

# The Role of Human Capital on the Performance of Islamic Banks in Indonesia, Malaysia, and Thailand

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#### ABSTRACT

This study investigates the relationship between human capital and the performance of Islamic banks in Indonesia, Malaysia, and Thailand. Our investigations collect data that we process and accumulate nationally from all Islamic banks listed on the stock exchange and report annual financial statements in Indonesia, Malaysia, and Thailand. Sourced from the financial statements of Islamic banks in Indonesia, Malaysia and Thailand, we investigated by accumulating investment in education and employee training made by Islamic banks, employee health investments made and reported by Islamic banks, and Performance of Islamic Banks in the period 1990 - 2020. We use time-series data and perform country-by-country estimates, which will be compared and conclusions drawn from the results of our investigations. To investigate the influence of health investment, education investment and performance of Islamic banks in Indonesia, Malaysia and Thailand. We used vector autoregressive analysis. After estimating the vector autoregressive in Islamic Commercial Banks and or Sharia Commercial Bank embryos in Malaysia, Thailand, and Indonesia. It can be concluded that investment in human resources in the form of investment in health and investment in education has a mutually reinforcing effect indicated by the direction of the positive influence relationship when each variable changes and responds to each other. It is in accordance with the theory of human capital, which states that human capital positively affects work performance.

Keywords: Islamic Finance, Deposit Interest Rate, Indonesia, Malaysia, Thailand.

#### 1. INTRODUCTION

According to Oppong & Pattanayak [1] The development of the banking industry is more directed to the human capital-based industry. Human capital is part of the banking industry. According to Adesina [2] Human capital is an important component in improving banking performance. Human capital gives employees the ability to perform well in the banking sector. This phenomenon has encouraged Islamic banking to make human capital a part of the performance improvement process.

According to Al-Shamali et al [3] Islamic banks as financial business actors based on Islamic teachings of course provide financial services according to Islamic teachings. Thus, in Islamic banking, there are legal rules that are binding and based on the teachings of the Islamic religion called Shari'a. According to Rehman et al [4], an Islamic bank's task depends on the bank's personal ability to provide financial services based on Islamic teachings. Thus, human capital is very important in the Islamic finance industry. Several empirical studies have found evidence that human

capital is a significant factor in determining organizational performance such as research from Widarni & Bawono [5], The conclusion from Widarni & Bawono [5] is in line with the results of research by Alhassan & Asare [6] and Aslam et al [7].

According to Mondal & Ghosh [8] Human capital is a source of human ability to work so that the banking sector becomes a source of excellence in competition in the banking industry. Nawaz [9] has explored the relationship between human capital, especially intellectual capital, on the productivity of the banking industry, especially in the Islamic banking industry. According to Brahmana & You [10] In terms of prospects, the Islamic banking industry has an emotional attachment to the Islamic community. Factors of belief or religion have an impact on financial decision-making, including debt-based financing decisions.

According to George et al [11] One of the country's economic policy priorities in Indonesia, Malaysia, and Thailand is developing human capital, including health development and investment in health facilities.

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Investment in the health sector is very important in protecting the community and tackling the COVID-19 outbreak.

According to Beja [12] The aim of state development by the governments of Indonesia, Malaysia, and Thailand is to create conditions for comprehensive disclosure of the potential of citizens in various fields of social relations and to increase the productivity of human resources including improving public health.

According to Li et al. [13], human capital in a country can be achieved by developing appropriate employment policies, progressive innovation in technology, supporting educational projects, modernizing the education system, and introducing effective and advanced medical technology according to world best practices. In addition, to achieve the goal, one should strive to increase the efficiency of projects and social services.

According to Andrés et al [14], human capital is everything a person's productive and high-quality work depends on its contribution to socio-economic development, namely, intelligence, health, knowledge, skills, and quality of human life. The function of this complex is the creation of knowledge, training, dissemination through long-distance transmission, its transformation into skills and abilities, its use to increase efficiency, productivity, quality, and innovation. This area of the knowledge economy has been at the forefront of socio-economic dynamics over the last half-century. The tremendous, in fact, explosive economic growth, intensified by the advent of computers and the Internet, is gradually replacing the real sector in the structure of GDP. In other words, the formation of a knowledge economy is part of post-industrial development, more precisely, "the highest stage of development of post-industrial society".

According to Charef et al [15] The most important property of the knowledge economy is that it has a significant multiplier effect on the development of all other industries. Thus, solving the problems of socioeconomic development is impossible without the main funding of the industries that create human capital. The success of developed countries is explained by a change in attitudes towards human resources from a public policy point of view: spending on social services, which were considered irreversible, began to be seen as an investment for the country's future prosperity.

According to Saeed et al [16], the concept of an Islamic financial system has become commonplace in the lexicon of financiers in many countries, not only Muslims. However, many citizens in various countries, including the United States and Great Britain, who have embraced Islam and refuse to use traditional banking services, have grown significantly. Therefore, the study of Islamic banking has become a very relevant topic in the global economy. We decided to understand the basic principles of this financial institution and its main differences from traditional banking.

As we have seen, the main difference is the prohibition of receiving rewards in the form of interest payments. However, at the same time, Islam in principle does not condemn seeking profit, only prohibits interest that does not depend on the results of activities.

According to Mayer [17] Islamic financial organizations first appeared in the 60s in Egypt, more precisely in 1963. Then the savings bank Mit Ghamr began to carry out operations to withdraw funds from individuals and invest the collected resources. In Muslim countries such as Malaysia, Indonesia, United Arab Emirates, Saudi Arabia, Brunei, there are banks of both types, and the number of ordinary banks is also quite large. Non-Muslim financial organizations, such as UBS and Citigroup, are also involved in lending activities under Sharia law. And European business schools are increasingly opening up faculties and departments in Islamic finance.

According to Jehawae [18] The Islamic Bank of Thailand aims to engage in financial business that does not run the principle on interest (usury or riba), and run other businesses that do not conflict with Islamic principles. to meet the need For Thai Muslims to have the correct financial channels according to Islamic principles and can meet the needs of the general public under the Islamic Bank of Thailand Act BE 2545 under the supervision of the Ministry of Finance. In Thailand, Islamic Banks are defined as universal banks that operate according to Islamic principles without the obligation of interest and do not conflict with Islam. Consisting of a security deposit (Wadiah), there are have 2 types of demand deposits. Types of demand deposits are savings and investment deposits (Mudharabah). Islamic Banks in Thailand fund raw material purchase loans and business investment loans. Personal loans. Car loans. Commercial housing (Realestate), project investment loans. Comparing the operations of Islamic banks and



conventional commercial banks, both are found to be the same. and different from the same service is a deposit service, credit service, And other services, the difference is the type of service in terms of deposits, differs according to deposit regulations. Returns are given to depositors of commercial banks generally including payment of interest on deposits.

This study investigates the relationship between human capital and the performance of Islamic banks in Indonesia, Malaysia, and Thailand. This study uses the Vector Analysis estimation technique. This research helps to explain the importance of investing in Human Capital to increase bank productivity.

#### 2. LITERATURE REVIEW

According to Widarni & Bawono [19] Human capital was developed by Becker where Becker argues that the costs incurred by humans to acquire skills will return in the form of increased performance which has an impact on increasing income. Human capital is an important component in the development of organizational performance. Therefore, one of the main trends in the modern world is the increasing competition for highly qualified human resources. This competition does not only occur among developed countries but also in rapidly developing countries, both at global and regional levels.

As historical experience shows, every radical economic and social change (for example, the industrial revolution, scientific and technological revolution, etc.) was carried out on the basis of human capital, which was formed in a certain historical period. The accumulation of knowledge, the level of development of education and science, the scientific, technical, managerial nature of the existing in the country have always been the main drivers of changes in society leading to new qualitative levels of development.

According to Blaga [20] The quality of human resources in any country can change under the influence of external factors (migration processes, integration projects, etc.) In this regard, for any country, the issue of effective management of human resources is paramount and determines the level of its competitiveness in the modern world. Moreover, this process has two interrelated directions. On the one hand, human resource management is directly related to the development of the socio-cultural sector, the creation of acceptable stable conditions for the evolution of language, culture, education, health care, and national identity. In other words, the state creates

an effective living environment and intellectual activity for its citizens, providing conditions for a quality life and effective self-realization. On the other hand, everyone, guided by the priority of personal growth, recognizes the need to invest in the development of his country, through individual self-realization, the progressive growth of the whole country is carried out. Thus, human resource management is a self-sustaining and reproducing system, in which the conditions and investments created in human capital lead to the formation of new qualities of a person.

According to Hoque & Liu [21] Investment in fixed assets in high-tech industry and infrastructure, combined with increased investment in human capital, will create a multiplier effect. Human Capital in Islamic teachings is highly recommended to be improved. Islamic financial institutions in carrying out their activities must adhere to sharia principles and rules as well as ethical principles.

An Islamic bank differs from a traditional one by following ethical principles when providing banking products and services to clients. Islamic banks also have an independent supervisory body the Sharia Board, which is an independent structure separate from the bank. The duties of the Shariah Council include monitoring adherence to sharia principles and rules in conducting banking activities. Currently, Islamic banks serve various banking services such as conventional banks but still maintain Islamic principles such as services for opening checking and savings accounts, providing financing products, performing cash services, payments, fund transfers, treasury services, etc., However, among newcomers, it's puzzling: "Can religion be combined with bank work?" Maybe quite successful. Islamic banks operate according to Sharia law - how religion governs behavior.

According to Albaity et al [22] The Islamic bank, as an investor, shares the risk of the company. To do this, financial institutions examine the credit history of entrepreneurs, companies, and possible threats in more detail.Islamic banking prohibits setting predetermined amount depending on the time and amount of debt. According to Muslim law, it is necessary to live and work in conditions of public honesty and truth. Muslims are not prohibited from seeking profit, but interest cannot be used for this. Some Muslims, even those living in European countries, adhere to Sharia law and refuse to receive interest in contributions. Islamic Banks do not receive



interest, so they become investors rather than creditors.

According to Alwi et al [23] Islamic banking forbids directing money to anything other than tangible products. Operations with futures, swaps, and other types of intangible products are prohibited. Islamic banking is against gambling. It is also forbidden to interact with derivatives (securities, the value of which depends on the underlying asset, or other securities). This is due to the fact that working with derivatives is too risky, and the client can lose the investment. Islamic banks will not approve loans for the sale of tobacco products, alcohol, weapons, distribution of pornography, and other dubious types of activities. If either party doubts even a fraction of a percent, the deal will not happen. Islamic bankers avoid financial problems. Interest-free loans that small businesses get from banks are called kardul hasans.

According to Miah & Suzuki [24] Murabaha is one of the popular services. Financial institutions allocate money for certain purchases. Islamic banks use the term musharaka to involve the co-financing of an idea or business by several investors. The company divides the losses depending on the amount contributed by the parties to the transaction. When placing deposits, the term "mudharabah" is used. Money owners give their funds to Islamic banks, and Islamic Banks invest them in business development. The principle of profitsharing is discussed first.

Bäker et al [25] conclude that academic accumulation or educational outcomes favor better career gains. Human capital is a source of national wealth. And, human resources with all the human capital owned nationally are very valuable assets for economic growth. Human capital is the driving force of the national economy through increasing organizational performance in the industry that is accumulated nationally.

Alhassan and Asare [6] examined worker productivity and creativity and found that employee productivity and creativity can be increased through training. Human capital has a positive influence on organizational performance. Adesina [2] concludes that the expertise and skills of bank employees determine the performance of the bank.

Human capital can be increased through education mechanisms and support from health investment because human capital cannot be separated from the human capital that owns it. Naruetharadhol et al [26] in their research conducted in Thailand, suggested that education can increase human capital. Balmaceda [27]

in his research found that investment in human capital education can increase employment opportunities which have an impact on increasing people's income in general. Research related to education, health, human capital and performance was conducted by Varghese et al [28] with research results stating that the level of educational attainment and health have an impact on increasing income through increased performance. Research by Ogundari & Awokuse [29] states that education and health are components of human capital in improving performance. The research of Ogundari & Awokuse [29] is in line with the theory of human capital. Ogundari& Awokuse [29] explain that in human capital theory, health and education are components of human capital.

According to Reilly [30] Human capital in addition to being important in the real economy nationally is also an important factor in improving organizational performance, including in the banking industry. According to Arshad [31] The development of human capital based on human capital has an impact on the sustainability of the Islamic bank's business and the improvement of the performance of the Islamic Bank which has an impact on social and economic development.

Based on the relationship between human capital and performance, we formulate the following hypothesis:

Hypothesis 1. Human capital investment in the form of investment in education and health of Islamic bank employees nationally has a significant positive impact on the performance of Islamic banks in Indonesia, Malaysia, and Thailand.

# 3. RESEARCH METHOD

In our investigations, we collect data that we process and accumulate nationally from all Islamic banks listed on the stock exchange and report annual financial statements in Indonesia, Malaysia and Thailand. Sourced from the financial statements of Islamic banks in Indonesia, Malaysia and Thailand, we conducted an investigation by accumulating investment in education and employee training made by Islamic banks, employee health investments made and reported by Islamic banks, and Performance of Islamic Banks in the period 1990 - 2020. We use time series data and perform country-by-country estimates which will be compared and conclusions drawn from the results of our investigations.



To investigate the direction of influence of health investment, education investment and performance of Islamic banks in Indonesia, Malaysia and Thailand. We used vector autoregressive analysis. By using the VAR Model as follows:

$$\begin{split} \Delta EI_t &= \psi EI_{t\text{--}1} + \beta_1 Hi_t + \psi_1 \Delta Hi_{t\text{--}1} + \beta_2 IBP_{t1} + \psi_2 \Delta IBP_{t\text{--}1} \\ &+ e_t \end{split}$$

$$\begin{split} \Delta HI_t &= \psi HI_{t\text{-}1} + \beta_1 EI_t + \psi_1 \Delta EI_{t\text{-}1} + \beta_2 IBP_{t1} + \psi_2 \Delta IBP_{t\text{-}1} \\ &+ e_t \end{split}$$

$$\begin{split} \Delta IBP_t &= \mu IBP_{t-1} + \beta_1 H i_t + \mu_1 \Delta H i_{t-1} + \beta_2 E I_{t1} + \mu_2 \Delta E I_{t-1} \\ &+ e_t \end{split}$$

Where IBP is Islamic Bank Performance, HI is a Health Investment, IE is an educational investment.

## 3.1. Variable Description

IBP is Islamic Bank Performance which we measure based on after-tax earnings sourced from the annual reports of Islamic banks listed on the stock exchange and we accumulate after-tax earnings for all Islamic banks in one country every year from 1990 - 2020.

HI is a Health Investment made by an Islamic Bank to all of its employees, starting from first aid to health insurance and other investments related to the physical and mental health of employees including investment in security and fire extinguishers made by all Islamic banks accumulated in one country every year from 1990 - 2020.

IE is an educational investment made by Islamic Banks for employees from learning assignments to training that supports increasing employee performance cumulatively in one country every year from 1990 - 2020.

All data is recorded through data collection from annual reports issued by Islamic banks or Islamic bank holding companies that are listed on the stock exchange from 1990 – 2020.

## 4. RESULT AND DISCUSSION

Before estimating the vector autoregressive, a stationarity test was carried out to ensure that all data were stationary. Stationarity results are presented in table 1, table 2, and table 3.

Table 1. Stationarity Test Indonesia

Method		Statistic	Prob.**
ADF - Fisher Chi-square		0.96	0.99
ADF - Choi Z-stat		3.07	1.00

Series	Prob.	Lag	Max Lag	Obs
IBP	1.00	2	6.00	28.00
НІ	0.78	0	6.00	30.00
EI	0.80	0	6.00	30.00

From the results of the stationarity test, the data in Indonesia is stationary.

**Table 2.** Stationarity Test Malaysia

Method			Statistic	Prob.**
ADF - Fisher Chi-square			0.8464	0.99
ADF - Choi Z-stat			2.9756	0.99
Series	Prob.	Lag	Max Lag	Obs
EI	0.795	0	6.0000	30.00
HI	0.824	0	6.0000	30.00
IBP	0.999	2.	6.0000	28.00

From the results of the stationarity test, the data in Malaysia is stationary.

Table 3. Stationarity Test Thailand

Method			Statistic	Prob.**
ADF - Fisher Chi-square			0.96	0.98
ADF - Choi Z-stat			2.05	0.98
Series	rob.	ag	Max Lag	Obs
EI	78		6	30
HI	81		6	30
IBP	97		6	30

From the results of the stationarity test, the data in Thailand is stationary. After testing for stationarity and ensuring that all data are stationary, vector autoregressive estimation can be performed. The vector autoregressive estimates are presented in table 4, table 5, and table 6.

**Table 4.** Estimation Vector Autoregressive Result Indonesia

maonesia			
	IBP	HI	EI
IBP	0.2258	0.0979	0.0104
	(0.2551)	(0.0724)	(0.0049)
	[ 0.88529]	[1.35224]	[ 2.13601]
HI	0.9550	0.1046	0.0417
	(0.9100)	(0.2583)	(0.0173)
	[ 1.04940]	[ 0.40488]	[2.40767]
EI	1.6038	0.2845	0.0422
	(10.1916)	(2.8927)	(0.1938)
	[ 16129]	[ 0.9836]	[ 0.21774]
R-squared	0.8504	0.9549	0.8883
Adj. R-squared	0.8368	0.9426	0.8578
F-statistic	70.2036	77.6622	29.1576



The significance and direction of the influence can be seen by comparing the T-statistic value with the positive and negative coefficient values. Based on the estimation results, it can be indicated that the performance of Islamic banks has a significant positive effect on the performance of Islamic banks in the future with a coefficient value of 0.2258 and a t-statistic value of 0.88529. The influence of Islamic banks has a significant effect on health investment (HI) with 0.0979 on the coefficient value and 1.35224 on the t-statistic value. The influence of Islamic banks has a significant effect on Education Investment (EI) with 0.0104 on the coefficient value and 2.13601 on the t-statistic value.

Investment in the health of Islamic bank employees in Indonesia has a significant effect on the performance of Islamic banks with 0.9550 on the coefficient value and 1.04940 on the t-statistic value. Health investment of Islamic bank employees in Indonesia has a significant positive effect on Health Investment with a coefficient value of 0.1046 and a t-statistic value of 0.40488. Investment in the health of Islamic bank employees in Indonesia has a significant positive effect on Education Investment with a coefficient value of 0.0417 and a t-statistic value of 2.40767.

Educational investment has a significant positive effect on Islamic Bank Performance with a coefficient value of 1.6038 and a t-statistic value of 16129. Educational investment has a significant positive effect on the health investment of Islamic Bank employees with a coefficient value of 0.2845 and a t-statistic value of 0.9836. Educational investment has a significant positive effect on education investment. in the future with a coefficient value of 0.0422 and a t-statistic value of 0.21774.

**Table 5.** Estimation Vector Autoregressive Result Malaysia

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	IBP	HI	EI
IBP	0.0024	0.0790	0.3778
	(0.0052)	(0.1243)	(0.2671)
	[ 0.46587]	[ 0.63570]	[ 1.41423]
HI	0.0335	1.0746	1.7109
	(0.0134)	(0.3215)	(0.6910)
	[ 2.50087]	[ 3.34226]	[ 2.47597]
EI	0.1587	7.9827	22.2498
	(0.1942)	(4.6615)	(10.0184)
	[0.81706]	[ 8.1247]	[ 23.2088]
R-squared	0.8800	0.9279	0.9543
Adj. R-squared	0.8473	0.9083	0.9418
F-statistic	26.9009	47.2011	76.4880

The performance of Islamic banks in Malaysia has a significant positive effect on the performance of Islamic banks in the future with a coefficient value of 0.0024 and a t-statistic value of 0.46587. The performance of Islamic banks in Malaysia has a significant positive effect on Health Investment with a coefficient value of 0.0790 and a t-statistic value of 0.63570. The performance of Islamic banks in Malaysia has a significant positive effect on Education Investment with a coefficient value of 0.3778 and a t-statistic value of 1.41423.

Health investment of employees by Islamic banks in Malaysia has a significant positive effect on the Performance of Islamic banks in Malaysia with a coefficient value of 0.0335 and a t-statistic value of 2.50087. Investment in employee health by Islamic banks in Malaysia has a significant positive effect on Health Investment in the future with a coefficient value of 1.0746 and t-statistic value of 3.34226. Investment in employee health by Islamic banks in Malaysia has a significant positive effect on Education Investment with a coefficient value of 1.7109 and a t-statistic value of 2.47597.

Investment in employee education by Islamic banks in Malaysia has a significant positive effect on the performance of Islamic banks in Malaysia with a coefficient value of 0.1587 and a t-statistic value of 0.81706. Investment in employee education by Islamic banks in Malaysia has a significant positive effect on future health investment with a coefficient value of 7.9827 and a t-statistic value of 8.1247. Investment in employee education by Islamic banks in Malaysia has a significant positive effect on Education Investment with a coefficient value of 22.2498 and a t-statistic value of 23.2088.

**Table 6.** Estimation Vector Autoregressive Result Thailand

	IBP	HI	EI
IBP	0.0054	0.0471	0.1410
	(0.0038)	(0.0591)	(0.1683)
	[ 1.43260]	[0.79701]	[ 0.83817]
HI	0.0279	0.8517	2.5705
	(0.0137)	(0.2153)	(0.6131)
	[ 2.04525]	[ 3.95553]	[ 4.19266]
EI	0.0048	5.8351	13.3273
	(0.2328)	(3.6734)	(10.4588)
	[0.02043]	[ 1.58848]	[ 1.27426]
R-squared	0.8240	0.9342	0.9494
Adj. R-squared	0.7760	0.9163	0.9355
F-statistic	17.1707	52.0820	68.7263



The performance of Islamic banks in Thailand has a significant positive effect on the performance of Islamic banks in the future with a coefficient value of 0.0024 and a t-statistic value of 0.46587. The performance of an Islamic bank in Thailand has a significant positive effect on Health Investment with a coefficient value of 0.0790 and a t-statistic value of 0.63570. The performance of Islamic banks in Thailand has a significant positive effect on Education Investment with a coefficient value of 0.3778 and a t-statistic value of 1.41423.

Investment in employee health by an Islamic bank in Thailand has a significant positive effect on the performance of an Islamic bank in Thailand with a coefficient value of 0.0335 and a t-statistic value of 2.50087. Investment in employee health by an Islamic bank in Thailand has a significant positive effect on future health investment with a coefficient value of 1.0746 and t-statistic value of 3.34226. Investment in employee health by Islamic banks in Thailand has a significant positive effect on Education Investment with a coefficient value of 1.7109 and a t-statistic value of 2.47597.

Investment in employee education by an Islamic bank in Thailand has a significant positive effect on the performance of an Islamic bank in Thailand with a coefficient value of 0.1587 and a t-statistic value of 0.81706. Investment in employee education by an Islamic bank in Thailand has a significant positive effect on future Health Investment with a coefficient value of 7.9827 and a t-statistic value of 8.1247. Investment in employee education by Islamic banks in Thailand has a significant positive effect on Education Investment with a coefficient value of 22.2498 and a t-statistic value of 23.2088.

Based on the estimation results. Investments in health and investment in education have a positive and significant impact on the performance of Islamic banks, whether they are still in embryonic conditions or when they are already commercial banks. This applies to all three countries, namely Indonesia, Malaysia, and Thailand. With many adherents of Islam in the three countries, it can be seen that religious factors influence the decision-making of customers who become customers of Islamic banks and the investment in human capital increases the impetus for the performance of Islamic banks in Indonesia, Malaysia, and Thailand.

#### 5. CONCLUSION

After estimating the vector autoregressive in Islamic Commercial Banks and or Sharia Commercial Bank embryos in Malaysia, Thailand, and Indonesia. It can be concluded that investment in human resources in the form of investment in health and investment in education has a mutually reinforcing effect indicated by the direction of the positive influence relationship when each variable changes and responds to each other. It is by the theory of human capital, which states that human capital positively affects work performance.

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