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The Impact of Human Capital on Economic Growth: A Panel Data Study on OECD Countries

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ABSTRACT

This study will make a significant contribution to the literature by demonstrating that human capital can be a key strategy for boosting economic development. The results of the analysis were based on data from thirty-six (36) countries of the Organization for Economic Co-operation and Development (OECD). This research analyzed the effect of human capital on economic growth in OECD countries, using data from 1990 to 2017 for thirty-six (36) OECD countries. For these purposes, the balanced panel data of variables like GDP per capita, human capital index, inflation rate, trade, and population growth rate were taken from the year of 1990 to 2017. The Pedroni and Kao residual co-integration test results have verified the existence of a long-run association between the variables. By agreeing Panel Autoregressive Distributed Model, the output showed the link between human capital with economic growth in the long run, ARDL. Moreover, inflation rate, trade, and population growth rate were found as the supporting indicators of economic growth in the long run. Specific policies for each country, therefore, were difficult to develop. Future studies can explore the impact for individual country of human capital on economic growth. The study suggested that there was a need to focus more on human capital for high economic growth in OECD countries.

Keywords: *Economic Growth, Human Capital, OECD Countries, Panel-ARDL Model.*

INTRODUCTION

The primary aim of every nation in order to boost social well-being is a high and sustainable level of economic development. However, economic growth and development should not be fostered on a sustainable basis at the expense of future generations — that means economic advancement along with ecological sustainability should coexist. Sustainable development is actually a prerequisite for any economy in the world. According to the World Commission (1987, p. 43), BA Growth and development are sustainable when they meet the current generation's needs without undermining the future generation's ability to meet their own needs. Similarly, Scutaru (2013) mentioned that achievement of high economic

growth rates was one of the four primary objectives of macroeconomic policy. A crucial feature of development is its contribution to the community's overall prosperity. Economic growth was required, which made it possible for the population to purchase more goods and services and helped to guarantee a greater amount of goods and services (health, education, etc.), which led to a real improvement of the standards of living demonstrated by Gasior, K. (2013), vital to cultural, social, and citizen success. In this research work, our main focus was to articulate the influence of human capital on economic growth and its development in the OECD countries. The development process is always based on key variables such as human capital, natural and physical capital (Sakiru Adebola Solarin 2024). Power resources that determine the growth pace; virtually every traditional economist believed in economic growth and sought to explain growth theories in various ways, and developed various models of growth. Over time, economists have discovered that a lower marginal return on the factor of production is not needed. With the help of new technology and, of course, a competent individual's skills and education of a person, you can manage and increase production (Khan & Chaudhry, 2019). Nowadays, there is a categorical division of the world that divides the developed, developing, and underdeveloped countries based on their GDP growth and capital accumulation. The Factors of Production are also important for the economic growth of the country (Khan & Chaudhry, 2019).

Education is recognized as one of the major drivers of economic development in a country because education offers the knowledge and skills to its people need to enhance productivity and thereby boost their quality of life and eventually their social welfare. Education, thus, contributes to a country's economic and social development and leads to an increase in productivity and welfare, and is likely to improve the distribution of revenue. Education can affect a country's economic growth through three mechanisms i.e. the productivity often improves by increasing workers' education, which ultimately leads to increased output; the capacity and capability for education that leading to technical innovation, the launching of new products and improving processes; and lastly, education enables the dissemination and transfer of information required to introduce new technology effectively, according to Tsamadias and Prontzas (2012). A good relationship between economic development and human resources exists, while a strong correlation between human capital and economic growth was exposed. Many studies have stressed the importance of increasing economic production of human capital or human resource development; here, Lucas (1988) and Romer (1990) were among the first to model this relationship. Mankiw et al. (1992) asserted that a separation between labour variables and human capital variables in the Solow growth model, which states that human capital has a positive effect on output and growth. In the 1990s, many empirical studies on economic growth (Barro 1991) found that economic growth has been influenced by human capital. A study by Tjahjono and Anugrah (2006) noted that an increase in human capital was accompanied by a rise in production. Hanushek and Kimko (2000) and Hanushek (2013), who studied the quality of education, found that it has a significant effect on increasing production and output levels.

Human capital impacts economic development and assists the economy through the extension of an individual’s expertise and knowledge. Human resources always creates the expertise, knowledge, and experience of employees in the economy of the country (Sumera Iqbal et.al. 2024).

Growth in the economy is an increase in the capacity to manufacture goods and services relative to previous years. The changes in the country's GDP assessed economic growth (Nicholas, S. 2019). Researchers have estimated the effect on economic growth of some variables through cross-sectional analysis and concluded that the role of human capital in economic growth is significant (Mankiw et al., 1992).

On the other hand, Neoclassical and endogenous growth theory have defined foreign trade, state consumption, geography, and institutional structures as economic growth determinants. However, among other determinants, human capital is the most important determinant. There is a direct impact of human capital on economic growth as more educated people are efficient and creative, contributing to new products and the increase of factor productivity, and are contributing more to the economic growth than the ordinary labour force (Teixeira et al., 2016).

The effect of human capital on economic growth illustrated that there was a positive relationship between human capital and economic growth (Tsamadias, C., and Prontzas, P., 2012). The education sector showed that an additional male high school year might be related to a growth rate of 0.36% per capita of GDP. This resulted in the production of skilled and trained workers, which eventually produced goods in a more efficient way and with a minimum cost of production. Recent findings show that economists were focusing primarily on improving the knowledge of people, their skills, prosperity, and fulfilment for creating their own cultures, societies, and nations around the entire world (Khan & Chaudhry, 2019). The effect of investment in human capital can be enhanced through development. The classical economists view human capital as the production of knowledge and skills, not as the workforce. The researcher economists believe that the theory of human capital acquisition is a very useful and successful idea, and the government should therefore invest in health and education to boost the resources and drive the economic growth (Ali Z. et al., 2017).

In this research work, the effect of human capital on economic growth in OECD countries has been studied. Economic growth is a significant feature for all countries, especially for OECD countries. There are many more reasons why they do not coordinate with the process of high growth. Focusing on human resources, particularly in power and industrialization, might be the way to achieve rapid economic growth. This dependence on these sectors alone will still not be the solution to the problem; therefore, this study may be needed to identify these challenges, because in the case of SAARC countries, it has still not been confirmed. The objective of the study was to examine the effect of human capital on economic growth in OECD countries. Human capital was added to other metrics of growth generation. In OECD countries, this combination of variables will help to track the theory of development. It will be useful to decide that these variables will be important for the growth process. In addition, this research will assist in determining the required policy in OECD countries to promote economic development.

Data and Methodology

To investigate the influence of human capital on economic growth in OECD countries, it has great significance because of the data, model, and methodology. The valid data, description of variables, theoretical and econometric model, and the methodology were very important steps of any good research.

The Mankiw–Romer–Weil model (an extended Solow growth model): The Mankiw–Romer–Weil (1992) model, abbreviated as the MRW Model, is an expansion of the Solow growth model. It adds a development factor to human capital and finds technology to be an improvement in the labour. The variable human capital itself is an extension of labour in which work is not only counted in units but also in ability levels. Highly qualified, often educated, work will yield higher results compared to non-trained people.

This section is based on a detailed explanation of the variables that are used in this research. The real gross domestic product is taken as the dependent variable, while human capital, real domestic absorption, number of persons employed, and gross capital formation are used as independent variables.

GDP per capita (PGDP): The per capita rate of GDP is calculated by dividing GDP by population at current market prices. The rise in real GDP per capita, which can be calculated from the change in actual GDP divided by population, may be a shift in the indicator (United Nations, 2007). The dependent variable, economic growth, is defined as the enhanced capacity of a country's production of goods and services in a specific time period, which is normally considered as one year. It is expected that the rapid production can increase economic growth, which is the need of the time for OECD countries. The proxy used here for the economic growth in the model is GDP per capita growth rate (PGDP).

Human Capital: The value of human capital lies in the global effect of both the macroeconomics and the individual levels. According to the Organization for Economic Co-operation and Development (OECD), human capital is defined as 'the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social, and economic well-being (OECD, 2001). The proxy used for human capital in the model is the human capital index.

Inflation Rate (INFL): Inflation is a situation in an economy where the prices of goods and services increase gradually. A rise in the price level of a product in an economy is known as inflation. A more precise definition of inflation is a sustained increase in the general price level in an economy. Inflation means an increase in the cost of living as the price of goods and services rise. The annual percentage change in the general price level is measured by the rate of inflation (Pettinger, 2018).

Trade (%): Trade is basically a concept of economics in which the buying and selling of goods and products at the national and international levels. The exchange of goods and services between two or more countries is international trade. The trade has an impact on the economy of a country and its growth level. Trade helps in increasing investment and capital formation.

Population Growth Rate (POP): The growth rate in population is a time factor in increasing population size. In general, the average annual growth rate is desired for both human and non-human populations. This provides us with more knowledge than an exact population rise over the whole century, and enables us to better estimate future years of population growth or decline (Study.com, 2017).

Data

In this study, the panel data were used. The details about the selection of countries, time period, and sources are given below:

1. Selection of Countries: To detect the effect of human capital on economic growth, we have chosen the OECD. There are 36 countries in this category.

Table 1: List of OECD Countries

Australia	Denmark	Hungry	Germany	New Zealand	Spain
Austria	Estonia	Iceland	Latvia	Norway	Switzerland
Belgium	Finland	Ireland	Lithuania	Poland	Sweden
Canada	France	Italy	Luxembourg	Portugal	Turkey
Chile	Greece	Japan	Netherlands	Slovenia	United States
Czech Republic	Korea Republic	Israel	Mexico	Slovakia	United Kingdom

Time Span of Data: The balanced data was collected from the year of 1990 to 2017 to explore the influence of human capital on economic growth in OECD countries.

Data Sources: The two sources of collected data were "World Development Indicators" and "Penword 9.1".

Specification of Empirical Model

This research was focused on the impact of human capital on economic growth in OECD countries. Stable economic growth was the need of modern times. Human capital, inflation rate, trade, and population growth rate were the indicators to support economic growth. For economic growth, the Solow growth model (1987) will be fitted in this research, which is the combination of economic growth, technology, capital, and labor.

$$PGDP = f(HCI, INFL, TRADE, POP) \text{ ------} \quad (1)$$

In above equation (1) shows that the per capita GDP growth rate is a function of human capital, inflation rate, percentage of trade, and population growth rate. These are the indicators that are used to increase economic growth. In the above equation human capital index is used as a proxy for human capital, and GDP per capita is used as a proxy for economic growth.

Now, we formulate the linear equation to identify the relationship between human capital and economic growth with other control variables.

$$PGDP_{it}=\alpha 0+\alpha 1HCI_{it}+\alpha 2_{it}INFL_{it}+\alpha 3TRADE_{it}+\alpha 4POP_{it}+\mu i \quad \text{---------- (2)}$$

In the above equation, $\alpha 0$ is the intercept, and the rest of αs are the slopes of the model. While it is showing the time with respect to panel data, μi refers to the error term in the model.

Where,

PGDP = Economic Growth as GDP per capita growth

HCI = Human Capital Index

INFL = Inflation Rate

TRADE = Percentage of Trade

POP = Population Growth Rate

Now we have applied the panel ARDL model to investigate the long-run and short-run influence of human capital on economic growth.

The long-run ARDL model to analyze the human capital effect on economic growth in OECD countries is given below as follows:

$$(PGDP_{it})=\alpha 0+\alpha 1(PGDP_{2it-1})+\alpha 2(HCI_{it-1})+\alpha 3INFL_{it-1})+\alpha 4(TRADE_{it-1})+\alpha 5(POP_{it-1}) +\mu it \text{ ----} (3)$$

The above equation (4) of long-run ARDL is used to estimate the relationship in the long run in OECD countries.

After the long-run ARDL, the Error Correction Model (ECM) is used to stabilize the error from the short run to the long run.

$$ECM_{it-1}=PGDP_{it}-(\alpha 0+\sum^{k}_{i=1}\alpha 1\Delta(PGDP_{2it-1})+\sum^{k}_{i=0}\alpha 2\Delta(HCI_{it-1})+\sum^{k}_{i=0}\alpha 3\Delta(INFL_{it-1})+\sum^{k}_{i=1}\alpha 4\Delta(TRADE_{t-1})+\sum^{k}_{i=0}\alpha 5\Delta(POP_{it-1}) \text{ ---------- } (4)$$

Then, finally, to analyze the effect of human capital on economic growth in the short run and to represent the error correction with the speed of adjustment tool, the equation of the short-run ARDL is given below:

$$\Delta(PGDP_{it})=\beta 0+\sum^{k}_{i=1}\beta 1\Delta(PGDP_{it-1})+\sum^{k}_{i=0}\beta 2\Delta(INFL_{it-1})+\sum^{k}_{i=0}\beta 3\Delta(TRADE_{it-1})+\sum^{k}_{i=1}\beta 4\Delta(POP_{t-1})+\psi(ECM_{it-1})+\mu i \text{ ---------- } (5)$$

In equation (5) above, β0 is the short-run intercept, and the remaining β parameters are the short-run coefficients. The sign (Δ) shows the transition and ∑is the short-term factor. Meanwhile, it is the panel data era, and the panel data demonstrates the impact of the preceding year. The sign (ψ) shows the speed of the correction tool with a negative sign used in ECM to correct short- to long-term defects.

METHODOLOGY

In the econometric techniques that were used on the Empirical model to clarify the influence of human capital on economic growth in OECD countries. The first step was descriptive statistics to statistically clarify the importance of variables. In our second point, the strong ties between variables defined by the correlation matrix should be analyzed. These steps were the primary steps to verify the statistical significance of the variables before beginning the analysis. The next important step was to check how variables were incorporated through unit root testing. Application of the ARDL test in the empirical model was attributable to the different degrees of order of inclusion between variables, in which some variables were stationary at the level and some at first difference. Before applying the test, it was first needed to check the long-term identification in the model. Co-integration between the variables that were detected by Padroni and Kao requires the residual co-integration test for this purpose. The cross-sectional dependency test was used to check the cross-sections between the variables. The next major step was to apply the ARDL test in order to identify the effect of human capital on economic growth on a long and short-term basis after such tests and clearance of the life of long-lasting lives. This was used to stabilize the error from the short run to the long run on the empirical model.

Descriptive Statistical Summary: A descriptive statistical description showing the normality and general fitness of the variable and of the empirical model is a primary important step of the study. This descriptive statistical overview is based on average, minimum, and maximum variable values. Standard deviation measures the differences from their mean value. During the normal distribution, the direction of the variable is observed by skewness. The Kurtosis is used to measure the variable's flatness and peakedness.

Correlation Matrix: The other step is the correlation between the variables, so that the relationship intensity between variables can be seen. In this step, the dependent variable relationship is evaluated with other independent variables. The identification of multicollinearity is also essential in this phase. If the value obtained between the dependent and the independent variable is greater than 0.90, then the problem of multicollinearity is a concern. Although the value should not be less than 0.29. The value below the critical value indicates that variables are weakly correlated or there is a weak correlation between them. The above meaning refers to the moderate relationship between variables. The 0.60 to 0.80 value indicates that the correlation is very high.

Unit Root Test: In order to identify their order of integration, the most important step before the test is to start the analysis is to applying the unit root test on variables. In order to ensure which tests are best for analysis, the variables should be stationary at the level or first difference. The unit root test is based on two types of stationary tests: Levin, Lin, and Chu (LL&C) and Im, Pesaran, and Shin (IPS). The first test Levin, Lin, and Chu was developed by three economists, Andrew Levin, Chien-Fu Lin, and Chia-Shang James Chu in 2002. This test is very well known for stationary testing and analysis, and is also considered to be the advanced form of the Augmented Dickey Fuller test. In the Levin, Lin, and Chu (LL&C) test, the independence among all cross-sectional units is assumed. Our second test is the Im, Pesaran, and Shin (IPS) test, mostly known as the IPS test. This test was developed by three economists named Kyung So Im, M. Hashem Pesaran, and Yong Cheol Shin in 2003. The purpose of this test is to unrestricted LL&C test assumptions. This test is also considered to be an improvement or an addition to the LL&C test. In addition, the IPS test is based on null and alternative hypotheses. The non-stationary hypothesis is the null hypothesis, while the alternative hypothesis applies to the stationarity of the series.

Pedroni and Kao Co-integration Test: Pedroni's residual co-integration test was developed by Pedroni (1999, 2004). This test is applied to check the co-integration among variables and to detect the long-run existence of the model. Moreover, the Pedroni co-integration test is related to the cross-section interdependence and deterministic trends. In addition, Kao (1999) developed the second test of co-integration, known as the Kao residual co-integration test. The co-integration test has the same basic Pedroni co-integration test approaches. In the Kao co-integration measure, the coefficients are homogeneous in first-stage regressors, and the intercepts are cross-sectional in first-stage regressors. In addition, the Kao co-integration test is also based on a null and alternative hypothesis with the same Pedroni co-integration test method. Kao's residual co-integration test is based on the significance of the ADF t-statistic value and probability value to detect the co-integration among variables and to prove the long-run existence of the model.

Panel-ARDL long run and Short run with ECM: The unit root test shows that the variables are stationary at a mixed level. Some variables are stationary at level I(0), and some of the variables are found to be integrated at first difference I (1). Such variables are found to be unified. The Panel Autoregressive Distributed Lag (P-ARDL) model is used in this mixed integration order among the variables. For a single equation, the P-ARDL model is considered the best model for panel analysis. In particular, when the sample

size is small, this model provides effective and unbiased estimation. Moreover, long and short run parameters of the empirical model have simultaneous estimation, which is also provided by the P-ARDL model. The Panel ARDL is based on long-run and short-run estimation. The first step is long-run estimation. Before doing this, the first step is the need for the clearance of the existence of a long-run model to see the efficiency of the model in the long run. The above-discussed Pedroni and Kao residual test is used to detect the long-run existence of the model by detecting co-integration among the variables. The first step is to calculate the long-run ARDL estimation after the acceptance of the long-run presence in the model. The overall effect of the long-term model is measured over a long period of time estimate and to estimate long-run relationships between the variables.

After the long-run estimation, the next important step is to measure the influence in the short run. The short-run P-ARDL estimation is based on the Error Correction Model (ECM). In short-run estimation, the effects of a short time period, mostly one year or two years, are estimated. In short-term estimation, the chance of the occurrence of error is very high. The error correction model is used to stabilize or reduce the error that occurs in the short run and can affect the long-run estimation. The model with the error correction uses the adjusting tool pace level to reduce the short-run to long-run error and stabilize the long-run evaluation. The method has a negative sign with the speed of change. The negative sign is supposed to reduce the short-run to long-run mistake that has occurred.

RESULTS AND DISCUSSION

Descriptive Statistics and Correlation Matrix: Table 4.1 shows the descriptive statistics of the data. The mean values of PGDP, HCI, INFL, TRADE, and POP are 2.121788, 3.138700, 4.926330, 85.65257, and 0.588105, respectively. The maximum values of PGDP, HCI, INFL, TRADE, and POP are 23.98551, 3.807068, 208.1778, 408.3620, and 6.017009, respectively. The minimum values of PGDP, HCI, INFL, TRADE, and POP are -14.26877, 1.802430, -9.729899, 16.01388, and -2.258464, respectively. The correlation matrix shows the overall association of the variables with each other.

Table 2: Results of Descriptive Statistics and Correlation Matrix

	PGDP	HCI	INFL	TRADE	POP
Mean	2.121788	3.138700	4.926330	85.65257	0.588105
Median	2.049082	3.198884	2.349719	70.12330	0.514285
Maximum	23.98551	3.807068	208.1778	408.3620	6.017009
Minimum	-14.26877	1.802430	-9.729899	16.01388	-2.258464
Std. Dev.	3.221480	0.396530	12.11817	51.69139	0.781740
Skewness	-0.159326	-0.892156	8.968180	2.346987	0.254741
Kurtosis	7.950133	3.670732	114.8008	11.74441	6.076189
Jarque-Bera	1003.693	148.2228	522995.4	4017.901	396.5975
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	2077.230	3072.787	4822.877	83853.87	575.7552
Sum Sq. Dev.	10149.62	153.7766	143619.2	2613216.	597.6728
Observations	979	979	979	979	979
PGDP	1				
HCI	-0.0770	1			
INFL	-0.0160	-0.3751	1		

TRADE	0.1140	0.1339	-0.0783	1	
POP	-0.1373	-0.0694	0.0912	-0.0524	1

Unit Root Tests: The unit root values of the variables will be calculated as the first step in empirical research. As we know, the variables should be I (0) or I (1) for the implementation of the ARDL panel method. The unit root values of the variables are determined in this context (Uzar, 2020). The following table 4.2 expresses the results of Levin, Lin, and Chu (Levin et al., 2002) (LLC) and Im Pesaran (2003) (IPS) unit root results. The results show that all variables are stationary at the level and at the first difference, except the human capital index HCI, which is stationary at the first difference only.

Table 3: Unit Root Test

	LLC		IPS	
	Level	1st Difference	Level	1st Difference
PGDP	-12.45***	-23.36***	-12.53***	-24.62***
HCI	4.89	-1.34*	4.31	-2.10**
INFL	-27.19***	-29.18***	-17.06***	-25.00***
TRADE	-2.55***	-17.47***	-5.39***	-17.17***
POP	-6.03***	-10.94***	-7.94***	-18.57***

***, **, and * show statistically significance at 1%, 5%, and 10% level, respectively.

Co-integration Tests: After the unit root levels of the variables have been established, it can be checked if the variables are co-integrated. The co-integration relationship between the variables is not necessarily important. It is stated. If there is, however, a co-integration relationship, the long-term predictions of the PMG approach can be assumed to be higher (Uzar, 2020). The following table 4.3 reports the two types of co-integration, like Pedroni and Kao. The results of both co-integrating show that variables PGDP, HCI, INFL, TRADE, and POP are associated in the long run.

Table 4: Pedroni & Kao Co-Integration Test Results

Pedroni Co-integration Test					
Alternative hypothesis: common AR coefs. (within-dimension)					
				Weighted	
		Statistic	Prob.	Statistic	Prob.
Panel v-Statistic		-2.454961	0.9930	-4.194696	1.0000
Panel rho-Statistic		-1.735097	0.0414	-2.312722	0.0104
Panel PP-Statistic		-9.540043	0.0000	-11.40313	0.0000
Panel ADF-Statistic		-6.185494	0.0000	-9.675417	0.0000
Alternative hypothesis: individual AR coefs. (between-dimension)					
		Statistic	Prob.		
Group rho-Statistic		0.397298	0.6544		
Group PP-Statistic		-13.03745	0.0000		
Kao Residual Co-integration Test					
				t-Statistic	Prob.
ADF				-10.25550	0.0000

Residual variance		10.74150	
HAC variance		4.827301	

Long Run and Short Run PMG Results: After the study of co-integration analysis, it is to estimate long and short-term relationships between variables through the panel ARDL model. The coefficient estimate of the error correction mechanism can be checked before long-term coefficients are estimated (Uzar, 2020). Table 4.4 expresses the short-run and long-run results. The results show human capital has a significant positive impact on economic growth, meaning that 1% increase in human capital will increase growth by 7.93% in the long run, while it is insignificant in the short run. While other control variables like INFL and TRADE are significant with a negative sign. Whereas the POP variable is insignificant.

Table 5: PMG Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Equation				
HCI	7.934***	0.740	10.713	0.000
INFL	-0.074***	0.012	-6.013	0.000
TRADE	0.032***	0.006	4.751	0.000
POP	-0.336	0.274	-1.225	0.220
Short Run Equation				
COINTEQ01	-0.758***	0.044	-17.053	0.000
D(HCI)	7.473	76.845	0.097	0.922
D(HCI(-1))	4.700	48.152	0.097	0.922
D(INFL)	-0.148**	0.074	-1.990	0.047
D(INFL(-1))	-0.096	0.068	-1.400	0.161
D(TRADE)	0.164***	0.027	6.048	0.000
D(TRADE(-1))	-0.065***	0.024	-2.652	0.008
D(POP)	-0.038	3.208	-0.012	0.990
D(POP(-1))	-0.309	3.214	-0.096	0.923
C	19.028***	1.582	12.027	0.000

***, **, and * show statistically significance at 1%, 5%, and 10% level, respectively.

CONCLUSION

This research analyzes the effect of human capital on economic growth in OECD countries. For this purpose, the balanced panel data of variables like economic growth, human capital, and inflation rate, percentage of trade, and population growth rate are taken from the year of 1990 to 2017. The Pedroni and Kao residual co-integration test results have verified the existence of a long-run association between the variables. By agreeing Panel Autoregressive Distributed Lags Model, the output showed the link between human capital with economic growth in the long run ARDL. Moreover, inflation rate, trade, and population growth rate are found as the supporting indicators of economic growth in the long run in OECD countries. The study suggested that there is a need to focus more on human capital for high economic growth in OECD countries. The results of the analysis are based on data from 36 countries of OECD countries. Specific

policies for each country, therefore, are difficult to develop. Future studies can investigate the impact of human capital on economic growth for individual countries.

POLICY RECOMMENDATIONS

Here are some policy recommendations on behalf of our empirical findings, which are as follows:

1. Economic growth is the need of modern times as well as the need of developing and developed economies. The OECD countries have much to improve their tools of growth by utilizing resources. There is a need to invest more and focus more on human capital for better economic growth.
2. The findings are useful for policymakers and government officials for decision-making and planning for long-term economic growth in OECD countries.

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