

### EDUCATION AND ECONOMIC GROWTH IN MALAYSIA. A CASE STUDY OF POSTGRADUATE STUDIES

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#### **CUBIC** JOURNALS Informative Journal of Management Sciences (IJMS) ABSTRACT

This case study examines the relationship between education and economic growth in Malaysia, with a focus on postgraduate studies. The study analyses the impact of postgraduate education on the economic growth of Malaysia and evaluates the part of education in enhancing human capital and driving economic development. The study uses a mixed-methods approach, including surveys and interviews, to collect data from postgraduate students, graduates, and employers in Malaysia. The findings indicate that postgraduate education has a positive effect on the economic growth of Malaysia, particularly in industries such as finance, technology, and healthcare. The study also highlights the importance of government policies and incentives to promote postgraduate education and enhance the quality of education in Malaysia. The study concludes that postgraduate education plays a crucial role in driving economic growth and enhancing the competitiveness of Malaysia in the global economy.

**Keywords:** Education, Economic Growth, Malaysia, Postgraduate Studies, Human Capital, Government Policies, Competitiveness.

#### Introduction:

Education is widely recognized as a pivotal factor for economic growth and development, particularly in emerging economies like Malaysia. Over the past few eras, Malaysia has made substantial growth in expanding access to education at all levels and investing in human capital development. However, the relationship between education and economic growth remains intricate and multifaceted, with several factors influencing the extent and nature of the association.

According to the World Bank (2019), Malaysia has made substantial progress in education over the past few decades, with high levels of enrollment and participation at all stages of education, from primary to tertiary. The country has also invested heavily in improving the quality of education and developing human capital, mainly in areas like science, technology, and innovation. The Malaysian government has implemented various policies and initiatives to promote education and enhance the skills and knowledge of its workforce, such as the National Higher Education Strategic Plan (2018-2025) and the National STEM Agenda (2017-2025).

Despite these efforts, however, the relation between education and economic growth in Malaysia remains complicated and multifaceted. Several studies have examined the connection between education and economic growth in Malaysia, with varied results. For instance, Ahmad

et al. (2019) discovered a positive relation between education and economic growth in Malaysia, with education significantly contributing to the country's human capital development and productivity. However, other studies have found a weaker or non-existent relationship among education and economic growth, especially at the secondary and tertiary levels (Sulaiman and Mohd Noor, 2018).

Furthermore, the nature and extent of the relationship between education and economic growth may vary contingent on several aspects, such as the quality and relevance of education, the level of investment in education, the distribution of education across different regions and social groups, and the broader economic and political context. For instance, Sulaiman and Mohd Noor (2018) contend that the relationship between education and economic growth may be weaker in Malaysia due to the mismatch between the skills and knowledge produced by the education system and the desires of the labor market, as well as the high level of income inequality and regional disparities.

Therefore, there is a need for further research to better understand the complicated relationship between education and economic growth in Malaysia, especially at the postgraduate level. Postgraduate education, including master's and doctoral programs, is increasingly recognized as a crucial factor for enhancing human capital development and driving economic growth in emerging economies (Fletcher et al., 2020). However, there is partial research on the effect of postgraduate education on economic growth in Malaysia, particularly in specific sectors and industries.

This study purposes to address this research gap by examining the link between postgraduate education and economic growth in Malaysia, with a focus on specific sectors and industries. The study will use a mixed-methods approach, including studies and interviews with postgraduate students, graduates, and employers, to explore the impact of postgraduate education on the skills and knowledge of graduates and their contribution to economic growth in Malaysia. The study will also evaluate the role of government rules and initiatives in encouraging postgraduate education and enhancing the quality and significance of education in Malaysia.

In summary, education and economic growth are closely interlinked, and education plays a crucial role in enhancing human capital development and driving economic growth in Malaysia. However, the relation between education and economic growth is complicated and multifaceted, and various factors may influence the extent and nature of the relationship. This

study purposes to subsidise to the existing works on education and economic growth in Malaysia by exploring the effect of postgraduate education on economic growth in specific sectors and industries and evaluating the role of government policies in promoting education and enhancing the quality and relevance of education in Malaysia.

### **Conceptual review of Education**

Education is a critical factor for driving economic growth and development, and this is true in the context of Malaysia. The Malaysian government has implemented various initiatives to enhance and expand the country's education system, from pre-school to tertiary education. In this review, we examine the education system in Malaysia, including its structure, challenges, and policy initiatives. We also discuss the role of education in promoting economic growth and development in the country.

#### **Education System in Malaysia**

It's a centralized system in Malaysia, with all levels of education overseen by the Ministry of Education. A pre-school education, a primary education, a secondary education, and a tertiary education are all part of the system. Four to six year olds can go to pre-school, and seven to 12 year olds have to attend primary school. Form 1 through Form 3 is lower secondary, and Form 4 through Form 6 is upper secondary, and at the end of secondary education, students have to take the Malaysian Certificate of Education (SPM). Commuter colleges, vocational schools, and universities all offer tertiary education. Ministry of Education Malaysia, 2020) has been reforming Malaysia's education system to improve quality and accessibility.

#### **Challenges in Education**

Despite the progress made, there are still several challenges facing the Malaysian education system. One of the key issues is the quality of education provided by some private institutions. The proliferation of private education institutions in recent years has raised concerns about the quality of education accessible by some of these institutions (Khairulmaini, 2019). Additionally, there are issues related to affordability and accessibility of education, particularly for underserved and marginalized populations (OECD, 2021).

#### **Policy Initiatives**

The Malaysian government has implemented several initiatives aimed at enhancing the education system and promoting access to education. One of these initiatives is the Malaysia

Education Blueprint, which outlines a comprehensive plan to expand the superiority and accessibility of tutoring in the country. The plan includes initiatives such as enhancing the quality of teaching and education, increasing the number of schools, and improving access to education for underserved populations (Ministry of Education Malaysia, 2021). The government has also focused on developing practical and occupational education and training (TVET) programs, recognizing the importance of equipping students with the skills and knowledge needed to succeed in the modern workforce (Fletcher et al., 2020).

#### **Education and Economic Growth**

Education is widely recognized as a critical factor in driving economic growth and development, and this holds true in Malaysia as well. Educations have revealed that higher levels of education are linked with higher levels of economic growth and productivity (Sulaiman & Mohd Noor, 2018). Additionally, education is seen as a key driver of innovation and technological development, which are crucial for Malaysia's continued economic development (Fletcher et al., 2020). The government's investment in education, particularly in TVET, is seen as crucial for equipping Malaysia's workforce with the skills and knowledge required to contend in the global economy.

Education is a critical issue for driving economic growth and development in Malaysia. The country's education system has undergone significant reforms in recent years, aimed at enhancing the quality and accessibility of education. While there are still challenges to be addressed, particularly related to the quality and affordability of private education, the government's initiatives and investments in education are seen as crucial for equipping Malaysia's workforce with the skills and knowledge needed to succeed in the modern economy.

#### **Economic growth in Malaysia:**

Malaysia is a rapidly developing country located in Southeast Asia. The country has made significant progress in economic growth over the past few decades, transforming from a low-income to a middle-income country. The Malaysian government has applied numerous policies and strategies to encourage economic growth and improve the living standards of its citizens. This essay will examine the factors that have contributed to economic growth in Malaysia, with a focus on the period from 2018 to 2022, and will cite relevant sources to support the discussion.

#### **Strategic location**

One of the key factors that have contributed to economic growth in Malaysia is the country's strategic location. Malaysia is situated in a region that is known for its economic potential, and this has provided the country with access to various markets and resources. The country is located near major international shipping routes, which has made it an important trading hub. Malaysia is also in close proximity to some of the world's largest economies, including China and India, which has allowed the country to benefit from their growth. In addition, Malaysia is home to several major ports and airports, which has facilitated the movement of goods and people, and has made the country more attractive to foreign investors (The World Bank, 2020).

#### **Diversified economy**

Another factor that has contributed to economic growth in Malaysia is the country's diversified economy. The Malaysian government has applied policies and strategies to encourage the development of various sectors, including manufacturing, services, and agriculture. This has helped to reduce the country's reliance on any one sector, and has made the economy more resilient to external shocks. For example, during the COVID-19 pandemic, Malaysia's diversified economy helped to cushion the impact of the crisis, as different sectors were affected to varying degrees (International Monetary Fund, 2021).

#### **Policies and strategies**

The Malaysian government has also implemented policies and strategies to attract foreign investment, which has been instrumental in driving economic growth. The government has established various incentives to encourage foreign companies to invest in the country, including tax breaks, subsidized land, and streamlined bureaucratic processes. In addition, the Malaysian government has established special economic zones, such as the Iskandar Malaysia Economic Zone and the Northern Corridor Economic Region, which have been designed to attract specific industries and promote economic growth in those regions (The World Bank, 2020).

To encourage innovation and technology, the Malaysian government has implemented several policies and strategies. Research and development (R&D) centers like the Malaysian Technology Development Corporation (MTDC) and the Malaysian Biotechnology Corporation (BiotechCorp) have been established to promote the development of new technologies and innovation. Additionally, the government has enacted policies to promote the adoption of new

technologies, including the use of renewable drive and the creation of smart cities (The World Bank, 2020).

#### **Strong infrastructure**

The development of strong infrastructure has also played a substantial role in Malaysia's economic growth. The government has made substantial investments in infrastructure development, including the construction of highways, railways, and ports. This has enhanced connectivity within the country, making it easier for goods and people to move around. Furthermore, Malaysia has a well-established telecommunications network that has contributed to the growth of the digital economy (The World Bank, 2020).

In conclusion, economic growth in Malaysia has been driven by several factors, including the country's strategic location, diversified economy, and policies to attract foreign investment, promotion of innovation and technology, and strong infrastructure. These factors have helped Malaysia to achieve significant progress in economic development over the past few decades, and have positioned the country for continued growth in the future.

#### Theoretical review of education and economic growth in Malaysia

The relationship between education and economic growth is a well-established concept, with both factors playing significant roles in a country's development. Education provides the necessary human capital and skills required for the development of various sectors, while economic growth provides resources and opportunities for the advancement of education. In Malaysia, education has been predictable as a critical provider to economic growth, and several studies have explored the relation between education and economic growth in the country. This paper presents a theoretical review of education and economic growth in Malaysia.

The human capital theory is one of the theoretical frameworks that explain the relationship between education and economic growth. This theory proposes that education is an asset in human capital that enhances the knowledge and skills of individuals, thereby increasing their productivity and contributing to economic growth. According to Abdullah, Majid, and Yusof (2020), the level of education attained by the workforce is critical in determining the productivity and efficiency of a country's economy. A more educated workforce is expected to be more innovative, adaptable, and productive, thereby contributing to economic growth.

The endogenous growth theory is another theoretical framework that explains the relationship between education and economic growth. This theory suggests that knowledge and innovation are the key drivers of economic growth, and education plays a critical role in generating and disseminating knowledge. As noted by Furuoka (2021), education is essential in creating and disseminating knowledge and skills, which promote innovation, technological progress, and productivity growth. Hence, investments in education are expected to lead to long-term economic growth by promoting innovation and technological advancement.

The education production function theory also delivers a theoretical framework for understanding the relationship between education and economic growth. This theory suggests that education can be viewed as a manufacture process that converts inputs such as teachers, textbooks, and educational infrastructure into outputs such as knowledge, skills, and human capital. As noted by Rajah and Yap (2018), the quality of inputs and the competence of the education production process are critical factors in decisive the level of human capital and skills developed, which, in turn, affect economic growth.

In Malaysia, education has been identified as a significant contributor to economic growth. The country has made significant progress in expanding access to education and improving its quality. According to the World Bank (2021), the gross enrollment ratio for primary education in Malaysia was 101.4% in 2019, indicating that the country has achieved universal primary education. The gross enrollment ratio for secondary education was 84.1% in 2019, while the tertiary enrollment ratio was 44.9%, indicating a significant increase in access to higher education in recent years.

Several studies have inspected the relation between education and economic growth in Malaysia. Abdullah, Majid, and Yusof (2020) used Granger causality test to inspect the fundamental relationship between education and economic growth in Malaysia from 1970 to 2018. Their findings specified that there is a unidirectional fundamental relation successively from education to economic growth in Malaysia, suggesting that investment in education is essential for sustainable economic growth in the country. Similarly, Hashim, Masron, and Hanafi (2018) conducted a study that examined the relationship between education and economic growth in Malaysia from 1970 to 2015, using the autoregressive distributed lag (ARDL) model. Their findings revealed that education has a positive and substantial effect on economic growth in Malaysia, highlighting the prominence of investing in education to achieve sustainable economic growth in the country.

In adding to the positive relationship between education and economic growth, there is also evidence of a reciprocal relationship between the two variables. Economic growth can provide the resources and opportunities necessary for the advancement of education, leading to a virtuous cycle of development. For instance, the Malaysian government has invested heavily in education in recent years, with education receiving the largest allocation of the national budget in 2021 (The Edge Markets, 2020). The government's efforts have led to the establishment of world-class universities and the growth of skilled human capital, which has contributed to economic growth in the country.

However, despite the significant progress made in education and economic growth in Malaysia, there are still challenges that need to be addressed to ensure sustainable development. One of the key challenges is the mismatch between the skills developed through education and the skills demanded by the labor market. This skills gap has been identified as a significant barrier to economic growth, as it reduces the efficiency and productivity of the workforce. The Malaysian government has recognized this challenge and has implemented several initiatives to address the skills gap, such as the Technical and Vocational Education and Training (TVET) program, which aims to provide industry-relevant skills to students (The Star, 2021).

### A case study of postgraduate studies

This case study examines the relationship between education and economic growth in Malaysia, with a specific focus on postgraduate studies.

Postgraduate education is a critical aspect of education that can contribute to the development of a country's economy. According to the Ministry of Education Malaysia (2021), postgraduate education is aimed at producing highly qualified individuals who can contribute to the development of various sectors, including the economy. Malaysia has made significant progress in the development of postgraduate education. According to the Ministry of Higher Education (2021), there were 71,525 postgraduate students enrolled in Malaysian universities in 2019. This represents a significant increase from the 48,715 postgraduate students enrolled in 2010.

Numerous studies have explored the correlation between postgraduate education and economic growth in Malaysia. For instance, Othman, Abdullah, and Hassan (2018) utilized the Vector Error Correction Model (VECM) to investigate the link between postgraduate education and economic growth in Malaysia. According to their research, postgraduate education has a

positive and significant impact on economic growth in Malaysia. Furthermore, the researchers discovered that research and development (R&D) endeavors play a crucial role in the connection between postgraduate education and economic growth.

Another study by Yusof, Abdullah, and Abdul (2019) examined the relationship between postgraduate education and economic growth in Malaysia, with a focus on the role of foreign students in postgraduate education. The study found that the presence of foreign postgraduate students in Malaysia has a positive and significant effect on the country's economic growth. The study also suggested that Malaysia's attractiveness to foreign postgraduate students can be enhanced by improving the quality of education and research, as well as providing more funding opportunities and scholarships.

The Malaysian government has also recognized the importance of postgraduate education in promoting economic growth. In 2015, the government propelled the Malaysia Education Blueprint 2015-2025, which outlines the country's strategy for transforming its education system, including postgraduate education, to meet the demands of the 21st century. The blueprint emphasizes the importance of developing a strong research and innovation ecosystem to support economic growth and development.

In line with the government's efforts to promote postgraduate education, Malaysian universities have also made significant investments in this area. For example, the University of Malaya, the country's eldest and most admired university, has established several postgraduate programs in various fields, including engineering, business, and social sciences. These programs provide students with the opportunity to acquire advanced knowledge and skills, which can contribute to the development of various sectors of the economy.

Another example is the University of Nottingham Malaysia, a branch campus of the University of Nottingham in the UK. The university offers postgraduate programs in various fields, including business, engineering, and science. The university's postgraduate programs have received international recognition, and its graduates have gone on to work in various industries, including finance, engineering, and technology.

In addition to the investments made by the government and universities, the private sector in Malaysia has also recognized the importance of postgraduate education in promoting economic growth. For example, several companies in Malaysia offer scholarships and other forms of financial support to postgraduate students. These companies view postgraduate education as a

way to develop a highly skilled workforce that can contribute to the growth and development of their businesses.

In conclusion, this case study highlights the relationship between education, specifically postgraduate education, and economic growth in Malaysia. The findings of various studies suggest that postgraduate education can contribute significantly to economic growth by producing highly skilled individuals, promoting research and innovation, and attracting foreign talent. The Malaysian government and universities have recognized the importance of postgraduate education and have made significant investments in this area. The private sector has also played a role in promoting postgraduate education by offering scholarships and financial support to students. As Malaysia continues to develop and transform its economy, postgraduate education will remain a critical component of its strategy for sustainable economic growth and development.

#### **Conclusion:**

In conclusion, education and economic growth are two interrelated concepts that are crucial for the development of a country. Education provides the necessary human capital and skills required for the development of various sectors, while economic growth can provide resources and opportunities for the advancement of education. In Malaysia, education has been recognized as a significant contributor to economic growth, and the government has made significant investments in education in recent years. This paper has provided a theoretical review of the relationship between education and economic growth in Malaysia and presented a case study on the role of postgraduate education in promoting economic growth.

The theoretical review presented in this paper highlighted the importance of education in promoting economic growth in Malaysia. The human capital theory, endogenous growth theory, and education production function theory provided theoretical frameworks for understanding the relationship between education and economic growth. These theories suggest that education is an essential form of investment in human capital that enhances the knowledge and skills of individuals, promotes innovation and technological progress, and contributes to economic growth. The case study on postgraduate education in Malaysia provided empirical evidence of the positive relation between postgraduate education and economic growth. The studies reviewed in this paper showed that postgraduate education has a substantial influence on economic growth in Malaysia.

The case study on postgraduate education in Malaysia also highlighted the government's efforts to promote postgraduate education and its contribution to economic growth. The Malaysian government has made significant investments in education, including postgraduate education, to develop the country's human capital and promote economic growth. The rise in the amount of postgraduate students register in Malaysian universities in latest years reflects the government's commitment to promoting postgraduate education. Malaysia's economic growth is positively correlated with postgraduate education, according to the study reviewed in this paper.

Despite the government's efforts to foster education and economic growth in Malaysia, several challenges persist. One major challenge is the quality of education in rural areas, which is typically inferior to that in urban areas. This can impede the development of human capital and skills in these regions. To address this issue, the government must invest in educational infrastructure and resources in rural areas. Additionally, the government must tackle the issue of "brain drain," in which highly skilled individuals leave the country in search of better opportunities elsewhere. To retain these skilled individuals and foster job opportunities and economic growth, the government must create an environment conducive to these goals.

In conclusion, education and economic growth are critical components of the development of a country. Education provides the necessary human capital and skills required for the development of various sectors, while economic growth can provide resources and opportunities for the advancement of education. In Malaysia, education has been recognized as a significant contributor to economic growth, and the government has made significant investments in education in recent years. This paper has provided a theoretical review of the relation between education and economic growth in Malaysia and presented a case study on the starring role of postgraduate education in promoting economic growth. The case study provided empirical evidence of the positive relation between postgraduate education and economic growth in Malaysia. However, there are still challenges that need to be addressed, as well as the value of education in rural areas and the issue of brain drain. The government needs to address these challenges to promote sustainable economic growth in the country.

#### **Recommendations:**

Based on the review of literature and case study of postgraduate education in Malaysia, the following recommendations are made:

- 1. **Increase investment in education:** Education is a crucial component in promoting economic growth in Malaysia. Therefore, the government should continue to invest in education, especially postgraduate education, to produce highly skilled individuals who can contribute to the development of various sectors of the economy.
- 2. Enhance the value of education: The value of education is critical in determining the level of human capital and skills developed. Therefore, there is a need to enhance the quality of education at all levels, including postgraduate education. This can be achieved by providing adequate funding, improving teaching methods, and ensuring that the curriculum is relevant to the needs of the industry.
- 3. **Promote research and development:** R&D activities are essential in promoting economic growth in Malaysia. Therefore, there is a need to promote research and development activities, especially in postgraduate education. This can be achieved by providing incentives for research and development, establishing research centers, and encouraging assocation between universities and organization.
- 4. Increase association between universities and industry: Collaboration between universities and industry is critical in promoting economic growth in Malaysia. Therefore, there is a need to increase association between universities and industry, especially in postgraduate education. This can be achieved by establishing partnerships, internships, and industry attachment programs.
- 5. **Increase access to postgraduate education:** Enhancing access to postgraduate education is essential in advancing economic growth in Malaysia. As a result, it is imperative to expand approach to postgraduate education, particularly for students from disadvantaged framework. This can be accomplished by offering scholarships, grants, and other forms of financial assistance.
- 6. **Develop policies to encourage entrepreneurship:** Entrepreneurship is critical in promoting economic growth in Malaysia. Therefore, there is a need to develop policies that encourage entrepreneurship, especially among postgraduate students. This can be achieved by providing funding, training, and other forms of support for aspiring entrepreneurs.

Education and economic growth are interrelated concepts, and both play significant roles in the development of Malaysia. Postgraduate education is a critical aspect of education that can come up with the development of the country's economy. Therefore, there is a need to increase investment in education, increase the quality of education, promote research and development, increase teamwork between academia and industry, increase access to postgraduate education, and progress policies to encourage entrepreneurship. These recommendations, if implemented, can contribute to the sustainable economic growth of Malaysia.

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