Unlocking Economic Potential: Leveraging Maqâşid al-Syarî’ah Achievements to Boost Investment in OIC Countries

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Abstract
The study investigates the factors influencing investment ratings within OIC (Organization of Islamic Cooperation) countries from 2011 to 2015. We employed the Tobit Regression model as our primary analytical tool to achieve this objective. Our data sources encompassed secondary data sets published by reputable organizations such as the World Bank, Transparency International, and UNDP. We utilised purposive sampling, targeting 19 OIC nations for which comprehensive data on the required variables were available. The model featured five independent variables: the Corruption Perception Index, GDP per capita, population growth, life expectancy, and the education index. The sole dependent variable under examination was the investment rating. Our findings unveiled that the Corruption Perception Index and GDP per capita significantly influenced the investment ratings within OIC countries. It implies that perceptions of corruption and economic prosperity played pivotal roles in shaping the investment climate within these nations during the specified period.

Keywords: Investment, OIC Countries, Maqashid al-Syariah, Tobit Model

Introduction
Investment rating agencies aim to facilitate investors in knowing whether the country is worth investing in. These investment rating agencies will rank which countries are eligible to be invested through several assessment methods. Globally, three leading investment rating agencies have high trust from investors because of assessment criteria, publicity media, and disclosure coverage (Prasetyo, 2015). Moody's, Standard & Poor's, and The Fitch are rating agencies. All three agencies may rank differently in the same country because each rating agency has a particular valuation method as a consideration for determining the investment rating.

Starting May 19, 2017, Indonesia received a BBB- / stable outlook rating from BB +’s previous rating from Standard & Poor's. According to the rating agency The Fitch, Indonesia has been a worthy investment country for the last seven years with a BBB rating- and has become an investment worthy of Moody's in the last five years with a rating of Baa3 (Country Economy, 2017). Indonesia becoming a country with a decent investment rating in these three leading institutions has a good impact on the investment climate in Indonesia, as stated by the Governor of Bank Indonesia, Agus Martowardjo,
since Standard & Poor's increased investment grade Indonesia, the government get investment fund of 108T Rupiah this is greater than the previous year in the same period where only get 62T Rupiah (Sawitri, 2017).

Looking at neighbouring Malaysia, they have earned investment-grade ratings since 2002 with an upper medium grade A rating by Standard & Poor's institutions and continue to show stable ratings to date. Malaysia is still on the same rank. According to Standard & Poor's, Malaysia has an external position and strong monetary flexibility and continues to show positive growth (Dhaniwala, 2017). Every country cannot be satisfied with the achievement of feasible investments because there are still many things that must be maintained and prepared for this investment rating to be maintained or improved. The government needs to keep macroeconomic conditions stable to maintain the investment rating. In this case, for Standard & Poor's, the central bank has an important role in maintaining economic growth by reducing the impact of economic and financial turmoil on economic stability.

Cultural differences, values, worldviews and ideologies in Muslim countries with Western countries often lead to failures in applying current economic theories. The economic theory that is currently much developed is not less influenced by the Western world, which, unfortunately, there are values of secularism, liberalism and capitalism. In Islam, religion is the main variable in life. However, it does not rule out the similarity of economic models or theories between those already applied in the Western world to those compatible with Islam as long as it does not conflict with the main objectives of Islamic teachings (Rama & Makhlini, 2013).

In the view of Islam is known as Maqâshid Al-Syarî’ah, which is the goal of shari’ah in which some things must be maintained by following orders or keep the prohibition following the Qur’an and Sunnah so that a just life can be enforced so that social welfare can realized. Five main things must be maintained in the Maqâshid Al-Syarî’ah, namely the guardianship of religion (hifdz al-dîn), the guarding of the soul (hifdz al-nafs), custody (hifdz al-’aql), custody of property (hifdz al-mâl). Therefore, if these five guards are well-maintained or maintained in a country, it will help improve the investment grade, providing investors with a safer sense and a good profit prospect. OIC stands for Organization of Islamic Cooperation with 57 member countries. The OIC gathers its members from the ideological equation of religiosity, Islam. As the world's largest government organization after the United Nations, the OIC is seen as the great power that the Islamic world possesses (OIC-OCI.org, 2017). As an organization based on Islamic values, OIC is perceived in line
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with the approach used in this research is Maqâshid Al-Syarî‘ah. Based on the background that has been mentioned above, the formulation of the problem that the authors discussed in this research is how the influence of religious custody variables (hifdz al-dîn), custody (hifdz al-mâl), hereditary (hifdz al-nasl) soul (hifdz al-nafs), and custody of reason (hifdz al-‘aql) to the state’s investment grade.

**Research Method**

*Data Types and Data Sources*

The type of data in this study uses secondary data, which has characteristics of Time Series (t) data, which are 19 OIC countries and also Cross Section (i) data, investment rating, corruption perception index, population growth, GDP per capita, life expectancy, and educational indices that range from 2011 to 2015. As this study uses secondary data, the data sources are obtained from relevant official sources, including World Bank, Transparency International, Fitch Rating, and Library research or library research, which is obtaining data through books, journals and other written materials related to this research. In this case, cite several theories that assist the discussion in this study. Investment grade is the dependent variable in this research, while the corruption perception index, population growth, GDP, life expectancy, and education index are independent variables.

*Analysis Method*

This study uses the Tobit methodology because observed data assume that the independent variables are not limited to only non-consumptive variables that are consumed of all variables (either free or not free) are correctly measured; no autocorrelation, no heteroscedasticity there is no perfect multicollinearity, and the mathematical model used to be precise (Ika, 2016). The output of this regression analysis is to estimate the dependent variable's values when the independent variable's value is known, according to Nashiruddin: 1997 in (Ali & Ascarya, 2010). The Tobit method assumes that the independent variables are infinite; only non-free variables are of limited value. (Gujarati, 2006) Tobit analysis is used if the dependent variable has an upper and lower limit value ranging from (0-100). The following is the Tobit regression model that is used if it is written statistically

\[ Y_{it} = \alpha_i + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \varepsilon_{it} \ldots \ldots \ldots (1) \]

\( Y_{it} \) is the limited dependent variable, \( \beta_1 \) is the coefficient, \( X_{it} \) is the independent variable, and \( \varepsilon \) is the term error and is assumed to be normally distributed. An additional \( X_{it} \) variable can be easily added to the model. If written in the Tobit regression model, the model used with the independent variables of internal-external factors in this study becomes:
\[ PI_{it} = \alpha_i + \beta_1 CPI_{it} + \beta_2 \ln PDB_{it} + \beta_3 PPOP_{it} + \beta_4 \ln AHH_{it} + \beta_5 EDU_{it} + \varepsilon_{it} \]  

where:

- \( PI \) = Investment Rating
- \( \alpha \) = Intercept
- \( CPI \) = Corruption Perceptions Index
- \( \beta \) = Slope
- \( PPOP \) = Population Growth
- \( i \) = individual
- \( \ln PDB \) = Gross Domestic Product
- \( t \) = Period
- \( \ln AHH \) = Life expectancy
- \( EDU \) = Education Index

**Analytical Procedures**

Here are the procedures for analyzing the data in this study:

**Parameter Estimation Testing**

To test the parameters in the Tobit method, the Wald test and Likelihood Ratio (LR) test (Laily, Ulfi, & Ismani, 2006).

**Likelihood Ratio Test (Test G):**

Test G is a test to see whether the relationship of independent variables to the dependent variable simultaneously has a significant effect. The hypotheses used are:

- \( H_0 : \beta_1, \beta_2, ..., \beta_k = 0 \)
- \( H_1: \) At least one \( \beta_j \neq 0 \)

Test statistics:

\[ G = -2\ln \left( \frac{L_0}{L_1} \right) \]

Information:

- \( L_{-1} \) = Likelihood without certain independent variables
- \( L_0 \) = Likelihood with a certain independent variable

This test follows the chi-square distribution with the degrees of freedom, that is, the number of parameters in the model so that the conclusion taken is \( H_0 \) is acceptable when test \( G \leq \chi^2 \), \( \alpha, k \), which means that none of \( \beta_j \) has a role to model.

**Wald Test**

This test is performed to test each \( \beta_j \) individually to show whether a free variable is feasible to enter into the model. The hypotheses used are:

- \( H_0 : \beta_j = 0 \)
H1: $\beta_j \neq 0$

Test statistic:

$$w^2 \frac{\beta_j^2}{Se(\beta_j^2)}$$

Information:

$Se(\beta_j^2)$: variant

$\beta_j^2$: the coefficient value of the alleged independent variable

$w^2$ follows the distribution of $\chi^2$ so that the decision based on H0 is not rejected when $\_w^2 \leq \chi^2 \alpha$ means $\beta_j$ has a role in the model.

**Individual Parameter Significance Test (t-test)**

The statistical test t is performed to show how far the influence of an explanatory or independent variable is in explaining the variation in the dependent variable. To test the influence of independent variable on dependent individual hypothetical can be made as follows:

H0: $\beta_1 = 0 = \text{no influence from the corruption perception index variable to the investment rating variable.}$

H1: $\beta_1 \neq 0 = \text{There is an influence of the corruption perception index variable on the investment rating variable.}$

H0: $\beta_2 = 0 = \text{no variable per capita GDP influence on investment rating variables.}$

H1: $\beta_2 \neq 0 = \text{There is an influence of the GDP per capita variable on the investment grade variable.}$

H0: $\beta_3 = 0 = \text{no effect of population growth variable on investment rating variable.}$

H1: $\beta_3 \neq 0 = \text{There is an influence of the population growth variable on the investment rating variable.}$

H0: $\beta_4 = 0 = \text{no effect of life expectancy variable on investment rating variable.}$

H1: $\beta_4 \neq 0 = \text{There is an influence of the life expectancy variable on the investment rating variable.}$

H0: $\beta_5 = 0 = \text{no effect of the education variable on the investment rating variable.}$

H1: $\beta_5 \neq 0 = \text{There is an influence of the education variable on the investment rating variable.}$

To test the hypothesis, we used the t statistic, t value calculated with the following formula:

$$t \text{ count} = \frac{\beta_j}{Se(\beta_j)}$$

Information:

$\beta_j$ = regression coefficient

$Se(\beta_j)$ = standard error regression coefficients
This t-test is done by comparing t arithmetic with the t table. When t arithmetic > t table, then the alternative hypothesis accepted that states that independent variables individually affect the dependent variable. Conversely, if t arithmetic < t table, the independent variable individually does not affect the dependent variable.

Results and Discussion

Model Estimation Result

Below, the researcher will present the estimation results on the Tobit regression model as the methodology used by the authors in this study. The results are presented in the form of likelihood ratio test results, the Wald test and the results of the Tobit regression equation on the research variables.

Likelihood ratio results

The likelihood ratio test is conducted to test the alleged factors against the dependent variable simultaneously. The results are then compared with the value of chi-square obtained from df = 1 with degree 1 and error rate 0.05, so obtained value 3.8414 for chi-square.

<table>
<thead>
<tr>
<th>Redundant variable</th>
<th>Log likelihood ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>6.654869</td>
<td>0.0099</td>
</tr>
<tr>
<td>LnPDBp</td>
<td>6.708754</td>
<td>0.0096</td>
</tr>
<tr>
<td>PPOP</td>
<td>0.760728</td>
<td>0.3831</td>
</tr>
<tr>
<td>LnAHH</td>
<td>1.427362</td>
<td>0.2322</td>
</tr>
<tr>
<td>EDU</td>
<td>0.445084</td>
<td>0.5047</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

From the likelihood ratio test with chi-square value 3,8414 with $G \leq \chi^2 \alpha$, k means $H_0$ is not rejected, which means that none of $\beta_j$ is role to model, hence obtained information that there are three $\beta_j$ which is not significant that is PPOP, LAHAHH and EDU which means $H_0$ is not rejected. It can be concluded that all of these variables and models influence except on population growth variables, life expectancy and education.

Wald Test

Test results on the Wald test showed later compared with the value of chi-square distribution with degree 1 at error level 0.05 at df = 5 is equal to 11.070.
Table 2 Wald Test

<table>
<thead>
<tr>
<th>Null Hypothesis Summary</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalized Restriction (=0)</td>
<td></td>
</tr>
<tr>
<td>C (1)</td>
<td>11.98842</td>
</tr>
<tr>
<td>C (2)</td>
<td>1.253663</td>
</tr>
<tr>
<td>C (3)</td>
<td>-18.98695</td>
</tr>
<tr>
<td>C (4)</td>
<td>-1.265444</td>
</tr>
<tr>
<td>C (5)</td>
<td>2.535113</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

Table 3 Chi-square Test

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>Value</th>
<th>Df</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>196.3066</td>
<td>5</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

One variable is not eligible, or H0 is not rejected on the variables of the corruption perception index. So, this independent variable shows no role or influence on the data or, in other words, independent variables not following the selected model (Tobit model). While all four other variables reject H0 and receive H1, all data on the four variables have been by the regression model used.

The Result Of Regression Equation

To estimate the achievement factor on Maqāshid Al-Syarī'ah to increase investment grade using Eviews 9.0, get the estimated estimation of the Tobit model in Table 4.

Table 4 Tobit Regression Test

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Coefficient</th>
<th>z-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-7.898419</td>
<td>-1.462922</td>
<td>0.1435</td>
</tr>
<tr>
<td>CPI</td>
<td>11.98842</td>
<td>2.625547</td>
<td>0.0087</td>
</tr>
<tr>
<td>LnPDBp</td>
<td>1.253663</td>
<td>2.636534</td>
<td>0.0084</td>
</tr>
<tr>
<td>PPOP</td>
<td>-18.98695</td>
<td>-0.873946</td>
<td>0.3821</td>
</tr>
<tr>
<td>LnAHH</td>
<td>-1.265444</td>
<td>-1.199224</td>
<td>0.2304</td>
</tr>
<tr>
<td>EDU</td>
<td>2.535113</td>
<td>0.667928</td>
<td>0.5042</td>
</tr>
</tbody>
</table>

Source: Data processed, 2023

From the estimation result, the factors that influence the increase of investment grade are variables of the perception index of corruption with a significance equal to 0.0087 and GDP per capita with a significance equal to 0.0084, then statistically at alpha 5%. While the population growth variables with a significant 0.3821, life expectancy with a significance of 0.1229 and education with a
significance of 0.2084 show a significance of more than 10%, which means the variable growth of population variable life expectancy and education variables cannot affect the significant increase in investment grade.

_Corruption Perceptions Index_

The result of the statistical test of the perception index of corruption has an effect on significantly the improvement of investment grade, which means that with the assumption that the other four variables are fixed, any increase of corruption perception index by one index point will increase investment grade by 11.98842 points. It explains that the level of investor confidence in the country is very important in accordance with the research done by Melliosa and Blanc (without years) that corruption significantly affects the sovereign rating. The level of corruption can also show two things: in the view of economic factors, the level of corruption indicates the level of development of a country, and a high level of corruption will hamper the country's development. Secondly, in the political view, the level of corruption reflects the quality of government; the higher the corruption level, the lower the quality of government.

Furthermore, in the research, Freckleton, Wright and Craigwell (2012) state that a country's low level of corruption can increase foreign direct investment in developing and developed countries. With the rise of a country's corruption perception index value, the country gets cleaner from corruption. The small level of state corruption will increase investor confidence as investors feel more secure and calm because they believe the funds invested will be well managed.

Corruption can occur because of decreased awareness and loyalty to the task and more concern with self-interest by harming others. A person who guards his religion will be manifest in the faith, and one who maintains his faith will have a significant impact on him, such as building a high level of awareness and loyalty to tasks and responsibilities, preventing munkar and eradicating evil, and balancing between personal and social interests (Ismail, 2014). So, it should be a Muslim to keep his faith and be a good person.

_GDP per capita_

The statistical test result of GDP per capita significantly influences the increase of investment grade with a significant value equal to 0,0084 and coefficient equal to 1,253663, meaning with the assumption of the fourth other variable remains hence every increase of GDP per capita equal to 1% will increase investment grade equal to 1,253663 %. In previous studies conducted by Melliosa and Blanc (without years), GDP per capita also gave significant and positive results on economic growth.
This explains that when there is an increase in state revenues, the country has a larger capital that gives investors confidence that the country can return the return of investors.

Population Growth
The statistical test result of population growth is insignificant to the increase of investment grade with a significant value equal to 0.3821.

Life Expectancy
The result of the statistical test of the perception index of corruption is not significant to the increase of investment grade with a significant value equal to 0.1229.

Education
The result of the statistical test of the perception index of corruption is not significant to the increase of investment grade with a significant value equal to 0.2084.

Conclusion
In summary, the culmination of this extensive research effort, encompassing hypothesis testing and comprehensive discussions throughout Chapter Four, has yielded crucial insights into the factors that significantly influence investment ratings in OIC countries from 2011 to 2015. These conclusions are intricately woven into the fabric of our research problem, theoretical framework, hypotheses, and the in-depth discussions in the preceding chapters.

1. The Corruption Perception Index, acting as a proxy for religious integrity, emerges as a potent force impacting investment ratings. The research unequivocally demonstrates that lower levels of corruption within a state can instil greater confidence in investors, ultimately resulting in an uptick in investment ratings.

2. Income per capita, serving as a proxy for property protection, yields a discernible and substantial influence on investment ratings. As per our findings, an upswing in per capita income can be a transformative force, significantly elevating the overall investment rating. Conversely, the population variable as a proxy for heredity care fails to yield statistically significant results in its association with investment ratings. Likewise, the Life Expectancy Rate, chosen as a proxy for spiritual well-being, emerges as a non-significant factor in determining investment ratings. Lastly, the education index, signifying intellectual development, also presents results that do not reach statistical significance concerning investment ratings.
In essence, this comprehensive research underscores the importance of addressing corruption perception and nurturing economic growth through increases in per capita income to enhance the investment climate within OIC countries. These findings bear significant implications for policymakers and investors keen on fostering a conducive investment environment, emphasizing the urgency of combating corruption and prioritizing economic development to attract heightened levels of investment.

Reference


Mellios, C., & Paget-Blanc, E. (t.thn.). Which Factors Determine Sovereign Credit Ratings?


