Human Capital and Economic Growth: Evidence from Selected Asian Countries

Syed Wahid Ali Shah
Ph.D. scholar, School of Economics, Finance and Banking, University Utara Malaysia

Syed Khurram Shahzad
M.Phil scholar, Department of Economics, Bahauddin Zakariya University Multan, Pakistan

Muhammad Abrar ul haq
Ph.D. scholar, School of Economics, Finance and Banking, University Utara Malaysia

Abstract
Impact of human capital on economic growth of selected Asian countries was examined, in the context of a visual search task. The main aim of this study is to find the empirical relationships among human capital and economic growth by using panel data technique for the period 1990-2012. In this study Government Expenditure on Health and gross school enrolment at secondary level used as a proxy variables for measuring human capital. The results of econometric estimation and panel least squares estimates indicated, a strong positive association of government expenditure on health and gross fixed capital formation with GDP. Another result of this study is that the gross school enrollment has positive but insignificant impact on gross domestic product. The study recommends that Government should escalate the enrollment of students in primary and secondary level, incentives to the people working abroad and should also facilitate the private sector to develop the labor force. Moreover, government should increase their expenditure on different areas of health sector such as for the development of infrastructure of health sector and provision of better health care facilities to the patients.
Keywords: Human capital, Economic growth, Capital, Asian countries.

1. Introduction

As an economic concept human capital is at least two centuries old, but its incorporation into the mainstream of economic analysis and research is not very old. Human-capital activities involve not merely the transmission and embodiment in people of available knowledge, but also the production of advance knowledge. Human capital analysis deals with acquired capacities which are developed through formal and informal education at school, home, and through training, experience and mobility in the labor market. Economists since Adam Smith recognized the importance of education as a type of private or social investment (Mincer 1984).The investment in human capital effectuates the improvement in financial reinforcement and connects to the phase of economic growth (Adam Smith, 1776).

Education levitates the total productivity and escalate the remuneration of individuals who become a part of human capital after getting skills, abilities and knowledge. This has been done due to the consistent level of income of individuals that expedite the all other factors of human capital to enhance the productivity. The human capital mainly focus on education in which different level of education, training, linking, exploring and some other capabilities promoted by the inner capacities of person, is being occupied more critically by others and so on (Amartya Sen,1999).The economists accentuated on the investment in human beings for the achievement of economic growth. The observed and circumstantial   relationship between economic growth and human capital verified by the various studies and empirical evidences. But the problem is that which factor or indicator of human capital has mainly effect the level of economic growth. The incorporation observed between the human capital and economic growth will cause to the development of human capital theories.

The latest and advanced growth theories mainly elucidate the devoir of education in the development of human capital. Investment in human beings elevate and endorsed the capabilities and skills which will cause to enhance their productivities and affects economic growth and also influence positively the financial condition of individuals. The human capital indicators, education and health as well as some measures of economic growth are necessary to investigate to fulfil this task (World Bank 2000:105).Physical capital and natural endowments are the factors which affect the economic growth in slow manner but the human capital is considered as a dynamic factor which affects the economic growth in consistent form. The skills and abilities of individuals can be improved with the promotion, development and focus on education and health variables. Economic growth is a primary aim of developing countries, and a recurrent theme in the human capital and economic growth literature is the role of education and health in this process. Understanding of capital is that it may be a bank account, steel plants in the country area and shares of a company. Unequivocally, all these are the pure form of capital in a sense because generate income and other useful outputs in the long run. Furthermore, a computer training course, Schooling, and the expenditure on health and educational and motivational lectures on

punctuality and honesty are capital too. All these forms of capital can ameliorate health and raise personal earnings. The reason, expenditures on education, training and medical care, are investments in capital. However, this type of investment generates human, not physical or financial, capital. The reason behind this phenomenon is a person cannot apartheid from his or her knowledge, skills and Health (Becker et al, 1994).

It is noteworthy, in most of the countries of Asia except the countries of East Asia, growth rate significance and the indicators of human capital are not satisfactory. Low government expenditures on education and health sector and less school enrollment cause the lower economic growth in the South Asian countries. While the opposite picture sighted in the East Asian countries. The rapid growth in the East Asian countries has the great lesson for the other regions of Asia. Harbison and Myers studied the relationship between manpower and education in the developing countries. Development of human capital is one of the essential conditions for financial development (Harbison and Myers, 1964).

A close relation between human capital and economic growth which become the principal cause of intention to the establishment of human capital theory. Investment which has been done in people elevates their individual development and improves the ability to get rid of poverty. Some measures of income security are required to fulfill this task of development as well as the education and health facilities (World Bank 2000:105).

Natural resources and Capital are regarded as the slow factors, on the other hand human capital is active factor of production in this modern Era. Economic growth is not possible without the development of competences and skills of human beings through education, health and other factors. The economic indicators like enrolment rate at school level, literacy rate, services of health and problems of pure water and sanitation demonstrate that the pace of human development is very low in Asian countries. Most of the countries of Asia have a very serious situation regarding the significant growth rate which is not at the level of developed countries in west and the indicators of human capital are not also very satisfactory. As in the past period, government invested in physical capital only, neglecting the human capital sector, resulted unemployment, illiteracy, shortfall of electricity and high poverty level. As the matter of Pakistan is concerned the accumulation of capital is lower than the growth rate of population. Unskilled labor with low production and lack of resources are obstacles in the way of economic growth. Countries of South Asia are growing faster than Pakistan after seeing this entire situation, following questions aroused:

- Why other economies of the world are achieving growth rate more than the growth rate of Asian countries?
- Which are the main factors causes of high economic growth in other countries of the world?
- Why the South Asian countries are incapable and incompetent of achieving the high positions and ranks in economic development indicators than East Asian economies?
- What are the effects of school enrolment, government health expenditures, physical capital, labor force and personal remittances on economic growth and GDP in selected Asian Countries?

The most important objective of this study is to sort out the answers of some basic questions regarding human capital and economic growth. Secondly, the aim of the study is to give some valuable suggestion to resolve these questions. The specific objectives of study are as follows:

- To intricate and elaborate the development of human capital in the Asian countries.
- To evaluate theoretical concepts about formation of human capital and economic growth.
- To assess historical trends and aspects of human capital development in Asian economies along with other factors which effect human capital and make their impact on economic growth.
- To find the empirical relationships among the variables which affect the human capital and economic growth.
- To wind up the results of the research and to define some recommendations about the subject matter.

2. Literature review

Impact of human capital on economic growth is not a new phenomenon but has the relative importance in the current research studies. The role of human capital expanded than the role of physical capital as human capital plays a dynamic and significant role in the production process.There is no shortage of empirical and theoretical studies regarding the role of human capital to economic growth and development, different studies have used either time series data or cross sectional data with different conclusions.Human capital was firstly considered as substitute to technological process to improve growth [Lucas1988].Traditionally, education and learning by doing were considered as main sources of human capital and were used as a factors in many growth models. Social capital has positive effect to economic growth in a similar way, as physical capital increases, human capital also increases which ultimately leads to growth. For that reason, investment in human capital will improve economic growth.

In the human capital case, it is generally considered as a positive contributor in the economic growth. Several studies have shown that human capital is positively related with economic growth [Romer, 1990; Becker,

1990; Mankiw, Romer, and Weil, 1992; Barro, 1991, 1994; khan, 2005; Qadri, 2011; chani et al 2012]. On the other hand, different studies conclude that education has minor or negative effects on growth, considering it consumption expenditure that directly affects individuals. As the education is financed with resources that directly involve in productivity, primary education is not easy and often ineffective and those who do receive secondary education are not necessarily well prepared. Therefore, human capital and capital both have inverse relation with GDP in long run [Arrow, 1973 and Spence 1973; Abbas and Foreman 2008; Chaudhry, 2010]. However human capital has proved itself to be one of the most significant determinants of sustainable economic growth. The positive and substantial impact of human capital on development through education is being well recognized. Educational institutions prepare the individual to be able to participate actively in all walks of life including economic activities. Net school enrolment ratio has positive and significant effect on economic growth in short-run as well as in long-run (lau et al, 1993; Afzal et al, 2010).Human capital (knowledge, skill, experience, education) has positive impact on the business rate of success which ultimately affect economic growth (Abrar-ul-haq et al, 2015).

Wollf (2000) investigated the role of human capital investment in economic growth. The data used in this study was secondary for 24 OECD countries on GDP, employment, and investment over the period 1950 to 1990.The descriptive statistics shows a positive association between years of formal education and labor productivity levels among OECD Countries. The increase in educational attainment seems to correspond to the growth in labor productivity over post World War II years. Moreover, econometric results show a positive and significant effect of formal education on productivity growth.

Freire-Seren (2001) investigated the role of human capital accumulation in economic growth. The author used pooled data ranging from 1960-1990. The sample period is divided into five year intervals. Different methodologies used in this study are OLS method, Simultaneous Equation Model and Speed of Convergence. The results probed the empirical evidence on the level effect, by simultaneous dependence between income level and human capital. The level of income has positive and significant effect on the process of human capital accumulation and that will cause to achieve the high economic growth.

Faridi et al. (2010) estimated the effect of education level on level of employment. In this study primary data from Bahawalpur district of Pakistan was used. Logistic regression technique has been used to estimate the coefficients of the variables. The operational model consists of different variables i.e. years of education, enrolment, health status, household assets and marital status. The study has concluded that experience of worker has positive and significant impact on level of education. Opportunities of employment and level of education both were positively correlated. Furthermore, study suggests that Government should provide health and education facilities to all the people of Pakistan.

Hanushek (2013) explored the role of human capital as a driver of   Economic growth in developing countries. The main focus of the study was cognitive skills rather than school attainment. The results shows that the interaction of cognitive skills and OECD countries is slightly negative indicating that skills are more important in developing countries. Moreover, differences in economic growth across countries are closely related to cognitive skills as measured by achievement on international assessments. Cognitive skills incorporated into empirical growth models showed school attainment has no independent impact on growth. The study suggests that slowing the pace of the establishing of schools to permits the development of quality schools appears to be a good solution.

Haq et al, (2015) investigated the impact of social capital on educational attainment. The author used primary data of southern Punjab (Bahawalpur and Bahawalnagar District), Pakistan from 600 household head. This study finds that the social capital is more important than financial capital. Results also proves that the positive and significant relation among educational expenditure and educational attainment. The study considered the parent's education as human capital and results shows that parent's human capital have strong and positive effects on children education. The study recommends that focus of educational policies should be on financial capital and put close consideration to hidden factors that plays key role in education development and economic growth.

3. Theoretical Framework and Methodology

Investment in human capital is a very critical term which has always positive and significant impact on growth rate. There are two important explanatory variables which accelerate the human capital are education and health. Health plays a vital role for the development of human capital. The public spending on education and health may cause to the development of human capital and that will accelerates the economic growth. The total spending on health sector may be calculated in this study as a percentage of GDP. The other important human capital variable is Gross School Enrolment at secondary level. There are two different aspects of gross school enrolment i.e. gross primary school enrolment and gross secondary school enrolment. Both are relatively important in the development of human capital that may cause to increase economic growth. The study include gross school enrolment at secondary level in percentage. Here in this study Government Expenditure on Health and gross

school enrolment at secondary level used as a proxy variables for measuring human capital. Lucas used the term "human capital" for the first time in production function. Lucas model is based on two sector growth model. In this special growth model, Lucas introduced the following production function:

$$Y = AK^{\alpha} (uhL)^{1-\alpha}$$

Where 'Y' represents to the total growth and explained variable. The explanatory variables used in this growth model are 'K' refers to as capital, Efficiency parameter set in this model by 'A' and 'U' denotes the total production with respect to time by total labor inputs which working in production process and 'L' is related to total labor and 'h' is the stock of human capital. In the light of Lucas model an econometric model was built to investigate the relationship between human capital and economic growth. Econometric model of the selected variables used in this study is given as follows,

$$GDP = \beta_0 + \beta_1(LF) + \beta_2(K) + \beta_3(GEH) + \beta_4(SE) + \beta_5(REM) + \varepsilon$$

GDP =   Gross Domestic Product
LF   =   Labor Force
K   =   Gross Fixed Capital Formation
GEH =   Government Expenditure on Health
SE   =   Gross School Enrollment
REM =   Personal Remittances
 ε =   Error Term

To examine the relationship between human capital and economic growth, the above specified model has been analyzed by employing the method of Panel Data Regression. The study is based on the secondary sources of data. The data are collected for the period of 1990 to 2012. The data for this study are obtained from World Development Indicators of World Bank. The sample comprises of 16 selected Asian countries from the four corners of Asia for the better understanding of human capital and economic growth relationship. The selection of countries on the basis of data availability describes the random economic characteristics of these countries. List of countries region wise included in the sample are given in the table below.

Table 1: List of Selected Asian Countries

Sr.	Name of Country	Region
1	China	Asia and the Pacific
2	Indonesia	Asia and the Pacific
3	Malaysia	Asia and the Pacific
4	Japan	Asia and the Pacific
5	Pakistan	Asia and the Pacific
6	India	Asia and the Pacific
7	Sri Lanka	Asia and the Pacific
8	Bangladesh	Asia and the Pacific
9	Islamic Republic of Iran	Asia and the Pacific
10	Turkey	Europe and Central Asia
11	Saudi Arab	Middle East and North Africa
12	Qatar	Middle East and North Africa
13	Russia	Europe and Central Asia
14	Mongolia	Asia and the Pacific
15	Singapore	Asia and the Pacific
16	Philippines	Asia and the Pacific

The description of variables is as follows.

Table 2: Variables Measurement

Variables	Measurement
Dependent Variable	
Gross domestic product	Gross domestic product at current US dollars
Independent Variables	
Labor force	People aged 15 and older, who are economically active population in millions
Capital	Gross Fixed capital formation in current US dollars
Government expenditures on health	Government expenditure on health as a percentage of GDP
School enrollment	Percentage of Gross secondary school enrollment
Personal remittance	Personal remittances in current US dollars

Descriptive Analysis

In this analysis of descriptive statistics study obtained the important quantitative descriptions of gathering data and explains them in disciplinary form. The descriptive statistical analysis reviews in summary form a given data

set and a combination of descriptive coefficients which represents the whole population or sample and also used to define the central tendency of data and inconsistency of dispersion of measures. The descriptive analysis stipulates the modest abstracts and measures of data which are simple and straightforward also. The descriptive statistics of the variables is given in following table 3.

Table 3: Descriptive Statistics of the Variables

	GDP	GEH	SE	REM	LF	K
Mean	**7.16**	**2.47**	**69.58**	**4.76**	**1.13**	**2.04**
Median	1.62	1.96	72.19	1.56	35047147	3.33
Maximum	8.23	8.44	114.27	6.25	7.88	3.83
Minimum	7.68	0.59	20.24	5500000.	746387.0	1.51
Std. Dev.	1.41	1.53	20.77	8.54	1.99	4.68
Skewness	2.78	1.30	-0.27	3.69	2.32	4.11
Kurtosis	10.22	4.76	2.29	19.17	7.14	24.43
Jarque-Bera	1060.31	126.32	10.16	4032.94	495.86	6720.62
Probability	0.000	0.000	0.006	0.000	0.000	0.000
Sum	2.19	758.25	21292.89	1.46	3.45	6.24
Sum Sq. Dev.	6.10	714.87	131610.1	2.23	1.21	6.69
Observations	306	306	306	306	306	306

Note: All the estimations are carried out by E-views 7 (Quantitative Micro Software)

The study used the annual data of 22 countries ranging from 1990 to 2012 and used the annual observation in this descriptive analysis. The average of gross domestic product is 7.16 which estimate in the descriptive statistical analysis and its standard deviation is 1.41. The mean of government expenditure on health is 2.47 after the descriptive statistical analysis with standard deviation of 1.53. The descriptive statistical analysis finds the average of gross school enrollment calculated is 69.58 and the standard deviation of gross school enrollment calculated is 20.77. The mean value of personal remittances calculated is 4.76 with the estimated standard deviation of 8.54. The present descriptive statistics analysis calculated the mean of labor force is 1.13 and the standard deviation of labor force calculated is 1.99. The average gross fixed capital formation estimated is 2.04 and the estimated standard deviation is 4.68.The measurement of skewness is of the asymmetry of the probability distribution of random variable showed lack of symmetry in the data. As the measurement of skewness in quantitative form is difficult for that reason the value of skewness may be positive or negative during the estimation. Gross school enrollment and government expenditure on health are little skewed as in contrast to the all of the variables included in this analysis.

Correlation Matrix

In this section of econometric analysis the correlation matrix is set to measure the degree of correlation between the correlation coefficient of possible variables. It also demonstrates the degree of linear relationship among the variables. Correlation coefficients which show the degree of correlation and linear relationship between the variables are set in the table called correlation matrix.

Table 4: Correlation Matrix of the Variables

	GDP	GEH	SE	REM	LF	K
GDP	1					
GEH	0.57	1				
SE	0.40	0.51	1			
REM	0.27	0.05	-0.06	1		
LF	0.37	0.07	-0.22	0.53	1	
K	0.94	0.39	0.31	0.39	0.50	1

Note: All the estimations are carried out by E-views 7 (Quantitative Micro Software)

The present correlation matrix shows the degree of correlation between important variables of the model justifies the empirical relationship and strength of relationship of GDP with other desired variables in Table 4.The correlation matrix also shows that the diagonal row of one's is the association or correlation of every strength with this one. The study analyzed in this correlation matrix that the association and correlation between all the variables is positive. The results of econometric estimation of this model explain and confirm the strong and positive correlation of GDP with the education and health variables. The correlation matrix of the variables of this model describes that there is strong positive association between gross domestic product GDP and desired variable. The correlation coefficients 0.94, 0.57 show that gross fixed capital formation and government expenditure on health are the important cause to increase the GDP. The correlation matrix shows the correlation coefficient fo personal remittances REM, labor force LF and gross school enrollment SE is 0.27, 0.37 and 0.40 respectively these values indicate weak association of gross domestic product GDP mentioned variables. The correlation matrix shows that all the explanatory variables included in this model have the positive and

significant relationship with the GDP except the gross school enrollment which have positive but insignificant relationship.

The correlation matrix shows that there is a weak positive correlation between personal remittances with GDP describes in a sense that there is a small or less increase in personal remittances, the reason, GDP also increase in small way and vice versa. But on the other hand a strong positive relationship between gross fixed capital formation and GDP shows the higher increase or decrease in gross fixed capital formation will cause the higher increase or decrease in GDP. The government expenditure on health also have a positive correlation with GDP but not say strong or not weak shows that there is an increase or decrease in government expenditure on health will cause the same in GDP.

The Panel Data Models

Panel data often called longitudinal cross sectional time series data used in the study to estimate the large scale dataset in which the actions of variables are estimated with respect to time. Panel data models used in this study for the range of time series data of 16 Asian countries. Large data size enhance significance of estimates, the panel data method with high degrees of freedom and higher degree of heterogeneity panels the association between the independent variables. The discussion on the estimates of the panel data models is initiated by random effect model and fixed effect model. The interpretation of the results of Hausman specification test and the common effects model is as follows.

Table 5: Correlated Random Effects – Hausman Test

Test Summary	Chi – Sq. Statistics	Chi-Sq. D.f.	Prob.
Cross-section random	157.17	5	0.0000

Fixed Effect VS Random Effect

Fixed Effect versus Random Effect Model are used in this study for panel data estimation. The results of null hypothesis and alternate hypothesis are as follows:

H_0:   Redundant Random Effect
H_1:   Fixed Effect

The estimation of null and alternate hypothesis showed that the null hypothesis is rejected so it is to accept the alternate hypothesis. The estimation showed that random effect model is significant and has no impact on dependent variable but fixed effect model is useful for this study and accepted for the panel data analysis.

Table 6: Fixed Effect Model (GDP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.59E+11	9.24E+10	-3.880799	0.0001
LF	1406.014	773.4752	1.817788	0.0701
K	1.999467	0.035612	56.14568	0.0000
GEH	1.73E+11	1.32E+10	13.13230	0.0000
SE	8.64E+08	1.06E+09	0.813992	0.4163
REM	4.259609	2.173584	1.959716	0.0510

Table 7: Diagnostic Test

R-squared	0.99	Mean dependent var	7.16
Adjusted R-squared	0.99	S.D. dependent var	1.41
S.E. of regression	1.40	Akaike info criterion	54.22
Sum squared resid.	5.61	Schwarz criterion	54.45
Log likelihood	-8277.33	Hannan-Quinn criter.	54.31
F-statistic	1719.41	Durbin-Watson stat	0.41
Prob. (F-statistic)	0.000000		

Fixed Effects Model

Fixed effect model also known as Covariance model, individual and least squares dummy variable model as well as within estimator as fixed effect model estimate the results within the sample of data. The results of fixed effect model are verified and significant and proved the model.

Random Effects Model

The random effect model (REM) is a type of ranked linear model often called variance components model developed by the supposition that independent variables individual effect are severely not collinear. The random effect model used in this study does not verified and significant with the model.

Estimation and Results

The results of Panel Least Squares estimates confirm that there is a positive and significant impact of independent variables includes on GDP. Results proved that the government should focus on the two main human capital variables (education and health). School enrollment at primary and secondary level has the significant and positive impact on GDP in long run and that will cause the high economic growth (Afzal, Farooq,

Ahmad, Begum and Quddos, 2010). Economic growth is affected by many factors and has benefited extensively from foreign trade, human capital, FDI that leaned towards the economic growth (Karimzadeh 2013).

This study depicts that physical capital development has the positive and significant impact on economic growth. These results matched with the results of other theories. The previous study admitted that there is a positive and significant impact of gross fixed capital on GDP and that will cause to increase in economic growth (Dritsakis and Varelas 2006). In many econometric studies the relationship between gross fixed capital formation and economic growth shows significant and positive impact. The study take the important human capital variable, government expenditure on health in this estimation, results show that there is a positive and significant impact of desired variable on economic growth and GDP. The previous study mainly focused on public spending on health and economic growth using co-integration method. The study finds that there is positive and significant relationship between health human capital variable on economic growth. The study focused on good governance and skilled manpower (Boussalem, Boussalem, Taiba, 2014). Another previous important study, the relationship of education and health with economic growth presented by (Biswajid and C.K. Mukhopadhyay, 2012) investigated that the impact of government expenditures on education and health care facilities has the significant and positive impact. But in some countries the study shows the opposite sign. In this study the impact of health public spending is positive and significant but on education enrollment is positive impact but insignificant.

The econometric estimation and panel data analysis also confirm that there is a positive and significant relationship between labor force and GDP and many previous studies showed that the relationship between labor force and economic growth is positive. The analysis also proved the results and verified the results of previous studies. The previous study proved that there is significant impact of labor force on GDP (Hanushek and Kimko, 2000).Another study finds that education has the vital role in human capital development and that leads to the development of labor force (Hafeez and Ahmad, 2002).

In the last study analyze the impact of personal remittances on economic growth and GDP. The analysis also confirms that there is a positive impact of personal remittances on GDP and economic growth. The previous analysis also finds the positive relationship between personal remittances and economic growth and the role of personal remittances in poverty reduction. The study finds that international labor migrations have the maintainable impact on poor people which are potentially benefitted. The study also suggested that personal remittances should be transferred through proper channel because that will cause the leakages in the economy using ARDL approach (Javid, Arif and Qayyum, 2012). The analysis and results of this study also proved that there is a positive and significant relationship between personal remittances and economic growth.

6. Conclusion

The present investigation is an attempt to provide the empirical verification and confirmation on the association between human capital and economic growth in the case study of selected Asian countries. In this study annual based data of variables ranging from 1990 to 2012 is used for analysis. The results of econometric estimation and panel least squares estimates confirm and indicated that there is positive and significant impact of independent variables on explained variable GDP. There are some important explanatory variables used in this model to verify the relationship between human capital and economic growth such as gross fixed capital formation, labor force, government expenditure on health, gross school enrollment and personal remittances which have the positive and significant impact on GDP. There are 16 Asian countries included in this analysis for the verification of model.

The econometric estimation and panel data analysis also confirm that there is a strong positive association among government expenditure on health, gross fixed capital formation K and GDP. The panel data estimation also proves that the random effect model results have no impact on designated variables of the model. So due to this result of random effect model, the study use the fixed effect model to explain the results of selected variables and their interpretation. The fixed effect model which is best estimator for this study is used to analyze and investigate the relationship between independent variables with dependent variable. The fixed effect model best proved this model and significance of estimated results. The important result of econometric estimation is that all the variables included in this model such as gross fixed capital formation, labor force, personal remittances, gross school enrollment and government expenditure on education has positive and significant impact on gross domestic product except the gross school enrollment which has positive but insignificant impact on gross domestic product. The study also concluded that some independent variables has strong positive but some has weak positive but significant impact on GDP.

Recommendations

a) The government should increase their expenditure on health sector because of strong correlation and impact of government expenditure on health with gross domestic product. The health and education are the main indicators of human capital. When the expenditures on these variables increases by the government,

GDP also increases. The health expenditure on different areas such as for the development of infrastructure of health sector and provision of better health care facilities to the patients.

b) Government must focus on the enrollment of students in primary and secondary level. For this purpose, government should increase expenditures on education sector to increase the school enrollments at secondary level as well as primary level. Government should facilitate the private sector also to increase gross school enrollments at primary and secondary level. Different seminars and conferences on the awareness of parents and guardians should be organized to achieve this task.

c) The study also proved that there is a strong association of gross fixed capital formation and gross domestic product. So, government should also increase the domestic capital as to increase in the gross fixed capital formation. As estimation analysis of the gross fixed capital formation shows the significant correlation with GDP. Therefore increase in the government expenditure on capital formation has the positive impact on Gross Domestic Product and it will increase the economic growth.

d) Personal remittances are the main source of countries income, so the government should make the best policies and gives the incentives to the people working abroad to facilitate and encourage to increase personal remittances.

e) Labor force of any country is consists on skilled, educated and trained persons. Labor force plays a vital and dynamic role in economic development. So government should enhance the labor force participation in the economic activity. For this purpose government should facilitate the private sector also to develop the labor force. Government should increase their expenditure on the formation of labor force.

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