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The Economic Impact of Globalized Education in Nepal

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Abstract

The global trends in higher education highlight the growing popularity of international education shift towards innovation and better productivity that demand updated and high-quality human resources. And on the supply side, it creates pressure on families to send their children to educational institutions not only within the country but also abroad. In the context of Nepal, the trend of opening higher education institutions and students going abroad for study accelerated after 1990. Students enrolled in the country and abroad are establishing networks to work through the exchange of ideas and products in the global market. In this paper, I present the primary findings from my research on the economic impact of globalization on education in Nepal by using the supply side human resource data of student enrollment in higher education in the country and Nepali students abroad, and its impact on trade, migration, foreign direct investment and remittance to the national economy of Nepal. For this study, 20 years of secondary data of above mentioned variables have been analyzed with the help of the econometric method of causal relations. Results show a positive impact of globalization on the economy of Nepal. The findings will be useful for making policy recommendations to developing countries like Nepal to enhance education by grasping the opportunities globalization offers.

Keywords: globalization, higher education, study abroad, remittance, foreign direct investment, grasping the opportunities.

Introduction

Globalization in this study relates all three indicators as economic, social, and political. It is the aggregate result of these indicators that increasingly link the economic, social, and political index of the country, and all the indicators show the value as of 0-100. This indicates a respective value that the countries have made, and the index of globalization in comparison to each other has been analyzed for the sake of countries' efforts. This paper studied "global education" through the number of Nepali students enrolled in higher education in the country and abroad, and the students' enrollment in the foreign universities, also known as "internationally mobile students." For the sake of this study, the secondary data are carried out in simple data analysis for the study of globalization, higher-level

enrollment in the country and abroad. Furthermore, the study incorporated variables such as: GDP, higher-level enrollment, remittance, trade openness, labour abroad flow, global index, and foreign direct investment in models I and II. The impact is analyzed with the help of the econometric method that is causal relations.

Internationalization of Higher Education

UNESCO (2015) defined that an internationally mobile student is an individual who has physically crossed an international border between two countries with the objective to participate in educational activities in a destination country, where the destination country is different from his or her country of origin. It explains the Higher Level Institutional Arrangement set up by the Government and the private sector in the country as: Universities, Colleges, research centers, Institutions, curriculum and networks that involve and deliver all kinds of learning capabilities to students in the country and abroad. Furthermore, the capacity as IHE is directly or indirectly related and involved in creating or connecting the employment opportunities nationally and internationally.

Education as a Trade in Services

A few developed countries have been attracting international students through their high-quality education, which guarantees their future with skill and knowledge and their application in productive sectors. For this, the countries have developed the curriculum to cope with the need of the present era to utilize available resources. The new consumer with new products can enhance the trading activities from innovative education and communication network.

Education and Remittance

Globalization of education refers to the student migration from one country to another seeking product-based skill and its utilization in income generation. The total remittance, inclusive of students' income from abroad, may not be included indirectly.

Education and Migration

Migration is increasingly helping the economic performance by moving people from one country to another. When globalized education prepares the way of opportunities in other countries, it ensures the best societal framework and

settlement as the people always seek new and new capabilities and their utilization. People see a unique future abroad due to education and effective network.

Economic Impact of Globalized Education

From the various literature, the researchers conclude that the economic impact of education refers to the change in the economic condition through:

- Change in income of the people and their purchasing power influence the demand for education and the consumption of high-quality goods and services in the country and abroad.
- Education collaboration with foreign universities, exchange of students and faculty members influence the education environment of both countries.
- Educational earnings or educational loan from the public sector influences the banks to advance the capacity for lending and accepting deposits.

Literature Review

Docquier and Rapoport (1998) suggest that the optimal migration rate of a highly educated population is likely to be positive for the economy.

Noorbash et al. (2001) analyze the econometric evidence for developing countries, showing that educational achievement (human capital) correlates with FDI inflows.

Arrow (2002) examines the ratio of Government consumption to GDP, index of the rule of law, international openness, and population variables; the result shows positive results in education with the capacity of adopting new technologies.

Duke (2002) finds that the investment in human capital becomes the key for the resource utilization and economic growth of the economy of a country.

Balusabramanyam (2003) explains that the many Indians studying or teaching at American Universities have helped the IT revolution in the US and facilitated the export of IT services to the US from India.

Beine et al.(2003) explain, using a cross-section of 50 developing countries and find that most countries combining low levels of human capital and low migration rates of skilled workers are affected positively by immigration.

Stevens and Weale (2004) focus their study on answering whether the high level of GDP in France and the UK is a consequence or cause of the high level of education. The study results conclude that a 1% increase in the students' enrollment rate in education raises GDP by 0.35%.

Aziz, et al.(2008) examine education and economic growth in the United States based on investment in the African countries and conclude that there is a positive association between higher education spending and per capita income growth rate.

Azam (2013) examines the relationship of workers' remittance with economic growth by using the empirical data of four developing countries in South Asia and finds a significant and positive relationship with each other.

UNESCO (2015) analysis relates that the vision of Education 2030 also reaffirms that education is a public good. This implies that the state is the main duty bearer in protecting and fulfilling the right to education as a shared societal endeavor of public policy formulation and implementation. The center part of this policy analysis is to share responsibility and commitment to solidarity at the local and global levels, which implies the great role of globalization in human resource mobilization in the country and abroad.

Globalization Index in Nepal

The Globalization Index, which includes the combined effects of the economy, political and social indicators, shows the continuously increasing situation of Nepal. Table 1 shows the value of globalization as 34.57 in the year 2003, and it reaches 48.40 in 2018 based on the value of 1-100, where Switzerland's value is the highest, i.e. 90.97 out of 100. And Somalia has the lowest position with a value of 30.16.

Table 1

Globalization Index of Highest Rank and Lowest Rank Countries and Nepal

Year/ Country	Highest Rank		Lowest Rank		Rank	Nepal	
	Country	Value	Country	Value		Value	Result
2003	Sweden	88.15	Bhutan	26.24	178	34.57	-
2008	Belgium	89.87	Somalia	27.68	165	43.20	Increased
2013	Switzerland	90.32	Somalia	28.80	165	46.78	Increased
2018	Switzerland	90.97	Somalia	30.16	158	48.40	Increased

Source: Adapted from <https://www.theglobaleconomy.com/>. Copyright 2021 by The Global Economy.Com.

The conclusion is that the value has been increasing every five years, and Nepal has an optimistic horizon from a globalization point of view. The effective implementation of all the policies will ensure the expected result in the days to come.

Globalization Index Indicators in Nepal (2011-2018)

The Globalization Index of Nepal shows the positive change in the economic indicators due to the positive transformation of the overall economic activities due to globalization. Since 1990, the liberalization of the economy and its implementation of all the policies have been made positive to connect the economy in the international arena. Table 2 depicts that the indicators of the economic index have been showing an increasing effect every year. The data shows 27.31 values in the year 2011, which is 32.48 in the year 2018. Similarly, the social index value was 44.26 in the year 2011, and it was 46.72 in 2018. Likewise, the data shows that the political index value has been increasing from 65.06 to 66.71 from 2011 to 2016 and gradually decreasing from 66.71, 66.69, and 64.86 in 2016, 2017, and 2018.

Table 2

Globalization Index Indicators in Nepal (2011-2018)

Year	Globalization Index	Economic Index	Social index	Political Index
2011	45.56	27.31	44.26	65.06
2012	45.89	27.59	44.34	65.68
2013	46.78	28.78	45.56	65.96
2014	48.01	31.51	46.58	65.90
2015	47.92	30.42	47.17	66.15
2016	48.76	32.07	47.45	66.71
2017	48.98	32.07	48.15	66.69
2018	48.08	32.48	46.72	64.86

Source: Adapted from <https://www.theglobaleconomy.com/>. Copyright 2021 by The Global Economy.Com.

From the data, on average, we can conclude that the Globalization Index value of Nepal is positive, but it is not significant as expected for the overall growth and development of the economy.

Higher Education Enrollment, International Students and Foreign Employment

The efforts made by the government sector as well as the private sector succeeded in increasing the enrollment of higher education in Nepal, although graduation rates were somewhat disappointing. Between 1998 and 2019, enrollment in higher education has increased by about 436.24 percent, from 100390 to 538333 in Nepal during the period. At the same time, employment has also increased at a very high number and rate. Table 3 shows the enrollment number of the students in higher education in Nepal, that the number in the year 1998 was 7745, and 236208 in the

year 2019. The increment rate was 2949.81 percent. It was due to the implementation of the economic liberalization policy in the country and the main effects of globalization in education. Likewise, international students from Nepal are increasing every year. The number was 19661 in the year 2008, and it reached 85758 in the year 2019, which was increased by 335.26 percent.

Table 3

Higher Education Enrollment, International Students and Foreign Employment

Year	Higher Education Enrollment	International Students	Foreign Employment
1998	100390	NA	7745
2003	129785	NA	105043
2008	203529	19661	249051
2013	678047	32241	450889
2018	486623	66853	354098
2019	538333	85758	236208

Source: Adapted from <https://www.mof.gov.np/site/publication-detail/3105>.

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The data depicted in Table 3 show the increasing number of higher education student enrollment every five years up to 2013, and from when the number fluctuated, decreasing in 2018 and increasing in the year 2019. The number of students going abroad is increasing continuously. Furthermore, the data show the increasing level of foreign employment from 1998 to 2013 and the decreasing level in the last year, 2018 and 2019. In conclusion, we may hope that the country is changing policy towards the development of high-quality human resources in the country and sending the quality human resources abroad with the expectation of a large amount of remittance and attracting adequate foreign direct investment in the country to boost up the economy.

Research Methodology

Research Design

This survey has examined the relationship between GDP as a dependent variable and the other six as the independent variables. Independent variables are Higher Education Enrollment, Globalization Index, Remittance, Foreign Direct Investment, Trade Openness, and Labour Supply to Abroad. The study has employed a causal comparative research design in order to observe the direction, magnitudes, and relationship between dependent and different independent variables. So, it helps in analyzing the cause-and-effect relationship.

Nature and Source of Data

This study is carried out using secondary data in the analysis. The sources of data are: the secondary data of the Ministry of Finance, the Ministry of Education, and UNESCO. Likewise, the data from the Global Economy.Com, Migration Report for the period of 20 years (1998 – 2018) are incorporated.

The Model:

The equation to be estimated has been specified as under:

$$Y_t = \beta_0 + \beta_1 HE_t + \beta_2 REMIT_t + \beta_3 TO_t + \beta_4 LA_t + \beta_5 GI_t + \beta_6 FDI_t + e_t \dots\dots\dots (1)$$

$$Y_t = \beta_0 + \beta_1 REMIT_t + \beta_2 FDI_t + e_t \dots\dots\dots (2)$$

Where,

Y_t = GDP of the year t.

HE_t = Higher Education Enrollment Students Number of the Year t.

$REMIT_t$ = Remittance of the Year t. TO_t = Trade Openness of the Year t.

LA_t = Labour Abroad Flow of the Year t. GI_t = Globalization Index of the Year t.

FDI_t = Foreign Direct Investment of the Year t.

e_t = Error Term

Coefficients β_0 = Constant.

Model I: Determinants of GDP in relation to remittance and FDI and other independent variables

Result Analysis:

The variable of interest, which are remittance (REMIT) and labor going abroad (LA), is found positive and significant. The coefficient is statistically significant at less than 1% and 1%, respectively. The coefficient size shows a 0.003 units increase in GDP as a 1% level of change in the remittance, controlling other factors.

Table 4

Determinants of GDP in Relation to Remittance and FDI and other Independent Variables

Variables	Coefficients	Std. Error	t-value	p-value
(Constant)	1.531	7.558	0.203	0.842
HE	0.000	0.000	-0.545	0.594
REMIT in Million \$	0.003***	0.000	8.827	0.000
TO	-0.049	0.068	-0.714	0.486
LA	0.000**	0.000	-2.907	0.011
GI	0.188	0.157	1.202	0.248
FDI	1.786	1.271	1.405	0.180
No of Observations: 19, R-square: 0.987, Adjusted R-Square: 0.982, F-value: 196.229, F-sig: 0.000				

Note: Significant at *** less than 1%. ** less than 5%. *less than 10%

Source: Output estimated by the researcher.

The findings support and justify the students going abroad and their contribution to the economy. The coefficient of Higher education enrollment (HE), Globalization index (GI), and foreign direct investment (FDI) are positive but not significant. Finally, the trade openness (TO) seems to have a negative impact on the economy of Nepal that has been struggling with the problem of trade deficit for the last 20 years.

Model II: Determinants of GDP in Relation the Remittance and FDI Result Analysis

Result Analysis:

According to Noorbakash et al. (2001), econometric study evidence for the developing countries shows that educational achievement (or human capital) is correlated with FDI inflows (as cited in Willem, 2005). The result analysis from the equation (2) variables, the remittance (REMIT), is found positive and significant. The coefficient is statistically significant at less than 1 percent. The size of the coefficient shows 0.003 units increase in GDP as a 1% level of change in the remittance, controlling other factors.

Table 5:

Determinants of GDP in Relation the Remittance and FDI

Variables	Coefficients	Std. Error	t-value	p-value
(Constant)	4.707	0.436		0.000
REMIT in Million \$	0.003***	0.000	0.942	0.000
FDI	2.419	1.471	0.072	0.117
No of Observations: 19, R-square: 0.978, Adjusted R-Square: 0.976, F-value: 421.293, F-sig: 0.000				

Note: Significant at *** less than 1%. ** less than 5%. * less than 10%.

Source: Output estimated by the researcher.

The findings support and justify the students going abroad and their contribution to the economy through remittance. The coefficient of foreign direct investment (FDI) is positive but not significant, although it has contributed a 24 percent level of unit.

Conclusion

- The variables of interest, which are the remittance (REMIT) and labour going abroad (LA), are found positive and significant. The coefficient is statistically significant at less than 1 and 1 percent, respectively. The coefficient size shows a 0.003 units increase in GDP as a 1 percent change in the remittance, controlling other factors, where the labour is the convergence of education.

- The findings support and justify the students going abroad and their contribution to the economy through remittance. The coefficient of foreign direct investment (FDI) is also positive and significant in relation to remittance and foreign direct investment at 24 percent level of unit.

Policy Implications

- Encourage students to choose more competitive advantage skill of education and country, ensuring high-quality education and income generation.
- Implement effective liberalization and export promoting policies and programs that can ensure a high level of income from the trade.
- Implement policies and programs to encourage students and other absent populations to return to the country after a certain period of time and apply their capacity to nation building.
- Foster remittances and foreign direct investment for education and use of diaspora to benefit development in the home country by using private and public capacity.

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