Available Online
Journal of Education and Social Studies
ISSN: 2789-8075 (Online), 2789-8067 (Print)
https://www.scienceimpactpub.com/jess

DO FINANCIAL INCLUSION, HUMAN CAPITAL AND GROSS FIXED CAPITAL FORMATION AFFECT ECONOMIC GROWTH? AN EVIDENCE FROM SELECTED DEVELOPING ECONOMIES

Safdar Iqbal Shaheen [1,*], Muhammad Tahir Amin [2], Zeeshan Muhammad Yasir [3] and Iqbal Javed [4]

[1] *Assistant Professor of Economics, Government Pir Yaqoob Shah, Associate College Phalia, District Mandi Bahuddin, Pakistan*
[2] *PhD Scholar, Preston University Kohat, Islamabad Campus, Pakistan*
[3] *Manager Energy Research & Coordination, IPPA, Islamabad, Pakistan*
[4] *Department of Economics, University of Lahore, Sargodha Campus, Pakistan*

ABSTRACT

Financial inclusion is generally considered a key driver of economic growth as it brings persons, families, and firms within the financial structure which activates consumption and expenses, particularly in the developing nations of the world. This research investigates the impact of financial inclusion with other major variables on the economic growth of selected developing nations. For the analysis, we have taken data from 2011 to 2020 from the concerned developing nations. By using a random effect technique, results show that financial inclusion, human capital, and urbanization tend to increase the economic growth of developing countries. Moreover, gross fixed capital formation also affects economic growth positively. The study results suggest that focus should be made on the provision of financial services to all segments of the community. Furthermore, there is a need for more educational facilities for having more economic growth. Finally, the Government should emphasize on more stable environment for more investment and industrialization in developing economies.

Keywords: Fixed capital formation; Trade openness; Economic growth.
** Email: prof.safdar1@gmail.com*

https://doi.org/10.52223/jess.2024.5332
Received: June 21, 2024; Revised: September 19, 2024; Accepted: September 26, 2024

INTRODUCTION

Economic Growth is significant as it improves the life standards of the world's population. It improves the situation of the economy in the initial phases of industrialization where physical capital accumulation is the major engine of growth. More investment is made in education by the people and it efficiently enhances growth more. The role of human capital in economic growth was studied by Schultz (1961) and Becker (1964), where, human capital can be described as the set of knowledge, skills, competencies, and capabilities personified in persons and obtained, with the help of education and health facilities. Education has been viewed as a fundamental human capital investment. It makes better and sharp the growth process and much work has been done on education and growth nexus. A level of human capital can be boosted by specialization and labor division, upgrading fundamental education, and training, initiating personal businesses, and producing more job chances. As a key factor of a nation, it helps in providing a highly expert and pioneering workforce that may use skillfully inadequate resources, which tends to increase the per capita income (Stiglitz, 2000; Brown, 2003).

Financial inclusion also contributes much towards economic growth. The public has no job chances, no access to opening a bank account, and hardly gets online or offline paid employment. In addition, Bhardwaj et al. (2018) showed that as regards 27% of adults in developing Asian nations hold a formal bank account.

This state requires discovering the contribution of financial inclusion in the economic development of the economies. It helps in the purchase and sale of goods and services along with helping in developing modern technologies, modern ideas exchange, and awareness. The notions of trade openness and trade liberalization are for the most part discussed subjects in the majority of the nations. Trade openness makes more growth possible in nations. Trade openness shows the situation where a home nation is allowed to be involved in trade with other nations. Trading actions more often than not comprise exports, imports, foreign direct investment, lending, loaning, and repatriation of funds from abroad (Goldberg et al., 2009). Trade openness also endorses growth in quite a few conducts. It makes the formulation of capital and enlarges the marketplace all the way through an augmenting investment (Miller & Upadhyay, 2000; Sulaiman et al., 2015).

Researchers and policymakers have been involved in reviewing studies indicating an association of some variables with economic growth. We have also reviewed some studies indicating key factors influencing economic growth positively or negatively in developing and developed nations. Economic growth may be influenced by income disparity. Income disparity also affected economic growth positively shown by Voitchovsky (2005). By using data from industrialized nations, it was found that income disparity increased the growth of rich economies. Heeks and Mola (2009) focused on the role of technology in enhancing economic growth. They provided plans for improving the growth of economies. Results showed that investment in technology will lead to a positive contribution to economic growth.

Awokuse (2007) examined the role of imports and exports in determining the growth of nations in Bulgaria, the Czech Republic, and Poland. The study findings showed the validated growth-led export, export-led growth, and import-led growth hypotheses. Similarly, Dufrenot et al. (2010) focused on the role of trade openness in the growth of 75 poor nations. And used regression technique. It was found that trade liberalization tended to increase growth in these countries. Likewise, Fetahi-Vehapi et al. (2015) also found a positive link between trade openness and economic growth in industrialized countries. However, this association was conditional on the initial GDP per capita and foreign direct investment. However, Masoud and Hardaker (2012) focused on the role of the stock market in affecting economic growth. It was pointed out that the stock market enhanced economic growth of the economy.

Trade openness may also affect workforce involvement and growth explained by Cooray et al. (2017). By using data from 1985 to 2012, it was pointed out that institutions and trade increased the productivity of labor. Le et al. (2019) examined the impact of financial inclusion on the growth of Asian nations on the basis of data from 2011 to 2016. Results revealed that financial inclusion caused for high growth of concerned economies. The misery index also affects the growth of nations. Pointing out this, Adrangi and Macri (2019) concluded that the misery index led to a decrease growth of Pakistan's economy. Kurteš et al. (2023) found that trade openness and human capital may influence the growth of eight Balkan economies by using data from 2000 to 2019. The result concluded that both trade openness and human capital enhanced economic growth. Sharma and Samuel (2019) focused on the role of inflation and unemployment on economic growth in Indian states. Findings indicated that the misery index caused low growth in India.

Previous research has focused on the role of foreign direct investment, inflation, institutional quality, etc in improving economic growth. However, our work has emphasized the major drivers of economic growth such as financial inclusion, human capital, urbanization, gross fixed capital formation, and trade openness in developing nations.

Significance of the Study

Scholars have concentrated on the impact of foreign direct investment, education, corruption, and financial development along with many factors on the growth potential of nations. However, a recent study signifies key drivers of growth highlighting human capital, industrialization, urbanization, gross fixed capital formation and trade openness in some chosen developing nations.

The Research Hypothesis

Hypothesis of the study are given below:

H1: Secondary school enrolment is expected to increase economic growth.

H 2: There is a positive relationship between financial development and economic growth.

H 3: Gross fixed capital formation is positively associated with economic growth.

H 4: The higher the urban population, the higher the economic growth.

H5: Trade openness is expected to positively influence the growth of developing economies.

METHODOLOGY

This research work has tried to highlight a financial inclusion-growth nexus in selected developing nations by utilizing data from 2011 to 2020. All the required information regarding variables has been taken from world development indicators. We have selected developing economies like Bangladesh, India, Indonesia, Iran, Jordan, Malaysia, Pakistan, Philippines and Sri Lanka in this analysis. GDP per capita ($ US) was selected as the dependent variable and explanatory factors were used as human capital, official development assistance, urbanization, gross fixed capital formation and trade openness. In this research, we have selected the random effect technique to check out how factors contribute positively to economic growth in developing nations of the world.

The econometric model can be shown as:

$$LGDPPC = \beta 0 + \beta 1\ DCRPS\ it + \beta 2 SCNDE\ it + \beta 3 URBNPO\ it + \beta 4\ LGRFCFit + \beta\ 5\ TRDOPN\ it + uit \quad (1)$$

LGDPPC= Log economic growth per capita

DCRPS = Domestic credit to the private sector (% of GDP)

URBNPO = Urban population as a percentage of GDP

LGRFCF= Log gross capital formation

TRDOPN= Trade openness

it = (time trend)

uit= (error term)

RESULTS AND EMPIRICAL ANALYSIS

The descriptive statistics results have been revealed in this section. Data reveals the main points here. It is found that on average, GDPPC is 6402.824. However, domestic credit to the private sector has been observed as 52.6681 percent in developing nations. Moreover, the urban population seemed 51.144 percent in the concerned economies. The standard deviation of almost all variables is less than the mean which points out that data is normal. Variations have been seen in GDPPC from 116723 to 127897.6 percent along with factors.

Table 1. Descriptive statistics of factors influencing growth.

Variables	Observations	Mean	Standard deviation	Minimum	Maximum
GDPPC	90	6402.824	18585.27	11.6723	127897.6
DCRPS	90	52.6681	29.0781	14.68225	133.9952
SCNDE	90	74.93146	17.2624	33.17973	99.48949
URBNPO	90	51.144	22.4848	18.196	91.418
LGRFCF	90	10.8444	0.5721544	9.7693	11.90204
TRDOPN	90	384089.8	3328290	25.3093	3.15E+07

Table 2 signifies the probability value of Chi2 as 0.9146 which supports the random effect method.

Table 2. Random effect results.

Variables	Coefficients, Standard Errors and z-values
DCRPS	0.0021*
	0.0006
	(3.49)
SCNDE	0.0048*
	0.0008
	(6.08)
URBNPO	0.0078*
	0.0024
	(3.26)
LGFCF	0.1443 *
	0.0358
	(4.03)
	0.0001*
TRDOPN	0.0004
	(0.28)
C	1.0292
	0.3661
	(2.81)
Wald chi2	290.56
Probability	0.0000
R2 Within	0.83
R2 Between	0.72
R2 Overall	0.71

Z-values are in parentheses; ** p<0.05, * p<0.1.

Financial inclusion is the major driver of economic growth in developing countries. People may have access to financial services or loans and they utilize them for general consumption and investments. This boosts employment, production, and economic growth. The finding shows that one percent increased financial inclusion results in increased growth of 0.0021 percent. The result is supported by Le et al. (2019).

Human capital also boosts economic growth and the living standard of the population. Highly expert and skillful capital is an asset for the economy and are contributing much to economic growth by involving themselves in the production process. The finding indicates that a one percent increase in secondary school enrolment may result in an increase in growth by 0.0048 percent in the concerned developing economies. The result is supported by Kurteš et al. (2023).

The role of the urban population in economic growth cannot be ignored. The skillful urban people are searching for and indulging themselves in many of the economic actions for making production and growth more and more. This may result in huge growth and prosperity in the economies. We find that economic growth increased by 0.0078 percent due to an increase in the urban population. The finding is supported by Chen et al. (2022).

Gross fixed capital formation may enhance too economic growth in developing nations. The majority of the population is making investments and is in favor of capital formation. This may enhance the investment and income chances more in the concerned nations. The study result reveals that growth seems to be increasing by 0.1443 percent as the result of increased gross fixed capital formation. The finding is consistent with Qayyum and Zaman (2019).

Finally, trade openness also improves economic growth and earning chances. It is observed that trade openness has increased economic growth in selected developing countries. However, the result is insignificant but positive.

CONCLUSIONS

In this work, we have analyzed how financial inclusion may affect economic growth in developing countries by using data from 2011 to 2020. A major focus was placed on the role of human capital, urbanization, and gross fixed capital formation in determining the economic growth of developing countries. We have employed a random effect technique in this analysis. GDP per capita has been used as the dependent variable. However, random effect finding points out that financial inclusion has boosted up growth of developing nations. Along with this, we have also confirmed a positive association of human capital, urbanization and gross fixed capital formation with the economic growth of nations. The study concludes that growth is dependent on financial access and highly educated population efforts. In view of the major results, it is suggested that there is a need for making provision of financial facilities to the population to make consumption and investments for enhancing growth. Moreover, the government must give more educational opportunities to the public to make their survival easy. Finally, there should be all kinds of stability in the economies to make industrialization and capital formation better. So, there is a need for investing in human and physical and social capital in concerned economies.

REFERENCES

Adrangi, B., & Macri, J. (2019). Does the misery index influence a US president's political re-election prospects? Journal of Risk and Financial Management, 12(1), 22.

Awokuse, T. O. (2007). Causality between exports, imports, and economic growth: Evidence from transition economies, 94, 389–395. https://doi.org/10.1016/j.econlet.2006.08.025.

Becker, G. S. (1964). Human capita. New York: National Bureau of Economic Research. https://www.nber.org/system/files/chapters/c3730/c3730.pdf.

Bhardwaj M., Hedrick-Wong Y., Howard T. (2018). Financial inclusion for Asia's unbanked. The World Bank Blogs. Published on April 30, 2020. Retrieved from: https://blogs.worldbank.org/en/allaboutfinance/financial-inclusion-asias-unbanked.

Brown, P. (2003). The opportunity trap: Education and employment in a global economy. European Educational Research Journal, 2(1), 141-179.

Chen, Y., Lee, C.-C., & Chen, M. (2022). Ecological footprint, human capital, and urbanization. Energy & Environment, 33(3), 487-510.

Cooray, A., Dutta, N., & Mallick, S. (2017). Trade openness and labor force participation in Africa: the role of political institutions. Industrial Relations: A Journal of Economy and Society, 56(2), 319-350.

Dufrenot, G., Mignon, V., & Tsangarides, C. (2010). The trade-growth nexus in the developing countries: A quantile regression approach. Review of World Economics, 146, 731-761.

Fetahi-Vehapi, M., Sadiku, L., & Petkovski, M. (2015). Empirical analysis of the effects of trade openness on economic growth: An evidence for South East European countries. Procedia Economics and Finance, 19, 17-26.

Goldberg, P., Khandelwal, A., Pavcnik, N., & Topalova, P. (2009). Trade liberalization and new imported inputs. American Economic Review, 99(2), 494-500.

Heeks, R., & Molla, A. (2009). Compendium on impact assessment of ICT-for-development projects. https://idl-bnc-idrc.dspacedirect.org/bitstream/10625/45567/1/132030.pdf.

Kurteš, S., Amidžić, S., & Kurušić, D. (2023). Impact of trade openness, human capital through innovations on economic growth: Case of the Balkan Countries. Economics Innovative and Economics Research Journal, 11(2), 199-208.

Le, Q., Ho, H., & Mai, N. (2019). The impact of financial inclusion on income inequality in transition economies. Management Science Letters, 9(5), 661-672.

Masoud, N., & Hardaker, G. (2012). The impact of financial development on economic growth: Empirical analysis of emerging market countries. Studies in Economics and Finance, 29(3), 148-173.

Miller, S. M., & Upadhyay, M. P. (2000). The effects of openness, trade orientation, and human capital on total factor productivity. Journal of Development Economics, 63(2), 399-423.

Qayyum, A., & Zaman, K. (2019). Dynamic linkages between international trade, gross fixed capital formation, total labor force and economic growth: empirical evidence from Pakistan. Acta Universitatis Danubius. Œconomica, 15, 1.

Schultz, T. W. (1961). Investment in human capital. The American Economic Review, 51(1), 1-17.

Sharma, A., & Samuel, A. (2019). Misery Index: Impact on GDP and cost of living in India. https://www.ijprems.com/paperdetail.php?

Stiglitz, J. E. (2005). Making Natural Resources into a Blessing rather than a Curse. In Covering Oil: A Report. Guide Energy Development; Open Society Institute: New York, NY, USA.

Sulaiman, C., Bala, U., Tijani, B. A., Waziri, S. I., & Maji, I. K. (2015). Human capital, technology, and economic growth: Evidence from Nigeria. Sage Open, 5(4), 2158244015615166.

Voitchovsky, S. (2005). Does the profile of income inequality matter for economic growth? Distinguishing between the effects of inequality in different parts of the income distribution. Journal of Economic Growth, 10, 3, 273–96