2002) for all variables except corruption. Because corruption has some missing values and LLC test cannot be applied for missing observation variable. We have applied (Im et al., 2003) test for corruption.

Table-3. Results of panel unit root test.

Variables	At Level	
	Levin, Lin and Chu	
	Statistics	Prob
INFORM	-5.8786*	0.0000
CHLABOR	-6.8297*	0.0000
GDPPC	-9.9206*	0.0000
POP	-38.6783*	0.0000
GLOB	-10.0272*	0.0000
AGEDEP	-11.6331*	0.0000
GFCF	-7.1033*	0.0000
GOVER	-4.6365*	0.0000
	Im Pesaran and Shin	
CORRP	-5.9650*	0.0000

Note: *Significance at 5 percent level.

The results of panel unit root test given in Table 3 show that all the variables are stationary at level. Stationarity of corruption has been checked through Im, Pesaran, & Shin test. It is also stationary at level.

4.2.1. SLS Estimates

The results of 3SLS estimates of the Equations 4, 5 and 6 are given in Table 4.

Table-4. 3SLS estimates for informal sector economy, child labor and economic growth.

Independent Variable: Informal Sector Economy		
Variable	**Coefficient**	**Prob.**
C	50.74085***	0.000
CHLABOR (Child Labor)	.2202094*	0.092
GDPPC (GDP per capita growth rate)	–1.733561***	0.000
CORRP (Corruption)	–1.701959**	0.037
POP (Population growth rate)	2.413579**	0.045
Independent Variable: Child Labor		
C	–8.862236	0.217
INFORM (Informal sector economy)	.3000765*	0.051
GDPPC (GDP per capita)	.8937206***	0.000
GLOB (Globalization)	–.225088**	0.032
POP (Population growth rate	2.29606**	0.038
AGEDEP (Age dependency ratio)	.2183428***	0.004
Independent Variable: Economic Growth		
C	11.04681***	0.003
INFORM (Informal sector economy)	–.4705626***	0.000
CHLABOR (Child labor)	.3422546***	0.000
GFCF (Gross fixed capital formation)	.0698922*	0.075
GLOB (Globalization)	.1145622**	0.011
GOVER (Governance)	1.668994***	0.008
No. of Observation = 410		

Note: *, ** and *** indicates 10 percent, 5 percent and 1 percent level of significance.

The Hausaman test is employed to detect the enodenetiy problem in the analysis. If the value of chi square is less than 5% the null hypothesis is rejected which describes that there exists endogeneity problem in the variables. If the value of chi square is greater than 5% it means there is no endogenety. The value of chi-square was found 0.000 that is less than 0.05 which means endogeneity problem exists in the dependent variable.

4.3. Discussion

The simultaneous equation model is comprised of three equations about informal sector economy, child labor and economic growth. We discuss the results in the same sequence.

4.3.1. Informal Sector Economy

It was hypothesized that child labor may increase informal sector economy. The results have indicated that child labor positively affects informal economy that is child labor augments informal economy. In informal sector most of the employees are the woman and the children. As the children are unskilled labor so cannot find job in the formal sector. They work in informal sector. Most of the companies who employed child labor do not show them as official employee. In this way as the child labor increases it enhances informal sector economy. Webbink, Smits, and De Jong (2012) analyzed the hidden child labor and argued that children in developing countries have many options regarding education and work. They can go to school, work in the home business, do household work and do both of them at the same time. Children in developing countries are less likely to attend school but more likely to work.

They work in hidden activities which are included in the informal sector of the economy. Kadonya et al. (2020) also argued that worst form of child labor is mostly prevailed in informal sector.

The 3SLS results show that economic growth decreases informal sector economy. Informal economy accounts all the hidden activities which occur due to poverty, lack of capital and technology as well as training and education. The economic growth results into improvement in technology, provision of financing to the poor, eradication of poverty and development of skill and training. It results into sliding down the informal sector. The same type of results are found by a number of studies (Buehn & Farzanegan, 2013; Buehn & Schneider, 2008; Loayza, 1996; Schneider et al., 2010). Galli and Kucera (2003) evidenced for 14 Latin American countries that by increase in economic development the informality declines and vice versa.

In the informal economy equation, along with endogenous variable of child labor and economic growth, the explanatory variables of corruption and population growth have also been added. A negative relationship has been seen between corruption and informal economy that is when corruption increases informal sector economy decreases. Theoretically corruption should increase informal sector economy through the channel of devastating the financial system, declining the development of technology and human capital, and distortion of the market economy as well as worsening the situation of implementation of labor and industrial laws. There may be another channel by which corruption may decrease the figures of informal economy. Through corruption the informal sector remains hidden and it avoids to pay taxes. It gives low wages to the workers and not have regulations implemented due to corruption. So, the results of current study may be justified by the argument that in developing economies practically the informal sector exists but due to corruption not come to the front and not calculated accurately. It explains that in developing economies corruption decreases the informal sector economy.

There emerged a positive relationship between population growth rate and informal economy. It is supported by Pham (2017). The countries with high population growth tend to absorb most of the labor force in the informal sector. High population growth increases the supply of unskilled labor force. It cannot get the job in the official economy due to the qualification and experience constraints. It is absorbed in the informal sector economy.

4.3.2. Child Labor

The results signify the positive role of informal sector in increasing child labor in developing economies. In the informal sector majority of the employees are children. Children work in the households, family business, in factories and as venders. In hidden activities of the economy, most of the employed are comprised of children. They work for low wages which increase their demand in informal sector. It explains that expanding informal sector means increasing child labor in the economy. Docquier et al. (2014) found that informality increases the child labor. They explained the link through accumulation of human capital. The incentive for the human capital accumulation declines due to existence of informal sector economy. Informal sector absorbs the unskilled and uneducated labor which reduces the demand for human capital and ultimately the demand for child schooling. Child labor is unskilled labor so the phenomena of informal sector increases the demand for child labor. Kireenko and Nevzorova (2015) evidenced that share of the informal economy as a percentage of GDP increases the rate of out of school children. The children not attending the school are assumed to be working in labor market. So informal sector in an economy increases child labor.

The coefficient of the economic growth depicts its positive impact on child labor. Hypothetically economic growth should decrease the child labor, but the existence of Kuznets curve in child labor (Abdullahi & Noor, 2015; Kambhampati & Rajan, 2006) explains that initially the increase in economic growth increases the child labor and then it decreases child labor. In our analysis, the economic growth has shown positive impact on child labor. It may be explained as higher economic growth requires more labor to meet the production needs which includes the adult labor as well as the child labor. Furthermore, in developing economies the agriculture sector contributes significantly in GDP which demands unskilled labor that is fulfilled by low wage child labor. Similarly in

developing economies the informal sector is a significant part of the economy so for production when the supply of unskilled adult labor is dried up the demand for child labor increases. In this way economic growth enhance child labor in developing economies.

In the child labor equation, along with informal sector economy and economic growth, we have included the variables of globalization, population growth and age dependency. It was hypothesized that globalization negatively affects the child labor. The results have shown that globalization decreases child labor in developing economies. The globalization increases employment opportunities which enhance per capita income of the economies. It induces the parents to send their children to school rather than to the labor market. Furthermore, the globalization particularly the economic globalization boost the technology transfer and propagate the formal sector and enhance the demand for skilled labor which resultantly decreases the child labor. Neumayer and De Soysa (2005) also suggested that the countries which are more open to trade and that have larger stock of foreign direct investment have lower incidence of child labor.

The population growth in a country has two types of implications for child labor. Firstly, the higher population growth rate results into higher ratio of under-15 dependents which needs higher expenditures for schooling as well as for other welfare dimensions of children like food, nutrition and health. The governments and the households in developing economies cannot meet these requirements and children are sent to labor market. Secondly, the higher population growth results in to increased poverty and decreased environment, hygiene and sanitation standards which increases the supply of child labor. The results of current analysis show that child labor is the consequence of higher population growth in developing economies. In the sample the average population growth of economies during 2001 to 2015 remained 1.96 annually. However, the highest population growth of 4.7 percent belongs to Sierra Leone and that is the country employing the highest level of child labor, i.e. 47.9 percent. Saad-Lessler (2010) also evidenced that high fertility rate is one of the major factors of child labor.

The coefficient of age dependency expressed that age dependency ratio increases child labor. In the developing economies the unemployment insurance schemes are generally non-existent. The public sector provisions like free schooling and child health facilities are scare. A major part of the economies lives below poverty line. On the other hand, fertility rate and population growth rates are high. The informal sector has a major part in the economy and the wages remain uncertain in this sector. All these factors make the dependency ratio a significant factor for the preference of parents to send their children to labor market.

4.3.3. Economic Growth

In the equation of economic growth, the economic growth is measured by GDP per capita growth and the fixed capital formation, globalization and governance are included as explanatory variables besides the endogenous variables of informal sector and child labor. The result of 3SLS indicates that informal sector negatively affects the economic growth. A strong argument for such type of relationship is based on the facts that informal economy is characterized by lack of capital, technology and financing. It is reflection of the unskilled, uneducated and casual labor force having lower wages/incomes, larger households and self-employed households. These factors decrease the labor productivity which adversely affects the economic growth of the nations.

Theoretically the child labor may affect economic growth through different channels in two opposite directions. Firstly, the child labor may increase the economic growth by providing the cheap labor force for production purposes. The economies where labor intensive industries are more prevalent may show such type of relation. Similarly, the economies where there is scarcity of technology and energy, and rural economy is dominant the child labor may positively contribute in economic growth. Secondly, in the economies where industrial and production sector is operated through advanced technology and sophisticated techniques of production the demand for unskilled or semi-skilled labor remains low. In this way child labor being an unskilled labor cannot contribute in the production and ultimately in economic growth. Another channel that devises the effects of child labor on economic

growth is the quality of human capital. The child labor reflects the poor quality of human capital in adulthood which retards the economic growth. The 3SLS results of the current study indicate that child labor positively contributes in economic growth. For the economic development two resources are necessary, first is financial resources and other one is the human resources. The human resources are availed in the form of child labor. The developing economies use this human resource for production and increase their national income. According to Basu and Van (1998) substitution axiom, the child labor and the adult laborers are substitutes. The work that is done by the adult laborers can also be done by the child laborers. The employers employ child laborers at low wages, which contribute in economic growth.

Gross fixed capital formation has been found encouraging effect on economic growth. Capital formation is the addition in the stock of the capital, machinery, equipment, tools, transportation asset and electricity. In the presence of human capital, it increases economic growth as per theory. It is evidenced by Ikechi and Anayochukwa (2014) for Nigeria and Paudel (2014) for Nepal. Gibescu (2010) also found strong correlation between economic growth and capital formation.

The coefficient of globalization suggests that globalization enhances economic growth. Globalization is social, economic and political integration among the countries. Countries exchange their goods, services, culture, ideas and political system. Globalization tends to increase the foreign direct investment and promotes the trade among countries. Technological innovations spread around the world through globalization. Industrial structure gets promoted due to interaction of the economies around the world.

The results in Table 4 suggest that good governance leads to better economic growth. It is comprised of the components like voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. The institution's efficiency, quality of the policies and implementation, political stability, control of corruption and implementation of the rules and regulations enhance economic growth. Olson, Sarna, and Swamy (2000) explained that the countries having good governance have higher levels of growth than the countries having poor governance.

5. CONCLUSION AND POLICY RECOMMENDATIONS

The interdependence of informal sector economy, child labor and economic growth has empirically been investigated through 3SLS technique by using the panel data of 50 developing economies covering the time period 2001-2015.

The major findings are that informal sector economy is positively influenced by child labor but negatively by economic growth. In the exogenous variables the corruption decreases informal sector while population growth boosts informal sector economy.

The child labor is positively influenced by the informal sector economy and economic growth. Population growth and age dependency have shown increasing effect on child labor while globalization has decreasing impact.

The economic growth of developing economies is negatively affected by informal sector economy but child labor positively contributes in economic growth. The capital formation, globalization and governance have encouraging effect on economic growth.

The findings explain that there exists a complex relationship between informal sector economy, child labor and economic growth. It leads to frame a multidimensional policy approach to slide down the informal sector and child labor and to increase the economic growth of the developing nations. For economic growth, the findings suggest that capital formation, globalization and governance are needed to be improved by the developing nations. The globalization will also slide down the child labor as findings depicted. For immense decrease in child labor, population growth and age dependency are needed to slide down. The control of population will squeeze the informal sector economy as well. However, as informal sector is increasing child labor and child labor is increasing economic growth, it needs the identification of policy options to break such type of link between informal sector,

child labor and economic growth. On the other hand economic growth is pushing down informal sector economy that is encouraging for the policy makers to frame the policy to increase economic growth.

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