

## The Remittance and the Private Investment in Nepal

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### **Abstract**

*The paper aims to analyze the relationship between remittance and private investment in Nepalese economy. The study used the Least Squared Regression Analysis with 43 years' time series data of remittance inflow and private investment over the period of FY 1974/75 to 2017/18 of Nepal. The study found that foreign remittance has a significant positive impact on private investment of Nepalese economy.*

**Keywords:** *Remittance, Private Investment, Nepal*

### **I. Introduction**

In a developing country like Nepal, unemployment is a major problem arising due to inadequate investment and lack of industrial development. As the people are unable to find jobs in their home country, they are compelled to travel for blue-collar jobs in order to fulfill the basic needs of daily life, repayment of their previous loan, and to improve the living standards. In Nepalese perspective, the majority of such migrant labourers belong to poor families. These labourers regularly transfer their savings from working in a foreign country to their family members in their country of origin. Such money transferred from a foreign country is referred as remittance. Among the working group of people in Nepal, seeking a foreign employment in developed countries is a normal procedure for better earning opportunities. Thus, remittance has become one of the major and largest sources of income in Nepal, and studies show that the remittance inflow from foreign countries is increasing remarkable (Lamichhane, 2018).

A World Bank report indicating the contribution of remittance in 2017 up to 28.31% of the gross domestic product (GDP) of Nepal (World Bank, 2018) shows that remittance has a greater impact on the Nepalese economy. Nepal Living Standards Survey 2010/11 identified that the remittance is the income source of 56 % of all households in Nepal. Among those households, remittance accounted for approximately one-third of total family income. The nominal average amount of remittance per recipient household in FY 2010/11 was measured NRs 80,436 and nominal per capita remittance received for all Nepal in FY 2010/11 was measured NRs. 9,245 ( Nepal Living Standards Survey 2010/11) . The proper investment of such income into productive sectors can positively impact our economy (Dhungana, 2012; Pant, 2006). However, only a small portion of the remittance is spent rationally into the productive sector of the economy (Bhatta, 2013). Most of the remittance received by the families is spent on unproductive sectors such as purchasing land and constructing buildings, financing of banquets, ornaments, entertainment, imitating the lifestyle of others, and so on.

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The enhancement of productivity and economic development of developing countries is possible through huge capital investment on productive and commercial sectors (Dhungana, 2012). A study conducted by Incaltarau and Maha (2012) to examine the impact of remittance on consumption and investment concluded that the remittance has a more significant contribution to investment than to consumption. Therefore, the remittance has a valuable potential to stimulate economic growth in the economy. Remittance is the largest source of external finance for many developing countries. These countries can accelerate the speed of development by increasing the savings and investment (Rizwan, Parmar & Nawaz 2014). Gheeraert, Sukadi Mata and Traca (2008) identified a higher positive effect on domestic investment with financial sector development in the economy by increasing the remittance. Despite the fact that the remittance income can contribute in capital formation to operate the small and medium level business in Nepal, the implementation of policies and the willingness of remittance recipient households to invest plays a key role to achieve positive results.

It is evident that the private investment plays a vital role in the sustainance of economic growth. There exists a highly positive relationship between investment and growth as the higher rate of investment on physical capital stock results in higher economic growth (Yasmeen, 2011). The remitted income through the formal sector has the potential of being a major source of capital for small and medium scale enterprises. However, the migrant family has not utilized the remittance as productive investment that would contribute on long-run development of the economy (Pant, 2011). Inadequate remittance income, unskilled entrepreneurship, lack of banking system development, and pressure of other expenditure needs have been identified as major factors that prevent the recipient households from investing in productive sectors (Kakhkharov, 2017). As such, remittance is causing a behavioral change in household expenditure trend. The households spend most of the remittance on consumption goods at the expense of investment goods (Cherono, 2013). In the developing countries, the majority of remittance income is primarily spent on consumption goods, real estate, fulfilling the desire of the families for demonstration, and nonproductive uses (Pant, 2008).

Due to the dependence of developing countries on remittance, proper utilization of remittance on productive sector may create a positive impact on the economic growth of the countries (Waqas, 2017). Although there is annual increase in remittance, there has been inadequate effort to utilize such a huge amount on productive sector and it has negatively impacted on the productivity and national economy. Neglecting the utilization of remittance gainfully into investments would not support the stimulation of national economic growth (Dhungana, 2012). Therefore, the researchers and policymakers are making efforts to study the impact of remittance on economic development. Most of the previous studies focused on the impact of remittance on growth, poverty alleviation, consumption, trade imbalance and balance of payment. However, researchers have not yet fully studied the impact of remittance on private investment. Therefore, the objective of this study is to analyze the impact of remittance on private investment in Nepal.

## **II. Review of Literature**

There has been a series of studies to investigate the relationship between remittance and private investment. Buch & Kuckulenz (2004) examined the relationship between workers' remittance and capital flow in developing countries as a sample of 87 countries using large panel data from 1970 to 2000. The researchers used regression and correlation analysis, and identified that the official capital inflow is positively correlated to the remittance. A similar study investigated the relationship between remittance and investment by using panel data of remittance flow to 79 developing countries during 1995-2005 (Bjuggren, Dzansi, and Shukur 2010). The study concluded that the impact of remittance on investment outlay depends on the availability of high-quality financial institution and well-developed credit market.

A study was conducted in Barbados to identify the relationship between remittance and private investment by analyzing the secondary data of 33 year period from 1970 to 2002 and using a formal econometric technique called Dynamic Ordinary Least Squares (Craigwell, Griffith, Boucher & McCaskie 2008). The study found 29% of significantly positive short-run and 25% long-run effect on private investment. The enhancement of the investment with higher economic growth from remittance income is possessed by improving the functioning systems and processes of an efficient flow of remittances.

Yasmeen, Anjum, Ambreen & Twakal (2011) studied the macroeconomic impact of remittances on economic growth rate, private investment and total consumption in Pakistan. The ordinary least square regression model was used to explore the impact of remittance by using 25 years' time series data collected from the economic survey for the time duration of 1984-2009. The study identified a positive relationship between private investment and the gross domestic product, and the worker's remittance. The remittance income turned as an important source of capital formation in Pakistan to increase the private investment.

Recently Issifu (2018) examined the relationship among remittances, institutions, financial sector development and the growth rate of domestic investment by using a balanced panel data of five Sub-Saharan African countries from 1984 to 2014. The study used econometrics and regression model and concluded that the remittance largely effect on investment in the presence of better financial institutions in the economy. The study also concluded that the remittance inflows are effective in stimulating domestic investment in the improved institutional environment. Similarly, Le (2011) concluded that the migrants will increase their investment in home country expecting monetary gain in the presence of a good financial market conditions. The migrants may invest when there is lower marginal utility of current consumption than the expected gain in marginal utility of future consumption. Further, Okodua (2013) also identified a significant and simultaneous positive impact on the overall level of private investment from workers' remittance inflows to Sub-Saharan African countries. Besides in the form of financial flow, there also exists the positive impacts on capital flows. The linear dynamic panel data model covering a period of twelve years secondary data from 2000 to 2011 was used and estimated using the dynamic panel data regression model.

### III. Research Methodology

#### Research Design

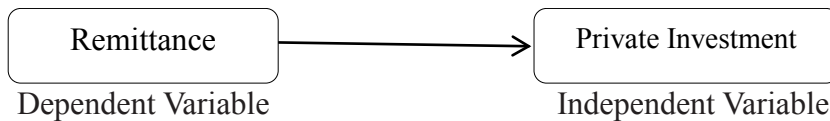
To analyze the impact of remittance on private investment, private investment is taken as a dependent variable and remittance income is taken as an independent variable. The first different method is used to improve the presence of the problem of positive autocorrelation. F-test and t-test are used to test the hypothesis.

#### Nature and Sources of Data

The study is based on secondary data published by the Ministry of Finance, Government of Nepal. The time series data starting from the period of FY 1974/75 to FY 2017/18 is used for analysis.

#### Research Framework

The conceptual research framework of the study is as follows:



*Figure 1.* Research framework of the remittance and private investment

#### Research Hypothesis

The hypothesis of the study is that there is positive impact of remittance on private investment.

#### Regression Model

The regression equation is

$$Y = \alpha + \beta X + \mu$$

Where, Y=Private Investment

X=Remittance

$\alpha$ =Constant

$\beta$ =Coefficient of Remittance

$\mu$ =Error Term

### IV. Interpretation of Results

The regression analysis result of the relationship between remittance and private investment is computed by using SPSS program. The summary of the result that is presented in table 1 shows the presence of positive autocorrelation as Durbin – Watson (DW) statistic in 0.669 figure. The result is found on the basis of 43 years data covering from FY1974/75 to FY2017/18 by using the least square method and the dependent variable is private investment.

Table 1

*Regression Result*

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	1517.831	687.665	2.207	0.033
Remittance	0.82703	0.028	29.836	0.000
R- Squared	0.954943			
Adjusted R- Squared	0.953871			
Standard Error of Regression	3953.133			
Prob (F-statistics)	0.0000			
Sum Squared Residual	656344891			
F-statistics	890.1614885			
Durbin-Watson stat	0.669			

Dependent Variable: Pvt. Investment

Method: Least Squares

Sample: 1974/75-2017/18

Included observation: 43

For the improved regression analysis model, the first difference method is used. The improved regression result is shown in table 2.

Table 2

*Regression Results Taking the First Difference Method*

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	632.02136	571.7668	1.105383	0.275438
Remittance	0.686905162	0.16676	4.119118	0.00018
R- Squared	0.292702639			
Adjusted R- Squared	0.275451484			
Standard Error of Regression	3220.620577			
Prob (F-statistics)	0.00018			
Sum Squared Residual	425268273			
F-statistics	16.96713			
Durbin-Watson stat	1.766			

Dependent Variable:  $\Delta$ Private Investment

Method: Least Squares

Sample: 1974/75-2017/18

Included observation: 43

From table 2, the coefficient of determination  $R^2$  shows that 29.27% variation in private investment is caused by remittance income received from abroad. The regression result with the use of the first difference method showed the value of Durbin-Watson (DW) statistic in 1.766 figure indicating

the absence of autocorrelation. The F-statistics 16.96 also showed the presence of a relationship between remittance and private investment. The computed F-statistics is significant at 0.000 level. Similarly,  $\Delta$ private investment is also significant at 0.000 level indicating a significant positive relation between  $\Delta$ private investment and  $\Delta$ remittance. Therefore, the alternative hypothesis is accepted and it indicates that the remittance income has a positive and significant impact on private investment in Nepal.

## 5. Conclusion

The results of the study indicate that the remittance income has a significant impact on private investment in Nepal. Hence, it can be concluded that the entire remitted income is not only consumed but also some portion of the remittance is invested. Therefore, the government should carry out the effective policies for receiving the remittance through the formal financial sectors only and should channelize the private investment into productive sector.

## 6. Limitations

This study is based on only two variables i.e. the remittance and the private investment in Nepal. The study has covered the data starting from FY 1974/75 to 2017/18 AD published by Ministry of Finance, Government of Nepal.

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**Appendix**

## Trend of Remittance and Private Investment in Nepal

(Rs in Ten Million)

<b>Fiscal Year</b>	<b>Remittances</b>	<b>Private Investment</b>	<b>Fiscal Year</b>	<b>Remittances</b>	<b>Private Investment</b>
1974/75	20.43	171.8	1996/97	559.5	4140.2
1975/76	23.13	181.1	1997/98	698.78	4280.2
1976/77	26.83	189.1	1998/99	1031.46	4138.1
1977/78	21.94	218.1	1999/00	1266.23	4688.8
1978/79	30.31	212.5	2000/01	4721.61	6668.71
1979/80	35.73	221.5	2001/02	4753.63	7244.99
1980/81	48.42	247.6	2002/03	5420.33	8335.38
1981/82	42.71	297.8	2003/04	5858.76	9422.62
1982/83	54.97	363.5	2004/05	6554.12	10032.61
1983/84	61.41	376.8	2005/06	9768.85	11802.3
1984/85	69.07	575.7	2006/07	10014.48	12869.19
1985/86	80.91	552.2	2007/08	14268.27	14545.29
1986/87	129.26	709.8	2008/09	20969.85	16676.1
1987/88	160.84	793.1	2009/10	23172.53	21122.26
1988/89	162.86	849	2010/11	25355.16	22892.44
1989/90	174.79	903.4	2011/12	35955.44	24562.93
1990/91	212.83	1409.7	2012/13	43458.17	30758.62
1991/92	231.65	1894.5	2013/14	54329.41	36703.41
1992/93	299.43	2550.9	2014/15	61727.88	48556.85
1993/94	346.91	2865.2	2015/16	66506.43	48679.17
1994/95	506.36	3330	2016/17	69545.24	67115.01
1995/96	428.36	3845.7	2017/18	75505.86	79200.05

Source: Ministry of Finance, Government of Nepal