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Effect of Public Investment on Health Population: A Review of BRICS Countries

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ABSTRACT

This research aims to investigate the perspectives offered by the literature on health population in relation to public investment, Foreign Direct Investment, and Economics Policy Uncertainty in emerging nations. This paper explores and summarizes current theoretical and empirical studies on the issue. It begins by providing a summary of public investment, foreign direct investment, and HP in the BRICS nations. The literature is identified in a second way, utilizing conceptual and practical knowledge from published works. Furthermore, this paper clarified theoretical methodologies that describes how these strategies function. This work advances the fields of public investment, health population, foreign direct investment, and economic policy.

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1. Introduction

China opened its economy to international investment and progressively lifted trade barriers; during the past few decades, FDI inflow has increased significantly. The increase in foreign direct investment is thought to be a source of cutting-edge technologies that promotes the spread of technology. Foreign direct investment (FDI) lowers unemployment, increases productivity in the host nation, and creates job possibilities. For the past few decades, China has prioritized foreign direct investment (FDI) in order to meet its goal of social and economic development. China's-Year-Book (2017) states that the industrial and secondary sectors receive 52.75% of foreign direct investment (FDI), with the primary and tertiary sectors receiving 2.56% and 44.69% of the total (Zhang et al., 2023).

As African countries lag behind their peers. An important tool for developing indicators in other parts of the world Foreign Direct Investment (FDI) is proposed to bridge this gap. As a result, African countries have launched a number of programs to increase FDI. For example, the as of January 1, 1999, African countries have signed more than 300 bilateral agreements. 58 bilateral investment treaties and investment treaties were signed. Egypt alone shows the highest figures among developing countries. Furthermore, a healthy population suggests a workforce that is more resilient—both physically and psychologically—and therefore more productive, which might increase foreign direct investment inflows. Increased productivity translates into greater wages for businesses and employees, which in turn drives up demand for goods and services. Good population health can consequently result in an increase in FDI inflows since higher earnings or return on investment can be extrapolated from the product life cycle hypothesis and the eclectic paradigm as a primary predictor of FDI inflows (Awan, Rahman, Ali, & Zafar, 2023; Immurana, Iddrisu, Owusu, & Yusif, 2023).

Despite the foregoing, there is still disagreement on how foreign direct investment affects development metrics. For example, it has been discovered that foreign direct investment (FDI) hinders economic progress in underdeveloped nations. As a result, FDI's detrimental effects on economic growth may result in reduced incomes, which will make it harder for individuals to pay for essential health care, such as a balanced diet, better sanitation and cleanliness, and high-quality medical treatment. This could worsen health outcomes. Conversely, foreign direct investment (FDI) is being praised for its ability and technological innovations that can boost economic growth. As a result, this will increase people's capacity to pay for medical supplies, hence improving health outcomes (Chaudhary, Nasir, ur Rahman, & Sheikh, 2023). The future of Canada's government-funded medical care system has been discussed of public discussion for the last ten years. Even while a number of topics have been brought up, the discussion has usually focused on the financial side, namely on whether the current fiscal framework can handle the demands on health care spending brought on primarily by the aging of the population. Intergovernmental fiscal ties have also been a topic of discussion because publicly-supported health care is a national program, meaning that it is constitutionally the province governments' responsibility but is partially paid by the federal government through intergovernmental transfers (Dawood, Majeed, Naveed, Farooq, & Hussain, 2023; Fatima et al., 2023; Ruggeri, 2007).

The standard of living for citizens has significantly increased as China's economy has grown. As a result, people are becoming more conscious of their health, and their need for medical services has been steadily rising. Health in a highly developed civilization now encompasses psychological well-being and social adaptability in addition to bodily ailments and athletic prowess. The financial expense of providing counseling to residents in order to preserve their physical, mental, and social adaptation is known as public health investment. Investments in health benefit the general public. Its primary goal is to empower people to live better, happier lives with good physical and mental health, particularly in the wake of societal progress and the growing demand for spiritual and material fulfillment (Health, 2023; Shafqat et al., 2023; Usman, Balsalobre-Lorente, Jahanger, & Ahmad, 2023; Yoon, Abdelmohsen, & Gorospe, 2014).

It is clear from the foregoing that FDI has an impact on development metrics other than only economic growth, such health outcomes. Nevertheless, the majority of empirical research on the topic focused on how foreign direct investment (FDI) affects economic growth, with relatively little attention paid to how FDI affects health. Foreign Direct Investment (FDI) is a significant factor in determining the economic progress of every country. However, manufacturing FDI only increases host country Gross Domestic Product increase when it has sufficient absorption ability to accept cutting-edge technologies. Despite this, FDI is a highly significant growth variable in transition economies because of its positive and statistically significant influence on the expansion of economy (Campos & Kinoshita, 2002; Ilyas, Banaras, Javaid, & Rahman, 2023; Khan & Saif-ur-Rehman, 2023).

The result of public policies aimed at managing our country's finite financial resources and public commodities like health is an economic erogeneity of psychological resilience. Stated differently, a nation's economic and public policies have an impact on psychological resilience. This indicates that either a rise in general anxiety or improved psychological resistance to survival threats can be attributed to the social milieu that the public policy has established. It is obvious that the way that life is structured and the safety net that individuals depend on to survive determine the socioeconomic backdrop. However, the significance of public policy in relation to the mental health of the general people has not been acknowledged. The well-known book has sparked a crucial discussion regarding the significance of public mental health policy for the management of mental institutions. Many people have accepted this strategy (Frank & McGuire, 2000; Nawaz, Rahman, Zafar, & Ghaffar, 2023; Rogers, 2024). Nonetheless, it is not acknowledged that general public policy has a significant role in public health and is a matter that merits careful consideration and preparation. We develop a sophisticated quantitative analytical methodology based on the Culture Based Development (CBD) paradigm that enables us to investigate how public policy impacts public mental health using the newly developed narrative economics of language technique (Chaudhary et al., 2023; Qadri et al., 2023; Tubadji, Boy, & Webber, 2023).

Pakistan's economy is highly dependent on foreign technology and finance since it lacks capital. There are numerous reasons for this subpar performance. Unfortunately, during the last 20 years, political upheaval, increased rates of inflation, rapid population expansion, and border disputes with foreign nations have all had a negative effect on Pakistan's economy. Poor savings lead to inadequate levels of investments, which in turn produce poor socio-economic infrastructure and poorer growth rates across various macroeconomic indices. One cannot ignore FDI's crucial significance in the growth phenomena. Pakistan, like other emerging economies, welcomes foreign direct investment (FDI) in the hope of reaping internal economic benefits, but it has not been as successful as its neighbors, China and India, in drawing steady and sizable FDI inflows. Another thing to consider in developing countries is the underutilization of foreign FDI to boost economic activities. This could be because these countries did not implement proper economic reforms that attracted enough FDI in the right amounts and varieties. Desired economic effects depend on the structural makeup and kind of FDI (Chakraborty & Nunnenkamp, 2008; Shahzadi, Ali, Ghafoor, & Rahman, 2023; Shahzadi, Sheikh, Sadiq, & Rahman, 2023; ur Rahman, 2018).

2. Literature Review

It was discovered that FDI lowered South Africa's baby and under-five mortality rates. In a related study, the population health of Ghana was represented by life expectancy and mortality rate. According to his research, foreign direct investment (FDI) significantly raises life expectancy while significantly lowering the death rate (Salahuddin, Vink, Ralph, & Gow, 2020).

The impact of foreign direct investment (FDI) on child health outcomes, namely infant mortality and under-five mortality, was studied with a focus on South Africa. A single country research, however, can be helpful in generating recommendations for policy that are specific to that country, but it is less helpful in generating recommendations for several countries. Furthermore, compared to cross-sectional or time series data, combining data from multiple countries over an extended period of time (panel data) minimizes estimation bias and offers more flexibility, efficiency, and statistical effects (Tabassum, Rahman, Zafar, & Ghaffar, 2023).

Examined how foreign direct investment (FDI) inflows affected Ghana's population health between 1980 and 2018. Malaria, infant mortality, and life expectancy are population health indicators. They used the Ordinary Least Squares (OLS) method and Simultaneous Equation to analyze the data, and the results show that FDI has a major impact on health outcomes. They came to the conclusion that increased FDI could enhance Ghana's population health. Furthermore, a crucial factor in determining a person's life expectancy is their mental health (Ullah, ur Rahman, & Rehman, 2023; Zhang et al., 2023).

The relationship between population health and FDI inflows has not been extensively studied. Nevertheless, none of these research investigated the link between health and foreign direct investment across multiple nations using the overall death rate as a population health metric. Furthermore, no study included multiple estimating techniques to account for endogeneity. Finally, no more than one FDI measurement was employed in any of the research focused on Africa. Therefore, given the importance mentioned in the introduction, our work fills up these gaps (Immurana et al., 2023). Furthermore, they talked about how people with relatively poor child performance would live in cities, while people with relatively strong child performance would live in rural areas. In any case, this tendency brought about a negative relationship between population density and fertility rate (Tanveer Ahmad, 2023; Zahra, Nasir, Rahman, & Idress, 2023).

Economic policy uncertainty relates to financial, tax, commercial, and other interconnected policies and influences the behavior of economic agents, such as decisions about investment and consumption. Furthermore, the global financial problems brought on by the universal Issues of 2007–2009, United Sate and middle west debt crises, trade war, and taxation policies between the United State and China, Brexit, and other events have increased awareness of economic policy unpredictability (Ayad, Sari-Hassoun, Usman, & Ahmad, 2023; Javaid, Noor, Hassan Iftikhar, Rahman, & Ali, 2023).

Investigated found that while FDI inflow has a positive impact on economic growth and can therefore improve health outcomes by raising people's ability to afford health inputs (i.e., income enhancement effect), It may also hinder economic expansion and make it more difficult for consumers to purchase goods that improve their health.

3. Empirical Review

FDI was found to boost economic growth in Malaysia from 1974 to 2009 when specific macroeconomic circumstances were met, based on the Hansen sample splitting and threshold estimation approach (Huo et al., 2023). Using the Johansen co-integration technique, it was investigated how foreign direct investment (FDI) affected the expansion of the service sector in Ghana from 1980 to 2013. According to the study, foreign direct investment (FDI) boosted the expansion of the service sector in the near term but not in the long term (Immurana et al., 2023; Zhao et al., 2023).

Examined the short- and long-term effects of foreign direct investment (FDI), and he took into account the expansion of FDI for the Malaysian economy from 1970 to 2003 by applying the most recent co-integration technique utilizing the ARDL model. They discovered that FDI significantly affects the health sector's value addition growth in both the short and long terms, increasing it by 1% and contributing to a positive change of 11.5%. The empirical results clarify that, in the context of Malaysia, foreign direct investment (FDI) plays a significant role in stimulating economic growth. In addition to highlighting the need of foreign direct investment, they have proposed that attention should also be paid to Malaysia's human capital (Ali, Akram, & Hafeez, 2021; Vučkovski, Paraušić, & Kljajić, 2023).

Additionally, several African nations signed double taxation agreements in the 1990s; these agreements should prevent countries from paying taxes twice in one transaction. In order to secure sustained economic development, countries, particularly those in developing regions, increasingly look to Foreign Direct Investment (FDI) as a crucial tool as the world grows more interconnected. Thus, substantial FDI inflows have occurred into emerging nations, including Africa. For instance, in 2009 and 2010, foreign direct investment (FDI) inflows were

108.5 crores, 102.7 crores, 300.6 crores, and 200 crores into North Africa, West Africa, East Africa, Central Africa, and Southern Africa, respectively (Immurana et al., 2023; Naz, Gulab, & Aslam, 2022).

They have also taken into account the endogenous switching model for accurate estimation and the delayed effect of FDI on the firm's size. Their empirical results clarify how FDI has a major impact on manufacturing firms' values and decision-making. Additionally, a crowding out effect is observed when business firms participate in defensive FDI. Finally, it has been determined that FDI has a positive impact on larger firms and a positive impact on smaller firms as well (Chuang, Chan, Su, Lee, & Tang, 2007; Li et al., 2022).

After looking at a panel of 12 Latin American governments, De Gregorio discovered a strong positive correlation between FDI and economic growth. Furthermore, the study has offered the notion that foreign direct investment (FDI) enables developing nations to engage in exchanges with other nations that have a generally positive impact on economic progress. Moreover, Caste Jon has used panel data to investigate how FDI affects productivity and its growth rate. The study's empirical analysis clarifies how foreign investment affects the nation's economic development. According to their findings, foreign direct investment (FDI) significantly and favorably affects developing economies when compared to less developed ones (Bilal, Shah, Rahman, & Jehangir, 2022; Info, 2022; Mar, 2001).

4. Methodology

The author of this study gathered and critically examined the pertinent literature by following the systematic literature review process as outlined by (Lacey, Matheson, & Jesson, 2011). The author develops a critical review form for a thorough and critical analysis, analyzing a number of important aspects of the earlier studies, including the paper's focus, bibliographic information, theory applied when appropriate, research technique, research philosophy, definition of FDI, FDI domain, research environment, study site, theoretical and practical evaluation, additional conclusion, and reported limits. The author has explored the literature from November 2000 to April 2022 for the critical review of this work. in order to find the most relevant FDI papers possible. (3) Google Scholar; (4) a comprehensive, multidisciplinary bibliography on foreign direct investment (FDI) that includes numerous references from various journals.

For this literature review, the author developed the selection criteria for the literature for this review by taking into account the following factors: books, reviews of literature, commentary, executive abstracts, conference summaries, abstracts with keywords, and stories from newspapers and magazines, and so on. For example, papers that did not deal with FDI or that were not empirical or conceptual were included in the selection. Nearly 600 articles were found overall by the author following duplication. When needed, the author looked at the methodology, abstract, and title of each paper to establish its applicability.

5. Conclusion

After the comprehensive analysis of the literature, it is determined that both the positive and negative effects of FDI are evident when compared to the total value of FDI. The fact that each of the two findings fills a vacuum in the literature on its own is really intriguing. Thus, the influence of foreign direct investment (FDI) on public investment is still up for debate, and numerous studies have been carried out to examine the effects of FDI on the economy as a whole. Given the unique economic, financial, and technological circumstances of the host countries, several studies have found a considerable and positive impact on the growth of the economy, while others have looked at a negative and significant impact.

This study will add to the body of knowledge on public investment, FDI, and population health. It will also investigate the relationship between factor productivity and health in the BRICS public investment sector. The current study made an effort to connect key ideas from the literature with topic-relevant contributions. Furthermore, this study's examination of the variables is lacking. As a result, the primary goal of the study is to present an accurate and thorough overview of earlier research on FDI, including contextual methodologies and practices.

6. Future Recommendations

Three reasons are raised in this review of the literature that warrant additional investigation. First, the RDL model, OLS regression, and GMM technique are employed in the majority of research conducted to examine FDI. It has been noted that only a small number of studies have used a dynamic vector error correction model (VCEM) to conduct the investigation during the literature review. In order to ensure that endogeneity and causation issues are addressed concurrently, the VCEM process helps to capture the time series dynamics under discussion appropriately, Endogeneity problems and causality problems are occurring concurrently throughout.

Furthermore, any potential indirect impacts and comments are also recorded using the VECM process. It is suggested that more research be done to determine how well public investment growth is executed when FDI receipts are substantial within the host nation, as the majority of FDI studies carried out before have mostly focused on the GDP and health growth of the host country. Only a small number of studies have looked at the health of the population. Third, compared to less developed nations, the studies were carried out the previous and evaluated within the framework of southeast Asian nations and Europe, research has been conducted across South Asia, including the BRICS countries.

Authors' Contribution

Tanveer Ahmad Shahid: Led the conceptualization, designed the methodology, oversaw data collection, wrote the initial draft.
Saif Ur Rahman: Contributed to methodology design, reviewed and edited the paper.
Salman Masood Sheikh: Assisted in data collection, reviewed and edited the paper.
Rubina Allahrakha: Contributed to methodology design, reviewed and edited the paper.

Conflict of Interests/Disclosures

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