



Investigation of Dynamic Spillovers of Foreign Direct Investment and Human Capital in Pakistan

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ABSTRACT

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Human capital enhancement is a leading indicator for sustainable development, and it has proven as a significant and widespread area of research over a few decades ago. In addition, emerging states' FDI consequently enhances the human capital comparatively with its previous level. Empirically, this research explains the association between foreign direct investment and human capital in Pakistan. Annual time series data is obtained for 1976 to 2020. ARDL is applied to the analysis and estimates the effect of many-core variables on human capital. The econometric analysis reveals unidirectional running from foreign direct investment to human capital. Therefore, foreign direct investment is not satisfactory and sufficient to bring Pakistan back to growth along with this; however, the other variables as the trade opens are essential to consider.

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1. Introduction

One critical factor of sustainable development is Foreign direct investment (FDI), which is equally essential to all economic growth sectors (Rismawan, Haryanto, & Handoyo, 2021). It creates employment opportunities, technical advancement, and innovative capital goods, expanding economic activity (Sonita, Miswardi, & Nasfi, 2021). However, on the other hand, FDI has a possible adverse consequence on the target economy. All this comprises a significant impact on the balance of payments as revenues are sometimes expelled and affect the competition in domestic national markets (Lewis & Wiser, 2007).

Furthermore, human capital development can be associated with technical knowledge in various dimensions. However, there has been a low transfer level of technical knowledge and management techniques in Pakistan (Kushnina, Perlova, & Permiakova, 2022). Moreover, most FDI arrivals go to the low and intermediates kill industry that do not necessitate considerable skills, with a concurrently minor prerequisite for investment in social capital (Burinskas, Holmen, Tvaronavičienė, Šimelytė, & Razminienė, 2021). In addition to this, high skill segments, the broader gaps in technology repressed the aptitude of the employees to acquire, because either the gap is not so insignificant that it is tough to connector because the apparent gaps deter growth (Ismail, Hamzah, & Bebenroth, 2018).

In underdeveloped nations, FDI arrivals are continuously are vertical (ARSLAN, SAĞLAM, & GÜZEL, 2018; Nguyen, Haug, Owen, & Genç, 2020). Hence, underdeveloped nations are inclined to accept substantial trade strategies to inspire trade and appeal to many capital arrivals from more developed nations to endorse growth. As a result, underdeveloped nations have experienced an extra ordinary upsurge in FDI arrivals in the current decade. The arrival of FDI in Asian underdeveloped nations was \$406770 million in 2012. Pakistan shares a

significant portion. The part of FDI is dynamic in underdeveloped nations' growth strategies. However, at the same time, it is controversial to a reasonable extent in part of underdeveloped nations. The socio-economic structure of underdeveloped nations significantly differs from the industrialized ones, which is conceivably likely to be the reason, unlike the presentation of this investment in such nations (N. Ali & Mingque, 2018). The spillovers coming from globalization are getting pace in underdeveloped nations and their struggle to develop the technical level being accomplished by the foremost rich nations (Lin & Zhang, 2019).

Though, to get the full benefit of technical dissemination for (Luken & Freij, 1995) home nation necessitates an adequate amount of human skills expansion in the host country (Abdouli & Omri, 2021). The congregation's human skills and capital level restricts the absorbent capacity that encumbers technological diffusion (Maryam & Jehan, 2018). The recent growth experienced by industrialized nations is because of gains from inexpensive intermediate materials and the workforce in underdeveloped countries (H. Ali, Yasmin, & ul Hasan, 2021). Conventionally, this outsourcing was made as constituent production; nevertheless, research and development, marketing, and sales. All this happened over the FDI flows, which may be vertical or horizontal (Noorbakhsh, Paloni, & Youssef, 2001). The first the flows were observed from more developed-to-more developed countries while transforming from developed to underdeveloped nations (Perkins & Neumayer, 2014; Vadra, 2012).

The well organized use of FDI is serious for underdeveloped nations since it is an indispensable foundation of money. Nevertheless, the involvement demonstrates that underdeveloped nations cannot benefit from FDI entrances due to various insufficiencies (Sinha & Sengupta, 2019). Alternatively, endogenous growth has uncovered the optimistic role of FDI in economic growth (Safdar, Shaheen, Yasmin, & Afzal, 2021). The constructive impact of FDI on the efficiency of an economy is also emphasized by supporting the positive contributions of FDI towards economic growth, especially in Pakistan (Maskay, Panta, & Sharma, 2006). It supports the conclusions that individuals develop the positive impact of FDI in economic growth. Nevertheless, these investigations found a negative association between economic growth and external capital (Samargandi, A. Alghfais, & AlHuthail, 2022).

Since the early 1980s, underdeveloped countries have suggestively alleviated limitations on foreign direct investment (FDI) inflows. This tendency has developed even more extensively during the 1990s. Actually, despite the absence of multiple contexts for FDI, bilateral, unilateral, and local exertions towards the liberalization of country wide FDI backgrounds have led to extraordinary convergence of management policy toward FDI among countries from all regions reduction in the flows of official sequestered wealth. In an atmosphere with more energetic capital flows, FDI is an income to balance loan and impartiality wealth in private external capital inflows. FDI is also less volatile the another capital flows (Nepal, Paija, Tyagi, & Harvie, 2021).

Furthermore, FDI is not a foundation of economic and employment (Liang, Shah, & Bifei, 2021; Yasmin, Shaheen, & Yasin, 2020). For underdeveloped country governments, FDI can also be intermediate for receiving skills, technical knowledge, administrative and decision-making performance, and admission to market places. Moreover, the less developed a country is, the more its prospects on FDI to improve its reserve and skills restraints. However, foreign investors are concerned about situations that offer suitable amalgamations of locational compensations (Song, Paramati, Ummalla, Zakari, & Kummitha, 2021).

2. Literature Review

Muhammad (2010) examined the influence of globalization on the human development index of Pakistan utilizing annual series ranging from 1975-to 2008. To check out the stationarity of data ADF test was utilized. Johansen's cointegration approach was adopted to investigate the association among the parameters. They found that FDI has a vital role in economic expansion and progress while FDI is not a single feature of the human development index. They conclude that FDI is significant, while due to income inequality in Pakistan, the coefficient of real GDP is insignificant and negative.

Nisar, Raza, Ali, and Tatlah (2011) derived the link between human capital formation and Pakistan's economic growth utilizing secondary data from 1972-1973 to 2010-2011. This

research employed OLS and found the long-term affiliation of economic growth and human capital. Outcomes indicated a positive relationship between GDP and education enrollment index, Gini coefficient, and GFCF. On the other hand, GDP is negatively related to infant mortality rate, investment growth, poverty, and inflation.

Chaudhry, Malik, and Faridi (2010) empirically explored the causal affiliation of human capital, trade liberalization, and economic progress in an inquiry of Pakistan utilizing annual data ranging from 1972-to 2007. They were using the ADF test for the process of stationarity. They utilized the Johansen cointegration, ECM, and Granger causality technique to explore the affiliation among the variables. Johansen's cointegration technique indicated the existence of a long-term association among economic growth, employed labor force, physical capital, trade opens, and human capital. They identified a causal relationship between human capital and trade liberalization to economic growth. They decided that human capital and trade openness are fundamental for Pakistan's long-term economic growth. They recommended that to increase the export of a country government should develop human resource development.

Human capital improvement may be connected in numerous ways to the transmission of practical knowledge. The inspiration of trade and investment openness thus be contingent on how the individuals can engross and use the evidence and knowledge thus developed (Thomas & Wang, 1997) originate the rate of wages is three percent higher in conditions with both a more cultivated labor force and a more open low-cost than in countries that had only one or the other.

Qadri and Waheed (2013) analyzed the human capital and economic progress of low, middle, and high-income countries (cross countries). They used data from 106 nations for the period 2002-2008. They were using the OLS model to estimate the association among the variables. They found that human capital had optimistic relation with economic growth. They concluded that the rate of returns on human capital is more significant in low-income nations than the long-term returns of human capital throughout the domain. Finally, they concluded that expenditures on human capital are essential for middle and low-income countries.

Herzer and Klasen (2008) argued that the long-run development is known to the technical production methods that are more dynamic through FDI than through domestic investment. It incased the idea that FDI is the most suitable technology transmission to the host country. Given this view, the technology is transported using two core channels: computers, electronics productions, and energy sectors. Since further most underdeveloped countries are comparatively improved in the primary sector of the economy than technological, the impact of FDI in repositioning technology is unavoidable.

3. Data and Methodology

3.1 Data sources

Most FDI inflows are observed toward the developing nations from developed countries. Later, given the aim of this research to study the influence of FDI on the Human capital in Pakistan will be discussed. Yearly time series data is obtained from the WDI for 1976 to 2020. A detailed list of variables is stated for the analysis.

3.2 Model Specification

Several models can be utilized to estimate the long-term relationship among variables. However, the ARDL approach is significant in small data handling. Moreover, this model is appropriate for the stationary series at a difference and level. FDI comes up with unconventional technologies for emerging countries. Domestic firms quickly reproduce these methods and inevitably gain an advantage, and labor skills improve accordingly in the production process. Though, it is evident that the imitation of technology is cheaper than revolutionizing new technologies with huge expenditures on research and development that ultimately are not optimal for under-developed nations. Later, another advantage to underdeveloped countries of imitating the technology is implementing this new expertise. FDI is consequently the optimum channel for transporting this unconventional expertise. Nevertheless, this replicating capacity is limited on the number of advanced firms plus the number of human capital stock in the host country.

$$HC = \beta_0 + \beta_1(INF) + \beta_2(GDP) + \beta_3(FDI) + \beta_4(TOP) + \beta_5(GOVEX) + \epsilon$$

Where GDP is a gross domestic product, HC is Human capital (secondary school enrollment gross), GEX is general government final consumption expenditure, INF is Inflation, FDI is FDI net arrivals, TOP is Trade (% of GDP).

Table 1: Variable Description

| Variable | Description | Data source |
|--------------|---------------------------|--|
| HC | Human capital | The ratio of Secondary school enrolment to total enrolment |
| INF | Inflation | The proportion of price change in the economy |
| GDP | GDP growth | The GDP Growth rate |
| FDI | Foreign direct investment | Total Foreign investment inflows |
| TOP | Trade openness | The sum of imports and exports is divided into the gross domestic product. |
| GOVEX | Government expenditure | Government purchases excluding the defense expenditure |

4. Empirical Estimation

The results of Descriptive analysis are given in table 2.

Table 2: Descriptive analysis

| | HC | INF | GDP | FDI | TOP | GEX |
|------------------|--------|---------|---------|--------|--------|---------|
| Mean | 1.5254 | 9.1035 | 4.9309 | 0.8545 | 0.3038 | 2.3432 |
| Median | 1.4792 | 9.7500 | 4.8465 | 0.6169 | 0.3000 | 2.3813 |
| Maximum | 1.7997 | 20.8000 | 10.2157 | 3.6683 | 0.3700 | 3.0223 |
| Minimum | 1.2376 | 3.1000 | 1.0144 | 0.0616 | 0.2500 | 1.5783 |
| Std. Dev. | 0.2143 | 3.6662 | 2.0666 | 0.8087 | 0.0292 | 0.3527 |
| Skewness | 0.1478 | 0.4051 | 0.2242 | 2.1120 | 0.1556 | -0.1599 |
| Kurtosis | 1.3693 | 3.6994 | 2.7015 | 7.1905 | 2.3203 | 2.2781 |

Source: Author estimation using Eviews-9.5

Table 3 gives the result of correlation analysis.

Table 3: Correlation Analysis

| Variables | HC | INF | GDP | FDI | TOP | FDI |
|------------|---------|---------|---------|---------|--------|--------|
| HC | 1.0000 | | | | | |
| INF | 0.1788 | 1.0000 | | | | |
| GDP | -0.3506 | -0.1852 | 1.0000 | | | |
| FDI | 0.5940 | 0.1338 | -0.1878 | 1.0000 | | |
| TOP | -0.4060 | -0.1032 | 0.1261 | -0.1102 | 1.0000 | |
| FDI | 0.1617 | 0.3383 | -0.1431 | 0.3685 | 0.0646 | 1.0000 |

Source: Author estimation using Eviews-9.5.

Table 4: UNIT ROOT

| | Trend and intercept | Intercept | Decision |
|---|---------------------|---------------------|----------|
| GDP at level | -0.194964, (0.9310) | | |
| GDP at 1st difference | -6.711515, (0.0000) | | I(I) |
| HC at level | | -1.854911, (0.6589) | |
| HC at 1st difference | | -6.126922, (0.0001) | I(I) |
| INF at level | -3.440826, (0.0599) | | |
| INF at 1st difference | -8.282932, (0.0000) | | I(I) |
| FDI at level | | -3.219806, (0.0951) | I (0) |
| FDI at 1st difference | | -4.243848, (0.0091) | I (I) |
| TOP at level | -7.284143, (0.0000) | | I (0) |

Source: Author estimation using Eviews-9.5.

The table 4 depicts a unit root result indicating the stationarity of the variables. It depicts that most of the series are stationary at the level form, and some variables have unit roots with differenced stationary.

Table 5: Cointegration analysis- BOUND TEST

| Test Statistic | Value | k |
|-----------------------|----------|----------|
| F-statistic | 5.961196 | 5 |
| Critical Value Bounds | | |
| Significance | I0 Bound | I1 Bound |
| 10% | 2.26 | 3.35 |
| 5% | 2.62 | 3.79 |
| 2.5% | 2.96 | 4.18 |
| 1% | 3.41 | 4.68 |

Source: Author estimation using Eviews-9.5.

This study analyzes the long-term relationship between FDI and Human capital in Pakistan. Table 5 shows the bond test results of the model. Significance levels are checked at 10%, 5%, 2.5% and 1%. The F-statistics estimate value of our first model is 5.961196, which is higher than the lower bond values and upper bond values , so we cannot accept the null hypothesis and accept the relationship between GDP growth and terms of trade and other control variables relationship.

**Table 6: Regression Results of Short-Run Model:
Dependent Variable: Human Capital**

| Variable | Coefficient | t-Statistic | Prob. |
|--------------------|-------------|-------------|--------|
| D(HC(-1)) | 0.391681 | 3.226825 | 0.0061 |
| D(INF) | -0.000177 | -0.412175 | 0.6865 |
| D(INF(-1)) | 0.000924 | 1.971250 | 0.0688 |
| D(INF(-2)) | -0.000709 | -1.563774 | 0.1402 |
| D(INF(-3)) | 0.001100 | 2.449623 | 0.0281 |
| D(GDP) | -0.002920 | -3.970963 | 0.0014 |
| D(GDP(-1)) | 0.002982 | 3.885337 | 0.0016 |
| D(GDP(-2)) | 0.001905 | 2.911353 | 0.0114 |
| D(GDP(-3)) | 0.001418 | 2.303528 | 0.0371 |
| D(FDI) | -0.001861 | -0.541072 | 0.5970 |
| D(FDI(-1)) | 0.011672 | 2.223041 | 0.0432 |
| D(FDI(-2)) | -0.016364 | -3.013888 | 0.0093 |
| D(FDI(-3)) | 0.016858 | 4.229835 | 0.0008 |
| D(TOP) | 0.068781 | 0.890289 | 0.3884 |
| D(TOP(-1)) | -0.007821 | -2.330732 | 0.0352 |
| D(FDI(-2)) | 0.002976 | 0.821797 | 0.4250 |
| D(TOP(-3)) | 0.015377 | 3.743038 | 0.0022 |
| CoIntEq(-1) | -0.036610 | -2.491895 | 0.0259 |

Source: Author estimation using Eviews-9.5.

The value of Count Eq (-1) is -0.036610, and it has a p-value equal to 0.0259, which is significant and negative of the value existing to it will converge in half then a more than in a period. ECT indicates that any deviation from the long-run equilibrium between variables is corrected by about 3.6% for each period. It takes a long period o return to its equilibrium

Table 7: Long-run results

| Variable | Coefficient | t-Statistic | Prob. |
|------------|-------------|-------------|--------|
| INF | -0.018854 | -1.078667 | 0.2990 |
| GDP | 0.292643 | 2.937684 | 0.0108 |
| FDI | 0.142328 | 4.231914 | 0.0002 |
| GEX | 2.280342 | 2.610592 | 0.0131 |
| TOP | 0.971899 | 2.121349 | 0.0422 |
| C | 5.832888 | 4.305247 | 0.0007 |

Source: Author estimation using Eviews-9.5

The coefficient of trade openness implies a direct association between trade and human capital expansion, leading to economic growth, and the relationship is statistically significant. The ARDL regression result supports that FDI positively contributes to the host country's economic development by bringing human capital to a level of the highest skills. Moreover, the result simply an insignificant impact of inflation on host country's economic growth. The coefficient of government expenditure is significant but has a positive coefficient. It implies that the Human capital must be increased if government investment increases (Shafuda & De, 2020). The coefficient of openness is positive and significant. Human capital is highly sensitive to change in the FDI, highlighting that its effect on economic progress is vital.

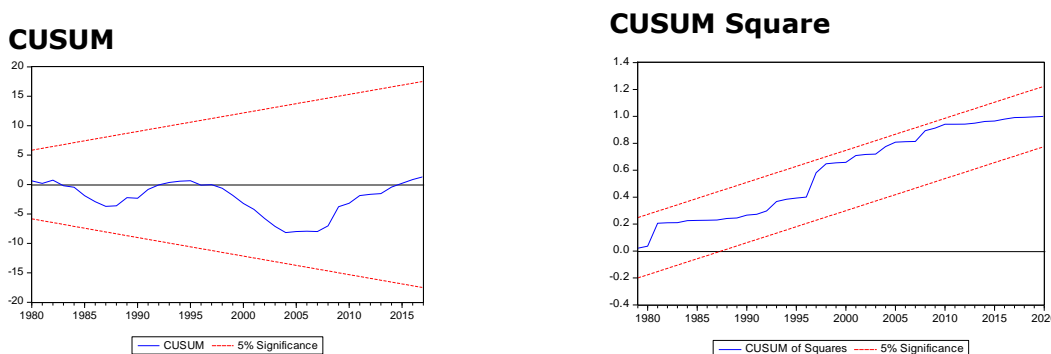
Table 8: Diagnostic Test

| Breusch-Godfrey Serial Correlation LM Test | | | |
|---|----------|----------------------|--------|
| F-statistic | 0.583296 | Prob. F(2,12) | 0.5731 |
| Obs*R-squared | 3.366893 | Prob. Chi-Square(2) | 0.1857 |
| Heteroskedasticity Test: Breusch-Pagan-Godfrey | | | |
| F-statistic | 0.333498 | Prob. F(23,14) | 0.9905 |
| Obs*R-squared | 13.45043 | Prob. Chi-Square(23) | 0.9415 |
| Scaled explained SS | 2.955748 | Prob. Chi-Square(23) | 1.0000 |

Source: Author estimation using Eviews-9.5

Table 8 illustrates that the model has no serial correlation as the results of the Brush Godfrey test demonstrate that the F- statistics are 0.5731, and it is significant. Therefore, there is no serial correlation, and Heteroscedasticity is not present in the model. Therefore, we reject the null hypothesis and accept the alternative hypothesis. Also, in the model Heteroscedasticity, the p-value of F-value is 0.9905, and the probability is statistically significant.

Figure 1: Plot of Cumulative Sum of Recursive Residuals



5. Conclusion

Finally, the research found substantial intact interactions and strong relations between FDI and human capital in the host country. Unambiguously, FDI arrivals have their significance in host nations. It upsurges the source of national investment through knowledge diffusion known as productivity spillovers by adopting more advanced technology and administration practices used by foreign firms. Therefore, there are two ways by which FDI can enhance growth: first, by enticing higher levels of total investment; and second, by diffusing more unconventional technologies with the enhancement of human capital. Human capital enhancement is the leading indicator for sustainable development, and it has proven as a significant and widespread area of research over a few decades ago. In addition, emerging states' FDI consequently enhances the human capital comparatively with its previous level. Empirically, this research explains the association between foreign direct investment and human capital in Pakistan. Annual time series data is obtained for 1976 to 2020. ARDL is applied to the analysis and estimates the effect of many-core variables on human capital. The empirical analysis reveals the existence of unidirectional short-run and long-run relationships running from foreign direct investment to human capital. Therefore, the diffusion of knowledge with higher technologies is essential to enhance human capital and, hence, economic growth at the other end. Therefore, foreign direct investment is insufficient to bring Pakistan back to growth; however, the other variables as the trade opens are essential.

References

- Abdouli, M., & Omri, A. (2021). Exploring the nexus among FDI inflows, environmental quality, human capital, and economic growth in the Mediterranean region. *Journal of the Knowledge Economy*, 12(2), 788-810.
- Ali, H., Yasmin, F., & ul Hasan, M. (2021). A Disaggregated Analysis of Foreign Direct Investment and Economic Growth in Pakistan: New insights from Tota and Yamamoto Causality. *statistics, computing and interdisciplinary research*, 3(2), 39-58.
- Ali, N., & Mingque, Y. (2018). Does foreign direct investment lead to economic growth? Evidences from Asian developing countries. *International Journal of Economics and Finance*, 10(3), 109-119.
- ARSLAN, Ü., SAĞLAM, Y., & GÜZEL, A. E. (2018). Causal relationship between foreign direct investment and export: The case of developing economies of Asia. *Asian Economic and Financial Review*, 8(4), 537-551.
- Burinskas, A., Holmen, R. B., Tvaronavičienė, M., Šimelytė, A., & Razminienė, K. (2021). FDI, technology & knowledge transfer from Nordic to Baltic countries. *Insights into regional development*, 3(3), 31-55.
- Chaudhry, I. S., Malik, A., & Faridi, M. Z. (2010). Exploring the causality relationship between trade liberalization, human capital and economic growth: Empirical evidence from Pakistan. *Journal of Economics and International Finance*, 2(9), 175-182.
- Herzer, D., & Klasen, S. (2008). In search of FDI-led growth in developing countries: The way forward. *Economic Modelling*, 25(5), 793-810.
- Ismail, M., Hamzah, S. R. a., & Bebenroth, R. (2018). Differentiating knowledge transfer and technology transfer: what should an organizational manager need to know? *European Journal of Training and Development*.
- Kushnina, L., Perlova, I., & Permiakova, K. (2022). *Knowledge Transfer in Intercultural Technical Communication in View of Translation Synergetic Paradigm*. Paper presented at the Proceedings of Sixth International Congress on Information and Communication Technology.
- Lewis, J. I., & Wiser, R. H. (2007). Fostering a renewable energy technology industry: An international comparison of wind industry policy support mechanisms. *Energy policy*, 35(3), 1844-1857.
- Liang, C., Shah, S. A., & Bifei, T. (2021). The Role of FDI Inflow in Economic Growth: Evidence from Developing Countries. *Journal of Advanced Research in Economics and Administrative Sciences*, 2(1), 68-80.
- Lin, J. Y., & Zhang, J. (2019). Learning to Catch up in a Globalized World. *How Nations Learn: Technological Learning, Industrial Policy, and Catch-up*, 149.
- Luken, R. A., & Freij, A.-C. (1995). Cleaner industrial production in developing countries: market opportunities for developed countries. *Journal of Cleaner Production*, 3(1-2), 71-78.
- Maryam, K., & Jehan, Z. (2018). Total factor productivity convergence in developing countries: role of technology diffusion. *South African Journal of Economics*, 86(2), 247-262.
- Maskay, N. M., Panta, R. K., & Sharma, B. P. (2006). *Foreign investment liberalization and incentives in selected Asia-Pacific Developing Countries: Implications for the health service sector in Nepal*. Retrieved from
- Muhammad, S. D. (2010). The effectiveness of financial development and openness on economic growth: Case study of Pakistan. *European Journal of Social Sciences*, 13(3).
- Nepal, R., Paija, N., Tyagi, B., & Harvie, C. (2021). Energy security, economic growth and environmental sustainability in India: Does FDI and trade openness play a role? *Journal of Environmental Management*, 281, 111886.
- Nguyen, A. T., Haug, A. A., Owen, P. D., & Genç, M. (2020). What drives bilateral foreign direct investment among Asian economies? *Economic Modelling*, 93, 125-141.
- Nisar, N., Raza, A., Ali, Z., & Tatlah, I. A. (2011). A linkage between human capital and demographic externalities.
- Noorbakhsh, F., Paloni, A., & Youssef, A. (2001). Human capital and FDI inflows to developing countries: New empirical evidence. *World development*, 29(9), 1593-1610.
- Perkins, R., & Neumayer, E. (2014). Geographies of educational mobilities: Exploring the uneven flows of international students. *The Geographical Journal*, 180(3), 246-259.
- Qadri, F. S., & Waheed, A. (2013). Human capital and economic growth: Cross-country evidence from low-, middle-and high-income countries. *Progress in Development Studies*, 13(2), 89-104.

- Rismawan, L. B., Haryanto, T., & Handoyo, R. D. (2021). Foreign Direct Investment Spillovers and Economic Growth: Evidence from Asian Emerging Countries. *Ekulilibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi*, 16(1), 49-63.
- Safdar, N., Shaheen, R., Yasmin, F., & Afzal, N. (2021). Pakistan's Growth Empirics and Foreign Direct Investment: An Assessment of the Role of Domestic Financial Sector. *Journal of Accounting and Finance in Emerging Economies*, 7(2), 357-367.
- Samargandi, N., A. Alghfais, M., & AlHuthail, H. M. (2022). Factors in Saudi FDI Inflow. *SAGE Open*, 12(1), 21582440211067242.
- Shafuda, C. P., & De, U. K. (2020). Government expenditure on human capital and growth in Namibia: a time series analysis. *Journal of Economic Structures*, 9(1), 1-14.
- Sinha, M., & Sengupta, P. P. (2019). FDI inflow, ICT expansion and economic growth: an empirical study on Asia-pacific developing countries. *Global Business Review*, 0972150919873839.
- Song, Y., Paramati, S. R., Ummalla, M., Zakari, A., & Kummitha, H. R. (2021). The effect of remittances and FDI inflows on income distribution in developing economies. *Economic Analysis and Policy*, 72, 255-267.
- Sonita, E., Miswardi, M., & Nasfi, N. (2021). The role of Islamic higher education in improving sustainable economic development through Islamic entrepreneurial university. *International Journal of Social and Management Studies*, 2(2), 42-55.
- Vadra, R. (2012). Shifting FDI's scenario: a case of an African safari. *International Journal of Indian Culture and Business Management*, 5(4), 367-384.
- Yasmin, F., Shaheen, R., & Yasin, A. (2020). An Analysis of Causal Relationship between Economic Growth and Unemployment: Evidence from Pakistan. *Annals of Social Sciences and Perspective*, 1(1), 09-17.