

Measuring IHDI in Indonesia and How the Impact of Investment and Government Expenditure

Achmad Fadlil Abidillah*¹, Rosida Dwi Ayuningtyas², Mohammadtahir Cheumar³

¹Airlangga University, Indonesia, Sultan Abdul Halim Mu'adzam Shah International Islamic University, Malaysia^{2,3}

Email: achmad.abidillah@gmail.com¹, rosidaayuningtyas@gmail.com², tahir@unishams.edu.my³

Abstract

This research aims to measure Indonesia's Islamic Human Development Index (IHDI) and analyze the effect of domestic investment, foreign direct investment, and government expenditure on Indonesia's IHDI. IHDI is measured by calculating five indicators which are derivatives of *maqashid sharia*, namely the religion index, life index, family index, science index, and wealth index. Meanwhile, the analytical tool used to determine the effect of domestic investment, foreign direct investment, and government expenditure on IHDI is panel data regression. Observations were made in 34 provinces in Indonesia from 2015 to 2019. IHDI calculations show that Special DI Yogyakarta, North Kalimantan, Riau Islands, East Kalimantan, and DKI Jakarta are the top five provinces with the highest IHDI. Meanwhile, North Sumatra, Papua, East Java, South Sumatra, and East Nusa Tenggara are the five provinces with the lowest IHDI. The regression analysis results show that the IHDI in Indonesia is positively influenced by domestic investment and government expenditure, while foreign direct investment does not affect the IHDI in Indonesia.

Keywords: *IHDI, Domestic Investment, Foreign Direct Investment, Government Expenditure.*

Abstrak

Penelitian ini bertujuan untuk menghitung Islamic Human Development Index (IHDI) di Indonesia dan juga untuk menganalisis pengaruh dari investasi domestik, investasi asing, dan belanja fiskal terhadap IHDI Indonesia. IHDI diukur dengan menghitung lima indikator yang merupakan derivatif dari *maqashid syariah*, yakni religion index, life index, family index, science index, dan wealth index. Sedangkan alat analisis yang digunakan guna mengetahui pengaruh investasi domestik, investasi asing, dan belanja fiskal terhadap IHDI adalah regresi data panel. Observasi dilakukan terhadap 34 provinsi di Indonesia dari tahun 2015 hingga tahun 2019. Hasil perhitungan IHDI menunjukkan bahwa Provinsi DI Yogyakarta, Kalimantan Utara, Kepulauan Riau, Kalimantan Timur, dan DKI Jakarta adalah lima besar provinsi dengan IHDI tertinggi. Sedangkan Provinsi Sumatera Utara, Papua, Jawa Timur, Sumatera Selatan, dan Nusa Tenggara Timur adalah lima provinsi dengan IHDI terendah. Hasil analisis regresi menunjukkan bahwa IHDI di Indonesia dipengaruhi secara positif oleh investasi domestik dan belanja fiskal, sedangkan investasi asing ternyata tidak berpengaruh terhadap IHDI di Indonesia.

Kata Kunci: *IHDI, Investasi Domestik, Investasi Asing, Belanja Pemerintah.*

INTRODUCTION

One of the main goals of national development is to improve human resources quality. There are several detailed indicators to measure it. Through UNDP (United Nations Development Program), Mahbub ul-Haq published the Human Development Index (HDI). HDI measures the quality of human resource development through three aspects: 1) Longevity and healthy life; 2) Knowledge/access to knowledge; and 3) Decent living standards and economic resources (Aydin, 2017; Herianingrum et al., 2019; Rama & Yusuf, 2019). UNDP has never actually claimed that the concept of human development index (HDI) is a concept that perfectly describes human development, and many economic scientists then try to explore and look for a more comprehensive indicator model (Rama & Yusuf, 2019). The HDI concept can be considered too general and less comprehensive if the context is human-Muslim resources. HDI is a free-value concept and cannot describe the moral-spiritual side, which is the key to human-Islamic development (Aydin, 2017; Herianingrum et al., 2019). Therefore, Anto (2011) introduced the Islamic Human Development Index (IHDI) concept.

According to Anto (2011), IHDI is the right indicator to describe the conditions of development in a country with a Muslim majority population because the IHDI indicator model measures five essential aspects that describe the quality of life as a Muslim. These five essential aspects of Islamic economics are known as *maqashid sharia*. These five basic aspects are 1.) Religion Preservation (*hifdzu ad-dien*); 2.) Life Preservation (*hifdzu an-nafs*); 3.) Heredity Preservation (*hifdzu an-nasl*); 4.) Intellectuality Preservation (*hifdzu al-aql*); and 5.) Wealth Preservation (*hifdzu al-maal*). These five basic aspects should be the ultimate goals of development from an Islamic perspective (Aydin, 2017; Herianingrum et al., 2019; Rama & Yusuf, 2019).

In 2019, Rama and Yusuf (2019) estimated the human-Islamic development index number for each province of Indonesia. However, from this study, it is known that the average IHDI in Indonesia is only 47,33. Suppose we use the minimum criteria for the human development index made by UNDP. In that case, none of the provinces in Indonesia achieves the moderate criteria because the highest limit for the low criteria is 60,00, and none of the provinces in Indonesia achieves more than 60,00. The following is the complete list of IHDI in Indonesia calculated by Rama and Yusuf (2019):

Table 1. IHDI of Indonesia (2019)

Rank	Province	IHDI
1	Central Kalimantan	58
2	Bali	57
3	North Maluku	55
4	East Kalimantan	54
5	Bangka Belitung	53
6	West Sumatera	52
7	Central Sulawesi	50
8	West Kalimantan	50
9	North Sulawesi	50
10	Maluku	50
11	Central Java	50
12	Riau	50
13	Jambi	49
14	Lampung	49
15	Riau Islands	49
16	East Nusa Tenggara	48
17	Southeast Sulawesi	48
18	Gorontalo	47
19	Bengkulu	47
20	South Kalimantan	46
21	South Sumatera	46
22	DKI Jakarta	46
23	Aceh	45
24	West Papua	44
25	North Sumatera	44
26	DI Yogyakarta	44
27	East Java	43
28	South Sulawesi	43
29	West Java	43
30	Banten	42
31	West Nusa Tenggara	41
32	West Sulawesi	41
33	Papua	28

Source: Rama & Yusuf (2019).

Table 1 shows that the average IHDI value from all provinces in Indonesia is 47,33, and there are only 17 provinces in Indonesia that have an IHDI above the average value. Almost all provinces on Java Island are below the average value, except for Central Java Province, with a score of 50,00. DKI Jakarta, the nation's

capital, also has an IHDI value below the average, with 46,00. Development in Indonesia is still centered on the island of Java, but it becomes a big question when almost all Java provinces have IHDI values below the average. This fact shows an ironic phenomenon. Although the level of development is high, when viewed from an Islamic perspective, it could be that the achievement of development is still low due to neglect of moral and spiritual aspects.

The quality of human development is the state government's primary responsibility. The government allocates fiscal expenditures in education, health, and socio-economics to improve the quality of individual communities (Baeti, 2013; Haque & Khan, 2019; Herianingrum et al., 2019; Qasim & Chaudhary, 2015; Rukiah, 2020). Several studies have proven the role of government expenditure on human development. Most of them found that government expenditure significantly increases human development (Baeti, 2013; Haque & Khan, 2019; Herianingrum et al., 2019; Mirza, 2012; Putri & Mintaroem, 2019; Qasim & Chaudhary, 2015; Sofilda et al., 2015). Meanwhile, the research conducted by Rukiah (2020) using the Granger causality method produces findings that are very different from the results of other studies. It found that government expenditure does not correlate with human development, especially IHDI.

Today, the role of investment is crucial for development. The flow of capital and investment is a stimulus for economic growth. Besides bringing capital flows, investment encourages innovation development, procurement of new technology, implementation of special skills training, and scientific development. Investment plays a significant role in developing new industries, increasing job opportunities, and indirectly increasing people's income and welfare (Davies & Quinlivan, 2006; Khan et al., 2019; Muhammad et al., 2010; Shahbaz et al., 2016; Wang et al., 2018). However, no research has analyzed the impact of investment on human development, especially Islamic human development. Only Khan et al. (2019) and Muhammad et al. (2010) investigated the impact of investment on human development in Pakistan. Hence, this study will try to analyze IHDI in Indonesia and the impact of domestic investment, foreign direct investment, and government expenditure on it.

RESEARCH METHOD

This quantitative study aims to measure the IHDI of 34 provinces in Indonesia and also to analyze the effect of domestic investment, foreign direct

investment, and government expenditure on IHDI. The IHDI measurement combines five derivative indicators of *maqashid sharia*: the religion preservation index, life preservation index, heredity preservation index, intellectuality preservation index, and wealth preservation index. These five indices consist of two to three variables representative of the index (Anto, 2011; Rama & Yusuf, 2019), the formula of IHDI is as follow:

$$IHDI = (\text{Religion Index} \times \text{Life Index} \times \text{Heredity Index} \times \text{Intellectuality Index} \times \text{Wealth Index})^{\frac{1}{5}}$$

Meanwhile, to analyze the effect of domestic investment, foreign direct investment, and government expenditure on IHDI, we use panel data regression analysis. The formula is:

$$IHDI_{it} = \alpha_0 + \beta_1 DOMINV_{it} + \beta_2 FDI_{it} + \beta_3 GOVEX_{it} + e_{it}$$

Three models can be formed from panel data analysis: the common effect model, the random effect model, and the fixed effect model (Firman, 2016). Therefore, to determine which model is the best, three tests need to be carried out, namely: the Lagrange Multiplier (LM) Test (to determine between the common effect model and the random effect model), the Hausman Test (to determine between the random effect model and the fixed effect model), and the Chow Test (to choose between fixed effect model and common effect model).

RESEARCH FINDINGS AND DISCUSSION

Measuring Indonesian IHDI

The Islamic human development index calculation results from 34 provinces in Indonesia can be seen in the following table:

Table 2. IHDI of Indonesia (2015-2019)

Provinces	IHDI					
	2015	2016	2017	2018	2019	2020
Aceh	63.36	63.57	64.97	61.09	65.36	64.83
Bali	63.95	63.17	63.50	61.54	67.26	64.23
Banten	60.83	63.27	63.33	61.27	63.50	60.88
Bengkulu	59.97	61.39	64.20	61.49	63.48	63.37
Jakarta	64.00	64.59	64.55	66.58	69.89	70.38
Gorontalo	51.16	54.54	52.14	55.57	57.65	59.43
Jambi	60.27	61.20	61.78	62.70	63.66	61.81
Jawa Barat	58.11	56.91	55.27	58.09	60.10	58.52

Provinces	IHDI					
	2015	2016	2017	2018	2019	2020
Jawa Tengah	59.80	59.29	59.93	60.30	62.27	60.93
Jawa Timur	42.28	54.09	48.89	52.26	54.56	55.82
Kalimantan Barat	56.04	57.36	56.32	57.95	60.12	60.29
Kalimantan Selatan	55.34	58.41	57.36	58.45	58.48	56.91
Kalimantan Tengah	58.88	60.97	58.74	58.58	60.67	60.30
Kalimantan Timur	67.67	66.65	65.28	66.10	69.61	70.97
Kalimantan Utara	67.78	68.22	64.48	66.52	73.73	70.56
Kep. Bangka Belitung	61.33	62.42	63.31	61.96	63.50	63.02
Kep. Riau	65.54	67.06	67.05	68.59	68.77	68.98
Lampung	56.13	58.85	58.74	59.24	61.52	63.00
Maluku	55.38	56.61	56.07	54.02	58.84	59.56
Maluku Utara	58.41	61.31	62.49	63.27	64.61	64.46
Nusa Tenggara Barat	61.17	57.46	57.11	54.87	58.01	57.31
Nusa Tenggara Timur	52.60	55.55	53.44	53.72	56.15	56.23
Papua	49.09	52.09	51.88	48.73	51.64	57.52
Papua Barat	60.85	62.89	60.83	61.94	65.16	67.31
Riau	61.88	62.80	62.81	61.44	65.58	64.51
Sulawesi Barat	53.06	55.97	56.05	58.52	59.44	57.66
Sulawesi Selatan	57.29	60.16	58.68	58.35	60.96	61.21
Sulawesi Tengah	54.55	54.55	52.62	55.33	54.73	58.31
Sulawesi Tenggara	57.14	59.47	59.13	58.53	62.29	60.09
Sulawesi Utara	60.70	61.48	61.68	60.32	64.44	64.90
Sumatera Barat	63.01	63.40	63.85	64.24	66.40	64.93
Sumatera Selatan	55.67	54.33	57.60	55.01	59.03	59.34
Sumatera Utara	55.54	43.04	43.29	47.06	53.38	52.99
Yogyakarta	68.29	68.87	68.80	67.77	69.84	68.30

Source: Processed data in Microsoft Excel.

From the results in table 2, several provinces with IHDI values were stable in the top 5, namely Jakarta, Yogyakarta, East Kalimantan, and Riau Islands. Two provinces that were consistent in the top 10 are West Sumatra and North Kalimantan. Meanwhile, only East Java province was steady in the bottom

5. Then, some reasonably consistent provinces filling the bottom 10 are East Nusa Tenggara, Papua, Central Sulawesi, and North Sumatra. If we sort the list based on the average IHDI from 2015 to 2019, the first rank is Yogyakarta Province, the second is North Kalimantan Province, and the third is East Kalimantan Province. Meanwhile, the provinces with the lowest IHDI scores are North Sumatra Province, East Java Province, and Papua Province.

Yogyakarta is the province with the best IHDI scores. Viewed from each IHDI indicator, Yogyakarta has the highest science index value compared to other provinces, while the religion and life index values are also higher than some other provinces. Yogyakarta is known as "*Kota pelajar*" because of its learning culture, excellent schools, and universities as knowledge centers. This educational aspect quality also impacts the conduciveness for other aspects such as religion and health. In addition, from the welfare point of view, although Yogyakarta is known as a tourism and cultural center, the wealth index value of Yogyakarta Province is relatively low compared to other provinces.

Meanwhile, North Sumatra Province has the lowest average IHDI score, with 49,22. The Religion Index of North Sumatra Province is the most minor compared to other provinces. North Sumatra's heredity index is also in a reasonably low rank. This condition can be used as an evaluation material for policymakers, especially in North Sumatra Province, so that in the future, they can make improvements for their region. DKI Jakarta Province, the nation's capital, is consistently among the top five provinces with the highest IHDI. However, regarding average IHDI values from 2015 to 2019, DKI Jakarta occupies fifth place under Riau Islands Province. In several aspects, such as the life index, intellectuality index, and wealth index, the DKI Jakarta Province scored above 70,00.

Effect of Investment and Government Expenditure on IHDI in Indonesia

Before analyzing the data, a correlation test is needed on the exogenous variables observed in the model. This correlation analysis aims to ensure the independence degree of the exogenous variables. Here are the results of the correlation test:

Table 3. Correlation Test

	DOMINV	FORINV	GOVEX
DOMINV	1	0.3625	0.6086

FORINV	0.3625	1	0.4869
GOVEX	0.6086	0.4869	1

Source: Processed data in Eviews 12.

From the results of the correlation matrix test, it can be seen in table 3 that the correlation value between each exogenous variable isn't more remarkable than 0,80 (Basuki, 2017). Therefore, it can be said that this research model is free from multicollinearity symptoms. The next step is to determine the best model to use as an estimation model, whether a standard effect model, a random effect model, or a fixed effect model. Therefore, it is necessary to carry out the Lagrange multiplier test, Hausman test, and Chow test. The summary of the test results is as follows:

Table 4. Lagrange Multiplier Test, Hausman Test, and Chow Test

Test	Cross-section Value	Probability	Best Model Conclusion
Lagrange Multiplier Test	314.2910	0.0000	Random Effect Model
Hausman Test	16.401381	0.0009	Fixed Effect Model
Chow Test	29.627907	0.0000	Fixed Effect Model

Source: Processed data in Eviews 12.

From the best model test in table 4, it can be concluded that the most appropriate model to use is the fixed effect model. The estimation results using the fixed effect model are as follows:

Table 5. Regression Results

Variables	Coefficient	t-Statistic	Probability
C	2.689461	8.372663	0.0000
DOMINV	0.005880	1.663038	0.0982
FORINV	-0.000847	-0.331726	0.7405
GOVEX	0.086835	4.037783	0.0001
R-Squared	0.858413		
Adj. R-Squared	0.827708		
F-Statistic	27.95627		
Prob(F-Statistic)	0.000000	Durb. Watson	1.828314

Source: Processed data in Eviews 12.

Table 5 shows domestic investment (DOMINV) has a variable coefficient of 0,005880 and a probability value of 0,0982. It means that this variable has a

positive impact on IHDI at a significance level of 10%. If domestic investment increases by 1%, the IHDI in Indonesia will increase by 0,0059%. Then, foreign direct investment (FORINV) has a variable coefficient of $-0,000847$ and a probability value of 0,7405. Because the foreign direct investment variable has a significance value of more than 10% (0,1), it can be said that this variable does not affect the IHDI. Then, the variable government expenditure (GOVEX) has a variable coefficient of 0,086835 and a probability value of 0,0001. It means that government expenditure positively affects Indonesia's IHDI because it is significant at the 1% level. If government expenditure increases by 1%, the IHDI will increase by 0,087%.

This estimation model properly explains the impact of domestic, foreign direct, and government expenditure on the Islamic Human Development Index (IHDI) in Indonesia. R-Squared and Adjusted R- Squared values show that this model can explain about 85,84% and 82,77% of the factors that determine the IHDI. In addition, simultaneously, domestic investment, foreign direct investment, and government expenditure significantly affect the IHDI in Indonesia, as can be seen from the F-Statistic value of 27,9563 and probability value of 0,0000, which is significant at the 1% level. Finally, this model passed the autocorrelation test with a Durbin Watson value of 1,8283 (Basuki, 2017; Sihabudin et al., 2021). This value was found to be higher than the dL value (1,6992), higher than the dU value (1,7966), did not exceed the 4-dU value (2,2034), and did not exceed the 4-dL value (2,3008).

The results in table 5 show that domestic investment (DOMINV) positively affects the Islamic human development index in Indonesia. The circulation of capital flows in the country can boost the Islamic human development index. As previously explained, investment brings funds into the business and other resources that can increase business capacities, such as innovation, technology, research, and development. This increase in business capacities will have many impacts on the workforce, such as increasing worker income and employment opportunities to increase the welfare of the wider community. Profits from domestic investment also revolve around the country, so investment profits are also beneficial for the national economy (Khan et al., 2019; Muhammad et al., 2010; Shahbaz et al., 2016).

Then, the foreign direct investment variable (FORINV) does not seem to affect Indonesia's Islamic human development index, as indicated by the

probability level that is not significant. In the case of the Islamic human development index, foreign direct investment has not yet had any impact on human development. Foreign direct investment may circulate in speculative sectors and pay less attention to social aspects. Of course, this phenomenon is understandable because investment funds from foreign parties only aim to generate profits for themselves and their own country. Even if they benefit the domestic economy, the impact will not be felt significantly. The results of this analysis contradict the research of Muhammad et al. (2010) and Reiter & Steensma (2010), who found that foreign direct investment positively impacts human development.

As the policymaker, the government must increase the circulation of domestic investment rather than foreign investment in the future. Based on the results of this study, we can see that domestic investment has more impact on human development than foreign investment. In addition, the form of investment must also be considered in detail, whether it is an Islamic investment or an investment that is contrary to Islamic law. Because as a country with a Muslim majority, Indonesia should be able to develop the *sharia* investment climate both at the regional and national level, for example, specialize in *sharia* investment schemes such as *sukuk* and *musharaka* for development projects in the regions as well as eliminating investment practices that contain *maisir*, *gharar*, *tadlis*, and *riba* (Budiyanti et al., 2021).

Furthermore, the estimation results of government expenditure (GOVEX) positively influence Indonesia's Islamic human development index. Based on these findings, it can be said that provincial government expenditure is quite well targeted in improving people's life quality. The government's fiscal expenditure allocation targets aspects that are closely related to IHDI indicators, such as aspects of education (science index), aspects of health services (life index and family index), and socio-economic aspects (wealth index and religion index). These findings are in line with several previous studies, such as the findings of Herianingrum et al. (2019), Putri and Mintaroem (2019), and also Sofilda et al. (2015), which conclude that government expenditure does have a positive role in increasing human development, especially on Islamic views.

CONCLUSION

This study produced two important findings: the measurement of the Islamic human development index (IHDI) in Indonesia and the impact of domestic investment, foreign direct investment, and government expenditure on IHDI. Yogyakarta Special Region Province, Jakarta Capital's Region Province, North Kalimantan Province, East Kalimantan Province, Riau Islands Province, West Sumatra Province, and Riau Province are provinces with stable IHDI scores in the top 10 from 2015 to 2019. Meanwhile, North Sumatra Province, East Java Province, East Nusa Tenggara Province, Papua Province, and Central Sulawesi Province are consistently ranked in the bottom 10. The central and provincial governments can evaluate this finding to focus on equitable distribution of human development in areas with low IHDI. The government must also maintain and increase the level of human development in provinces with high IHDI scores.

This study also found that domestic investment and local government fiscal expenditure positively affect the Islamic human development index in Indonesia. However, foreign direct investment has not shown an impact on the Islamic human development index in Indonesia. So it can be concluded that domestic investment instruments and government fiscal expenditure are very strategic to improving human development in Indonesia. The limitation of research on IHDI is the lack of available data relevant to *maqashid sharia* indicators. An example is the indicator of religion preservation (*hifdzu ad-dien*), which really needs an illustration of the people's level of worship and adherence to Islamic law. Due to this kind of limited data, data that are close to relevant are used, such as the level of crime and drug cases (Anto, 2011; Rama & Yusuf, 2019). Therefore, the authors recommend for further research to develop indicators in calculating the IHDI to be more comprehensive. Then it is also necessary to examine the difference in the impact between Islamic investment and conventional investment on IHDI so that the framework for the role of investment in human development can be more detailed.

REFERENCES

- Anto, M. H. (2011). Introducing an Islamic Human Development Index (I-HDI) to Measure Development in OIC Countries. *Islamic Economic Studies*, 19(2), 69–95. <https://platform.almanhal.com/Files/Articles/24448>
- Aydin, N. (2017). Islamic vs conventional Human Development Index: Empirical evidence from ten Muslim countries. *International Journal of Social Economics*, 44(12), 1562–1583. <https://doi.org/10.1108/IJSE-03-2016-0091>
- Baeti, N. (2013). Pengaruh Pengangguran, Pertumbuhan Ekonomi, dan Pengeluaran Pemerintah Terhadap Pembangunan Manusia Kabupaten/Kota di Provinsi Jawa Tengah Tahun 2007-2011. *Economics Development Analysis Journal*, 2(3), 85–98. <https://doi.org/10.15294/edaj.v2i3.1984>
- Basuki, A. T. (2017). Pengantar Ekonometrika. In *Danisa Media*. Sleman: Danisa Media.
- Budiyanti, N., Kosasih, A., & Az-zahra, S. A. (2021). Sharia Investment in Islamic Economic Principles. *FITRAH: Jurnal Kajian Ilmu-Ilmu Keislaman*, 7(1), 119–132. <https://doi.org/http://dx.doi.org/10.24952/fitrah.v7i1.3679>
- Central Bureau of Statistics. (2022). Data Jumlah Tindak Pidana Menurut Kepolisian Daerah. <https://www.bps.go.id/indicator/34/101/1/jumlah-tindak-pidana-menurut-kepolisian-daerah.html>, accessed September 5th 2022.
- Central Bureau of Statistics. (2022). Data Angka Harapan Hidup Menurut Provinsi dan Jenis Kelamin. <https://www.bps.go.id/indicator/40/501/1/angka-harapan-hidup-ahh-menurut-provinsi-dan-jenis-kelamin.html>, accessed September 5th 2022.
- Central Bureau of Statistics. (2022). Data Unmeet Need Pelayanan Kesehatan Menurut Provinsi. <https://www.bps.go.id/indicator/30/1402/1/unmet-need-pelayanan-kesehatan-menurut-provinsi.html>, accessed September 5th 2022.
- Central Bureau of Statistics. (2022). Data Laju Pertumbuhan Penduduk Menurut

Provinsi. https://www.bps.go.id/indikator/indikator/view_data_pub/0000/api_pub/WVRITTCySlZDa3lUcFp6czNwbHI4QT09/da_03/2, accessed September 5th 2022.

Central Bureau of Statistics. (2022). Data Presentase ASI Eksklusif Menurut Provinsi. <https://www.bps.go.id/indikator/30/1340/1/persentase-bayi-usia-kurang-dari-6-bulan-yang-mendapatkan-asi-eksklusif-menurut-provinsi.html>, accessed September 5th 2022.

Central Bureau of Statistics. (2022). Persentase Kelahiran yang Ditolong Oleh Tenaga Kesehatan. https://www.bps.go.id/indikator/indikator/view_data/0000/data/1345/sdgs_3/1, accessed September 5th 2022.

Central Bureau of Statistics. (2022). Data Angka Harapan Lama Sekolah Per Provinsi. <https://www.bps.go.id/indikator/26/417/1/-metode-baru-harapan-lama-sekolah.html>, accessed September 5th 2022.

Central Bureau of Statistics. (2022). Data Angka Rata-Rata Lama Sekolah Per Provinsi. <https://www.bps.go.id/indikator/28/1429/1/rata-rata-lama-sekolah-penduduk-umur-15-tahun-menurut-provinsi.html>, accessed September 5th 2022.

Central Bureau of Statistics. (2022). Presentase Penduduk Miskin Menurut Provinsi. <https://www.bps.go.id/dynamictable/2016/08/18%2000:00:00/1219/persentase-penduduk-miskin-menurut-provinsi-2007---2019.html>, accessed September 5th 2022.

Central Bureau of Statistics. (2022). Data Produk Domestik Bruto Perkapita <https://www.bps.go.id/indikator/52/288/1/-seri-2010-produk-domestik-regional-bruto-per-kapita.html>, accessed September 5th 2022.

Central Bureau of Statistics. (2022). Data Laju Pertumbuhan PDRB Atas Harga Konstan 2010 Menurut Provinsi. <https://www.bps.go.id/indikator/52/291/1/-seri-2010-laju-pertumbuhan-produk-domestik-regional-bruto-atas-dasar-harga-konstan-2010-menurut-provinsi.html>, accessed September 5th 2022.

Central Bureau of Statistics. (2022). Realisasi Investasi Penanaman Modal Dalam

- Negeri Per Provinsi. <https://www.bps.go.id/indicator/13/793/1/realisasi-investasi-penanaman-modal-dalam-negeri-menurut-provinsi-investasi-.html>, accessed September 3rd 2022.
- Central Bureau of Statistics. (2022). Realisasi Investasi Penanaman Modal Luar Negeri Per Provinsi. <https://www.bps.go.id/indicator/13/1840/1/realisasi-investasi-penanaman-modal-luar-negeri-menurut-provinsi.html>, accessed September 3rd 2022.
- Central Bureau of Statistics. (2022). Statistik Keuangan Pemerintah Provinsi. <https://www.bps.go.id/publication/2021/12/21/39a0b6b2f4ebbe0d1883e6eb/statistik-keuangan-pemerintah-provinsi-2018-2021.html>, accessed September 3rd 2022.
- Davies, A., & Quinlivan, G. (2006). A panel data analysis of the impact of trade on human development. *Journal of Socio-Economics*, 35(5), 868–876. <https://doi.org/10.1016/j.socec.2005.11.048>
- Firman, M. (2016). *Ekonometrika 2*. Depok: Masterbook of Business and Industry.
- Haque, M. I., & Khan, M. R. (2019). Role of Oil Production and Government Expenditure in Improving Human Development Index: Evidence from Saudi Arabia. *International Journal of Energy Economics and Policy*, 9(2), 251–256. <https://doi.org/10.32479/ijeep.7404>
- Herianingrum, S., Muhammad Nafik, H., Fauzi, Q., Afifa, F. U., & Laila, N. (2019). The effect of government expenditure on islamic human development index. *Opcion*, 35(88), 685–703.
- Khan, N. H., Ju, Y., & Hassan, S. T. (2019). Investigating the determinants of human development index in Pakistan: an empirical analysis. *Environmental Science and Pollution Research*, 26(19), 19294–19304. <https://doi.org/10.1007/s11356-019-05271-2>
- Mirza, D. S. (2012). Pengaruh Pertumbuhan Ekonomi Terhadap IPM. *Jurnal Ekonomi Pembangunan*, 1(1), 8.
- Muhammad, S. D., Majeed, S., Hussain, A., & Lal, I. (2010). Impact of globalization on HDI (Human Development Index): Case study of Pakistan. *European Journal of Social Sciences*, 13(1), 46–55. Retrieved from

<https://www.researchgate.net/publication/228240564%0AImpact>

- National Anti Narcotics Agency. (2022). Data Statistik Kasus Narkoba Per Provinsi. <http://www.puslitdatin.bnn.go.id/portfolio/data-statistik-kasus-narkoba/>, accessed September 5th 2022.
- Putri, R. M., & Mintaroem, K. (2019). Determinan Islamic Human Development Index (IHDI) Provinsi Jawa Timur Tahun 2001-2016. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 6(7), 1410–1420. <https://doi.org/10.20473/vol6iss20197pp1410-1420>
- Qasim, M., & Chaudhary, A. R. (2015). Determinants of Human Development Disparities: A Cross District Analysis of Punjab, Pakistan. *The Pakistan Development Review*, 54(4), 427–446. Retrieved from <http://www.jstor.org/stable/43831329>
- Rama, A., & Yusuf, B. (2019). Construction of Islamic Human Development Index. *JKAU: Islamic Econ*, 32(1), 43–64. <https://doi.org/10.4197/Islec.32-1.3>
- Reiter, S. L., & Steensma, H. K. (2010). Human Development and Foreign Direct Investment in Developing Countries: The Influence of FDI Policy and Corruption. *World Development*, 38(12), 1678–1691. <https://doi.org/10.1016/j.worlddev.2010.04.005>
- Rukiah. (2020). Analysis Relationship of Economic Growth, Fiscal Policies and Demographic to Islamic Human Development Index in Indonesia (Granger Causality Approach). *FITRAH: Jurnal Kajian Ilmu-Ilmu Keislaman*, 6(1), 31–46. <https://doi.org/10.24952/fitrah.v6i1.2490>
- Shahbaz, M., Mallick, H., Mahalik, M. K., & Sadorsky, P. (2016). The role of globalization on the recent evolution of energy demand in India: Implications for sustainable development. *Energy Economics*, 55, 52–68. <https://doi.org/10.1016/j.eneco.2016.01.013>
- Sihabudin, Danny Wibowo, Sri Mulyono, Jaka Wijaya Kusuma, Irvana Arofah Besse Arnawisuda Ningsi, Edy Saputra, Ratni Purwasih, S. (2021). *Ekonometrika Dasar Teori dan Praktik Berbasis SPSS* (V. Mandailina, M. Ibrahim, & H. R. P. Negara, eds.). Banyumas: Pena Persada.
- Sofilda, E., Hermiyanti, P., & Hamzah, M. Z. (2015). Determinant Variable

Analysis of Human Development Index in Indonesia (Case for High and Low Index at Period 2004-2013). *OIDA International Journal of Sustainable Development*, 08(09), 11–28. Retrieved from <http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-D>

Wang, Z., Zhang, B., & Wang, B. (2018). Renewable energy consumption , economic growth and human development index in Pakistan : Evidence form simultaneous equation model. *Journal of Cleaner Production*, 184, 1081–1090. <https://doi.org/10.1016/j.jclepro.2018.02.260>