

**Collaborative Innovation of Economics Society:
Economics, Banking, and Islamic Economics Review**

ISBN: 978-602-392-632-9

e-ISBN: 978-602-392-633-6

Penulis :

1. Dra. Any Meilani, M.Si.
2. Yosi Mardoni, S.E, M.Si.
3. M. Fuad Hadzig, M.Si.
4. Dra. Hendrin Hariati Sawitri, M.Si.
5. Luthfi Ibnu Tsani, S.Pd.
6. Rini Efrianti, S.E., M.Si.
7. Prof. Dr. Taufiq Marwa, S.E., M.Si.
8. Prof. Nurlina Tarmizi, M.S., Ph.D.
9. Dr. Sa'adah Yuliana, M.Si.
10. Afrida Putritama, S.E., M.Sc.Ak.

Penelaah Materi : 1. Yosi Mardoni S.E, M.Si.
2. M. Fuad Hadzig, M.Si.

Desainer Cover/ Ilustrator : Nurul Fitriana, S.Ds.
Ley Outer : Nono Suwarno
Copy Editor : 1. Yosi Mardoni. S.E, M.Si.
2. M. Fuad Hadzig, M.Si.

Penerbit:

Universitas Terbuka
Jalan Cabe Raya, Pondok Cabe, Pamulang, Tangerang Selatan - 15418
Banten – Indonesia
Telp.: (021) 7490941 (hunting); Fax.: (021) 7490147
Laman: www.ut.ac.id.

Edisi kesatu
Cetakan pertama, 2019

©2019 oleh Universitas Terbuka

Hak cipta dilindungi Undang-Undang ada pada Penerbit Universitas Terbuka
Kementerian Riset, Teknologi, dan Pendidikan Tinggi



*Buku ini dibawah lisensi *Creative commons* Atribut Nonkomersial
Tanpa turunan 3.0 oleh Universitas Terbuka, Indonesia.
Kondisi lisesi dapat dilihat pada [Http: //creativecommons.or.id/](http://creativecommons.or.id/)*

Universitas Terbuka : Katalog Dalam Terbitan (Versi RDA)

Nama : Any Meilani

Judul : Collaborative Innovation of Economics Society : Economics, Banking, and Islamic Economics Review (BNBB) / penulis, Dra. Any Meilani, M.Si., Yosi Mardoni, S.E, M.Si., M. Fuad Hadzig, M.Si., Dra. Hendrin Hariati Sawitri, M.Si., Luthfi Ibnu Tsani, S.Pd., Rini Efrianti, S.E., M.Si., Prof. Dr. Taufiq Marwa, S.E., M.Si., Prof. Nurlina Tarmizi, M.S., Ph.D., Dr. Sa'adah Yuliana, M.Si., Afrida Putritama, S.E., M.Sc.Ak. ; penelaah materi, Yosi Mardoni S.E, M.Si., M. Fuad Hadzig, M.Si. ; desainer cover/ ilustrator, Nurul Fitriana, S.Ds. ; lay outer, Nono Suwarno. ; Copy Editor, Yosi Mardoni S.E, M.Si., M. Fuad Hadzig, M.Si.

Edisi : 1 | Cetakan : 1

Deskripsi : Tangerang Selatan : Universitas Terbuka, 2019 | 154 halaman ; 21 cm (termasuk daftar referensi)

ISBN :

e-ISBN:

Subyek : 1. Teknologi Industri
2. Ekonomi – Inovasi
3. Bank dan Perbankan
4. Islam dan Ekonomi

5. Industrial Technology
6. Economy - Innovation
7. Bank and Payment
8. Islam and Economics

Nomor klasifikasi : 338.7 [23]

201900123

PREFACE

This book is a collection of papers presented at the seminar of “Collaborative Innovation of Economic Society in the Era of the Fourth Industrial Revolution (4.0)” organized by The Faculty of economics Universitas Terbuka in Collaboration with Indonesian College of Accountancy with held in Jakarta on December 5, 2018.

The Book is organized in 7 themes: Customer Perception of Islamic Bank Products; Sukuk Growth Comparation. Why Is Indonesia Lost With Malaysia ?; Tourist Perception And Preference On Islamic Tourism ; Analysis of Investment Level on Growth of Processing Industry Sector In Central Java ; Industrial Revolution 4; The Role of Investment in Industrial Growth in Indonesia ; Determinants of Unemployment in South Sumatera Province Using Panel Regression Analysis and The Dual Banking System In Indonesia.

Hopefully coverage this book can be benefited to academicians, practitioners, and university students who interested in this topic. We accept criticism and suggestions for further improvement of this book.

South Tangerang, January 2019
Editorial team

Yosi Mardoni
M.Fuad Hadziq

CONTENTS

PREFACE	i
CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vii
ACKNOWLEDGEMENTS	xi
COLLABORATIVE INNOVATION OF ECONOMIC SOCIETY IN THE ERA OF THE FOURTH INDUSTRIAL REVOLUTION (INDUSTRY 4.0)	
EDITORIAL	1
Customer Perception Of Islamic Bank Products (Case Study Of Islamic Bank "X")	
<i>Any Meilani, M. Fuad Hadziq</i>	5
Sukuk Growth Comparation. Why Is Indonesia Lost With Malaysia?	
<i>M. Fuad Hadziq, Any Meilani</i>	23
Tourist Perception And Preference On Islamic Tourism	
<i>Yosi Mardoni</i>	41
Analysis of Investment Level on Growth of Processing Industry Sector In Central Java	
<i>Luthfi Ibnu Tsani</i>	71
Industrial Revolution 4; The Role of Investment in Industrial Growth in Indonesia	
<i>Hendrin Hariati Sawitri</i>	89
Determinants of Unemployment in South Sumatera Province Using Panel Regression Analysis	
<i>Rini Efrianti, Taufiq Marwa, Nurlina Tarmizi, Saadah Yuliana</i>	101
The Dual Banking System In Indonesia	
<i>Afrida Putritama</i>	119
CONTRIBUTORS	137

LIST OF TABLES

Customer Perception Of Islamic Bank Products (Case Study Of Islamic Bank "X")

Any Meilani, M. Fuad Hadziq

Table 1. Profile of Sharia Bank Customers "X"	13
Table 2. Criteria of CSI	18
Table 3. Level of Conformity of Sharia Bank Customer Perception "X" towards Sharia Bank Products	19

Sukuk Growth Comparation. Why Is Indonesia Lost With Malaysia?

M. Fuad Hadziq, Any Meilani

Table 1. Total Amounts and Amounts of Sukuk and Sukuk Outstanding Emissions 2002-2014	24 28
Table 2. General Characteristics of Sukuk	30
Table 3. Use or yield objectives	31
Table 4. Research variable	35
Table 5. About regression models in Indonesia	36
Table 6. Regression Models In Malaysia	

Tourist Perception And Preference On Islamic Tourism

Yosi Mardoni

Table 1. Islamic tourism Indicators	44
Table 2. Likert scale	47
Table 3. Respondents' Knowledge of Islamic Tourism	50
Table 4. Concern for Halal Labels at Restaurants	50
Table 5. Using Sharia Hotels When Staying	51
Table 6. Requirement of Labeling in Restaurants, Hotels and Travel Agencies	52
Table 7. Analysis of Attraction Variable	53
Table 8. Analysis Variable of amenity	54
Table 9. Analysis of Variable of Accessibility	55

Table 10. Analysis of Muslim-friendly services and facilities at the destination	56 57
Table 11. Analysis of Attraction Variable	58
Table 12. Analysis of Amenity Variable	59
Table 13. Analysis of Variable of Accessibility	
Table 14. Analysis of Muslim-friendly services and facilities at the destination	60
Table 15. Analysis of perceptions and preferences of Tourist at West Sumatra on Islamic tourism on the entire Indicators and Variables	61
Analysis of Investment Level on Growth of Processing Industry Sector In Central Java	
Luthfi Ibnu Tsani	
Table 1. Equation Estimate Results	78
Table 2. Equation Estimate Results	78
Table 3. Equation Estimate Results	79
Industrial Revolution 4; The Role of Investment in Industrial Growth in Indonesia	
Hendrin Hariati Sawitri	
Table 1. Industrial Sector Development 2014-2017	90
Table 2. Investment in Indonesia	91
Table 3. Direct and Indirect Effects and Total Influences	95
Table 4. Significance Dependent Variable: Y	96
Determinants of Unemployment in South Sumatera Province Using Panel Regression Analysis	
Rini Efrianti, Taufiq Marwa, Nurlina Tarmizi, Saadah Yuliana	
Table 1 Economic Growth and Unemployment In South Sumatera Province and Indonesia Year, 2010-2015	102
Table 2. Chow Test	107
Table 3. Lagrange Multiplier Test	108
Table 4. Hausman Test	109
Table 5. Multicollinearity Test Value	111

Table 6. <i>Heteroscedasticity Test Value</i>	112
Table 7. <i>Estimated Model Panel Regression Results</i>	113

The Dual Banking System In Indonesia

Afrida Putritama

Table 1 The Differences Between Interest And Profit Sharing Ratio in Islamic Banking	122
Table 2 Comparison of Credit in Conventional Banking With Musyarakah Financing and Mudharabah Financing In Islamic Banking	125
Table 3 Comparison of Credit in Conventional Banking With Murabahah Financing In Islamic Banking	127

LIST OF FIGURES

Customer Perception Of Islamic Bank Products (Case Study Of Islamic Bank "X") Any Meilani, M. Fuad Hadziq	
Figure 1. Kuadran Model IPA	10
Figure 2. Cartesian Diagram of Sharia Bank Customers "X"	15
Sukuk Growth Comparation. Why Is Indonesia Lost With Malaysia? M. Fuad Hadziq, Any Meilani	
Figure 1. Developments in the Issuance of Global Sukuk 2010- 2015	25
Figure 2. Portion of Issuance of Sukuk by the State	26
Tourist Perception And Preference On Islamic Tourism Yosi Mardoni	
Figure 1. Cartesian diagram	63
Figure 2. Perception and Preference Gap of West Sumatra Tourist About Islamic Tourism	68
Industrial Revolution 4; The Role of Investment in Industrial Growth in Indonesia Hendrin Hariati Sawitri	
Figure 1. Path Analysis Model	94
Determinants of Unemployment in South Sumatera Province Using Panel Regression Analysis Rini Efrianti, Taufiq Marwa, Nurlina Tarmizi, Saadah Yuliana	
Figure 1. Normality Test	110

ACKNOWLEDGEMENTS

Many parts and individuals participated in the development of the ideas presented in this text. We thank to Faculty of Economics Universitas Terbuka and for all the authors who have contributed to this book: Any Meilani, Fuad Hadziq, Yosi Mardoni, Luthfi Ibnu Tsani, Hendrin Hariati Sawitri, Rini Efrianti, Taufiq Marwa, Nurlina Tarmizi, SaadahYuliana, Afrida Putritama. We would also like to thank to the reviewers of this edition for the valuable feedback they provided during the writing process.

COLLABORATIVE INNOVATION OF ECONOMIC SOCIETY IN THE ERA OF THE FOURTH INDUSTRIAL REVOLUTION (INDUSTRY 4.0)

EDITORIAL

Currently, the world of education is discussing about The Fourth Industrial Revolution (4.0). This era characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres. It is disrupting almost every industry in every country. Disruptive innovation refers to an innovation that creates a new market and value network and eventually disrupts an existing market and value network, displacing established market leaders. The following is a summary of some of the studies prescribed at the seminar.

In the first, research from **Any Meilanani** about Customer Perception of Islamic Bank Products (Case Study of Islamic Bank "X") for analyzing the level of customer perceptions of the product of Islamic Bank "X". The finding of this research showed the customer perception of the Islamic Bank "X" is very satisfied with the products offered by the Islamic Bank "X".

In the next study related to Islamic banking, **Fuad Hadziq** had researched about sukuk. His research showed the development sukuk of Indonesia is very slow. Even though Indonesia has been considered a potential market in the Islamic finance industry. The growth of Malaysian sukuk is much bigger and faster than Indonesia. Government efforts in sukuk growth solutions in Indonesia suggest that the distribution of APBN funds to Islamic banking and investment into sukuk is mainly in the infrastructure sector.

Furthermore, research on the Tourist Perception and Preference on Islamic Tourism is written by **Yosi Mardoni**. He analyzed tourist perceptions and preferences for Islamic tourism in West Sumatra province. The results of this study indicate that some variables of Islamic tourism in West Sumatra are still low in performance even though their importance is high. But on the other hand, there is a variable with a high level of importance and also its performance has been good and has become the power of Islamic tourism owned by West Sumatra.

The investment climate must be maintained amid the development of the 4.0 industrial revolution. Technology-based investment is considered to grow in line with the shift to industry 4.0. research on investment is done by Hendrin Hariati Sawitri. The industrial sector can be said to be a leading sector, that can trigger other industrial sectors to increase. In this study found that variables of Direct Investment and portfolio investment and Gross Domestic Product have a positive effect on the food and beverage industry, but the tax variable as an intervening variable to influence portfolio investment has a negative effect on the food and beverage industry. It is hoped that investment will not only affect the food and beverage industry, but also can affect the leading industries in the 4th Industrial Revolution era, such as the Chemical, Textile, Electronics and automotive industries.

In the study entitled "Determinants of Unemployment in South Sumatera Province Using Panel Regression Analysis" by **Rini Efrianti**, This study found that there is a negative relationship between economic growth, government expenditure, and investment on unemployment, while population has a positive effect on unemployment. The economy of Central Java Province experienced a change in the growth source from the processing industry sector which is tradable sector into the financial services sector which is a non-tradable sector. The changes in these growth sources indicate the presence of deindustrialization symptoms.

From this background, **Lutfi Ibn Tsani** conducted a study to determine the factors that affect the level of investment and its implications for the growth of manufacture industry sector. The factors that influence the level of investment are the level of education and capital expenditure. The level of education can increase productivity and imply increased growth and attract investors to invest in these production activities. While capital expenditure which is a reflection of the role of government has a negative effect on the level of investment. Increased investment will affect the decline in the employment share of the manufacturing sector. This is because in Central Java is dominated by industry with capital-intensive.

Furthermore, **Afrida Puritama** researched about why most Moslems have avoided conventional bank? In this article, the author intends to explain the basic differences between Islamic banking and conventional banking in the dual banking system in Indonesia such as the economic

impact of the dual banking system, interest in conventional banking versus profit sharing in Islamic banking, time value of money in conventional banking versus time value of money in Islamic banking, agency theory in conventional banking versus trust-based financing in Islamic banking, credit in conventional banking versus musyarakah financing and mudharabah financing in Islamic banking, and credit in conventional banking versus murabahah financing in Islamic banking.

CUSTOMERS PERCEPTION ON ISLAMIC BANK PRODUCTS (A CASE STUDY OF ISLAMIC BANK "X")

Any Meilani and M. Fuad Hadziq

BACKGROUNDS

Islamic banking in Indonesia has grown greatly since the issuance of operational legal bases about Islamic banking. Regulation No. 10 of 1998 concerning changes to Law Number 7 of 1992 on banking stipulates that Bank Indonesia as the monetary authority guarantees the legality of Islamic banks and provides wider space for Islamic banks. The development of Islamic banking shows the growth in the number of *sharia* banking office networks. However, there are still some obstacles and weaknesses in terms of Islamic banks: the extensive operating network, incomplete and effective supporting institutions, not optimal and the lack of human resources with expertise in Islamic banking. From the consumer side, another weakness found is the limited understanding of the public regarding *sharia* banking financial services business activities. This limitation causes many people to have inappropriate perceptions about the operation of Islamic banks.

Based on the OJK survey in 2013 in 20 Indonesian provinces, the level of financial literacy of Indonesian people classified as well literate only reached 21.84 percent. Especially for banks, the literacy rate is high (21.80 percent). This shows that the community is knowledgeable and believes in banking institutions, products, banking services, and has skills in using banking products and services, which is only one fifth of the total population. The low level of financial literacy is in line with the low utilization of banking products and services by the community: 57.28 percent (Muflihani, 2015).

Based on the results of a study conducted by Muflihani (2015) on 70 micro-entrepreneurs who have become *sharia* bank customers, it is known that 40% of respondents have a low level of literacy on Islamic banking. This is based on the limited understanding of micro-entrepreneurs on the concept of Islamic banks, Islamic banking products and services, and skills in using Islamic bank products.

Many of the weaknesses and challenges of Islamic banks are related to people's perceptions of Islamic banks. These weaknesses are limited, lack of public knowledge and understanding of Islamic bank products and services. There are still many segments of society that must be the target of optimal socialization, especially segments of society that are considered to be in an environment that has the potential to grow and implement *sharia* values.

Islamic banks must be more aggressive and dare to open themselves to increase socialization to the wider community, especially in fostering awareness of the importance of the application of *sharia* in life. Therefore, efforts to increase public knowledge about Islamic banks have become a strategic issue in the development of Islamic banks in the future. The better the public's knowledge about Islamic banks is, the higher the possibility of using Islamic banks will be. By recognizing the state of *sharia* banking consumers, Islamic banks are expected to be able to know the needs and desires of consumers. One of the big problems in Islamic banking is the level of understanding (awareness) of Islamic bank products. At present, very few people know about Islamic banking products and terms in Islamic banking (Kompas Daily, 2012). In addition, Islamic banks must maintain old customers, so that customers who have been loyal to Islamic banks may not have received less attention or neglected. Because if the customers feel less or dissatisfied with the services provided, it is likely to have an impact on the turnover of Islamic banks.

Service is very important in an effort to increase customer satisfaction. Customer needs and satisfaction can be fulfilled if Islamic banks are able to understand customer behavior. Customers as consumers are important assets where customers contribute significantly to the development of the company's reputation.

Sharia Bank "X" is one of the Islamic banks that receives credit at the national and foreign levels. Currently, *Syariah* Bank employees "X" number 4,450 people in 68 branch offices, 171 sub-branch offices, 17 cash offices, 17 functional offices, 23 mobile service cars, 29 payment points and 16,977 ATMs. Customers of *Sharia* Bank "X" can utilize the parent branch network (Sharia Channeling Office / SCO) in 1,490 outlets in Indonesia and will grow with the growth of their assets. *Syariah* Bank "X" is committed to providing the best for customers, and the Islamic Bank "X" continues to experience

excellent business growth. Bank X business grows in the average growth of the Islamic banking industry in Indonesia. In 2016, its total assets reached Rp. 28.3 trillion. It became one of the biggest players in the national Islamic banking industry. At the end of 2016, Bank "X" posted a net profit rose by 21.38%, assets rose by 23.01%, Third Party Funds (DPK) rose by 25.41% and financing rose by 15.36% (Annual Report of *Syariah* Bank "X", 2016).

This achievement will not be achieved without the support or participation of its customers. Customer participation will be good if there is a good perception of Islamic banks. Adawiyah (2010) found that there were seven factors that became the criteria for consumer selection of Islamic banks, and consumer perceptions were the most influential factors in consumer decisions in choosing Islamic banks. Based on this explanation, the researchers of the study reported in this article are interested in investigating customer perceptions of the product of Islamic Bank "X".

SHARIA BANKING

According to Regulation No.10 of 1998 Islamic banks are banks that carry out their business activities based on sharia principles which in their activities provide services in payment traffic. Sharia principles, according to Article 1 Paragraph 13 of Law No.10 of 1998 concerning banking, are rules of agreement based on Islamic law between banks and other parties for depositing funds or financing business activities, or other activities declared in accordance with *sharia*, including financing based on the principle of profit sharing (*mudharabah*), financing based on the principle of equity participation (*musyarakah*), the principle of buying and selling goods with profit (*murabahah*), or financing of capital goods based on the principle of pure rent without choice (*ijarah*), or by the option of transferring ownership of goods rented from the bank by another party (*ijarah wa iqtina*).

According to Arifin (2006), Islamic banks were established with the aim of promoting and developing the application of Islamic principles, *sharia* and their traditions into financial and banking transactions and other related businesses. The main principles followed by Islamic banks are:

1. prohibiting usury in various forms of transactions

2. conducting business and trade activities based on the acquisition of legitimate profits
3. giving *zakat*

As long as conventional banking practices do not conflict with Islamic principles, Islamic banks adopt existing banking systems and procedures. However, if there is conflict with *sharia* principles, Islamic banks plan and implement procedures to adjust their banking activities to the principles of Islamic *sharia*.

With a variety of products offered, Bank *Syariah* "X" is committed to advancing Islamic-based banks. In addition, the application of *hasanah* lifestyle owned by *Syariah* Bank "X" is a major advantage that is not possessed by other banks so that it is expected to be the consumer's choice bank that prioritizes *hasanah* values in their lives. Life that does not only prioritize worldly life, but also has provisions for life after dying by doing good (*hasanah*).

There are a number of previous studies conducted abroad and domestically. First, Metawa and Almosawi (1998) in Bahrain found that the decision of customers to use Islamic bank products was because they were more driven by religious factors, namely their adherence to Islamic principles. Second, Naser, Jamal and Al-Khatib (1999), who used a sample of 206 customers of Islamic banks in Jordan to examine customer awareness and satisfaction with Islamic bank products and facilities, showed that even though the customer was aware of the products and facilities offered by Islamic banks, such as *murabahah*, *musyarakah* and *mudharabah*, customer responses indicated that they were not satisfied with the products and facilities available.

Third, Haron and Norafifah (2000) who, in their research in Malaysia, found a positive relationship between deposits in Islamic banks and the level of profits. In summary, the results of this research concluded that the factor that drove customers to save money in Islamic banks was the motivation to seek profits or economic factors. Fourth, the results of BI's research with IPB in South Kalimantan (2004) showed that there were seven variables which had strong links with respondents who had the potential to be associated with Islamic banks, namely: (1) the existence of Islamic banks, (2) knowledge

of Islamic banks, (3) perceptions of interest in conflict with religion, (4) consideration of professionalism, (5) positive impression on Islamic banks, (6) status of religious leaders, and (7) types of employer jobs.

Fifth, Amani's research (2010) conducted at the Al-Munawwir Krapyak Islamic Boarding School in Yogyakarta revealed that the perception of *santri* towards Islamic banks was only limited to reasoning arguments, because there were still many students of Al-Munawwir who used the services of conventional banks. They reasoned that the *Shariah* bank was still small, the knowledge of the *santri* was still lacking, so the *santri* had difficulty choosing the *syariah* bank. However, the students tried to implement transactions in accordance with Islamic law in dealing with their environment.

Sixth, Muflihani's (2015) study disclosed that Islamic banks that run their operations based on Islamic principles were known by 59 respondents or 84.28 percent. The variables that had a positive and significant effect were the duration of education, operating profit and the dummy intensity of socialization and education by Islamic banks. Therefore, there is a need for a strategy for planning education and stronger synergies between the Islamic banking industry and other stakeholders, such as *OJK*, *ulama*, campuses and other community organizations.

Understanding the behavior of customers of good Islamic bank financing is something that is important for marketing needs that are right in a wider scope. In competition and expanding markets, the behavior of customers in Islamic banks is very important to identify and understand, especially by Islamic banks.

METHODS

The data in this study were primary data, namely research data obtained directly from consumers. In addition, secondary data was also needed, which was data on Islamic Bank products "X" offered to customers and other literature related to the topic of this research. The study used a nonprobability sampling technique, which is a sampling technique that does not provide the same opportunity or opportunity for each member of the population to be selected as a sample. The non-probability sampling technique used was accidental sampling. The number of samples in the

study were 180 customers from 3 locations that had the most customers, namely: Jakarta, Surabaya and Bandung. The questionnaire used was taken from the previous research, namely a questionnaire developed by Yulianti (2012) with a slight modification that was adjusted to the current situation.

The research data was collected by giving questionnaires to *sharia* bank customers directly. In addition to exploring the material, interviews were conducted with several Islamic bank customers and Islamic bank employees.

Customers' perceptions of *Syariah* Bank products "X" are strongly influenced by the expectations and reality of services received by customers. One method is the Importance Performance Analysis (IPA). It has several advantages over other methods. These advantages can show product attributes that need to be increased or reduced to maintain customer satisfaction, the results are relatively easy to understand and require low costs. The IPA technique is explained by Martilla & James (1977) "Importance-Performance Analysis" published in the Journal of Marketing (Algifari, 2015). This model is used to measure the performance of satisfaction that is considered important by the customer and the satisfaction performance received by the customer. The main purpose is as a diagnostic tool to facilitate identifying attributes that are based on the interests of each. Achievement of the performance of the product or service is shown in the article that has four quadrants, namely Quadrant A, Quadrant B, Quadrant C and Quadrant D, and each quadrant shows the performance of the product or service being assessed. The following figure is an original form of the science model Cartesius degree diagram developed by Martilla and James.

Kuadran A Main priority	Kuadran B Maintain Achievement
Kuadran C Low Priority	Kuadran D Over

Figure 1. Kuadran Model IPA
Resource: Martilla dan James (1977)

According to Santosa (2011), the first stage in the science method is to determine the level of suitability between the level of importance and the level of performance of the quality of the attributes under study through a comparison of performance scores with interest scores. The suitability level formula used is:

$$Tki = \frac{X_i}{Y_i} \times 100\%$$

Information:

Tki : level of conformity

Xi : performance level score

Yi : importance level score

The second stage is calculating the average for each attribute perceived by the customer, using the formula

$$\overline{X1} = \frac{\sum X1}{n} \quad \overline{Y1} = \frac{\sum Y1}{n}$$

Information:

X1 : average product performance score

Y1 : average score of importance on the product

n : number of customers

The third stage is calculating the average of all the attributes of importance (Y) and performance (X) which are the boundaries in the Cartesian diagram, using the formula:

$$\overline{\overline{X}} = \frac{\sum \overline{X1}}{k} \quad \overline{\overline{Y}} = \frac{\sum \overline{Y1}}{k}$$

Information:

$\overline{\overline{X}}$: average product performance level score for all factors or attributes

$\overline{\overline{Y}}$: average level of importance of all attributes that affect customer satisfaction

K : the number of attributes that can affect customer satisfaction

The next step is the description of each attribute in the Cartesian diagram.

According to Suryawan and Dharmayanti (2013), customer satisfaction is determined by customer perceptions of product or service performance in customer expectations. Customers will be satisfied if their expectations are fulfilled or will be very satisfied if their expectations are exceeded. The level of customer satisfaction can be measured using the Customer Satisfaction Index (CSI) method. This Customer Satisfaction Index is needed to measure the level of customer satisfaction with several advantages, such as efficiency (not only satisfaction indexes but also obtain information related to dimensions / attributes that need to be improved), easy to use and simple and using a scale that has high sensitivity and reliability. The stages in measuring CSI (Siagian in Amran and Ponti Ekadeputra, 2010) are as follows.

1. Calculating the Weighted Factor: changing the average value of importance to a percent number so that the total weighting factor is 100%
2. Calculating the Weighting Score: the multiplication value between the average value of the level of performance with Weighted Factor.
3. Calculating Total Weighted: sums the Weightes Score of all attributes
4. Calculating the Satisfaction Index: Weighted Total divided by the maximum scale used (in this study the maximum scale used is 5) then multiplied by 100%.

RESULTS

Profile of *Sharia* Bank Customer "X"

Sharia Bank customers "X" who were respondents in this study were 180 people from 3 regions: Surabaya, Bandung and Jakarta. The age of most customers was between 25-39 years; 59% are female; 40% are private employees; 98% are Muslim; and 42% are bachelor-educated. From the characteristics of customers, the number of customers and the composition of the age groups in the three regions were not much different. Based on gender, only the Bandung region had a balanced composition of men and

women while in the Jakarta and Surabaya regions it was dominated by women. Around 85% of respondents had become customers of the "X" Syariah Bank between 1-4 years, and only 46% of respondents had become customers of the "X" Islamic Bank for a maximum of 1 year.

Table 1. Profile of Sharia Bank Customers "X"

	Surabaya		Bandung		Jakarta		Total	
Age	f	%	F	%	f	%	f	%
15 - 24 years old	17	28	13	22	21	35	51	28
25 - 39 years old	28	47	24	40	21	35	73	41
40 - 54 years old	12	20	16	27	15	25	43	24
55 - 69 years old	3	5	7	12	2	3	12	7
70 - 84 years old	-	-	-	-	1	2	1	1
Total	60	100	60	100	60	100	180	100
Gender								
Male	22	37	31	52	20	33	73	41
Female	38	63	29	48	40	67	107	59
Total	60	100	60	100	60	100	180	100
Jobs								
PNS	7	12	10	17	12	20	29	16
Public	27	45	15	25	30	50	72	40
Entrepreneur	8	13	11	18	5	8	24	13
House wife	5	8	12	20	7	12	24	13
Trader	-	-	3	5	1	2	4	2
Unemployment	13	22	9	15	5	8	27	15
Total	60	100	60	100	60	100	180	100
Religion								
Islam	59	98	59	98	59	98	177	98
Kristen	1	2	1	2	1	2	3	2
Total	60	100	60	100	60	100	180	100
Education								
SD	-	-	1	2	-	-	1	1
SLTP	-	-	1	2	1	2	2	1

	Surabaya		Bandung		Jakarta		Total	
SLTA	23	38	24	40	22	37	69	38
DIPLOMA	4	7	8	13	5	8	17	9
S1	30	50	21	35	25	42	76	42
S2	3	5	3	5	5	8	11	6
S3	-	-	1	2	2	3	3	2
Total	60	100	60	100	60	100	180	100

In addition, it was found that 66% of respondents, besides being customers of Islamic banks, also became customers in conventional banks, while only 34% were loyal customers of Islamic banks only. In addition, it was found that 66% of respondents, besides being customers of Islamic banks, also became customers in conventional banks, while only 34% were loyal customers of Islamic banks only. There is a possibility that the condition of customers who become customers in both banks is "floating mass". According to the results of the study by Daniar and Syam (2012) on customers of Islamic banks and conventional banks in Jakarta and Bandung, it was found that the increase in the number of *sharia* bank customers was not due to an increase in the "sharia loyalty" market segment, but due to the increase in the "floating mass" segment becoming a *sharia* banking customer without leaving his conventional banking. Yet, this needs to be proven again in a study.

CUSTOMER PERCEPTION ANALYSIS WITH THE IPA METHOD

Customers' perceptions of *Sharia* Bank "X" products are inseparable from customer perceptions of what customers feel (performance) and what customers expect (importance). According to Suryawan and Dharmayanti (2013), customer satisfaction is determined by customer perceptions of product (service) performance (service) in meeting the customer's expectations. Customers will feel satisfied if their expectations are exceeded. Likewise, the customer of *Syariah* Bank "X" will compare between what the customer expects and what the customer feels. Customer perceptions of the *Syariah* Bank "X" in combination from the three sample

regions, namely Surabaya, Bandung and Jakarta can be seen in this picture below.

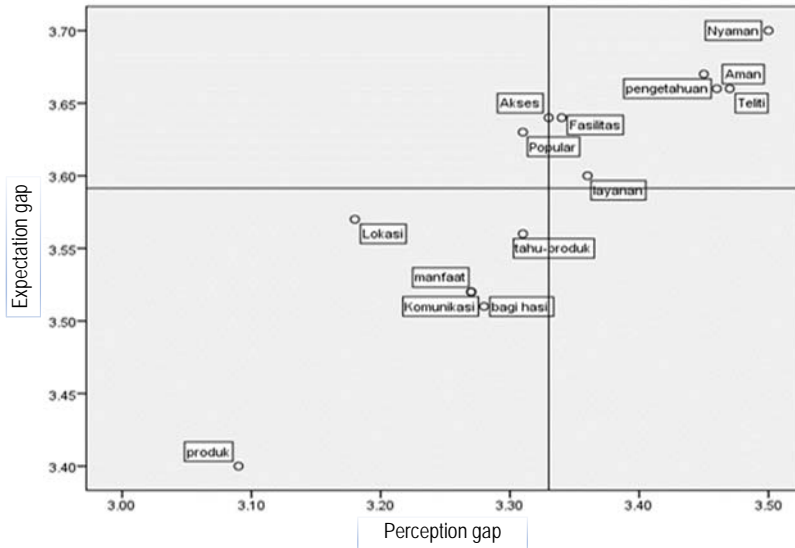


Figure 2. Cartesian Diagram of Sharia Bank Customers "X"

In Quadrant A, when viewed from the customer's interest, the attributes are at a high level. But if seen from the satisfaction, the customer feels a low level, so that the customer demands an improvement in these attributes. Islamic Bank "X" should make an effort to improve these attributes in order to increase customer satisfaction which also means that these attributes need to be better managed so that customer satisfaction can be achieved. There are two attributes that fall into this quadrant, namely access and popular. Noor and Sanrego (2014) stated that access is one of the factors that have a positive influence on the preferences of *pesantren* communities in choosing and saving in Islamic banking in DKI Jakarta. Likewise, the results of the study of Kardoyo and Ahmad (2015) in the UNNES PPs Economics Education Study Program revealed that the access dimension is a top priority for improvement.

Popular attributes indicate that customers consider Islamic Bank "X" as not yet well known in the community, so Islamic banks can evaluate promotions or outreach to be better known by the public. The results of Utami's (2011) study of 100 respondents was that popular factors influence the behavior of conventional BRI customers in determining their choice of banking services. If customers feel they are familiar with Islamic banks, it will be easy to encourage customers to use Islamic bank products. For this reason, Islamic Banks "X" should improve access and popular attributes by conducting periodic and ongoing evaluations or monitoring.

There are six attributes included in Quadrant B: comfort, knowledge, accuracy, security, facilities, and service. In this position, when viewed from the customer's interests, the attributes are at a high level. From satisfaction, customers also feel a high level. This requires Islamic banks to be able to maintain their position because these attributes have attracted customers. According to the research of Gerrard and Cunningham (2004), inconvenience is one of the factors that influence the moving behavior of bank customers in the Asian region. Similarly, Budiono (2006) explained that one of the factors that had the most influence in the decision to move banks in Yogyakarta was a factor of discomfort.

The results of the research by Noor and Sanrego (2014) state that knowledge is one of the factors that positively influences the preferences of *pesantren* communities in choosing and saving in Islamic banking in DKI Jakarta, meaning that the higher the value of knowledge is, the higher the chance to become *sharia* bank customers will be. However, the facility factor has a negative effect on the preferences of *pesantren* communities in choosing and saving in Islamic banking in DKI Jakarta. Facility factors that have a negative effect are estimated because of the lack of public knowledge about Islamic banks, so that it can lead to customers' disinterest in using Islamic banks and even tend to choose conventional banks. The study conducted by Yulianti (2012) indicates that accuracy is one of the things that is required or absolutely necessary by Islamic banks, because these factors have a significant difference in giving appreciation to all Islamic bank financing products. Damayanti's study (2017) shows that security and service variables have more influence on customers' interest in deciding to save at Bank Syariah Mandiri. Based on this explanation, Islamic Bank "X"

must try to maintain this achievement because these attributes are considered by customers as the superior products.

In the C Quadrant of the interests of customers that attributes are not considered important, even though the level of customer satisfaction is quite good. However, the customer ignores the attributes located in this position. There are six attributes that are included, namely location, product knowledge, benefits, communication, profit-sharing, and products. Muhammad (2014) found that location was the dominant factor in influencing the Darunnajah boarding school community to choose Islamic banks, while the results of Ernawati's (2015) study stated that the location did not affect the community's decision to choose Islamic banks. The study conducted by Rachmawati (2017) on 100 BRI Syariah customers in Surabaya stated that product knowledge has a significance of 0.482. This means that product knowledge is considered not to have an effect on saving decisions, because the possibility of customers who lack information about each Islamic principle contained in the product and the difference in each principle (*wadiah*, *mudharabah*, etc.). Customers only know the Islamic bank products in broad outline and in less detail.

Yulianti (2012) shows that benefits are one of the things that are obligatory or absolutely necessary by Islamic banks, because both of these factors have a significant difference in giving appreciation to all Islamic bank financing products. Ratna (2016), who carried out research with 132 respondents consisting of 78 customers and 54 employees from four Islamic banks in Semarang City, found that communication did not affect the loyalty of *sharia* bank customers. Ernawati (2015) stated that profit sharing had an effect on people's decisions in choosing Islamic banks.

Profit sharing is able to compete with interest-bearing banks, and with profit sharing it will feel more comfortable and satisfied so that if the profit share is given in accordance with a mutual agreement, the community's decision to choose Islamic banks will increase. Based on this explanation, there are results of research that supports and there are also those who do not support the treatment of these attributes. Apart from that, the Islamic Bank "X" needs to react more carefully through evaluating the performance of these attributes periodically and continuously.

There are no attributes included in the D Quadrant, meaning that the Islamic Bank "X" successfully manages its products according to the customer's wishes because of what customers consider as less important, and Islamic banks do not give priority to these attributes.

ANALYSIS OF CUSTOMER PERCEPTION LEVEL WITH CSI METHOD

Customers' perceptions of *Sharia* Bank "X" products are inseparable from customer perceptions of what customers feel (performance) and what customers expect (importance). On the other hand, measuring the level of customer satisfaction is very important to do to find out how much customer expectations can be fulfilled by the Islamic Bank "X".

Tabel 2. Criteria of CSI

No.	CSI	Criteria CSI
1	$X > 0,81$	Very satisfied
2	0,66 – 0,80	Satisfied
3	0,51 – 0,65	Satisfied enough
4	0,35 – 0,50	Lack enough
5	0.00 – 0,34	Not satisfied

Source : Table index CSI Aritonang

By referring to the reference value of the Customer Satisfaction Index (CSI) above, 81% of Aritonang (Table 2), where the CSI value $> 81\%$, shows very satisfied. The level of customer perceptions in a joint manner, namely customers of the Islamic Bank "X" in the Surabaya, Bandung and Jakarta regions, amounting to 180 people can be seen in Table 3 below.

Table 3. Level of Conformity of *Sharia* Bank Customer Perception "X" towards *Sharia* Bank Products

Atribut	Importance	Performance	Level of Conformity
Knowledge	3.67	3.45	12.67
Knowing roduct	3.56	3.31	11.78
Product	3.40	3.09	10.49
Benefit	3.52	3.27	11.52
Profit sharing	3.51	3.28	11.48
Communication	3.52	3.27	11.50
Services	3.60	3.36	12.09
Location	3.57	3.18	11.35
Careful	3.66	3.47	12.68
Save	3.66	3.46	12.67
Comfort	3.70	3.50	12.96
Popular	3.63	3.31	12.02
Access	3.64	3.33	12.12
Fasility	3.64	3.34	12.14
Total	50.26	46.61	167.47
		CSI	83.29314265

Source: primary data (2017)

Referring to the reference CSI values are above 81% of Aritonang (Table 2), where CSI values > 81% indicate criteria are very satisfied. The results of the analysis of the perception of customer satisfaction in the Islamic Bank "X" in combination in three regions, namely Surabaya, Bandung and Jakarta, have CSI values above, which is 83.29%. This shows that the customers of the *Syariah* Bank "X" in combination are very satisfied with the products of Islamic banks.

Research Limitations

The limitations of this study are as follows.

- 1) There are not many samples, only 180 customers
- 2) Limited ability of customers to understand the contents of questions or statements and honesty to answer questionnaires.

- 3) Samples are taken based on accidental sampling, so there is a possibility that the sample is less representative because it depends only on the sample members at the time.

Based on the results of the study, it can be concluded that: 1) based on the IPA method, the attributes of access and popularity are the top priority to be improved by the Islamic Bank "X" so that customer satisfaction can be achieved because the customer considers the two attributes as important, while the Islamic Bank "X" has not provided services that meet customer expectations, and 2) the results of calculation of the CSI method show that the perception of the customers of Islamic Bank "X" is very satisfied with the products offered by the "X" Islamic Bank.

Suggestions that can be given based on the results of this research and discussion are: 1) Islamic Bank Leader "X" should make it a top priority to improve the quality of access and popular attributes. The thing that can be done by Islamic Bank "X" is periodic monitoring and evaluation activities; and 2) more in-depth research on customer satisfaction with certain products that are more specific (not products in general) is needed.

REFERENCES

- Adawiyah, W.R. 2010. Considerations, Knowledge and Attitudes of Individual Consumers towards Islamic Banks. *Journal of Development Economics*, Volume 11, number 2. December 2010, p. 191-201.
- Amani, Intan. 2010. Perception of Santri Al Munawwir Krapyak Yogyakarta against Sharia Banks - UIN Sunan Kalijaga (thesis).
- Arifin, Zainul. 2006. *Basic Basics of Sharia Bank Management*. Jakarta: Alfabet Library.
- Algifari. 2015. *Measuring Service Quality with Satisfaction Index, Importance Performance Analysis (IPA) and Canoe Models*. Yogyakarta: Kurnia Kalam Semesta.
- Amran, T and Ekadeputra, P. 2010. Measurement of Customer Satisfaction using the Canoe Method and Root Cause Analysis (PLN Case Study in Tangerang). *Journal of Industrial Engineering* 1 (2): 164.

-
- Budiono, Vincentius Allen. 2006. Analysis of Consumer Behavior in Deciding on Moving Banks in Yogyakarta. Essay. Atma Jaya University. Yogyakarta.
- Daniar, A. and Syam, N. W. 2012. Construction of the meaning of conventional banks for Muslims. *Sosiohumaniora*, Volume 12, No. 2, July 2012: 104-115.
- Damayanti, S. 2017. The Influence of the Views of Islam, Service and Security on Customer Interests to Save at Bank Syariah Mandiri Branch X. Faculty of Economics and Business, Trisakti University. Jakarta.
- Ernawati, Tatik. 2015. Effect of Products, Services, Promotions, Locations and Profit Sharing on Community Decisions in Selecting Islamic Banks (Survey at BTN Syariah Surakarta Branch). Essay. Accounting Study Program, Faculty of Economics and Business, Muhammadiyah University, Surakarta.
- Gerrard, P., & Cunningham, J. B. 2004. Consumer switching behavior in the Asia banking market. *The Journal of Service Marketing*, 18 (2/3), 215.
- Haron, Sudin and Ahmad, Norafifah. 2000. The Effects of the Conventional Interest Rates of Profit on Funds are Deposited with Islamic Banking System In Malaysia. *International Journal of Islamic Financial Services*, Volume 1, Number 4, January-March, Malaysia.
- Kamal Naser, Ahmad Jamal and Khalid Al-Khatib. 1999. Islamic Banking: A Study of Customer Satisfaction and Preferences in Jordan. *The International Journal of Banking Marketing for the Financial Services Sector*. Vol. 17 No. 3.
- Martila, J.A. and James, J.C. 1977. "Importance Performance Analysis" *Journal of Marketing*. Vol. 2 No. 1 thing 77-79.
- Metawa and Almosawi. 1998. Banking behavior of Islamic banks customers: Perspectives and Implications, *International of Bank Marketing*, Vol. 16, No. 7, pp. 299-313.
- Muflihani, Z.F. 2015. Micro Business Actors' Literacy Levels on Sharia Divination. *Iqtishodia*, *Repubika Islamic Economics Journal*.
http://fem.ipb.ac.id/d/iqtishodia/2015/Iqtishodia_20150827.pdf
- Muhammad, K.A. 2014. Influence of citizen knowledge about Islamic banking on interest in choosing Bank Muamalat products (case study of

- santri Darunnajah Islamic boarding school). Sharia Faculty and law thesis, Syarif Hidayatullah State Islamic University, Jakarta.
- Noor, Fahd and Sanrego, Y.D. 2014. Preferences of Islamic Boarding Schools for Islamic Banks (case study of DKI Jakarta). Published in the Tazkia Islamic Business and Finance Review.
- Ratna, Citra Ayu P. 2016. Analysis of factors that influence Customer Loyalty and Employees of Sharia Banks in Semarang City. Semarang State University (UNNES). <http://lib.unnes.ac.id/26075/> on August 17, 2017.
- Rachmawati, Ivany. 2017. Analysis of the Effect of Promotion, Price, Product Knowledge and Religious Knowledge on Customer Decisions Choosing to Save at BRI Syariah Bank in Surabaya. Essay. Perbanas College of Economics, Surabaya. <http://eprints.perbanas.ac.id/2884/1/ARTIKEL%20ILMIAH.pdf>, October 10, 2017.
- Santoso. 2011. Consumer Perception of the Quality of Telo Bakpao with the Impormance Performance Analysis (IPA) Method. Journal of Agricultural Technology, 12 (1): 9.
- Now, Uma. 2011. Research Methods for business Edition I and 2. Jakarta: Salemba Empat.
- Suryawan, S and Dharmayanti, D. 2013. Analysis of the Relationship between Experiential Marketing, Customer Satisfaction and Customary Loyalty Cafe Miss Sweet Grand City Mall Surabaya. Journal of Marketing Management 2 (3): 3.
- Utami, Budi. 2011. Comparison of Determinants of Banking Election Decisions (Case Study at the Sharia People's Bank of Indonesia and Conventional Bank Rakyat Indonesia). Faculty of Economics, Gunadarma University. budi_utami.staff.gunadarma.ac.id/Publications/files/2448/Jurnal+Tesis+pdf.pdf. May 14, 2017.
- Yulianti, Farida. 2012. Customer Perception of Islamic Banking Products in Banjarmasin City. SPREAD Journal, Vo; 2 No. 1 April 2012.
- Kompas Daily. 2012. The Three Biggest Problems in Sharia Banks, in Kompas on August 13, 2012. <http://ekonomi.kompas.com/read/2012/08/13/15282835> / Tiga. Problems. Enlarged. Di. Bank. Syariah, dated 14 January 2017

SUKUK GROWTH COMPARATION: WHY DOES INDONESIA LOSE WITH MALAYSIA?

M. Fuad Hadziq dan Any Meilani

BACKGROUNDS

Islamic *sharia*-based financial concepts have been widely accepted in the world and have become alternatives, both for *sharia* compliant markets (*syariah* compliance), and for conventional markets as a source of profit (profit source). One of the *sharia* financial instruments that has been issued by both the state and corporation is *sukuk* or Islamic bonds. At present, several countries have become regular issuers of *sukuk*, for example Malaysia, Bahrain, Brunei Darussalam, United Arab Emirates, Qatar, Pakistan, and Germany State of Saxony.

The number of *sukuk* issuers from year to year has increased because market opportunities will be very responsive to *sukuk* issuance. Almost all of the *sukuk* issued were sold out by the market, even some cases caused excess demand. The Islamic bond industry in Indonesia is expected to grow as in Malaysia, which has achieved results above US \$ 3 billion. In addition, the potential of investors from Muslim countries around the world reaches above US \$ 7000 billion. An amount that is not small and very significant to be a prospective market for *sharia* bonds going forward. That is an opportunity for the development of Islamic bonds in Indonesia to attract investors, especially foreign investors, because the majority of Indonesia's population is *Muslim* (Dede, 2011). This opportunity is a challenge as well as a very large and broad market in Indonesia, considering that Indonesia is the largest Muslim-occupied country in the world, reaching 250 million. Besides, the market share of Islamic economics has reached 8.4% of the national economic market share and the market share of Islamic banking has also reached 5.4% of the total national banking market share.

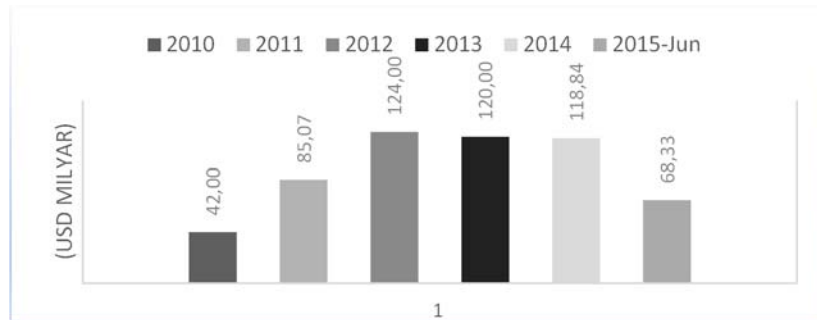
Table. 1
Total Amounts and Amounts of *Sukuk* and *Sukuk* Outstanding Emissions
2002-2014

Year	<i>Sukuk</i> Emission		Outstanding <i>sukuk</i>	
	Total value (billion)	Total number	Total value (billion)	Total Number
2002	175	1	175	1
2003	740	16	740	6
2004	1424	13	1394	13
2005	2009	16	1979	16
2006	2282	17	2179	17
2007	3174	21	3029	20
2008	5498	29	4958	24
2009	7015	43	5621	30
2010	7815	47	6121	32
2011	7915	48	5879	31
2012	9790	54	6883	32
2013	11994	64	7553	36
2014	12727.4	68	7391	36

Source: Directorate of Sharia Banking - Financial Service Authority

Based on data from the *Sharia* Banking Directorate above, that *sukuk* in Indonesia experienced a significant development. It can be checked that in the 2002 period, 2014, the value of *sukuk* emissions has experienced a growth of 7.172 percent, meaning that the value of *sukuk* emissions has increased 70 times from the base year. This growth is in line with the development of the number of *sukuk* issued. This phenomenon shows the high interest of corporations or institutions for Islamic financial instruments as an option in investing in the financial sector. In addition, the standardized value of *sukuk* has also experienced significant developments up to 2014, namely the value of IDR. 7,391 billion -. This value is almost reaching 50% percent of the value of *sukuk* emissions. It can be concluded that in 2014 the total value of *sukuk* that has been paid (due) is more than 50 percent of total *sukuk* emissions.

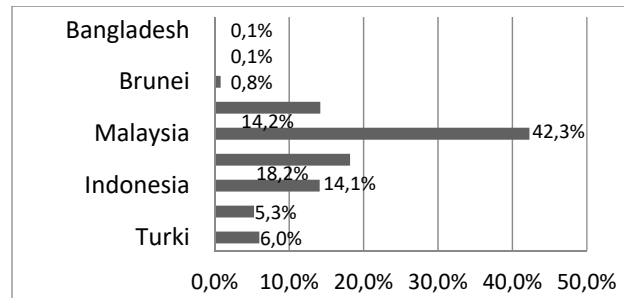
In Indonesia, corporation *sukuk* is better known as *sharia* bonds. In 2002, the National *Sharia* Council issued a *fatwa* No: 32 / DSN-MUI / IX / 2002, concerning Obligation of *Sharia*. The regulation makes *sukuk* legally strong. However, in the process, *sukuk* instruments issued by companies (corporation *sukuk*) as well as by the state (sovereign *sukuk*) developed very rapidly in the world. However, why is the development of *sukuk* in Indonesia very slow? Even though Indonesia is considered a potential market for the development of the Islamic finance industry.



Source: *Global Sukuk Report 1Q 2015*

Figure 1
Developments in the Issue of Global *Sukuk* 2010-2015

In the graph above, the issue of global *sukuk* has been fluctuating during 2010-June 2015. In 2015, *sukuk* issue decreased significantly. This is because of the withdrawal decision by the Central Bank of Malaysia (BNM) and move to other instruments. The reason behind the decision was due to the impact of rising fuel prices, political problems, and a decline in the value of the Malaysian ringgit (Ahmad, 2015). As a result of the BNM decision, the total global *sukuk* issue experienced a drastic decline, which decreased 42 percent from the previous year. This phenomenon shows the magnitude of the influence of the issue portion of Malaysian *sukuk* on total global *sukuk* issue so that the impact can significantly affect the number of global *sukuk* issue.



Source: Global Sukuk Report 1Q 2015

Figure 2 Portion of Issuance of Sukuk by the State

From the graph above it can be explained that the total issue of Malaysian *sukuk* turned out to be 42.3 percent of the total global *sukuk* issued. This amount makes Malaysia the largest *sukuk* issuing country in the world although in terms of the number of its *muslims* population are not comparable to the population in other *muslim* countries. In addition, the difference in the portion of *sukuk* issue seems to have a far gap with other *muslim* countries, such as the United Arab Emirates, which is only 18.2% in the second position, while Indonesia was in the fourth place with a value of 14.1 percent.

According to Achsien (2004), there are many challenges in the growth of Islamic bonds in Indonesia, such as socialization to investors, opportunity costs, liquidity, regulation or legislation. In addition, many macroeconomic variables are factors that influence the development of *sukuk* in one country. These factors need to be broken down into small parts that can be redefined into a factor that can be a joint influence. Therefore, we need to know more deeply through our own research for the discovery of comprehensive outcomes.

The influence of liquidity, regulation, and legislation on *sukuk* is caused by the three aspects that provide an overview of the legal security and certainty of an investment instrument, so that the three aspects have a big contribution in making investment decisions by investors, in this case investment *sukuk*.

The purpose of this research is to analyze the causal factors in slowing *sukuk* growth from macroeconomic variables in Indonesia compared to Malaysia. After knowing these variables, then measuring the magnitude of the influence of macroeconomic variables on the growth of *sukuk* was carried out. This can map the pattern of macroeconomic variables that plays a big role and has a domino effect on the imbalance in *sukuk* growth in Indonesia.

If any variables that influence the mapping of comparability between the two countries is found, then the analysis of the barrier factors of the *sukuk* growth of the two countries takes place. This stage will produce output results that are used to further analyze business solutions from the government as regulators to accelerate the business of *sukuk* growth.

LITERATURE

The *sukuk* originally came from the Arabic word: *صكوك*, in the plural form is *صك* or *Sakk*, which means legal, charitable, check instruments which are used for ligation based on *sharia* principles. In other words, *sukuk* is a long-term securities based on *sharia* principles issued by issuers to holders of Islamic *ligation* that require issuers to pay income to holders of Islamic ligation in the form of profit sharing and repay bonds at maturity (Burhanuddin, 2009)

Sukuk as Islamic financial products are often equated with bonds (bonds) even though they have somewhat different characteristics. According to Adam (2006), *sukuk* has general characteristics that make it have the same quality as other conventional financial products, as in the following table:

Table 2.
General Characteristics of *Sukuk*

Can be traded (Tradable)	<i>Sukuk</i> represents the actual owner of a clear asset, asset benefits, or business activities. He can be traded according to market prices
<i>Rateable</i>	<i>Sukuk</i> can be rated by rating agencies, regional and international.
<i>Enhanceable</i>	In addition to the underlying assets or business activities, <i>sukuk</i> can be guaranteed in other collateral based on <i>sharia</i> principles.
<i>Legal Flexibility</i>	<i>Sukuk</i> can be structured and offered nationally and globally with different tax treatment.
<i>Redeemable</i>	The structure of the <i>sukuk</i> allows it to be redeemed.

Resource: Adam (2006)

Some of the advantages of *sukuk* are being able to reach wider investors, especially for investors who care about *sharia* aspects. *Sukuk* is also useful in diversifying portfolios as a source of funds. *Sukuk* offers a relatively low price, with a high level of demand. *Sukuk* generally have the same lowest or minimum price compared to conventional bonds. Whereas *sukuk* weaknesses are more complicated structures because they require the existence of an accommodating asset or underlying asset. *Sukuk* is an investment instrument, so it has clear tax and legal uncertainty. *Sukuk* also does not have official benchmarks, because government *sukuk* have not been issued (Ascarya, 2007).

As with bonds, *sukuk* is also one of the investment instruments in the capital market. The risk of *sukuk* globally is also similar to the risk of conventional bonds. According to the Chartered Financial Analyst (2007) cited by Nurul Huda and Mustofa Edwin (2007), the *sukuk* risks are; first, the risk of rate of return is the risk that exists in all types of *sukuk* with a fixed rate. In other conditions, yields are very dependent on the performance of companies in volatile *mudharabah* contracts.

Second, credit risk. Investors have credit risk at the *ijarah* *sukuk* because of default payments on the lease of the underlying asset. A repeated

mechanism for higher yields / interest rates with higher defaults is not allowed in Islamic law. If the lender has another substitute alternative when the underlying asset cannot cover the loss, the credit risk in the *sukuk* must be assessed independently.

Third, exchange rate risk (foreign exchange rate risk). Exchange rate risk occurs when the return on the management of an underlying asset is given in a foreign currency. At that time, the issuer can calculate and provide collateral in the purpose of protecting investors from exchange rate movements. Fourth, price / collateral risk. Price level risk will occur when the specification of the asset at the proposed *sukuk* issuance value is different from the actual market value and report on the value of the underlying asset. *Sukuk ijarah* is the most vulnerable to this risk because leased assets can depreciate below market prices. Good management of assets is an important factor in dealing with this risk.

Fifth, liquidity risk (liquidity risk). Investors risk the long-term flow of liquidity on the secondary market. In the condition of buy and hold, that is the tendency to buy and hold *sukuk* sales, thus creating inefficient *sukuk* ownership patterns, for example, in *sukuk salam* whose assets are agricultural commodities traded in the securities market. In addition, the Zero Coupon *Sukuk* in *Istisna* and *Murabahah Sukuk* which cannot be sold is bought on the secondary market, because it is caused by debt sale and purchase (*bai ad-dayn*). It is also prohibited by the major scholar.

Sixth, *sharia* compliance risk (*sharia* compliance risk). In *sukuk* trading on the market, *sukuk* structures can occur that do not fulfill *sharia* aspects, so that *sharia* rules are made with the aim of protecting *Muslim* investors from practices that resemble Islamic principles.

Yield is an advantage in *sukuk*. The usage can be detailed as follows (Reilly, 1994):

- 1) Yield calculated by the number of coupons received for one year against the price of *sukuk* is called the current yield.
- 2) Yield used until maturity is yield maturity
- 3) Yield to buy back a *sukuk* is yield to call

The explanation of this yield can be described as follows:

Table 3
Use or Yield Objectives

Type of yield	Function and purpose
a) <i>Horizon yield</i>	a) The purpose of measuring the level of <i>sukuk</i> income in the selling maturity condition
b) <i>Promised yield to call</i>	b) The goal is to buy back
c) <i>Promised yield to maturity</i>	c) Measure of the level of income projected to the maturity of <i>sukuk</i>
d) <i>Current yield</i>	d) The unit of profit is the current income level
e) <i>Nominal yield</i>	e) Can be measured from the coupon rate

Resource : (Really, 1994: 486)

METHODS

This research is a combination of quantitative and qualitative approaches. Using these approaches, researchers make a complex picture, examine the words, detail reports from the respondents' views, and conduct studies on natural situations (Cresswell, 1998: 15). A descriptive analysis method was used in the study reported in this article. This method is used to identify from the outside about the influence, calculate the magnitude of the influence and impact of the influence, and test the effect of independent variables on the dependent variable.

The types of research data are primary and secondary data. The data was taken by the Head of the *Sharia* capital market body, the Ministry of Finance in charge of *Syariah* Finance, the Head of the *Sharia* Financial Services and central bank authorities in Indonesia and Malaysia as well as Bank Indonesia, *OJK*, and *Bank Negara* Malaysia. Besides, it was also conducted by conducting direct interviews with the *Sukuk* Agency in Malaysia. Research time was 8 years, starting from 2008 to 2015 in the form of monthly time series.

The reason for choosing Malaysia as an object of research is that Malaysia is the largest *Muslim sukuk* country in the Southeast Asia. Malaysia dominates the *sukuk* market by 38 percent of the total global *sukuk* issuance of US \$ 77.1 billion in 2016, followed by Indonesia which controls 27 percent of the global *sukuk* market and 12 percent of the Cayman Islands. This was proven in mid 2007, which recorded total emissions of RM 111.5 billion (\$ 33 billion). In addition, the market share of *Sharia* banking accounts for almost 23% of the total national economy of Malaysia, although 15% of its customers are non-*Muslims*. Meanwhile, market *sharia* banking share in Indonesia in 2015 was only 4.6%. A distinguishing factor from Indonesia is that three Islamic banks in Malaysia already have assets of US \$ 5.4 billion. This cannot be achieved yet from the total of all *sharia* banking in Indonesia (FETA, Ministry of Finance 2015).

The method of the research analysis was the path analysis method, that is, by analyzing the relationship patterns between variables that aim to find out the direct and indirect effects between the independent and bound variables.

a. Sub-Structure Equation I

$$(Z = \alpha + \rho_{yx1}X_1 + \rho_{yx2}X_2 + \rho_{yx3}X_3 + \rho_{yx4}X_4 + \rho_{yx5}X_5 + \rho_{y\epsilon}1)$$

b. Sub Structure equation II

$$(Y = \alpha + \rho_{yx1}X_1 + \rho_{yx2}X_2 + \rho_{yx3}X_3 + \rho_{yx4}X_4 + \rho_{yx5}X_5 + Z + \rho_{y\epsilon}1)$$

Table 4. Research Variable

Question	Resources	Method
1. What are the causal factors in slowing <i>sukuk</i> growth from macroeconomic variables in Indonesia compared to Malay?	Book, journal, <i>BI</i> , <i>OJK</i> and Malaysian state bank	In-depth interview Documentation
2. How much influence do macroeconomic variables have on <i>sukuk</i> growth in Indonesia and Malaysia?	<i>BI</i> rate, inflation, deposit interest	Path analysis

Question	Resources	Method
3. What is the mapping of the patterns of economic variables that play a big role and have a domino effect on the imbalance in <i>sukuk</i> growth in Indonesia?	<i>BI</i> rate, inflation, deposit interest, <i>sukuk</i> , economic growth, monetary	Path analysis
4. What efforts should the government do as regulators to accelerate the efforts to grow <i>sukuk</i> in Indonesia and Malaysia?	Primary data in Indonesia Book, journal, <i>BI</i> , <i>OJK</i> and Malaysian state bank	Documentation In-depth interview with participants
5. What are the obstacles to the growth of <i>sukuk</i> in Indonesia compared to Malaysia?	Book, journal, <i>BI</i> , <i>OJK</i> and Malaysian state bank	Documentation In-depth interview with participants

RESULTS

Macro Variable Development

According to data from Bank Indonesia (2018), the development of Indonesian Islamic banks in February 2018 amounted to 13 BUSs, increased by 4 BUSs, 2 BUSs were the conversion of Conventional Commercial Banks and 2 BUS spin off *Sharia* Business units (UUS) so that the number of UUS in 2010 decreased by 21 UUS. The growth of Islamic banking deposits in Bank Indonesia's banking report in 2008 reached IDR. 27,696 billion, then in 2012 it reached IDR 147,512 billion. This is a very good result for the development of Islamic banking deposits. Such growth cannot be separated from good planning carried out by various groups in the progress of Islamic banking. Finally in the future, the growth of deposits in Islamic banking is higher in percentage than conventional bank deposits.

Whereas in Malaysia, the growth in deposits is more volatile than in Indonesia. In aggregate, the total is greater. In 2008, it was in the range of 3 thousand in million ringgit. However, deposits declined in the second

semester of 2009 when the range fell to 779 in million ringgit (Bank Negara Malaysia, 2017). These figures are strongly influenced by the political conditions of government, through various policies in the economy.

While the rising trend of *sukuk* continued to climb monthly in 2008 to 2015. At the beginning of January 2008, *sukuk* emissions were still in the range of IDR 5,498 billion. Lapse of time later precisely in December 2012, *sukuk* emissions had reached IDR 9,790 billion). Subsequently, *sukuk* emissions continued to increase significantly (*sukuk* site in Malaysia). The results of this research in the growth of *sukuk* in Indonesia have several indicators, including growth tends to be sluggish with an increase in the range of 5-10%. Corporate *sukuk* is still relatively small compared to the ratio of total *sukuk* emissions, the contract used is still limited to *Ijarah* and *Mudhorobah*, the allocation of *sukuk* for infrastructure development is still very small, maturity of 5-10 years is relatively short, government funds and private funds are very small invested in *Sukuk*. This is in line with the research findings from Ascarya (2007) which showed that the government's commitment in developing the Islamic financial system, especially *sukuk*, is still very minimal. Therefore, clear efforts are needed in strategic levels with the aim of accelerating the development of the Islamic financial system, so that the government must pay more attention to the political will in developing the *sukuk* strategy in the future.

While *sukuk* in Malaysia have several indicators, among others, there are many product innovations. Besides, *sukuk* has been issued in many sectors not only in infrastructure. The covenants in the *sukuk* have experienced many developments, not only from one school to another but from many schools, especially Imam Hanafi. This conclusion is the result of interviewing researchers with one of the *sukuk* institutions in Malaysia.

This rapid *sukuk* growth is in line with Kontan's daily economic & business news, Thursday, June 26, 2008. *Sukuk* has now become an integral part of the global financial system. In 2007, the value of *sukuk* traded on the global market has increased more than twice compared to 2006, and reached US \$ 62 billion compared to 2006 of US \$ 27 billion. From 2001 to 2006, *sukuk* experienced an average growth of 123%. Even projected in the next five years, the *sukuk* market can penetrate the level of US \$ 100 billion, depending on conditions of credit market stability. Meanwhile, Moody's

estimates that the *sukuk* market will increase by 35% per year. In 2010, the global *sukuk* market was estimated to be able to penetrate up to US \$ 200 billion, mainly supported by countries in the Gulf region, Britain, Japan and Thailand.

In 2008, the overall *sukuk* trade reached IDR 1,385,450 million. Furthermore, in 2009, there has been an increase to IDR 11,051,383 million. Then, a very significant increase also occurred, an increase of IDR 34,839,931 million in 2010. This result is a remarkable achievement for the development of *sukuk* from year to year.

This development is comparable with the growth in Malaysia which is the center of *sukuk* growth in Southeast Asia. *Sukuk* in Malaysia continues to experience rapid growth. At the start of the research in 2008, *sukuk* had reached 5,498 in million ringgit and soared above 100% above 10,000 in million ringgit in 2013. Even at the end of the research year it had reached 13,000 in million ringgit in 2015 (*sukuk* site in Malaysia).

BPS reported that there were fluctuations in the inflation index in 2008 - 2015. Reports from BPS also showed that the inflation rate in 2008 reached an average of 6.22%. Then, in 2009 there was a significant decline of 4.52%. At the end of 2015 the inflation rate continued to decline to the point of 4.52%. The data indicates that inflation is still in the low inflation range because it is averaged in the range of still within 5%. This happened in the range of 2008-2010 in the political situation, such as the campaign and the General Election that could be said to be relatively safe and calm. (BPS report)

The deposits used in this research were 12-month deposits. This reference is based on the largest funding reference in deposits in Indonesia, which is on 12-month deposits. The table above shows that in the first year the interest rate research is around 7%. Slowly into the following year, in 2009 it reached 8.25% which was the highest interest rate in this research.

Furthermore, the trend continued to decline until 2013 to reach the range of 5.75%. In 2014, the deposit interest rate increased to around 7.5%. This inflation rate for developing countries is still relatively low. Within 7 years, from 2008 to 2015, the development of SBI experienced fluctuations that were quite up and down, although the fluctuations are still in a reasonable stage, given the absence of an economic recession in Indonesia.

The trend at the beginning of the research began with 8% and then declined around 6%, and rose again in the final year of research which reached 7.5% (BI report).

The GDP used in this research is economic growth at BI. Economic growth in Indonesia is quite good compared to countries in the world, especially in Asia. Indonesia is still the highest country and only lost to China & India. Economic growth in this research began with 6% to 4.71% at the end of 2015. The GDP can be said to be high growth. Only at the beginning of 2015 that only reached 3.50% (BI report).

In the first year of research M1M2 was in the range of IDR 1,182,383, billion. Slowly into the following year, in 2015 it reached IDR 4,848,000 billion. The development of M1M2 continued to increase significantly. In accordance with the theory, the increase in circulation of money continues to develop over time (BI Report).

Comparison of Macro Variable Effects

From the data processing that has been done, we get the following results.

Table 5 Regression models in Indonesia

	B	Beta (W)	t	Sig.
(Constant)	.916		1.275	.205
<i>Bunga_deposito</i>	.064	.020	.452	.653
SBI	-.049	-.022	-.512	.610
<i>Inflasi</i>	.123	.117	4.351	.000
DPK	.091	.209	1.688	.095
PDB	-.435	-.244	-8.735	.000
M1M2	.517	.732	5.830	.000
R2	0.967			
Adjusted R2	0.964			

The regression results have a large R Square which is equal to 96.7%, so it can be interpreted that the variables of interest on deposits, SBI, Inflation, DPK, GDP and M1M2 can explain 96.7%, against *sukuk* emissions in

Indonesia. Then, the remaining 3.2% is explained by other variables, which is not included in the test. These results revealed that these variables had a very large and significant influence on the development of *sukuk* in Indonesia.

Table 6. Regression Models in Malaysia

	B	Beta (W)	t	Sig.
(Constant)	-11115,424		-8,408	,000
Interest deposit	20,194	,004	,031	,975
SBI	-1005,109	-,188	-1,725	,088
Inflation	-11,150	-,009	-,380	,705
DPK	,028	,053	,879	,382
PDB	61,664	,080	3,449	,001
M1M2	,017	,963	17,924	,000
R2	0.975			
Adjusted R2	0.974			

Note: *p<0.05 (Significant)

Resource: SPSS Data

While in Malaysia the influence reached 97.5% of *sukuk*, which is greater than Indonesia. R square in the two big countries explains that *sukuk* is very closely related to the volatility of the development of supporting macro variables. The implications were supported by the results of the F / Simultas Test in Malaysia which stated that there was a true influence of macro variables on *sukuk*.

From the equation, it can be interpreted that the results of the T-test that the constant variable regression model has a coefficient of 0.916. This means that if other independent variables are considered permanent or non-existent, deposits will experience an increase in deposits of 0.916 billion rupiah. This coefficient can be interpreted as such, because it can be seen from the R-square at the beginning that the amount is 96%, indicating that there are still other variables outside the independent variables that affect the development of Islamic *sharia* emissions.

From the correlation coefficient for the deposit interest variable is 0.064, it is known that the *sukuk* variable coefficient is positive at 0.064 which means that any increase in deposit interest by 1% will increase the *sukuk* by 0.064 billion *sukuk*. However, the results obtained from the T-test showed that the p-value was $0.653 > 0.05$, then H_0 is accepted which means that deposits do not affect *sukuk* in Indonesia. This interpretation is in line in Malaysia which shows the absence of the effect of deposits on *sukuk*. Researchers analyze that deposits and *sukuk* are separate investment instruments. Deposit interest in Indonesia tends to fluctuate as well as has not significantly affected the growth of *sukuk* as an investment instrument that is considered to be a competitor between the two.

In addition, the correlation coefficient for the SBI variable is -0.049 with the SBI variable coefficient being negative at -0.049, which means that every 1% increase in SBI will reduce *sukuk* by -0.049 billion Islamic banking deposits. The results of the T-test obtained showed that the p-value was $0.610 > 0.05$, then H_1 was accepted which means that SBI has no effect on *sukuk* in Indonesia. This conclusion is also the same in Malaysia, that Malaysian interest rates do not affect *sukuk*. Interest rates still have not had a reciprocal effect on *sukuk*.

From the table, it is also known that the correlation coefficient for the inflation variable is 0.123. It is known that the inflation coefficient of inflation is positive at 0.123, which means that every increase in 1 rupiah of inflation will reduce *sukuk* by 0.123 billion. The results of the T-test showed that the p-value was $0.000 < 0.05$, then H_0 was rejected, which means that inflation affects the *sukuk* in Indonesia. The incident was inversely proportional to Malaysia, which stated that inflation had no effect on *sukuk*. When viewed from the data, inflation in Malaysia is not patterned. Increases and decreases can occur every month and even then the volatility is often and large. It is very different from the growth of *sukuk* which continues to increase continuously every month and year.

In the table above it is also known that the correlation coefficient for the DPK variable is 0.091. It is known that the variable coefficient of DPK is positive at 0.091 which means that every increase of 1 rupiah DPK will increase the *sukuk* by 0.091 billion. The results of the T-test showed that the p-value was $.095 < 0.05$, then H_0 was accepted, which means the price of

deposits does not affect *sukuk*. This is the same as in Malaysia. Deposits do not affect the growth of *sukuk*. Although Malaysia is very large in its Islamic bank assets, it does not occur in its deposits. Seeing from its growth in the early years of research is still slow, but in 2010-2015 this experienced a continued upward development.

The Beta model results globally that the development of *sukuk* in Indonesia, the biggest macroeconomic factor that affects money supply, is GDP and finally inflation. This means that if the Indonesian government concentrates on *sukuk* plants, priorities and strategies are needed in the circulating financial arrangements, then GDP and inflation. Compared to Malaysia, from the Beta model the biggest macroeconomic factor that affects is GDP, then money supply. Likewise, in Malaysia, the Malaysian government must provide more optimization and priority to the GDP and money supply policies. In fact, this has been reflected in the three growth rates of *sukuk* emissions in Malaysia because of the high GDP in the country.

The barrier to *sukuk* growth in Indonesia compared to Malaysia is: the contract used is still limited with *Ijarah* and *Mudhorobah*; the allocation of *sukuk* for infrastructure development is still very small; the maturity range is 5-10 years which is relatively short and government funds and private funds are very little invested in *Sukuk*. This is somewhat in line with the results of research from Armadita (2013) which revealed that Indonesia has limited number human resources in the sector. In terms of product innovation, it is still very limited because the Islamic capital market regulation is lacking in updates. As well as from the accounting side, that *sukuk* has not been regulated in the standard *Sharia* PSAK. This is also in line with Blair (2005) who stated that the growth of *sukuk* in Indonesia is still hindered from less innovative contracts, such as the *Bai al Inah* ban which is not permitted in Indonesia because of the risk of non-compliance with *sharia* principles or *sharia* compliance risk.

CONCLUSION

Factors that influence the growth of *sukuk* in Indonesia are internal and external. Internal factors include company profits, leverage, ham prices, company profit projections, operating expenses, and so on. While external

factors include inflation, economic growth, exchange rates, gold prices, GDP, economic growth and so forth.

Variable deposits, SBI, GDP, inflation, TPF Islamic banking, the money supply have an effect of 96% on the growth of *sukuk* in Indonesia. While the remaining 4% is influenced by other variables. Furthermore, the mapping of *sukuk* in Indonesia is different. Malaysia is much larger than Indonesia. In Indonesia, *sukuk* is affected by 96% by variable deposits, SBI, GDP, inflation, Deposits, Islamic Banking, the money supply, but in Malaysia it is affected by 97.5%.

Government efforts in *sukuk* growth solutions in Indonesia suggest that the distribution of *APBN* funds to Islamic banking and investment into *sukuk* is mainly in the infrastructure sector, and also for the allocation of religious funds: *zakat*, *infaq*, almsgiving, Ministry of Religion. Therefore, more massive, structured and long-term socialization and education is needed. In the long term, it is expected that the government will be more concerned in the development of special institutions themselves that focus on *sukuk*.

REFERENCES

- Achsien, Iggie H., 2003, *Sharia Investment in the Capital Market: Initiating Concepts and Techniques in Sharia Portfolio Management*, Jakarta: PT. Gramedia Main Library, Cet. Second.
- Ahmad, Nurul Wajhi, et al. "Growth and Prospect of Sukuk in Malaysian Market: A Review." 2015 Proceedings of the 2nd International Conference on Management and Finance.
- Armadiyanti, Putri. "Opportunities and Challenges for the Development of Sharia Bonds (Sukuk) in Indonesia." *Journal of Educational Technology Students* 2.1 (2013).
- Ascarya and Diana Yumanita, 2007, *Comparing The Development Islamic Financial / Bond Market in Malaysia and Indonesia*, IRTI Publications (2008): Saudi Arabia.
- Bank Indonesia report, accessed on Monday, April 23, 2018
- Bank Negara Malaysia report, accessed at www.bnm.gov.my/ at 12
- Blair, William, *Legal Issues in the Islamic Financial Services*, a paper presented at a seminar in Kuwait March 1-2 2005

- Burhanuddin S. 2009. Sharia Capital Market: Legal Review. Yogyakarta: UII Press Yogyakarta.
- Central Bureau of Statistics report, <https://www.bps.go.id/>.
- Cresswell, 1998, Research Method, Journal of Business and Economics Research (JBER), Volume 5, Number 3.
- Dede, 2011, Development of Sharia Bonds in Indonesia: Opportunity and Tan-hand Analysis, Jakarta: Innovatio. Vol X, No. 2 July December 2011.2015 Global Sukuk Report IQ.Daily economic and business, Kontan, Thursday, June 26, 2008
- Huda, Nurul & Edwin, Mustafa. "Investment in the Islamic Capital Market" Publisher Kencana Prenada Media Group. Jakarta. 2007
- BPPK Report, Ministry of Finance 2015
- N.J. Adam, Sukuk: A Panacea for Convergence and Capital Market Development in the OIC Countries, Paper presented at the 6th International Conference on Islamic Economics and Finance, Jakarta, Indonesia, November, 21-24 2005.
- Reilly K. Frank, Keith C. Brown. 2006. Investment Analysis and Portfolio Management, Issue 8, USA: Thomson, South-Western.
- Report of the National Sharia Council of the Indonesian Ulama Council, <https://dsnemui.or.id/>

TOURIST PERCEPTION AND PREFERENCE ON ISLAMIC TOURISM

Yosi Mardoni

BACKGROUNDS

The tourism sector is one of the important and potential sectors in economic development and has a strategic role in national development. The large number of tourist visiting will have a positive impact, especially for tourist areas and generally for the country. Karyono (1997) said that the tourism sector would expand access to business fields and open employment fields, increase the income of the people and government, encourage the preservation and development of national culture, broaden the horizon of the archipelago, encourage regional development, encourage environmental preservation, broaden the archipelago and growing love of the homeland.

In 2014, the press release of the Minister of Tourism and Creative Economy stated that the tourism sector had increased. The contribution of the tourism sector rose from 10% to 17% of the total exports of Indonesian goods and services. The position of the tourism sector as the biggest contributor of foreign exchange increased from rank 5 to rank 4 with foreign exchange earnings of 10 billion USD. Meanwhile, its direct contribution to GDP has reached 3.8% and if it takes into account the multiplier effect, tourism contribution to GDP reaches around 9%. Absorption of labor in this sector has also reached 10.18 million people or 8.9% of the total number of workers, making it the fourth largest sector of labor creation (Widagdyo, 2015).

Data from the Central Bureau Statistics (BPS) states that the number of foreign tourist arrivals in July 2016 reached the highest record in one month, reaching 1.03 million visits or increasing by 20.42 percent compared to the previous month (traveling business). While according to tourism ministry data, the number of tourists grew by 19.98 percent from 2015 to 2016.

The number of tourist visits to West Sumatra continued to increase. Data from the Central Bureau Statistics recorded around 4,224 people visiting as foreign tourists in August 2016. The number was dominated by

tourists from Malaysia as many as 2,898 visitors, Australia (197 visitors), China (100 visitors), France (84 visitors), Britain (28 visitors), the United States (23 visitors), Germany (22 visitors), and other countries (800 visitors) (www.gosumbar.com).

Today, Islamic tourism is a new tourist destination in the world. Utilizing the World Tourism Organization (UNWTO), it is showed that foreign Muslim tourists contributed 126 billion US dollars in 2011. That number beat tourists from Germany, the United States, and China. According to the Global Muslim Traveler data, Indonesian Muslim tourists are among the top 10 most traveled countries. However, Indonesia is not included in the top 10 destinations for Muslim visitors (Alim, 2016). Therefore the Ministry of Tourism and Creative Economy determined Indonesia as one of the Islamic tourist destinations in the world.

The Ministry of Tourism and Culture of the Republic of Indonesia has so far developed and promoted service businesses in the field of hotels, restaurants, tourist travel agencies, and spas in 12 Islamic tourist destinations. The development was carried out in a number of cities in the provinces of Aceh, West Sumatra, Riau, Lampung, Banten, Jakarta, West Java, Central Java, Yogyakarta, East Java, West Nusa Tenggara and South Sulawesi (Sapudin, 2014).

In 2016, West Sumatra won four titles in National Tourism Halal Competition. West Sumatra won the Best Halal Travel Bureau category, the Best Halal Travel Destinations, the Best Halal Restaurants, and the Best Culinary Destinations (People's Mind, 2016). West Sumatera as one of the regions developed as an Islamic tourist destination and won the Halal Tourism competition. This is of course judged by the readiness of West Sumatra, infrastructure and overall community readiness, which also include the business community and local governments that provide full support in its development. However, the Indonesian people in general and tourists, in particular, have not fully understood what is called Islamic tourism and how it is implemented at the technical level. Based on the formulation of the problem above, the research questions are arranged as follows: how do tourists perceive *sharia* tourism in West Sumatra Province, how are tourists preferences for *sharia* tourist destinations in West Sumatra province.

METHODS

Types and Sources of Data

The data used in this study consisted of primary and secondary data that are both quantitative and qualitative. Primary data was obtained from questionnaires and direct interviews with several tourists to obtain data on the characteristics, attitudes, and perceptions of consumers on Islamic tourism in West Sumatra. Secondary data was from literature studies obtained from the Central Bureau of Statistics (BPS), the Office of Tourism, Newspapers, and from other sources relevant to this research.

Sampling Methods

This Research used a non-probability sampling method, namely judgment sampling technique. This method was chosen because not all members of the population had the same opportunity to become respondents (Simamora, 2004). Judgment sampling is a sampling technique based on criteria that have been formulated in advance by researchers (Nazir, 2005). The application of judgment sampling in this study was carried out with several criteria, namely:

- a. Aged more than 17 years. Determination of the age of more than 17 years with the assumption that at that age the respondent has been able to account for the process of the purchase decision made.
- b. Respondents are tourists who visit the West Sumatra Islamic tourist destinations.
- c. In one family only one person is taken as the respondent so as not to influence each other in answering the questionnaire. Respondents needed in this study amounted to 150 people. According to Umar (2005) in determining the number of respondents, the number of 30 people has represented to approach the normal curve, so that it has been able to provide a stable range of samples as the estimation of population diversity. Total respondents were 150 visitors, divided into two tourist locations in West Sumatra (Padang and Bukittinggi). Each location had 75 respondents.

Data Collection Method

This research used a survey method. The survey method is a method of collecting primary data by conducting questionnaires and question and answer with respondents (Simamora, 2004). Survey method is a procedure where only a portion of the population is taken and used to determine the desired characteristics and characteristics of the population (Nazir, 2005). The first step is to ask the initial question, namely the question about the requirements that must be owned by consumers to be able to become respondents in this research. If the consumer has fulfilled the requirements then asking the next questions related to the research problem follows.

Data Analysis Methods

Islamic tourism Indicators used in this study was adapted from the indicators proposed by the Ministry of Tourism which consists of several variables, namely:

Table 1. Islamic Tourism Indicators

No	Variable	Sub Variable	Indicators	Scale
1	Attractions	Nature Culture Artificial	Performing Art, cultural and attractions that are in accordance with Islamic tourism criteria	Ordinal
			Sanitation and environmental cleanliness	Ordinal
			There is a proper and sacred place of worship for Muslim tourists on a tourist attraction	Ordinal

No	Variable	Sub Variable	Indicators	Scale
			Availability proper washing facilities (cleanliness and availability of water for purification) at attractions.	Ordinal
			Availability Halal food and beverages in Attractions	Ordinal
			Educative elements in attractions	Ordinal
2	Amenities	Hospitality	Places of worship decent conditions in hotels and another overnight	Ordinal
			Condition decent ablution facilities and other overnight hotel room	Ordinal
			Availability of halal food and beverages at other hotels and residences	Ordinal
			Availability of safe, comfortable and conducive hotel facilities for families and business	Ordinal

No	Variable	Sub Variable	Indicators	Scale
			Sanitation and environmental cleanliness	Ordinal
		Restaurant/beverage food provider	Availability of restaurants that provide food and beverages guaranteed halal with halal certification from the Indonesian <i>Ulama</i> Council	Ordinal
			Sanitation and cleanliness of the restaurant environment and food and beverage providers	Ordinal
3	Accessibility	Information	Ease of access to halal tourist information	Ordinal
		Affordability	Easy to reach attractions supported by bus terminal infrastructure, docks, airports	Ordinal
			Clarity of transportation costs	Ordinal
			Ease of communication	Ordinal

No	Variable	Sub Variable	Indicators	Scale
4	West Sumatra as the destination	family-friendly	West Sumatra as a family-friendly tourist destination	Ordinal
		safety	West Sumatra as a tourist destination safe for Muslim tourists	Ordinal
		place of arrival	West Sumatra as the place of arrival of Muslim tourists	Ordinal

Source: (Ministry of Tourism, Republic of Indonesia)

Data on community perceptions were obtained from 150 respondents. Calculations for value weights are carried out using a Likert scale, that can be seen in the following table:

Table 2 Likert Scale

The x-axis (perception)	Interest	weight
Very good(VG)	Very important (VI)	5
Good (G)	Important (I)	4
Medium (M)	Important enough (IE)	3
Bad (B)	Less important (LI)	2
Very Bad (VB)	Not Important (NI)	1

The next procedure was to calculate the amount of weight of performance/perception ratings for each variable found in this study.

The steps of the analysis in this study are as follows:

1. Analysis of Service Quality (Towards *sharia* tourism)
 - a. Calculating the validity and reliability of the instrument
 - b. Calculating the Mean (average), Median (middle value) and Mode (the most frequently occurring value) and standard deviation (deviation) on perceptions and expectations and Servqual of each item/attribute and each dimension of service provided:
 - i. Servqual (*sharia* tourism) = 0 (means good service)
 - ii. Servqual (*sharia* tourism) > 0 (means good service)
 - iii. Servqual (*sharia* travel) < 0 (means poor service)
 - c. Calculate the frequency of servqual + histogram per dimension distribution and per item for all respondents
 - d. Calculate suitability based on perceptual weights and expectation weights for each question item (*sharia* tourism attributes) from all respondents (Supranto, 1991)
 - e. The formula for conformity is as follows:

$$Tki = \frac{Xi}{Yi} \times 100 \%$$

Where :

Tki = suitability level of respondent

Xi = Islamic tourism rating score (perception score)

Yi = rating score for customer interest (expectation score)

Score per attribute = weight value for each answer x also the respondent who answers the choice.

2. Profile dimensions of service quality (Islamic tourism) Cartesian diagram
 - a. Calculate average expectation perception values based on *sharia* tourism dimension categories and calculate the average of each attribute (question item) in each dimension (supranto,1991)

$$\text{Dimension average} = \frac{\text{Total weight in every dimension}}{\text{Total number of respondents}}$$

$$\text{Average value of each attribute} = \frac{\text{Average value of dimensions}}{\text{Number of dimension items}}$$

- b. Calculate the average value of basic perceptions and expectations of all respondents by first counting the number of weights of each attribute (to make a Cartesian diagram)

$$\text{Average value} = \frac{\text{Even total weight per item}}{\text{Number of respondents}}$$

- c. Explain the indicator attributes of all *sharia* dimensions with a Cartesian diagram to explain the profile map of the quality of service dimensions (*sharia* tourism).
- d. To be able to see the position of the data collection that has been analyzed easily, it can be divided into 4 places in the Cartesian diagram, namely:
- i. Quadrant I shows that the element of Islamic tourism is very important for tourists, but the government has not implemented it according to the wishes of tourists, giving rise to disappointment or dissatisfaction.
 - ii. Quadrant II shows that the element of Islamic tourism is considered important by tourists and has been implemented well by the government and managers and satisfies tourists, the government maintains its performance
 - iii. Quadrant III shows that the element of Islamic tourism is considered less important by tourists where the government should run normally only
 - iv. Quadrant IV shows that the elements of Islamic tourism are considered to be less important, but have been implemented well by the government very satisfactorily. This is considered excessive.

RESULTS

Islamic Tourism Knowledge

In this study, it was also seen how respondents were aware of *sharia* tourism, halal labeling in restaurants, use of *Sharia* hotels, and concern for *halal* tourism.

Table 3
Respondents' Knowledge of Islamic Tourism

Statement	Frequency	Percentage
Know	93	62
Don't Know	57	38
Total	130	100

Source: Primary data, 2017

From Table 3 above, it can be seen that only about 62 percent of the respondents who were the objects in this study knew about Islamic tourism. The remaining 38 percent still do not know about Islamic tourism.

Table 4
Concern for *Halal* Labels at Restaurants

Statement	Frequency	Percentage
Paying attention to <i>halal</i> labels at restaurants	9	6
Not paying attention to <i>halal</i> labels on packaging	141	94
Total	150	100

Source: Primary data, 2017

From Table 4, it can be seen that not all of the respondents who were the objects in this study noticed the *halal* label in the restaurant. Only 6% of respondents pay attention to the *halal* label on the packaging of raw materials used. The remaining 94% do not pay attention to *halal* labels in restaurants. This condition occurs because the culture of West Sumatra society is known as religious. Therefore, the trustworthiness of tourists for restaurants and resorts in West Sumatra is already high. Even so, the *halal* problem is not just the use of raw materials in accordance with Islamic rules but also lies in the process. *Halal* certificates are important, to guarantee the raw materials and processes in accordance with Islamic rules.

Table 5
Using *Sharia* Hotels When Staying

Statement	Frequency	Percentage
Yes	13	9
No	137	91
Total	150	100

Source: Primary data, 2017

From Table 5 above it can be seen that not all of the respondents who were the objects in this study (or more than 90 percent) did not use *Sharia* hotels to stay. Only about 9 percent of respondents used *Sharia* hotels when staying.

Table 6
Requirement of Labeling in Restaurants, Hotels and Travel Agencies

Statement	Frequency	Percentage
Strongly need	78	52
Needs	48	32
Less necessary	10	7
No need	14	9
Very No need	0	0
Total	150	100

Source: Primary data, 2017

From Table 6 above, it can be seen that 52% of respondents who were the object of this study stated that it was very necessary to include *halal* labels in restaurants, hotels and travel agencies, while 32% of respondents said it was necessary. Only 7% of respondents stated that it was less necessary while the remaining 9 percent said it was not necessary.

ANALYSIS OF TOURIST PERCEPTION

Table 7
Analysis of Attraction Variable

Statement	VG	G	F	B	P	Total Weight	Average
Performing Art, cultural and attractions that are in accordance with	85	240	183	24	0	532	3.54

Statement	VG	G	F	B	P	Total Weight	Average
Islamic tourism criteria							
Sanitation and environmental cleanliness	120	180	201	28	0	529	3,53
There is a proper and sacred place of worship for <i>muslim</i> tourists on a tourist attraction	445	128	87	0	0	660	4.4
Availability of proper washing facilities (cleanliness and availability of water for purification) at attractions	125	420	36	16	0	597	3.98
Availability of <i>Halal</i> food and beverages in attractions	410	240	24	0	0	674	4.49
Educative elements in attractions	85	188	255	2	0	530	3.53

Source: Primary data, 2017

Table 7 shows the attractions variable indicators of food availability and *halal* drinks are the most weighted. Consumer confidence in the *halal* food in West Sumatra is high. The availability of proper places of worship also received very good attention from the respondents. The lowest weight is sanitation and environmental cleanliness, then followed by arts and cultural performances and attractions that are in accordance with the criteria of Islamic tourism generally.

Table 8
Analysis Variable of Amenity

Statement	VG	G	M	B	VB	Total Weight	Average
Places of worship of decent conditions in hotels and another overnight	0	288	195	26	0	509	3.39
Condition of decent ablution facilities and other overnight hotel room	200	128	192	28	0	548	3.65
Availability of <i>halal</i> food and beverages at other hotels and residences	545	96	51	0	0	692	4.61
Availability of safe, comfortable and conducive hotel facilities for families and business needs	125	420	36	16	0	597	3.98
Hotel sanitation and cleanliness of the hotel	305	324	24	0	0	653	4.35
Availability of restaurants that provide food and beverages guaranteed <i>halal</i> with <i>halal</i> certification and <i>MUI</i>	330	136	132	12	0	610	4.06
Sanitation and cleanliness of the	570	84	42	2	0	698	4,65

Statement	VG	G	M	B	VB	Total Weight	Average
restaurant environment and food and beverage providers							

Source: Primary data, 2017

In the amenity variable, sanitation and cleanliness of the hotel environment received the highest weight, then the availability of halal food and drinks in the hotel also had a good appreciation from the respondents of this study.

Table 9
Analysis of Variable of Accessibility

Statement	VG	G	M	B	VB	Total Weight	Average
Ease of access to <i>halal</i> tourist information	60	268	198	10	0	536	3.57
Easy to reach attractions supported by bus terminal infrastructure, docks, airports	135	168	231	8	0	542	3,61
Clarity of transportation costs	360	136	129	2	0	627	4,18
Ease of communication	125	420	36	16	0	597	3,98

Source: Primary data, 2017

Clarity of transportation costs is an indicator that has the highest value, followed by ease of communication indicators. The variable that received the most attention was easy access to *halal* tourism information because it is the indicator with the lowest weight.

Table 10
Analysis of muslim-friendly services and facilities at the destination

Statement	VG	G	M	B	VB	Total Weight	Average
West Sumatra as a family-friendly tourist destination	565	104	33	0	0	702	4.68
West Sumatra as a tourist destination safe for <i>muslim</i> tourists	305	324	24	0	0	653	4.35
West Sumatra as the place of arrival of Muslim tourists	125	420	36	16	0	597	3.98

Source: Primary data, 2017

The condition of West Sumatra as a family-friendly tourist destination is an indicator of the highest weight. The condition of West Sumatra as a place of arrival of Muslim tourists, on the other hand, had the lowest weight.

ANALYSIS OF TOURIST PREFERENCE

Table 11
Analysis of Attraction Variable

Statement	VI	I	IE	LI	NI	Total Weight	Average
Performing art, cultural and attractions that are in accordance with Islamic tourism criteria	250	208	138	0	4	600	4
Sanitation and environmental cleanliness	525	88	69	0	0	682	4,545
There are proper and sacred places of worship for <i>muslim</i> tourists on tourist attractions	445	124	90	0	0	659	4,39
Availability of washing facilities (cleanliness and availability of water for purification) in tourist attractions	170	432	24	0	0	626	4,17
Availability of halal food and beverages in attractions	345	324	0	0	0	669	4.46
There are educative elements in attractions	85	192	255	0	0	532	3,55

Source: Primary data, 2017

Based on Table 11, it can be seen that the indicator of attraction of sanitation and environmental cleanliness is the highest weight. It means that the desire of tourists for sanitation and environmental cleanliness in West

Sumatra are very high. Halal food and drinks available at the tourist attraction also received very good attention from respondents. The indicator educative elements in attractions is the lowest weight. This shows that tourists do not consider the importance of attractions that have an educative element.

Table 12
Analysis of Amenity Variable

Statement	VI	I	IE	LI	NI	Number Weight	Average
Conditions for proper places of worship in hotels and other accommodation in hotels and other	360	176	102	0	0	638	4,25
Conditions for proper washing facilities places to stay	535	84	66	0	0	685	4,57
Availability of <u>halal</u> food and beverages in other hotels and places to stay	530	68	81	0	0	679	4,53
Availability of hotel facilities that are safe, comfortable and conducive for families and business needs	160	428	33	0	0	621	4.14
Sanitation and cleanliness of the hotel environment	340	308	15	0	0	663	4.42
Availability of restaurants that provide food and beverages guaranteed	305	324	24	0	0	653	4,35

Statement	VI	I	IE	LI	NI	Number Weight	Average
<i>halal with halal certification and MUI</i>							
Sanitation and cleanliness of the restaurant environment and service providers food and beverages	430	156	75	0	0	661	4,40667

Source: Primary data, 2017

In the amenity variable, the condition of proper washing facilities in the hotel and other places to stay got the highest weight, then the availability of halal food and beverages in other hotels and residences also received high attention from respondents in this study. The availability of a safe, comfortable and conducive hotel facilities for families and business is the lowest indicator weight among indicators in the amenity variable.

Table 13
Analysis of Variable of Accessibility

Statement	VI	I	IE	LI	NI	Total Weight	Average
Ease of access to halal tourist information	405	168	81	0	0	654	4,36
Easy-to-reach attractions supported by bus terminal infrastructure, pier, airport	620	64	30	0	0	714	4,76
Clarity of transportation costs	670	44	15	0	0	729	4,86
Ease of communication	305	320	27	0	0	652	4,35

Source: Primary data, 2017

Clarity of transportation costs is the highest weight, then followed by easy-to-reach attractions supported by bus terminal, dock, airport infrastructure. Variable that lack response from tourists is the ease of communication.

Table 14
Analysis of muslim-friendly services and facilities at the destination

Statement	VI	I	IE	LI	NI	Total Weight	Average
West Sumatra as a family-friendly tourist destination	595	68	42	0	0	705	4.7
West Sumatra as a tourist destination safe for <i>muslim</i> tourists	650	44	27	0	0	721	4,8
West Sumatra as a place of arrival for <i>muslim</i> tourists	325	320	15	0	0	660	4.4

Source: Primary data, 2017

The condition of West Sumatra as a safe tourist destination for *Muslim* tourists is the highest weight indicator. The condition of West Sumatra as a place of arrival of Muslim tourists is the lowest weight.

Perceptions and preferences of tourists on Islamic tourism from all variable indicators

Based on the analysis of perceptions and preferences of West Sumatra Travelers on *Sharia* Tourism throughout the variables, it is concluded that the overall indicators of the variables has not been categorized as good and in accordance with the expectations of respondents.

Table 15
Analysis of perceptions and preferences of tourist in West Sumatra on Islamic tourism on the entire indicators and variables

No	Indicators	Perception weight	Preference weight	X	Y
1	Performing art, cultural and attractions that are in accordance with Islamic tourism criteria	532	600	3.54	4.00
2	Sanitation and environmental cleanliness	529	682	3.53	4.55
3	There is a proper and sacred place of worship for <i>muslim</i> tourists on a tourist attraction	660	659	4.40	4.39
4	Availability proper washing facilities (cleanliness and availability of water for purification) at attractions	597	626	3.98	4.17
5	Availaility of <i>halal</i> food and beverages in attractions	674	669	4.49	4.46
6	Educational elements in attractions	530	532	3.53	3.55
7	Places of worship decent conditions in hotels and another overnight	509	638	3.39	4.25
8	Condition of decent ablution facilities and other overnight hotel room	548	685	3.65	4.57
9	Availability of <i>halal</i> food and beverages at other hotels and residences	692	679	4.61	4.53

No	Indicators	Perception weight	Preference weight	X	Y
10	Availability of safe, comfortable and conducive hotel facilities for families and business needs	597	621	3.98	4.14
11	Sanitation and cleanliness of the hotel	653	663	4.35	4.42
12	Availability of restaurants that provide food and beverages guaranteed <i>halal</i> with <i>halal</i> certification from the Indonesian <i>Ulama</i> Council	610	653	4.06	4.35
13	Sanitation and cleanliness of the restaurant environment and food and beverage providers	698	661	4.65	4.41
14	Ease of access to <i>halal</i> tourist information	536	654	3.57	4.36
15	Easy to reach attractions supported by bus terminal infrastructure, docks, airports	542	714	3.61	4.76
16	Clarity of transportation costs	627	729	4.18	4.86
17	Ease of communication	597	652	3.98	4.35
18	West Sumatra as a family-friendly tourist destination	702	654	4.68	4.59
19	West Sumatra as a tourist destination safe for <i>muslim</i> tourists	653	721	4.35	4.81
20	West Sumatra as the place of arrival of <i>muslim</i> tourists	579	660	3.98	4.40
	Rata-Rata			4,05	4,40

Source: Primary data, 2017

To see the position of each attribute according to quality and preference can be seen in the following cartecius diagram which is divided into 4 consciousness. The Horizontal axis shows the quality of service with the vertical axis indicating the respondent's preference. From the analysis carried out in this study we obtained Cartesian consciousness analysis as shown below:

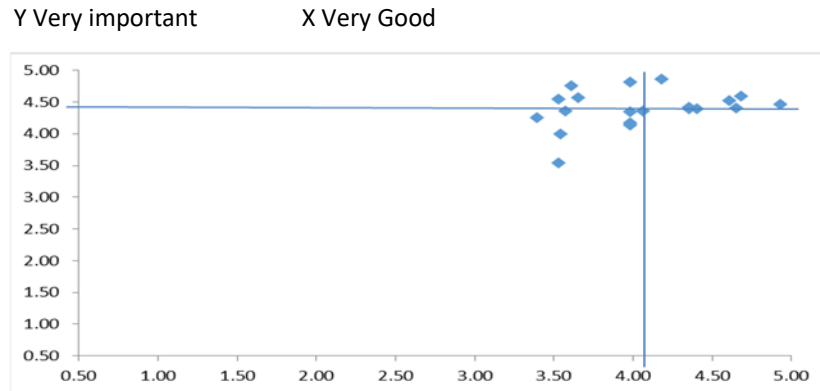


Figure 1 Cartesian Diagram

The diagram can be analyzed as follows:

1. Art and cultural performances and attractions that are in accordance with the criteria of Islamic tourism: located in Quadrant III with ordinate (3.54, 4), which means that art and cultural performances and attractions that are in accordance with the criteria of Islamic tourism are considered less important by tourists and are not satisfactory, so the government should run normally.
2. Sanitation and environmental cleanliness: located in Quadrant II with ordinate (3.5, 4.57), which means that sanitation and environmental cleanliness are considered important by tourists and yet have not been implemented properly by the government and managers and have not satisfied tourists, so the government needs to improve its performance.
3. There is a proper and sacred place of worship for *muslim* tourists in tourist attractions: it is located in Quadrant IV with ordinate (4.40, 4.39), which means that there is a proper and sacred place of worship for *muslim* tourists in tourist attractions deemed less important, but it has been well implemented by the government with very satisfying tourists.
4. Availability of proper washing facilities (cleanliness and availability of water for purification) in tourism objects: located in Quadrant IV with ordinate (3.98, 4.17). This indicator is considered less important, but

has been implemented well by the government and satisfy tourists very well.

5. *Halal* food and drink are available in the tourist attractions: it is located in Quadrant I with ordinate (4.93, 4.46), which means that availability of halal foods and drinks in the tourism objects considered by tourists as very important, and have been implemented well by government and managers and satisfy tourists. The government maintains its performance.
6. The educative element in attraction: it is located in Quadrant III with ordinate (3.53, 3.54), which means that educative element was considered to be less important by tourists and less satisfactory, so the government should run normally.
7. The condition of a proper place of worship in a hotel and other place of stay : it is located in Quadrant III with the ordinate (3.39, 4.25), which means that the condition of a proper place of worship in hotels and other places of stay was considered less important by tourists and unsatisfactory. The government should run normally.
8. Condition of decent ablution facilities and other overnight hotel room: located in Quadrant II with ordinate (3.65, 4.526), which means that this indicator is considered important by tourists and yet has not been implemented properly by the manager and has not satisfied tourists. The manager needs to improve its performance.
9. Availability of *halal* food and beverages in hotels and other places to stay: located in Quadrant I with ordinate (46.1, 4.53), which means that the availability of *halal* food and beverages in hotels and other places of stay is considered very important for tourists, and has been well implemented by the government and managers and satisfy the tourists. The government maintains its performance.
10. Availability of hotel facilities that are safe, comfortable and conducive for families and business needs: located in Quadrant IV with ordinate (3.98, 4.14) availability of safe, comfortable and conducive hotel facilities for families and business needs are considered less important by tourists and unsatisfactory. The government should run normally.
11. Sanitation and cleanliness of the hotel: located in Quadrant I with ordinate (4.35, 4.42), which means that this aspect is considered very

important for tourists, and have been carried out well by managers and satisfy the tourists. The manager maintains its performance.

12. Availability of restaurants that provide food and beverages guaranteed *halal* with *halal* certification from the Indonesian *Ulama* Council: located in Quadrant IV with ordinate (4.06, 4.35) which means this indicator is considered less important, but it has been well implemented by the government with very satisfying tourists.
13. Sanitation and cleanliness of the restaurant and providers of food and beverage services: located in Quadrant I with ordinate (4.65, 4.41), which means that it is considered very important for tourists, and has been carried out properly by the manager and satisfy tourists. The manager maintains its performance.
14. Ease of access to *halal* tourist information: located in Quadrant III with ordinate (3.57, 4.36), which means that the ease of access to *halal* tourism information is considered less important by tourists and less satisfactory, so the government should run normally.
15. Easy-to-reach tourist attractions supported by bus terminal, dock, airport infrastructure: located in Quadrant II with ordinate (3.61, 4.76), which means this indicator is considered important by tourists and yet has not been well implemented by the manager and has not satisfied tourists. The government needs to improve its performance.
16. Clarity of transportation costs: located in Quadrant I with ordinate (4.18, 4.86), which means that it is considered very important for tourists and has been well implemented by the manager and satisfy tourists. The manager maintains its performance.
17. Ease of communication: located in Quadrant III with ordinate (3.98, 4.35), which means that this indicator is considered less important by tourists and less satisfactory, so the government should run normally.
18. The condition of West Sumatra as a family-friendly tourist destination: located in Quadrant I with ordinate (4.68, 4.59), which means that it is considered very important for tourists, and has been implemented with both by the manager and satisfy tourists. The manager maintains its performance.
19. West Sumatra as a safe tourist destination for *muslim* tourists: located in Quadrant I with ordinate (4.35, 4.81), which means that it is

considered very important for tourists, and has been well implemented by the manager and satisfy tourists. The manager maintains its performance.

20. West Sumatra as the place of arrival of *muslim* tourists: located in Quadrant II with ordinate (3.98, 4.4), which means this indicator is considered important by tourists and yet has not been implemented properly by the manager and has not satisfied tourists. The government needs to improve its performance.

Quadrant Analysis on Tourist's Perception and Preferences on Islamic Tourism

Quadrant analysis maps priority between one attribute relative to the other variables. Based on the analysis of tourist perceptions and preferences above, it can be known that what are the main priorities, variables that must be maintained, low priority and excessive variable. All of that variables must be addressed immediately in the strategic effort of Islamic tourism management. .. Grouping variables found in each quadrant can be seen in the following explanation

Quadrant I (Maintain Achievement). The variables contained in this quadrant have a high level of importance according to respondents and their performance is good, so it must be maintained. The indicators in this variable are the strengths or advantages of Islamic tourism based on respondents. The implication of the variables contained in this quadrant must be maintained. Governments, communities and the private sector need to maintain quality and maintain the performance of these variables. The variables contained in this quadrant include the availability of *halal* food and beverages in attractions, availability of *halal* food and beverages in hotels and other places to stay, sanitation and cleanliness of the hotel environment, sanitation and cleanliness of the restaurant environment and providers of food and beverage services, clarity of transportation costs, West Sumatra as a family-friendly tourist destination, West Sumatra as a safe tourist destination for *muslim* tourists.

Quadrant II (High Priority). The indicators contained in this quadrant have a high level of importance but their performance is also considered not good. Therefore, the indicators contained in this quadrant must receive

special attention and be prioritized. The variables contained in this quadrant include sanitation and environmental cleanliness; condition of decent ablution facilities and other overnight hotel room; easy to reach attractions supported by bus terminal infrastructure, docks, airports; and West Sumatra as the place of arrival of *muslim* tourists.

Quadrant III (Low Priority). The variables contained in this quadrant have a low level of importance and their performance is also considered to be poor by respondents. The government, the public, and the private sector need to make improvements to these variables to prevent the variable from shifting to Quadrant II. The variables contained in this quadrant include art and cultural performances and attractions that are in accordance with the criteria of Islamic tourism, educative element in attraction, the condition of a proper place of worship in a hotel and another place of stay, ease of access to *halal* tourist information, and ease of communication.

Quadrant IV (Excessive). The variables contained in this quadrant have a low level of importance according to the respondent but have good performance and are considered excessive by the respondents. Increasing performance in these variables will only lead to waste of resources. Indicators found in variables in this quadrant include: there is a proper and sacred place of worship for *muslim* tourists in tourist attractions; availability of proper washing facilities (cleanliness and availability of water for purification) in tourist attractions; availability of safe, comfortable hotel facilities and conducive to family and business; availability of restaurants that provide food and beverages that are guaranteed *halal* with *halal* certification from *Ulama* Council.

GAP ANALYSIS

The results of the gap analysis conducted show that in general, it is still below the expectations of respondents. The variables that have a difference in weight below the average value are art and cultural performances and attractions that are in accordance with the criteria of Islamic tourism; sanitation and environmental cleanliness; there are appropriate cleaning facilities (cleanliness and availability of water for purification) at tourist attractions; educative elements in attractions, conditions for a proper place

of worship in hotels and other places to stay; condition of decent ablution facilities and other overnight hotel room; availability of safe, comfortable and conducive hotel facilities for families and business, sanitation and cleanliness of the hotel, availability of restaurants that provide food and beverages guaranteed *halal* with *halal* certification from the Indonesian *Ulama* Council; ease of access to *halal* tourist information, easy to reach attractions supported by bus terminal infrastructure, docks, airports, Clarity of transportation costs, ease of communication, West Sumatra conditions as a destination safe tour for *muslim* tourists, West Sumatra as the place of arrival of *muslim* tourists.

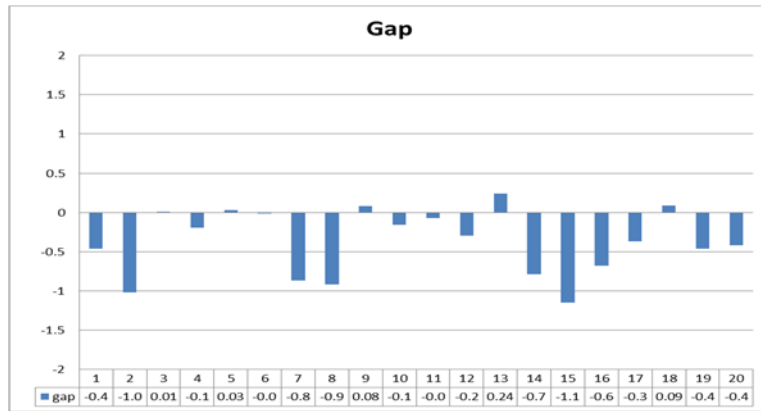


Figure 2 Perception and Preference Gap of West Sumatra Tourist About Islamic Tourism

The variable that does not have a gap is there is a proper and sacred place of worship for muslim tourists on a tourist attraction; availability of *halal* food and beverages at other hotels and residences; *halal* food and beverage availability in other hotels and residences; sanitation and cleanliness of the restaurant environment and food and beverage providers, West Sumatra as a family-friendly tourist destination.

REFERENCES

- Alim, Haidar Tsany. Et al. 2015. Analisis Potensi Pariwisata Syariah Dengan Mengoptimalkan Industri Kreatif Di Jawa Tengah Dan Yogyakarta. Artikel. Semarang : Undip.
- Battour, Mohamed; Ismail, Mohd. Nazari; and Battour, Moustafa. 2010. The Impact of Destination Attributes on Muslim Tourist's Choice. *International Journal of Tourism Research*
- Chookaew, S. (2015). Increasing Halal Tourism Potential at Andaman Gulf in Thailand for Muslim Country. *Journal of Economics, Business, and Management*, 739-741.
- Kamarudin, L. M. (2013). Islamic Tourism: The Impacts on Malaysia's Tourism Industry. *Proceedings of International Conference on Tourism Development*, 397-405.
- Karyono, Hari. (1997). Kepariwisataaan. Jakarta: PT. Remaja Rosdakarya.
- Rosyid, M. 2014. Strategi Optimalisasi Wisata Syariah di Kudus. *Jurnal Equilibrium*. Volume 2, No.2, Desember 2014.
- Sapudin, A., Adi, F., & Sutomo. (2014). Analisis Perbandingan Hotel dan Pariwisata Syariah dengan Konvensional. Bogor: Magister Manajemen Syariah IPB.
- Sucipto, Hery dan Andayani Fitria. (2014). Wisata Syariah : Karakter, potensi, prospek dan tantangannya. Jakarta : Grafindo Books Media.
- Syed O.A. (2001). *Catering to the needs of Muslim Travelers*. Paper presented at the second conference of ministers from Muslim countries, Tourism: Challenges and opportunities, Kula Lumpur, 10-13, October.
- Sulistiyono, Prasetyo Adi. (2016). Analisis Atribut Islam, Faktor Pendorong Dan Faktor Penarik Terhadap Motivasi Wisatawan Muslim Berkunjung Ke Provinsi Aceh. Artikel Fakultas Ekonomi dan Bisnis Universitas Brawijaya.
- Traveling.Bisnis.2016.<http://traveling.bisnis.com/read/20160901/85/580365/bps-kunjungan-wisman-ke-indonesia-capai-rekor-tertinggi>
- Wahab, Salah. (2003). Manajemen Kepariwisataaan. Jakarta: Pradnya Paranita

Widagdyo, Kurniawan Gilang. 2015. Analisis Pasar Wisata Halal Indonesia.

The Journal of Tauhidinomics Vol. 1 No. 1 (2015): 73-80.

<https://www.gosumbar.com/berita/baca/2016/10/05/selama-agustus-kunjungan-wisatawan-asing-ke-sumbar-terus-naik/#sthash.xoLYbcm3.dpbs>

<http://www.pikiran-rakyat.com/wisata/2016/09/23/sumbar-aceh-ntb-borong-anugerah-wisata-halal-nasional-2016-380605>

ANALYSIS OF INVESTMENT LEVEL ON GROWTH OF PROCESSING INDUSTRY SECTOR IN CENTRAL JAVA

Luthfi Ibnu Tsani

BACKGROUNDS

The purpose of all countries in carrying out economic activities is the achievement of economic development that leads to the welfare of society. One indicator of the achievement of economic development is the economic growth that can be measured from the amount of Gross Domestic Product (GDP). In Indonesia, there is one province that has a big influence on the formation of GDP that is Central Java Province. According to BPS (2016), Central Java Province became the fourth province that has the largest contribution in the formation of Indonesia's GDP after West Java. Central Java Province is also a province that has an economic growth rate that tends to increase every year. In addition, the growth rate in the province is almost equal to the national economic growth rate. Economic growth in the region or province can usually be measured from the amount of Regional Gross Domestic Product (RGDP).

In accordance with the PDRB structure according to the business field, Central Java Province has three main sectors, namely processing industry sector, agriculture sector, trade sector -hotel-restaurant, and service sector of the company. However, Central Java Province experienced an interesting phenomenon of changing sources of growth after the monetary crisis of 1997/1998 from a predominantly industrialized economy to an economy dominated by the corporate services sector. This is evident from the growth of the corporate services sector which reached 8.24 percent, while the manufacturing sector only able to increase its growth by 4.55 percent in 2015-2016 (BPS, 2016).

The phenomenon of changing sources of growth from the manufacturing sector including tradable sector that turned into the service sector of companies that is a non-tradable sector can be regarded as a symptom of deindustrialization. According to some studies on deindustrialization, growth dominated by non-tradable sectors is

considered to be unfavorable in economic development. Because it tends to be more capital-intensive and does not change the added value of an output. The decline in the performance of the Central Java processing industry is in fact reflected in areas of high intensity in industrial activities that are central to industrial activities, both large and medium industries and small industries, owned by Central Java Province. According to BPS (2016), the role of manufacturing industry sector stagnated in 2010-2014 and sharply decreased by 2015 by 4.62 percent.

From the above explanation, it can be seen that the decline in the manufacturing sector's is very unfortunate given the ability of this sector to encourage economic activity. According to Arsyad in Pomegranate (2009), the manufacturing sector is able to encourage the activities of agriculture, services, trade, transportation, communications and other sectors, expand employment opportunities and increase public incomes. If the decline of the industrial sector continues to be left, deindustrialization symptoms are feared will hamper economic growth in Central Java Province.

The decline in the manufacturing sector can be identified by looking at the conditions of the factors of production used, one of which is the accumulation of capital that is repressed by the level of investment. According to Dewi (2010), investment level is a manufacture-incentive that can increase demand for manufacturing industry sector. In addition, Rowthorn and Coutts in Metinara (2011) revealed that the level of investment has a more dominant influence in explaining the achievement of the manufacturing sector. Referring to this, the condition of the investment rate in Central Java seems quite fluctuating. The instability of the investment level is indicated to be the cause of the deindustrialization symptoms. If the government allows this fear of de-industrialization symptoms will be greater and has implications for the decline in economic growth in the future.

Referring to the above description, a study of the causes of instability of the investment level and its relationship to the improvement of the main sector, namely the processing industry sector in Central Java Province. The investment rate study on the growth of the manufacturing sector will be seen from two sides, namely the role of output and the role of productivity (employment share) in accordance with Kaldorian industry growth theory. the phenomenon of decreasing sectoral role of the manufacturing industry

sector needs to be studied to find out more about the causes and implications of the phenomenon, especially in terms of production factors seen from the level of investment as a whole. Therefore, the authors have an interest to examine it with the formulation of the problem as follows: (1) What factors affect the level of investment in Central Java 2012-2016 ?; (2) What is the effect of investment level on output share in Central Java in 2012-2016? ; (3) What is the effect of the investment rate on employment share in Central Java in 2012-2016?

INVESTMENT IN THE ECONOMY

Investment as one form of capital accumulation becomes one of the important factors in increasing economic growth. According to Fatihudin (2011), economic growth will increase if three main factors can be met, namely capital accumulation, population growth, and technological progress. The capital accumulation will occur if a portion of the revenue is reinvested in order to enlarge the output in the future. Arsyad in Wati (2013) also considers investment activities in the form of factory construction, purchase of machinery, equipment and other capital goods can increase the capital stock in the form of the net real capital value of all goods using productive capital owned by the state. The capital stock will encourage the country to reach a higher level of output. The important role of investment is continuously the main discussion in the development of growth theory, such as Harrod-Domar theory and Solow's theory that capital accumulation is very important for economic growth. On the other hand, Stern in Astuty (2011) argues that investment, as a form of capital accumulation, is also influenced by the business environment or business climate. The business climate is all policies, governance, and circumstances, both ongoing or future, that can affect the rate of return and investment risk. According to Astuty (2011), many surveys the factors affecting business climate are labor, productivity, regional economy, physical infrastructure, socio-political conditions, and institutions. The investment and business climate will be further discussed on the theory of inclusive growth.

Industrialization and State of the Manufacturing Processing Industry

Industrialization is the development strategy of countries in the world to achieve high economic growth and sustainable economic development. Basri (2002) says that industrialization is a social engineering process that enables a society to be ready for transformation in various areas of life to be able to improve the dignity of its life as a social being amidst constantly changing and challenging challenges. According to Meloor in Yustika (2000), economic development is essentially a process by which the economy can be changed from what most of the countryside and agriculture become as industries and services in its composition. From the above statement it can be seen that the industrial sector, in fact, can improve the national output, worker productivity, and absorb unemployed workers. Therefore, the manufacturing sector is often the main sector in the acceleration of economic development. According to the definition referred to by the Central Bureau of Statistics, the manufacturing industry sector is a production unit located in a certain place conducting economic activities and aims to convert a good by mechanical, chemical or hand, into new goods or products and are of higher value and are closer to the final consumer (Metinara, 2011).

Kaldorian Industrial Growth Theory

Kaldor theory assumes that the manufacturing sector is a growth engine for a region in increasing the growth of other sectors while increasing economic growth. Kaldor's growth theory. In research Dewi (2010), this theory there are three aspects of the industry highlighted. First, GDP growth has a positive relationship to the growth of the manufacturing sector. Second, the labor productivity of the manufacturing sector has a positive relationship with the growth of the manufacturing sector itself. In this case, the manufacturing sector is considered to generate an increasing return to scale (increasing scale of return). The scale can be created if the sector is doing capital accumulation and technological innovation. In this case, learning by doing is very important to maintain the long-term steady state of the sector. Third, the growth of the non-processing industry sector has a positive relationship with the growth of the manufacturing sector. This is

motivated by the tendency of a non-processing industry sector that leads to the diminishing return to scale.

The second theory of industrial growth Kaldorian states that increasing return to scale can only be created by the accumulation of capital and technological progress. Investment factor into its own spotlight in the development of theory, because the investment is able to provide manufacturing incentives that can accelerate the growth of the sector. It takes a high level of investment to be able to renew technical mechanization of production. According to Djojohadikusumo (1994), the mechanization of production techniques can be realized with the addition of capital per worker. The growth of the manufacturing sector can be seen in the productivity of workers and the ratio of capital to labor. This shows that investment factor as a form of capital accumulation is very important in increasing the productivity and growth of the manufacturing industry sector.

Inclusive Growth Theory

Inclusive growth theory is a growth theory that aims to increase economic growth and reduce poverty simultaneously. (Ianchovichina and Lundstorm, 2009). The inclusive meaning of this theory is defined as providing opportunities for people to conduct economic activities efficiently complemented by market protection and safe labor migration. The opportunity in question is that the available employment must be comparable to the established work offer. The balance of employment can be realized by improving the business and investment climate. According to the World Bank (2011), established investments will be able to increase the productivity of the economic sectors and open up employment opportunities.

This theory was developed by Ricardo Hausmann, Dani Rodrik, and Andres Velasco in 2005. This approach reveals the various causes of unhealthy slow economic growth caused by poor investment levels. This approach recognizes that the private sector plays an important role in economic growth. In this theory, it is assumed that a strong private sector can increase productivity and invest in existing sectors and help the sector become a productive sector.

Inclusive growth theory is used as a framework for identifying inhibiting growth from the side of employment provision resulting from investment formation. The private sector in an area has an excess of savings that can be allocated to invest. Then the investment tends to be used to expand the market by increasing output and employing more workers. This growth diagnosis works by analyzing the most influential growth components and finding out what factors can affect the component. According to Hausman, Rodric, Velasco (2005), the component that blocks growth in a region is the investment climate and what factors will affect the level of the investment. In this theory, factors affecting the decline in investment rates are the high domestic investment financing and low return on investment.

METHOD OF RESEARCH

Type of Research, Data Type, Scope of Research

This research uses descriptive research method with the type of quantitative approach. This research was conducted in 35 districts/cities in Central Java. Data which is secondary data with form data panel. Data were taken from the Central Statistics Agency and the Regency / City Statistic Center of Central Java Province.

Analysis Method

To analyze the data in this study, researchers used a system of simultaneous equations with the method of estimation of Stage Least Square (2SLS). According to Sumodiningrat (1994), the model of simultaneous equations is a model that allows an equation to form a system of equations that describes the dependence between the variables in the equation. For example, the endogenous variable (Y) is not only a function of the explanatory variable (X) or $Y = f(X)$ but also $X = f(Y)$. Based on research by Blyde et al (2010), Sodik and Nuryadin (2008), Dewi (2010), Metinara (2011), and Hidayat (2011), a simultaneous equation model is as follows:

$$INV = f(INF, HDI, RGDP, EXP_MODAL) \quad (1)$$

$$GDP_IND = f(INV, HDI) \quad (2)$$

$$EMPSHARE = f(INV, HDI, GDP_IND) \quad (3)$$

Information:

INV : Investment Level

GDP_IND : *Output Share* of Processing Industry Sector

EMPSHARE : *Employment Share* of Processing Industry Sector

INF : Inflation

RGDB : Regional Gross Domestic Product

HDI : Human Development Indeks

EXP_MODAL : Capital Expenditure

Before estimating the above simultaneous equations, the data used first converted with Ln format to make data more smooth and easy to be processed by econometric applications used. Researchers use Eviews8 to estimate the data.

RESULTS AND DISCUSSION

To answer the first problem formulation, this research uses simultaneously equation data analysis method in the form of Two-Stage Least Square (2SLS). In the discussion of the results of the research, researchers will use two main theories, namely the theory of industrial growth to estimate the factors that affect the level of investment and Kaldorian industrial growth theory to estimate the influence of the level of investment, which is one factor of production, on two aspects of industrial growth, namely the output share and employment share.

Discussion of Statistical Results

In accordance with the research methodology, this study uses the Two-Stage Least Square method (2SLS) which will show the relationship between the first, second, third problem formulation. The results of the estimation and test results for equation (1) are shown in the table below:

Table 1 Equation Estimate Results (1)

Variable	coefficient	t-statistic	Prob	α	Result
LOGINF	-0.108536	-0.703523	0.4830	0.05	Not significant
LOGHDI	4.291478	3.276988	0.0013	0.05	significant
LOGEXP_MOD	0.645456	3.632807	0.0004	0.05	significant
C	-28.27629	4.432221	0.0000	0.05	significant

Source: Data processed Eviews

Based on the table above, there are estimation results for equation (1) which can be arranged into a model for the factors that influence the level of investment in Central Java as follows:

$$\text{LOGINV} = -28.27629 - 0.108536\text{LOGINF} + 4.291478 \text{ LOGHDI} - 0.645456 \text{ LOGEXP_MOD}$$

Whereas the estimation results and test results for equation (2) are shown in the table below:

Table 2 Equation Estimate Results (2)

Variable	coefficient	t-statistic	Prob	α	Result
LOGINV	0.647324	6.651909	6.651909	0.05	significant
LOGHDI	3.283871	2.073674	2.073674	0.05	significant
C	6.633417	0.998357	0.998357	0.05	Not significant

Source: Data processed Eviews

Based on the above table there are estimation results for equation (2) which can be arranged into equations to describe the effect of investment level on the growth of manufacturing industry sector which is referenced from output share in Central Java as follows:

$$\text{LOGOUT_SHARE} = 6.633417 + 0.647324 \text{ LOGINV} + 3.283871\text{LOGHDI}$$

Whereas the estimation results and test results for equation (3) are shown in the table below:

Table 3 Equation Estimate Results (3)

Variable	coefficient	t-statistic	Prob	α	Result
LOGINV	0.580425	9.053029	0.0000	0.05	significant
LOGHDI	2.439578	2.658926	0.0088	0.05	significant
LOGOUT_SHARE	0.206307	4.157175	0.0001	0.05	significant
C	-6.482631	-1.704766	0.0906	0.05	Not significant

Source: Data processed Eviews

Based on the above table there is an estimate for equation (3) which can be compiled into equations to describe the impact of the investment rate on the growth of the manufacturing sectors referred to from the employment share in Central Java as follows:

$$\text{LOGEMP_SHARE} = -6.482631 - 0.580425\text{LOGINV} + 2.439578\text{LOGHDI} + 0.206307\text{LOGOUT_SHARE}$$

In accordance with the above statistical results, the discussion of the estimation results will be described in the following sections:

Factors Affecting the Investment Level of Central Java 2012-2016

Influence of Inflation on Investment Level

Inflation variables do not significantly influence the level of investment. In high inflation in a country, it will have a negative impact on existing investment. This is because if the price of goods and services on the market is very high then the tendency of people to consume goods and services will be reduced. Rising prices - the price is not on the market accompanied by a rise in salaries or income in the community so that it makes the consumption of people to fall. With the decline in public consumption, it will cause a negative impact on the production process. However, the estimation results show different results from the theory. This rejection of the theory of inclusive growth shows that inflation has not been able to influence the production of industrial activities.

Influence of the Human Development Index on Investment Levels

The variables of the human development index have a significant effect on the variable level of investment. This is in accordance with the theory of inclusive growth where the quality of human resources is indeed influential in increasing investment. Human resources are one of the factors of production used in production activities. If there is an increase in the quality of human resources, productivity in producing output will increase and contribute to encouraging an increase in profits (profit) assuming a fixed cost structure. As output increases, the return on investment will increase. This increased return makes the ability to invest in the future increase. This result is also consistent with the theory of human capital used in Atmanti's (2005) research. This theory states that when a person's education increases, he will be able to increase his income in the future. When the income rises it will have implications for increasing savings and consumption of investment goods increases too.

Effect of Capital Expenditure on Investment Level

Capital expenditure variables significantly influence the variable level of investment. Regional spending is one instrument that can be used by local governments to control economic conditions. Capital expenditure is a regional expenditure allocated to increase the capital capacity of a region. This can be seen from Rostow and Musgrave in Mangkoesoebroto (1999) which states that the government's capital expenditure model is divided into three stages, namely the provision of infrastructure, increasing growth, and the health of the community. So, in theory, it can be seen that capital expenditure has a positive effect on the level of investment because capital expenditure is considered as a stimulus factor for the formation of investment and the government's role in the economy.

As described above, capital expenditure will usually be used to provide public goods in order to realize economic efficiency which leads to increased investment in the future. However, the results obtained do not match the theory presented above. This is because capital expenditures that flow in fact do not provide incentives for investment activities in Central Java. The increase in capital expenditure allocated to the supply of public goods is not balanced by the quality that makes the benefits of public goods decline over

time. This situation makes production activities inefficient and produces high production costs. This causes investors to tend to withstand capital flows due to economic activities in the area due to low returns caused by the inefficiencies that occur.

The Influence of the Investment Level on the Output Share of the Manufacturing Industry Sector

Investment level variables have a significant effect on the manufacturing sector, sector output share variable. The estimation results are in accordance with the Kaldorian industry growth theory which became the theoretical basis for this study. This theory states that the productivity of the manufacturing industry sector that has a positive relationship with output growth will only reach the scale of increasing returns to scale when capital accumulation and technological innovation. The Increased investment which is a factor of production in production activities can increase production or output. This increase in output leads to an increase in the return to scale or an ever-increasing production scale. With this, the industry in Central Java is able to expand the industry.

This shows that investment is used as an activity that is able to increase the economic ability to produce output in the future (Kusumaningrum, 2007). Investment activities are carried out in the form of purchasing capital goods used to replace damaged capital goods, purchasing new machinery to increase the productivity of production activities and increasing industrial output. The ability of investment levels to increase output in industrial activities indicates that the industry is included in capital-intensive industries. Capital-intensive industries use higher capital allocations compared to the allocation of labor as a factor of production.

The ability of investment levels to increase production output in the industrial sector also indicates that the level of investment can be manufacturing-intensive. The thing referred to as manufacturing-intensive is the level of investment flowing into an area that is used to buy manufacturing products that are capital-oriented (Dewi, 2010). Increased investment in the manufacturing industry in Central Java was also caused by an increase in purchases of capital goods-oriented manufacturing products. In this case, the level of investment can be manufacturing-intensive

The estimation results above indicate that the level of investment is one of the factors that cause a decrease in the manufacturing sector's share output. From this, investment acceleration is needed to encourage output growth in the manufacturing industry sector to achieve optimal industrial growth. The investment acceleration can be realized by optimizing the factors that affect the level of investment described in the previous section.

The Influence of Investment Levels on Employment Share Processing Industry Sector

The investment level variable has a significant influence on the employment share of the manufacturing industry sector. The negative sign of the coefficient on the investment rate variables shows the negative relationship between the two variables. Employment share is basically the role of the industrial sector workforce for the entire workforce. In this study, the employment share is used to show the productivity of the manufacturing industry. This can be explained by Harrod-Domar's theory in advance where per capita output (Y / I) is strongly influenced by per capita capital (k / I). So when there is an increase in employment share or the workforce will reduce the per capita output and the productivity of the manufacturing industry will decline and vice versa.

The negative relationship between investment rate and employment share reflects that investment can improve the productivity of the manufacturing industry sector. But on the other hand, increased investment can also make employment opportunities in this sector decline. This is because the industry in Central Java leads to the industry with capital-intensive. In the capital-intensive industry, any increase in investment will be responded by reducing the labor force with the assumption of a fixed number of factors of production. These results are in line with Kaldor's industry growth theory, where increased investment can improve the productivity of the manufacturing sector.

Capital-intensive industries tend to use capital as the main factor in production activities. The allocation of greater use of capital is based on the assumption that the use of faster capital provides returns in the form of profits, increases efficiency in industrial activities, and reduces production costs (Wijaya, 2014). This is in accordance with the ICOR concept where the

purpose of the investment is to replace capital tools that can no longer be used at the same time to extend the usefulness of capital tools and not directed towards investments that are oriented towards empowering the workforce (Widdyantoro, 2013).

In addition, the existing labor conditions in the manufacturing industry sector for Central Java Province are dominated by workers with the latest education in primary, junior high and high school. This makes it difficult for workers to make adjustments to the tendency of the industry to invest by buying advanced machinery. These difficulties make the industry ultimately lay off or not using labor that does not have the ability to adapt to the mechanization of such production techniques.

Basically, in industrial activity, a complementary relationship exists between capital and labor skills (Syafitri, 2002). Industrial activities with capital-intensive tend to require a workforce with high-skill capacity with a high level of education and skill. A capital-intensive industry requires a high skill workforce to produce innovation and use the machines in the production activities.

From the above results, the increase in investment is indeed able to provide industrial incentives for the manufacturing sector. However, on the other hand, an increase in investment has an impact on the decline in employment. It takes the cooperation between government, society, and entrepreneurs to be able to solve the problems that arise such as the lack of employment in Central Java.

LIMITATIONS OF RESEARCH

Referring to the overall discussion above, there are some limitations that this research has. First, in analyzing the factors that influence the level of the investment using inclusive growth theory, this study focuses only on one component, namely the return of economic activity. Researchers only focus on the return side because it is adjusted to the results of previous studies and the conditions of the research object. Second, researchers tend not to use variables that cannot be projected with numbers such as examples of government failure, market failure, and banking intermediation. This is because researchers find it difficult to find the right

value projections for these variables to be estimated by a quantitative approach. Third, inadequate data availability causes the number of simultaneous equation observations above to be less in accordance with the econometric estimation requirements. This is due to the difficulty of researchers in accessing the necessary data and the phenomenon of the decline in the industrial sector which is used as the background of the research has only occurred in the last six years and has not happened in the long term.

CONCLUSION

- 1) The level of investment is influenced by two things, namely: (i) human development index, where this index is able to increase productivity and have implications for increasing profits that can attract investors to invest in these economic activities and (ii) capital expenditure as an illustration for the role of government, in fact, tends to have a negative influence on the level of investment and has not been able to increase investment in an economy.
- 2) Increased investment will have an effect on increasing the output share of the manufacturing industry sector, this is because investment is able to increase production levels which have implications for the expansion of industrial growth. This also indicates that industries in Central Java are capital-intensive and manufacture-intensive.
- 3) Increased investment will affect the decline in the employment share of the manufacturing industry sector. This is because in Central Java it is dominated by capital-intensive industries. In a capital-intensive industry, each increase in investment will be responded to by a reduction in labor with the assumption that the number of factors of production remains. Thus, the processing industry sector in Central Java is unable to become a base sector of employment that can be used to overcome the problem of unemployment.

REFERENCE

- Ali, Ifzal & Hyun, Hwa Son. 2007. Measuring Inclusive Growth. Asian Development Review vol.24, no.1. Asian Development Bank.
- Astuty, Ernany D. 2011. Dynamics of Economic Development and Implementation of Investment Policies in Tangerang Regency as a Supporting Area for DKI Jakarta's Growth Center. Journal of Economics and Development, Vol.XIX (1). Jakarta: Indonesian Institute of Sciences.
- A.Yasinta, Risna. Setiawan. Akbar, MS. 2010. Modeling of GRDP in East Java Province with a Simultaneous Equation System Approach. Journal of Statistics, Faculty of Mathematics and Natural Sciences, Sepuluh November Institute of Technology. Surabaya: Sepuluh Nopember Institute of Technology.
- The World Bank. 2016. Diagnosis of Economic Growth in Central Java. Jakarta: World Bank Jakarta.
- Central Java Statistics Center. 2016. Statistics of Medium Large Manufacturing Industry Central Java Province 2016. Semarang: Volume Book 1. Central Java Statistic Center 2016
- Central Java Statistics Center. 2016. Provincial and District / City Financial Statistics in Central Java 2016. Semarang: Central Java Statistical Center
- Basri, Faisal H. 2002. Indonesian Economy: Challenges and Expectations for Indonesia's Economic Awakening. Publisher Erlangga. Jakarta
- Baum, Warren C & Tolbert, Stokes M. 1998. Investing in Development: Learning from the Experience of the World Bank. Jakarta: UI Press.
- Blyde, J., Piheiro, AC., Daude, C., & Fernandez-Arias, E. 2010. Competitiveness and Growth in Brazil. Brazil: Inter-American Development Bank
- Case, Karl. E & Fair, Ray C. 2007. Economic Principles. Jakarta: Erlangga Publisher.
- Pomegranate, Rosa. 2009. Dynamics of the Manufacturing Industry Sector in the East Java Province Regional Economy. Thesis. Bogor: Graduate School of Bogor Agricultural University.
- Dewi, Diah A. 2010. Deindustrialization in Indonesia 1983 - 2008: A Kaldorian Approach. Thesis. Bogor: Graduate School of Bogor Agricultural University.

- Djojohadikusumo, Sumitro. 1994. Development of Economic Thought: Basic Theories of Growth and Development Economics. Jakarta: Gramedia Publishers
- Fahmi, Irham. 2012. Investment Management: Theory and Problem Answer. Jakarta: Publisher Salemba Empat
- Fatihudin, Didin. 2011. Investment Urgency, Economic Growth Against Economic Potential and Investment Opportunities in District / City in East Java Province (Case: Agriculture, Gas Oil and Tourism Sector). Journal of Economics, Vol.4, No.2. Surabaya: Airlangga University.
- Gujarati, Damodar.N. 2006. Econometrics Basics Volume I. Jakarta: Erlangga Publisher.
- Gujarati, Damodar. N. 1993. Basic Econometrics. Jakarta: Erlangga Publisher.
- Hausmann, R., Rodrik, D., Velasco, A. 2005. Growth Diagnostics. Harvard University.
- Hidayat, Fauzi. 2011. Analysis of the Influence of Investment and Labor on the Growth of the Processing Industry Sub-Sector in Bekasi Regency. Essay. Jakarta: Syarif Hidayatullah State Islamic University (UIN).
- Hutasuhut, Saidun. 2006. Analysis of Factors Affecting the Growth of Non-Oil and Gas Industry in North Sumatra Province. Journal of Industrial Systems Volume.7, January 1, 2006. University of North Sumatra
- Ianchovichina, E & Lundstorm, S. 2009. Inclusive Growth Analytics: Framework and Application. Policy Research Working Paper of Economic Policy and Debt Department. Washington: World Bank
- Jhingnan, ML. 1993. Economic Development and Planning. Jakarta: PT. Raja Grafindo Persada.
- Jogiyanto, H.M. 2010. Business Research Methodology: Misguided Kaprah and Experiences. Yogyakarta: BPFE Yogyakarta.
- Krugman, Paul.R & Obstfeld, M. 2000. International Economics: Theory and Policy. Jakarta: PT. Gramedia Index.
- Kuncoro, Mudrajad. 2007. Indonesian Industrial Economies: Towards a New Industrial State of 2030? Yogyakarta: ANDI Publisher.
- Kuncoro, Mudrajad. 2010. Problems, Policies, and Politics: Development Economics. Jakarta: Erlangga Publisher

-
- Kusumaningrum, Adhitya. 2007. Analysis of Factors Affecting Investment in DKI Jakarta Province. Essay. Bogor: Department of Economics, Bogor Agricultural University.
- Lonni, Kasnawi, T., Uppun, P. 2011. Effect of Quality of Human Resources on Economic Growth in Mamasa Regency. Economic Journal. Makassar: Hasanuddin University
- Nazir. M. 2003. Research Methodology. Jakarta: Ghalila Indonesia Publisher.
- Mandala, Ardy & Raharja, Edy. 2012. The Role of Education, Experience, and Innovation Against the Productivity of Small and Medium Enterprises. Semarang: Diponegoro University
- Mangkoesebroto. Guritno. 1999. Public Economy. Yogyakarta: BPF of Gajahmada University.
- Mertinara, Susi. 2011. Factors Affecting Deindustrialization in Indonesia in 2000-2009. Thesis. Bogor: Graduate School of Bogor Agricultural University.
- Mankiw, N.Gregory. 2003. Fifth Edition Macroeconomic Theory. Jakarta: Erlangga Publisher.
- Prasetyo, P. Eko. 2008. The Quality of Growth: The Role of Technology and Investment of Human Capital As a Booster for Quality Growth Economics. JEJAK Volume 1 Number 1 September 2008.
- Rowthorn, Robert & Ramaswamy, Ramana. 1999. Growth, Trade, and Deindustrialization. IMF Staff Paper, Vol.46, (No.1). The International Monetary Fund.
- Now, Uma. 2003. Research Methodology for Business. Jakarta: Publisher Salemba Empat.
- Sodik, Jamzani & Nuryadin, Didi. 2008. Determinants of Local Investment: Case Study in Provinces in Indonesia. Journal of Economic Development; Economic Research on Developing Country. Yogyakarta: Faculty of Economics UPN "Veteran" Yogyakarta.
- Sumodiningrat, Gunawan.1994. Introduction to Econometrics. Yogyakarta: BPF Yogyakarta.
- Sutanto, Henry. 2009. Analysis of Factors Affecting Investment Level in Batu City AHP Method (Analytics Hierarchy Process). Essay. Malang: Department of Economics, Faculty of Economics and Business, University of Brawijaya.

- Syafitri, Wildan. 2002. Analysis of Productivity Determinants and Wages in the Indonesian Manufacturing Sector. TEMA Volume III I March 2002
- Todaro, Michael P. & Smith, Stephen C. 2006. Third World Economic Development. Jakarta: Erlangga Publisher.
- Yustika, Ahmad Erani. 2000. Industrialization of Suburbs. Yogyakarta: Publisher Pustaka Belajar.
- Wati, Silvi AP. 2013. Analysis of Investment Contribution Towards Unemployment and Poverty in Batu City in 2010-2012. Minor Thesis. Malang: International Program Department of Economics, Faculty of Economics and Business, University of Brawijaya.
- Widdyantoro, Andre. 2013. Influence of GDP, Investment and Number of Business Units Against the Absorption of Workers of Small and Medium Enterprises in Indonesia Period 2000-2011. Essay. Jakarta: Syarif Hidayatullah State Islamic University (UIN).
- Wijaya, Radewa RM. 2014. Effect of Minimum Wages, GRDP, and Population on Open Unemployment Rate (Case Study of Gerbagkertasusila 2007-2012). Essay. Department of Economics, Faculty of Economics and Business, University of Brawijaya.
- Zaenuddin, M. 2005. Analysis of Factors Affecting Investment PMA in Batam. JEJAK, Vol.2, (No.2).

INDUSTRIAL REVOLUTION 4: THE ROLE OF INVESTMENT IN INDUSTRIAL GROWTH IN INDONESIA

Hendrin Hariati Sawitri

BACKGROUNDS

The 4th Industrial Revolution is characterized by global changes. Changes can be gradual and systematic. These changes can be between individuals, communities, and nations (Muhammad Yahya, 2018). These changes can occur quickly, as a dimension of time. The world is connected with cyberspace. Changes in the phase of human life are characterized by many things, one of which is change in the industrial era.

The term Industry 4.0 itself was officially born in Germany precisely when the Hannover Fair was held in 2011 (Kagermann et al., 2011 in Hoedi Prasetyo 2018). Germany has a big interest in this matter because Industry 4.0 is part of its development plan policy called the High-Tech Strategy 2020. The policy aims to keep Germany in the forefront of manufacturing (Heng, 2013 in Hoedi Prasetyo 2018). Several other countries also participated in realizing the concept of Industry 4.0 but used different terms, such as Smart Factories, Industrial Internet of Things, Smart Industry, or Advanced Manufacturing. Even though they have different terms, they all have the same goal, namely to increase the competitiveness of each country's industry in facing a very dynamic global market. This condition is caused by the rapid development of the use of digital technology in various fields. Industry (Hoedi Prasetyo et al, 2018)

Furthermore Yahya said that Industry 4.0 as the latest technological revolution phase changed the way human activities in scale, scope, complexity, and transformation from previous life experiences. Humans will even live in global uncertainty, therefore humans must have the ability to predict a rapidly changing future. Each country must respond to these changes in an integrated and comprehensive manner. The response involved all global political stakeholders, ranging from the public, private sector, academia, to civil society so that the challenges of industry 4.0 could be managed as opportunities. (Muhammad Yahya, 2018)

The role of government in the 4th Industrial Age is very important in capturing opportunities for industrial development in Indonesia. In this case

the government has prepared 5 leading industrial sectors, namely 1. Food and beverage processing industry, 2. Textile industry, 3. Automotive industry, 4. Electronics industry and chemical industry, 5. Chemical, Pharmaceutical and Traditional Medicine industries. Other industries outside of the five industries are still encouraged in their development.

To encourage the industrial sector, investment roles and other factors are needed as related derivatives to encourage industrial growth. An illustration of the role of the industrial sector in recent years on GDP can be seen in Table 1 below.

Table 1 Industrial Sector Development 2014-2017

No	Non Oil and Gas Processing Industry	<i>Persentase (year on year)</i>			
		2014	2015	2016	2017
	Non Oil and Gas Processing Industry	5.61	5.05	4.43	5.14
1	Food and Beverage Industry	9.49	7.54	8.33	13.76
2	Tobacco Processing Industry	8.33	6.24	1.58	-7.64
3	Textile and Apparel Industry	1.56	-4.79	-0.09	6.39
4	Leather Industry, Leather and Footwear	5.62	3.97	8.36	-2.75
5	Timber Industry, Wood and Cork Products and Woven Goods from Bamboo, Rattan and the like	6.12	-1.63	1.74	4.85
6	Manufacture of Paper and Paper Products; Printing and recording media reproduction	3.58	-0.16	2.61	-4.52
7	Chemical, Pharmaceutical and Traditional Medicine industries	4.04	7.61	5.84	-5.46
8	Rubber Industry, Rubber and Plastic Goods	1.16	5.04	-8.50	3.10

No	Non Oil and Gas Processing Industry	Persentase (year on year)			
		2014	2015	2016	2017
9	Manufacture of Non-Metallic Galleries	2.41	6.03	5.47	1.58
10	Basic Metal Industry	6.01	6.21	0.99	7.05
11	Metal Goods Industry; Computers, Electronic Goods, Optics; and Electrical Equipment	2.94	7.83	4.33	0.27
12	Machinery and Equipment Industry	8.67	7.58	5.05	9.51
13	Transportation Equipment Industry	4.01	2.40	4.52	5.38
14	Furniture Industry	3.60	5.17	0.46	3.79
15	Other Processing Industries; Machine and Equipment Repair and Installation Services	7.65	4.66	-3.04	-2.22

Source: BPS, GDP growth rate based on business field, 2014-2017, processed

Meanwhile, the role of investment in GDP that can drive industrial growth can be seen in the following table.

Table 2 Investment in Indonesia

Investment (Million USD)		
Year	Direct Inv	Portfolio Inv
2013	12,295	10,875
2014	15,266	25,802
2015	10,704	16,183
2016	16,02	18,946

Source: NPI, 2013-2016 Bank Indonesia Report

From Table 1 above, it can be seen that the non-oil and gas industry sector in Indonesia has a greater role, although there are several sub-sectors that experience fluctuations.

To anticipate the 4th Industrial Revolution, the government through the Ministry of Industry has prepared several industry sub-sectors which are considered to have an upward trend. Minister of Industry said that the efficiency of machines and humans had begun to connect to the internet. Based on the mapping of the subsector industry to anticipate the 4th industrial revolution, five non-oil and gas industry sub-sectors will be the driving force and pilot. The five sub-sectors are the food and beverage, chemical, textile, electronic and automotive industries.

Table 2 above shows that the Role of Investment from 2013 to 2016 fluctuated, but most of it indicates the role of investment tends to increase. The role of investment in both direct investment and portfolio tends to increase. One of the drivers of the success of industry improvement is the existence of investment and innovation in industry matters as revealed by Minister of Industrialization in Indonesia (Airlangga Hartarto, 2017).

In the development process, the industrial sector is used as a development priority which is expected to have a role as the leading sector or sector leader for the development of other sectors (Arsyad, 2010: 442). The industry sector is a leading sector that the industrial sector can spur and lift the development of other sectors, such as the agricultural sector and the service sector (Irma Mar'atus et al, 2017).

Theory Caldorian considers that the manufacturing industry sector is a growth engine for a region in increasing the growth of other sectors while increasing economic growth. Furthermore, Irma (2017) revealed that in Dewi's research (Dewi 2010 in Irma Mar'atus 2017) there were three aspects of the industry that were highlighted. First, GDP growth has a positive relationship to the growth of the manufacturing industry sector. Second, labor productivity in the manufacturing sector has a positive relationship with the growth of the manufacturing industry itself. In this case the manufacturing industry sector is considered to be able to produce increasing returns to scale (scale of returns that increase). This scale can be created if this sector carries out capital accumulation and technological innovation. Third, the growth of the non-manufacturing sector has a positive

relationship with the growth of the manufacturing industry sector. This is motivated by the tendency of the non-industrial processing sector to lead to diminishing return to scale.

The second Caldorian industry growth theory states that increasing returns to scale can only be created with the accumulation of capital and technological advances. Investment factors are in the spotlight in developing the theory, because investment is able to provide manufacturing incentives that can accelerate sector growth. It requires a high level of investment to be able to renew the mechanization of engineering from production.

The point is the role of investment is needed by the industry sector in its development. From various previous studies that led to the importance of this industry sector in increasing national production, the authors want to examine the role of investment in encouraging industrial sector development in Indonesia in the industrial revolution era 4.0.

METHODS

This research was conducted to determine the extent of the role of slim and portfolio investments in encouraging leading non-oil and gas industries in the era of the 4th industrial revolution. This study was quantitative in that it used published data by Bank Indonesia, the Ministry of Finance and the Ministry of Industry. To find out how much the relationship between each independent variable to the dependent variable, a path analysis with regression analysis with the program Eviews 5 was used.

The sample in this study was data on the Food and Beverage Industry, Direct Investment, Portfolio Investment, Gross Domestic Product, and Tax. The data range is in 2013.1 until 2017.4 with $n = 20$

Path Analysis is an extension of multiple linear regression analysis that is used to estimate the quality relationship between variables (causal models) which are tiered based on theory. This analysis is also useful for knowing the relationship between independent variables and dependent and indirect relationships through intervening.

The steps in path analysis (path analysis) are,

- 1) Designing a model based on theoretical concepts as follows:
- 2) Determining the equation of the structural model

First Step construct the model

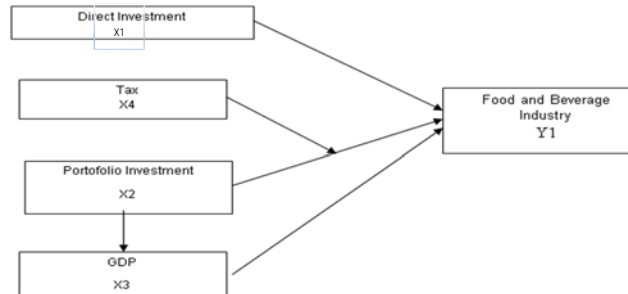


Figure 1 : Path Analysis Model

- a. The direct investment variable has a direct effect on the Food and Beverage Industry
- b. Tax Variable moderates the effect of Portfolio Investment on the Food and Beverage Industry
- c. The portfolio investment variable is effectively moderated by the tax variable to influence the food and beverage industry
- d. The GDP variable has a direct effect on the Food Industry and Beverages

The second step of determining the structural model equation is:
Structural Equations

$$Y = c + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + e_4$$

Where:

Y = Food and Beverage Industry

b = Path Coefficient

X1 = Direct Investment

X2 = Portfolio Investment

X3 = GDP

X4 = Tax

e = Error

The Figure states that there are four structural relationships where, the first relationship is a causal relationship from X1 to Y. The second relationship states the causal relationship of X3 and X2 to Y, here X3 is an intervening variable which moderates X2 to Y. Third, it states a causal relationship from X4 to Y. The fourth relationship states the causal relationship between X1, X2 and X3 and X4 to Y.

Table 3 Direct and Indirect Effects and Total Influences

Relationship Variable	Effect		Total
	Directly	Indirect Via X3	
X1 → Y	B1	-	B1
X2 → Y	B2	(B2XB3)	(B2XB3)
X3 → Y	B3	-	B3
X4 → Y	B4	-	B4

RESULTS

Path Analysis Results (Path analysis)
Structural Equations

$$Y = c + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4$$

Get results :

$$Y = -6,33 + 0,12 X_1 + 0,29 X_2 + 4,89X_3 - 2,4X_4$$

-1.80 0.48 2.9 3.29 -1.47

Table 4 Significance
Dependent Variable: Y

Variable	Coefficient	t count	t table ($\alpha, n-k$)	Conclusion
C	- 6,33	-1,80	2,13 (0,05,16)	-(1,8)<2,13 not significant
X1	0,12	0,48	2,13 (0,05,16)	0,48 < 2,13 not significant
X2	0,29	2,9	2,13 (0,05,16)	2,9 > 2,13 significant
X3	4,89	3,29	2,13 (0,05,16)	3,92 > 2,13 significant
X4	2,4	-1,47	2,13 (0,05,16)	-1,47 < 2,13 tidak Signifikan
		COUNT	table	
R- Squared	0,537			
D-W		1,33	dl = 0,562 (k=5, 15) du=2,21 (k=5, 15)	4-d>du , (4-1,33) > 2,21 2,67 > 2,21 There is no negative autocorrelation
F Stat		4,35	3,24 (0.10, 5, 15)	4,35 > 3,24 The regression equation Y over X is significant

From these results it can be seen that Linearity Test with t test indicates that the Direct Investment (X1) variable is less significant, Portfolio Investment (X2), GDP (X3) variable significantly influences and Tax (X4) has less significant effect on Food Industry Variables and Drinks (Y1).

Meanwhile the Direct Investment coefficient (X1) is 0.12, the Portfolio Investment coefficient (X2) is 0.29 and the GDP coefficient (X3) is 4.89, influencing positively which means that if X1, X2, X3 are raised respectively

1 the unit will increase Y by 0.12, 0.29, 4.89 units. Meanwhile the Tax coefficient (X4), amounting to - 2.4 means that if X4 is increased by 1 unit instead it decreases the Food and Beverage Industry (Y) by 2.4 units. Tax Variable (X4) is not able to moderate Portfolio Investment (X2) to improve the Food and Beverage industry (Y1). Therefore, Tax is expected to be driven again by its role to be able to influence investment to be able to improve the industry.

F test, F count = 4.35 and F table value of 3.24 (df1 / df2, 5/15, $\alpha = 0.10$) it turns out that F count is greater than F table so it can be concluded that simultaneously the independent variable can explain the dependent variable or independent variable has a relationship that is relevant to the dependent variable.

From the Durbin Watson statistic, the DW value is 1.33, from the calculation that $4-d(4-1.33 = 2.67)$ is greater than $dU 2.21$ ($k = 5, \alpha = 0.05$) which means that there is no negative autocorrelation between the variables in the study at the level of 95%.

The R-Square value is 0.54, which means that about 55% of the dependent variable can be explained by the independent variable, so there are still variables outside the 4 independent variables that can affect the food and beverage industry.

The results of this study indicate that the investment that is expected to drive the industry is found to be reliable. It can be seen that direct investment and portfolio investment have a positive effect, as well as the role of GDP to stimulate industrial development has a positive effect. Taxes cannot yet affect portfolio investment that hope to improve the industry. Food and beverage processing industries can be played in the 4th Industrial Revolution.

Based on the results of the study it can be concluded that:

1. Direct investment has a positive influence on the Food and Beverage Industry
2. Portfolio investment has a positive influence on the Food and Beverage Industry. Results showed that the effect of Portfolio Investment was greater than the effect of Direct Investment.

3. GDP has the greatest influence on the development of the food and beverage industry.
4. There is a need to examine the influence of investment on industries other than the food and beverage industry.

Based on the results of the study, a number of things are suggested as follows. In order to face the 4th Industrial Revolution it is necessary:

1. Continuing to develop the role of investment, especially direct investment in the food and beverage industry.
2. Although the role of large Portfolio investment in the growth of the food and beverage industry, it needs to be developed again to encourage the development of this industry for the future.
3. Taxes have not been able to play a role in developing the food and beverage industry, even though tax is expected to spur portfolio investment so that it will be expected to further improve the food and beverage industry.
4. A need to examine the influence of investment on other industries besides the food and beverage industry shall be taken into account.

REFERENCE

- Arsyad, Lincoln. 2010. *Ekonomi Pembangunan*, Edisi 5. UPP STIM YKPN Yogyakarta. Yogyakarta.
- Dewi, Diah A. 2010. *Deindustrialisasi di Indonesia 1983 – 2008 : Sebuah Pendekatan Kaldorian*. Thesis. Sekolah Pasca Sarjana Institut Pertanian Bogor. Bogor.
- Heng, S. (2014). *Industry 4.0: Upgrading of Germany's Industrial Capabilities on the Horizon*. <https://ssrn.com/abstract=2656608>, Diakses pada 17 Juni 2017. Hermann
- Hoedi Prasetyo dkk, 2018., “ Telaah Klasifikasi Aspek dan Arah perkembangan Riset”, *Jurnal teknik Industri UNDIP*, Vol 13, No 1, Januari 2018
- Irma Mar’atus, dkk, 2017., “Analisis Investasi Sektor Industri Manufaktur, Pengaruhnya terhadap pertumbuhan Ekonomi dan Penyerapan Tenaga

Kerja di Indonesia”, Jurnal Paradigma Ekonomika, Vol 12 No 1, Januari-Juni 2017.

Kagermann, H., Lukas, W.D., & Wahlster, W. (2011). Industrie 4.0: Mit dem Internet der Dinge auf dem Weg zur 4. industriellen Revolution. <http://www.vdi-nachrichten.com/Technik-Gesellschaft/Industrie-40-Mit-Internet-Dinge-Weg-4-industriellen-Revolution>, Diakses pada 17 Juni 2017.

Kagermann, H., Lukas, W.D., & Wahlster, W. (2013). Final report: Recommendations for implementing the strategic initiative INDUSTRIE 4.0. Industrie 4.0 Working Group. Kothari

Menteri Perindustrian Airlangga Hartarto di sela agendannya menghadiri World Economic Forum on ASEAN 2017 di Phnom Penh, Kamboja, Jumat (12/5).

Muhammad Yahya., Prof., M.Kes., M. Eng, 2018, “Era Industri ke 4 : Tantangan dan Peluang perkembangan Pendidikan Kejuruan”. Pidato Pengukuhan Penerimaan Jabatan Professor tetap dalam bidang Ilmu Pendidikan Kejuruan Fakultas Teknik Universitas Negeri Makassar, 14 Maret 2018.

DETERMINANTS OF UNEMPLOYMENT IN SOUTH SUMATERA PROVINCE USING PANEL REGRESSION ANALYSIS

**Rini Efrianti, Taufiq Marwa, Nurlina Tarmizi dan
Saadah Yuliana**

BACKGROUNDS

Economic growth and unemployment are essential issues of each nation paying little mind to their development activities level. Nations focus on their economy strategies towards building up economic growth and unemployment alleviation. In spite of the fact, there is a wide writing about the connection between economic growth and unemployment. There is not an agreement on the bearing and power of the relationship. Contrasts in the economic structures of nations additionally ponder the connection between economic growth and unemployment as it was (Neely, 2010; Özel, 2013; Bourguignon *et al.*, 2014). Theoretically, there is a link between economic growth and unemployment rate. If economic growth increases then the production of goods and services in a region will also increase. This increase indicates an expansion in production activities that will encourage increased employment in various sectors of the economy, so that the unemployment rate will decrease (Donbursch, 2001).

The province of South Sumatera as one of the rice granaries outside Java has an important role for the regional and national economy. The economic performance of South Sumatera during the period 2010-2015 grew slower than the national growth rate. The economy in that period grew at an average rate of 5.54 percent per year, lower than the national average growth rate which was 5.90 percent. One of the causes is the slowdown in oil and gas production which has a substantial share in the regional economy. The economy of South Sumatera includes the top three in Sumatera after Riau and North Sumatera. In 2012, the contribution of South Sumatra's GDP in the national level reached 3.06 percent, while at the level of Sumatra region reached 13 percent (BPS, 2016).

The rate of economic growth and unemployment in South Sumatera Province 2010-2015 is illustrated in Table 1.1. Based on Table 1.1 it can be

seen that since 2012 the economic growth rate of South Sumatera Province continued to slow down, so was the national economic growth rate. Although the pace of economic growth is slowing, the employment situation in South Sumatera Province shows good condition. This is reflected in the decline in the unemployment rate during the period 2010-2014. Similarly, compared to the national unemployment rate, the unemployment rate in South Sumatera Province is below the national unemployment rate.

**Table 1 Economic Growth and Unemployment
In South Sumatera Province and Indonesia
Year, 2010-2015**

Year	Economic Growth (%)		Unemployment (%)	
	Sumsel	Indonesia	Sumsel	Indonesia
2010	5,53	6,22	6,65	7,14
2011	6,36	6,17	5,77	6,56
2012	6,83	6,03	5,70	6,14
2013	5,31	5,58	4,84	6,25
2014	4,70	5,01	4,96	5,94
2015	4,50	4,88	6,07	6,18

Source: BPS, 2017

Based on the data described in the table above, it can be concluded that the rate of economic growth which continued to decline did not cause the unemployment rate increased, but on the contrary, the unemployment rate continued to decline. This condition encourages researchers to conduct in-depth study of determinants of unemployment in districts /cities in South Sumatera Province. The variables used in this study are economic growth, government spending, investment and population.

According to the Statistics Indonesia (BPS) in the employment indicator, unemployment is defined as unemployed individuals who are looking for a job or preparing for a new business or a resident who is not looking for a job because it has been accepted to work but has not yet begun work. Sukirno (2007) has stated that unemployment is a situation where a person who belongs to the workforce wants to get a job but has not got it. Someone who

is not working but not actively looking for work is not classified as unemployed. The main factor causing unemployment is the lack of aggregate spending. Entrepreneurs produce goods and services with the intention of making a profit, but the profits will be obtained if the entrepreneur can sell the goods and services they produce. The greater the demand, the greater the goods and services they embody. Increased production will increase the use of labor.

To measure the unemployment rate of a region, two approaches can be used, which are:

- 1). *Labour force approach*. The size of the unemployment rate can be calculated based on the percentage and the ratio of the number between the unemployed and the total labor force.

$$\text{Unemployment} = \frac{\text{Unemployed}}{\text{Total Labor Force}} \times 100\%$$

- 2). Labor Utilization Approach.
 - a. *Employed* are people who work full or work hours reach 35 hours per week.
 - b. *Underemployed* are those who work but have not been fully utilized or working hours within a week of less than 35 hours.

This research was based on *Keynesian Unemployment theory* and *Malthusian Population Trap Theory*. According to Keynes, unemployment occurs due to low aggregate demand, so that economic growth hampered not caused by low production, but by low consumption. Keynes argues that this can not be left to the free market mechanism. As the amount of labor increases, wages will fall. This would be detrimental to the producers because the decline in wages means that people's purchasing power of goods and services also decreases so that people's consumption decreases. Finally, producers suffer from losses, and production numbers decrease. This results in reduced labor and increased unemployment (Soesastro, 2005).

Malthus's theory explains that the propensity of population grows infinitely beyond the limit of food supplies. This encourages people to compete in ensuring their survival by finding a source of food. With this

competition there will be some people who are marginalized and no longer able to obtain food. In modern society means that the more rapid population will produce more and more labor. But this is not matched by the existing job opportunities. Because of the small number of job opportunities, they compete each other to get jobs and who are marginalized in the competition becomes the unemployed group (Todaro, 2014).

To provide an understanding of determinants of unemployment, the study reported in this article reviews some literature. Nickell (1979), for example, utilized UK information to appear that a long time tutoring up to 12% decreases duration of unemployment by 4%, whereas instruction at conventional levels and over decreases the term by 12%. Echebiri (2005) considered the determinants of unemployment in Umuahia, Nigeria. He recognized that Umuahia features an elevated rate of population growth so that most of the work constrain are unemployed. He collected a test of 220 young people from rural-urban migration and found that youth unemployment within the town shared common characteristics with that found in numerous creating nations. Moreover, he found that instruction and work inclination had a coordinate relationship with unemployment.

Eita and Ashipala (2010) inspected the determinants of unemployment in Namibia from 1971 to 2007. They connected the Engel-Granger two-step econometric approach and found that they were in line with the Okun's law and the Harrod-Domar. This appears that changes in Net Residential Item (GDP) impact changes in unemployment. A few researcher have tested about the causes of unemployment. Bakare (2011) found that request for work, supply of work, populace, swelling, capacity utilization, net capital arrangement, wage rate, and private household speculation were major determinants of urban unemployment in Nigeria from 1978 to 2008.

Cheema and Atta (2014) studied about economic determinants of unemployment in Pakistan. The analysis on the effect of price stability on economic growth and unemployment in Pakistan utilizing time arrangement data from 1973 to 2010 by applying ARDL bound approach showed output gap, productivity and economic uncertainty while it had a statistically significant positive relationships with unemployment.

Maqbool *et al.* (2013) found something comparative. They stated that GDP, population, inflation and foreign direct investment are significant determinants of unemployment in Pakistan in both the short-run and long-run investigation from 1976 to 2012. Considerations have appeared that the level of education achieved by individuals can impact how long unemployment endures. Individuals who have accomplished incredible statures in education tend to induce re-employed when they lose their occupations. Oniore *et al.* (2015) inspected the determinants of unemployment in Nigeria utilizing time arrangement information and error correction model. They appeared that GDP growth rate, inflation rate, degree of openness, and private domestic investment were factually noteworthy in explaining changes in unemployment within the short-run. Their co-integration test appeared that a long-run relationship exists among the factors and the adversely marked ECM and critical appeared tall speed of alteration from short-run variances to long-run equilibrium.

There are other studies on the impact of government expenditure on unemployment. Nwosa (2014) inspected the effect of government purchases on unemployment and poverty rates in Nigeria from 1981 to 2011. By applying the OLS technique, he found that government expenditure has positive and critical effect on unemployment rate whereas it incorporates a negative and critical effect on poverty rate. Auerbach and Gorodnichenko (2012) examined the relationship between government expenditure and unemployment in Nigeria. By using an error correction modeling method, they found a significant relationship which suggests an increment in government purchases leads to a drop in unemployment rate.

METHODS

This study used a data panel that was a combination of time series and cross section data. The study was conducted in 15 districts / cities from 17 districts / cities in the province of South Sumatera. 2 other districts / municipalities, namely Muratara and Pali districts were not included in this study because they have not published the local government expenditures data. The variable used in this research was unemployment using Open Unemployment Rate (TPT) indicator. Economic growth was illustrated by

using per capita GDP indicators where this indicator was more comprehensive in measuring economic growth because it places greater emphasis on regional capacity to increase GRDP beyond the population growth rate (Emalia, 2009).

Hereinafter was variable of government expenditure, using indicator of realization of local government expenditure covering direct expenditure and indirect expenditure. Variable Investment used gross fixed capital formation indicators. Other variable was population.

The model that was built in this research is:

$$Unm = f(EG, Gex, Inv, Pop)$$

$$Unm_{i,t} = \delta_0 + \delta_1 EG_{i,t} + \delta_2 Gex_{i,t} + \delta_3 Inv_{i,t} + \delta_4 Pop_{i,t} + \varepsilon$$

Unm is unemployment, *Gex* is government expenditure, *Inv* is investment, *Pop* is population. The analysis was done by using Eviews 8 software.

SELECTION OF PANEL DATA MODEL

1. Chow Test

Chow test is a test to determine the model of fixed effect or random effect is most appropriate used in estimating panel data (Widarjono, 2013). The hypotheses in the chow test are:

$H_0 = \text{Common Effect Model atau pooled OLS}$

$H_1 = \text{Fixed Effect Model}$

The regression result based on *common effects model* or *pooled OLS* method and *fixed effect model* obtained F- statistics below:

Table. 2 Chow Test

Redundant Fixed Effects Tests
Pool: Pooled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	9.540932	(14,71)	0.0000

Source: Computed by authors, 2018

Based on the results of the *Chow test* we have obtained the probability value (p-value) of the cross-section F statistic value, which has a probability value of 0.0000. With the level of $\alpha = 0.05$, the *p-value cross-section F* was smaller than 0.05 ($0.000 < 0.05$), it can be concluded that H_0 was rejected so that the model used in this research was *fixed effect model*.

2. Lagrange Multiplier Test

To find out whether the random effect model was better than the *common effect* (OLS) method, the *Lagrange Multiplier* (LM) test was used. The hypothesis in the LM test was:

H_0 = Common Effect Model

H_1 = Random Effect Model

The results of the regression-based methods common effect pooled OLS model or probability values is as follow:

Table 3. Lagrange Multiplier Test

Lagrange multiplier (LM) test for panel data

Date: 04/29/18 Time: 17:04

Sample: 2010 2015

Total panel observations: 90

Probability in ()

Null (no rand. effect) Alternative	Cross-section One-sided	Period One-sided	Both
Breusch-Pagan	54.23972 (0.0000)	0.222580 (0.6371)	54.46230 (0.0000)
Honda	7.364762 (0.0000)	-0.471783 (0.6815)	4.874072 (0.0000)
King-Wu	7.364762 (0.0000)	-0.471783 (0.6815)	3.373066 (0.0004)
GHM	-- --	-- --	54.23972 (0.0000)

Source: Computed by authors, 2018

Based on the result of Lagrange Multiplier (LM) test, the probability value was 0,0000. Probability value smaller than 0.05 indicates the rejection condition H_0 . In this case H_0 was the *Common Effect Model*. So because the value of probability = 0,0000, then with 95% confidence level it can be concluded that the data have *random effect model* more appropriate used.

3. Hausman Test

Hausman test is a statistical test to determine whether the most appropriate fixed effect or random effect model is used. Hypothesis in Hausman test is:

H_0 = Random Effect Model

H_1 = Fixed Effect Model

From the result of regression test using *random effect model* and *fixed effect model*, Chi-Square Statistic value is given as follows:

Table 4. Hausman Test

Correlated Random Effects - Hausman Test

Pool: Pooled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	10.742126	4	0.0296

Source: Computed by authors, 2018

Based on the results of the test Hausman, the prob value was smaller than 0.05 which indicated the rejection condition H_0 . Thus, because the value of the prob was 0,0296, then with 95% confidence level it can be concluded that H_0 was rejected and model used in this research was Fixed Effect Model.

OVERVIEW OF THE FINAL MODEL SELECTIONS

In the previous test, the parameter estimation in the panel data, according to the chow test, suggests that it would be more appropriate to use the fixed effect model method, whereas according to the lagrange (LM) test, it would be more appropriate to use the *random effect model*. According to the hausman test, on the other hand, it would be more appropriate to use the fixed effect model. Therefore, it can be concluded from the three tests, the model to be selected was the *fixed effect model*.

CLASSIC ASSUMPTION TESTS

1. Normality Test

The significance test of the influence of the independent variable on the dependent variable through T-test will only be valid if the residual we get has a normal distribution. Normality test aims to see if a data is normally distributed or not. A method that can be used to detect whether the residual has a normal distribution or not is a test developed by Jarque-Bera (JB). The way to detect it is to see the value of Jarque-Bare (JB-test) < value of χ^2 (Chi-Square) the table receiving H_0 means normal distribution, whereas if the

Jarque-Bera value (JB-test) > value χ^2 (Chi-Square) table reject H_0 means it is not normally distributed.

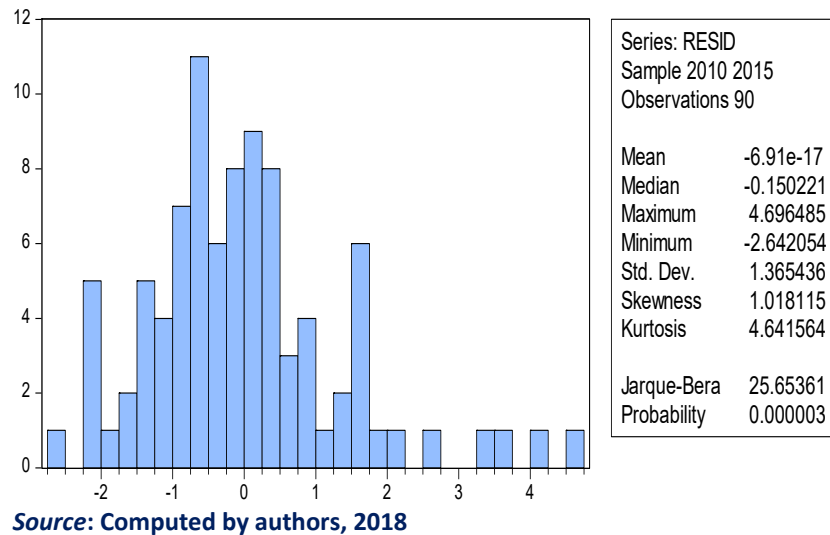


Figure 1 Normality Test

Based on the JB test, the value of JB-test = 25.65361, while the value of Chi-Square with $k = 4$, degrees of freedom or $df = 75 - 4$, then $df = 71$ at $\alpha = 5\%$ ie χ^2 - table = 91.67. Thus, JB-test < χ^2 - table, means accepting H_0 representing the normal distributed residual.

2. Multicollinearity Test

Multicollinearity test is a linear relationship between independent variables in the regression. Therefore, we need to detect multicollinearity by testing the correlation coefficient (r) between the independent variables. As a rule of thumb, if the correlation coefficient is high enough, for example above 0.85, then there is supposedly multicollinearity in the model. Conversely, if the correlation coefficient is relatively low then we suspect it does not contain multicollinearity.

Table 5 Multicollinearity Test Value

	EG	Gex	Inv	Pop
EG	1	0.78385452044952	0.2718310303516872	0.4798094618192414
Gex	0.78385452044952	1	0.4097628851474931	0.6689825411424952
Inv	0.2718310303516872	0.4097628851474931	1	0.398787170264055
Pop	0.4798094618192414	0.6689825411424952	0.398787170264055	1

Source: Computed by authors, 2018

Based on the results of data processing above, the multicollinearity test results shown the correlation coefficient value between *EG* with *Gex* of 0.78385452044952, the correlation between *EG* with *Inv* of 0.2718310303516872, the correlation between *EG* with *Pop* of 0.4798094618192414, correlation between *Gex* with *Inv* of 0.4097628851474931, with *Pop* of 0.6689825411424952, the correlation between *Inv* and *Pop* was 0.398787170264055. The low correlation coefficient was not expected to have *multicollinearity problems*.

3. Heteroscedasticity Test

The heteroscedasticity test is a condition in which variant inequality occurs from the residual for all observations in the regression model. A good regression model is no heteroscedasticity problem. The method that can be used for heteroscedasticity test is glejser testing. Test Glejser testing is done by regressing the independent variables to the residual absolute value. As a basic understanding, the residual is the difference between the value of observation and the predicted value, and the absolute is the absolute value. If significant values between independent variables and residuals are greater than 0.05 then no heteroscedasticity occurs.

Table 6
Heteroscedasticity Test Value

Variables	Sig/Prob
Constanta (<i>c</i>)	0.2262
Economic Growth (<i>EG</i>)	0.8091
Government Expenditure (<i>Gex</i>)	0.8404
Investment (<i>Inv</i>)	0.5947
Population (<i>Pop</i>)	0.1347

Source: Computed by authors, 2018

Based on the results of data processing above, the results of heteroscedasticity test can be seen from the significance value greater than 0.05, it can be concluded that there is no problem *heteroskedasticity* in the regression model.

4. Autocorrelation Test

Autocorrelation is used to test whether in a linear regression model there is a correlation between errors in period *t* and error in period *t-1* (previous). If there is a correlation, then there is an autocorrelation problem. A good regression model is a regression independent of autocorrelation. Detecting an autocorrelation can be done by using Durbin Watson, generally taken benchmark:

1. The D-W number below -2 means there is a positive autocorrelation.
2. The D-W number between -2 to +2, means there is no autocorrelation.
3. The D-W number above +2 means there is a negative autocorrelation.

Durbin watson value can be seen in Table. 6.1 which is 2.119079. Since the value of DW 2.119079 is between -2 to +2 it can be concluded that there was no *autocorrelation* in the model.

DATA PANEL REGRESSION USING FIXED EFFECT MODEL

The regression equation was used to see the effect of economic growth (*EG*), government expenditure (*Gex*), investment (*Inv*), and population (*Pop*) on unemployment (*Unm*). The results of multiple linear regression analysis done with the help of program eviews 8 got the results of regression equation as follows.

Table 7
Estimated Model Panel Regression Results

Dependent Variable: Unm
Method: Pooled Least Squares
Date: 04/29/18 Time: 13:02
Sample: 2010 2015
Included observations: 6
Cross-sections included: 15
Total pool (balanced) observations: 90

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	29.06683	16.95992	1.713854	0.0909
EG	-0.459196	0.965386	-0.475661	0.6358
Gex	-0.612299	0.757962	-0.807822	0.4219
Inv	-0.097028	0.107322	-0.904084	0.3690
Pop	-0.389267	1.056028	-0.368614	0.7135
Fixed Effects (Cross)				
_OKU--C	-0.167740			
_OKI--C	1.580090			
_ENIM--C	1.002357			
_LAHAT--C	-0.889966			
_RAWAS--C	-3.013467			
_MUBA--C	0.029993			
_BANYUASIN--C	0.266904			
_OKUS--C	-3.134894			
_OKUT--C	-1.711340			

_OI--C	-1.868864
_LAWANG--C	-1.811332
_PALEMBANG--C	6.599294
_PRABUMULIH--C	1.492157
_ALAM--C	-0.600343
_LINGGAU--C	2.227151

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.702608	Mean dependent var	5.310444
Adjusted R-squared	0.627213	S.D. dependent var	2.503842
S.E. of regression	1.528752	Akaike info criterion	3.871873
Sum squared resid	165.9330	Schwarz criterion	4.399611
Log likelihood	-155.2343	Hannan-Quinn criter.	4.084688
F-statistic	9.319021	Durbin-Watson stat	2.119079
Prob(F-statistic)	0.000000		

Source: Computed by authors, 2018

The result of fixed effect model estimation is shown in Table.6.1. All independent variables used in this study, i.e. economic growth (*EG*), government expenditure (*Gex*), investment (*Inv*), and population (*Pop*) was not statistically significant at $\alpha = 1\%$ which means that economic growth, government expenditure, investment, and population partially have no effect on unemployment in districts / cities of South Sumatera Province. However, the value of regression coefficient of *EG*, *Gex*, and *Inv* were negative value which indicates the results of this study is in accordance with Keynesian theory of unemployment. The negative regression coefficient means that if economic growth, government expenditure, and investment increase then unemployment will decrease. Vice versa, if economic growth, government expenditure, and population decreases then unemployment will increase.

Furthermore, the regression coefficient of population variable was negative which indicates that if the population increases then unemployment in the districts / cities of South Sumatera Province will decrease, and vice versa if the population decline then unemployment will increase. The results of this estimate contradict with *Malthus's theory of population traps*. According to Malthus, large populations will cause problems for economic development in a country. Large populations which were not comparable with job creation will lead to intense competition in getting jobs, which cause people with limited capacity unable to enter into the labor market, thus making them unemployed.

Simultaneously, there was an influence of economic growth, government expenditure, investment, and population on unemployment in districts / cities in South Sumatera Province. This can be seen from the value of F-statistic = 0,0000 < value of α (0,05). The coefficient of determination described by the value of R-squared of 0.702608 means that as much as 70 percent variation of unemployment variables can be explained by the variables contained in the model, namely economic growth, government spending, investment, and population. The remaining 30 percent was explained by other variables that were not included in the model, such as capital, inflation, economic openness, real exchange rate, crude oil prices, capital stock and banker's acceptance rate (Maqbool, Sattar and Bhalli, 2013; Omitogun *et al.*, 2014; O'Nwackukwu, 2017).

Based on the estimate results shown in Table. 6.1, it can be seen that there are different intercept from each district/city. The intercept value of each district/city is as follows: OKU of 28.9 (29.06683 - 0.167740), OKI for 30,6 (29.06683 + 1580090), Muaraenim for 30,0 (29.06683 + 1.002357), Lahat for 28,2 (29.06683 - 0.889966), Musi Rawas for 26,1 (29.06683 - 3.013467), Muba for 29,1 (29.06683 + 0.029993), Banyu Asin for 29,3 (29.06683 + 0.266904), OKU Selatan for 25,9 (29.06683-3.134894), OKU Timur for 27,4 (29.06683-1.711340), Ogan Ilir for 27,2 (29.06683-1.868864), Empat Lawang for 27,3 (29.06683-1.811332), Palembang for 35,6 (29.06683+6.599264), Prabumulih for 30,6 (29.06683+1.492157), Pagar Alam for 28,5 (29.06683-0.600343), and Lubuk Linggau for 31,3 (29.06683+2.227151).

Development activities undertaken within a region should be able to promote economic growth through increasing of government expenditure. The increase in government expenditure, especially those allocated to strengthen infrastructure, will attract investment entry into the region. The increased of investment will encourage the creation of new job opportunities so that employment increases and the use of labor also increases, which will lead to increased welfare of the community.

In addition, a large population if followed by improving the quality of human resources by expanding and facilitating access to education and health will make the population as a driving factor for economic growth. High population is a potential market for goods and services production. This will lead to an increase in production and investment activities that will increase the use of labor.

REFERENCES

- Auerbach, A. J. and Gorodnichenko, Y. Y. (no date) Fiscal Multipliers in Recession and Expansion. In *Fiscal Policy after The Financial Crisis*. The University of Chicago Press.
- Bakare, A. . (2011) 'The Determinants of Urban Unemployment Crisis in Nigeria : An Econometric Analysis', *Journal of Emerging Trends in Economics and Management Science*, 2(3), pp. 184–192.
- Bourguignon, F. et al. (2014) 'Unemployment and Economic Growth in Nigeria', *Journal of Economics and Sustainable Development*, Volume 5 N(Paper), p. pp.19, 69-81. doi: 10.5539/ijef.v8n12p113.
- BPS Provinsi Sumatera Selatan (2016) 'KEADAAN KETENAGAKERJAAN PROV SUMSEL FEBRUARI 2016', *Berita Resmi Statistik*, pp. 5–10.
- Cheema, A. R. and Atta, A. (2014) 'Economic Determinants of Unemployment in Pakistan : Co-integration Analysis', *International Journal of Business and Social Science*, 5(3; March 2014), pp. 209–222.
- Eita, J. . and Ashipala, J. . (2010) 'Determinants of Unemployment in Namibia', *International Journal of Bussiness and Management*, 5(10, October 2010), pp. 92–104. doi: 10.3923/jas.2015.1190.1195.

-
- Maqbool, M. ., Sattar, T. M. A. and Bhalli, M. . (2013) 'DETERMINANTS OF UNEMPLOYMENT: Empirical Evidences from Pakistan', *Pakistan Economic and Social Review*, 51(2), pp. 191–207.
- Neely, C. J. (2010) 'Okun's Law : Output and Unemployment', (4), pp. 2009–2010. doi: 10.3923/sscience.2016.1422.1427.
- Nwosa, P. I. (2014) 'Government Expenditure, Unemployment, and Poverty Rates in Nigeria', *JORIND*, 12(1).
- O'Nwackukwu and Chinedu Increase (2017) 'DETERMINANTS OF THE RATE OF UNEMPLOYMENT IN NIGERIA', *International Journal of Information Research and Review*, 4(1), pp. 3593–3595.
- Omitogun, O. et al. (2014) 'Unemployment and Economic Growth in Nigeria', *Journal of Economics and Sustainable Development*, Volume 5 N(Paper), p. pp.19, 69-81. doi: 10.5539/ijef.v8n12p113.
- Oniore, J. O., Bernard, A. O. and Gyang, E. J. (2015) 'Macroeconomic Determinants of Unemployment in Nigeria', *International Journal of Economics, Commerce and Management*, III(10), pp. 215–230.
- Özel, H. A. (2013) 'Investigation of Economic Growth and Unemployment Relationship for G7 Countries Using Panel Regression Analysis Funda H . S EZGİN , PhD . Biga Faculty Of Economics And Administrative Sciences', 4(6), pp. 163–171.
- Soesastro, H. dkk. (2005) *Pemikiran Dan Permasalahan Ekonomi Di Indonesia Dalam SetengahAbad Terakhir:Proses Pemulihan Ekonomi*. Yogyakarta: Penerbit Kanisius.
- Todaro, M. P. (2014) *Economic Development*. 12th edn. Trans-Atlantic Publications.
- Widarjono, A. (2013) *EKONOMETRIKA. Pengantar dan Aplikasinya. Disertai Panduan Eviews*. Edisi Keem. UPP STIM YKPN.

THE DUAL BANKING SYSTEM IN INDONESIA

Afrida Putritama

BACKGROUNDS

Most Moslems have avoided conventional bank because of the existence of the interest that is forbidden by Islamic *Shari'ah* in conventional bank's operation. This is what drives *Moslems* to establish Islamic banking. Islamic banking is the effort of *Moslems* to stay away from the interest that is forbidden by Islamic *Shari'ah* in order to run Islam in a *kaffah* based on Al Qur'an and As-Sunnah. The solution to this problem is by using the dual banking system in Moslems countries.

METHODS

The method used in this paper was literature study. The dual banking system means conventional banking and Islamic banking practised simultaneously in one country and have an equal juridical position. Although the dual banking system has been operating for two decades in Indonesia, many Indonesians still do not understand the differences between them. There are still many Indonesians who consider margins in Islamic banking is tantamount to conventional banks because of the interest on the nominal margin on Islamic banking just as high as the interest of conventional banks. Associated with the problem, in this article the author intends to explain the basic differences between Islamic banking and conventional banking in the dual banking system in Indonesia.

RESULTS

The Economic Impact of Dual Banking System

The majority of the modern financial system is the interest-based banking model so that most *Muslims* have avoided themselves from it for religious reasons so that the solution for this problem is by using dual banking system in Islamic countries (Şimşek, Bayındır, and Ustaoglu, 2017).

In a dual banking system, the choice among the different macroprudential models is mostly influenced by traditions, current institutional frameworks for other policies, political economy considerations, and there is no differentiation of macroprudential policy framework between conventional and Islamic financial institutions that has been practiced by the authorities with dual banking system (Zulkhibri, Naiya, 2016). In their research, Ali and Azmi (2017), using samples of Organization of Islamic Countries (OIC) member countries that have dual banking system over the period 2007–2013, found that Islamic banking is playing a complementary role toward conventional banking practices and was conducive to economic growth but unfortunately it does not affect the economic volatility.

Similar with Ali and Azmi's research (2017), it was also found that not only the presence of a strong Islamic banking system which was not vital to the regional government's attempts to source additional financial resources from the Islamic world (Salim, 2015) but also had a limiting effect on risk shifting although it was not adequate to fully abolish the overall risk-shifting incentives (Alaabed, Masih, and Mirakhor, 2016). Indonesia embraces dual banking system that is practiced in two banking system simultaneously in one country that is conventional banking and Islamic banking, which have equal juridical position as agent of development (Djumhana, 2000).

The fundamental difference between the two is the conventional banking runs its operations on the basis of economic democracy and the principle of prudence, while Islamic banking is based on the principles of Islamic law, economic democracy, and the precautionary principle. The operational foundation of *sharia* banking is regulated through Rule No. 21 Year 2008 on Islamic Banking, while banking regulation is generally regulated in Rule No. 10 the Year 1998 on Banking. The development of Islamic banking in Indonesia is quite rapid with an average asset growth of more than 65% in the last five years so that the Islamic banking can be more instrumental in encouraging the economic development of Indonesia (<https://www.ojk.go.id/id/kanal/syariah/tentang-syariah/Pages/Perbankan-Syariah.aspx>).

Weill (2011) used Lerner indices and the Rosse-Panzar model to examine banks samples from 17 countries with dual banking system over the period 2000–2007 and found that Islamic banks did not have greater

market power than conventional banks because Islamic banks had different competitive behaviour with the conventional commercial banks. On the other hand, Čihák & Hesse (2010) found that the market share of Islamic banks did not have a significant impact on the financial strength of other banks; furthermore, small Islamic banks tend to be financially preponderant than small commercial banks; large commercial banks tend to be financially preponderant than large Islamic banks; and small Islamic banks tend to be financially preponderant than large Islamic banks which may reflect challenges of credit risk management in large Islamic banks.

Indonesia has been using the dual banking system for two decades and it can run well until nowadays. The dual banking system in Indonesia offers alternative financial capital opportunities for the developing Islamic countries (Levent, Ustaoglu, Tatoğlu, 2017), higher Islamic banking market power than conventional commercial bank (Cupian, 2016), and the risk of Islamic bank is the main concern (Ascarya, Karim, Rahmawati, Muqorrobin, and Wiranatakusuma, 2016). Sumarti, Hayati, Cahyani, Wahyudi, Trisanti, Meylani (2017) used the indicators of the growth of Islamic banking (third-party funds, the assets, and total funding) and the indicators of economic growth in Indonesia (Gross Domestic Product, the growth rate of GDP by bank industry, and inflation) over the period 2003-2013 with Time Series model and found that the Islamic Banking growth had not given significant impact on economic growth.

Islamic banking activities in Indonesia are institutionally implemented by Islamic Commercial Banks and Islamic Business Units. Islamic Bank is bank based on *sharia* principles in its activities providing services through payment traffic (Article 1 paragraph 7 of Rule No. 21 Year 2008 on Islamic Banking), while the Islamic Business Unit is a work unit of the head office of a conventional commercial bank functioning as the holding office of an office or unit conducting business based on *sharia* principles or a work unit in a branch office of a bank located abroad conducting conventional business activities serves as the head office of a Islamic sub-branch office and/or Islamic unit (Article 1 point 10 of Rule No. 21 Year 2008 on Islamic Banking).

Interest in Conventional Banking versus Profit Sharing in Islamic Banking

The conventional banking business obtain interest in return of their contract, vice versa, the Islamic banking has a profit sharing agreement. The principle of profit sharing is to undertake a contract on the profits to be gained by the parties in the form of a profit sharing ratio where the amount is determined by mutual agreement and shall be with the willingness of each party without any coercion. Antonio (2001) describes the differences between interest and profit sharing ratio in the table below.

Table 1.
The Differences Between Interest and Profit Sharing
Ratio in Islamic Banking

Interest	Profit Sharing Ratio
Interest determination was made when the contract with the assumption must be profitable	The determination of the ratio/profit sharing ratio is made at the time of the contract with reference to the possibility of profit/loss
The amount of the percentage based on the amount of money (capital) lent	The amount of profit-sharing ratio is based on the amount of profit earned
Fixed interest payments as promised without consideration of whether the project being undertaken by the customer profit or loss	Profit sharing depends on the profit of the project being run. If the business loses, the loss will be shared by both parties
The amount of interest payments does not increase even if the number of profits doubled or the state of the economy is "booming".	The amount of profit sharing increases according to the increase in the amount of revenue
The existence of interest is doubtful (if not criticized) by all religions, including Islam	No one doubts the legitimacy of profit sharing

Determination of profit-sharing ratio delivered by *Madzab* Syafi'i and Maliki, and also approved by *Madzab* Hanafi and Hambali, is the ratio of profit in accordance with the comparison. According to Sadique (2009), there are two methods to treat these two elements, namely the Equal-weight and Adjusted-weight. Equal-weight method is used if the business has an element of capital (monetary capital) and employment (labour capital), whose influence is equal to profit. Adjusted-weight method is used when the business has one element (the element of capital or work elements) which is more influential in the acquisition of profit.

Time Value of Money in Conventional Banking versus Time Value of Money in Islamic Banking

Time Value of Money is a concept which believes that the money available today is more valuable than the money available in the future due to the ability to generate revenue. The concept of Time Value of Money in Islamic banking is only valid on *Ijarah* transactions, both associated with the object the benefit of goods and services, whereas in conventional banking applies to all transactions (Widodo, 2014). In the conventional banking, both goods and money are considered as items that can be traded. Conversely, in Islamic banking, money is only a medium of exchange, a unit of account, and as capital. In Islamic banking, buying and selling on credit allowed to take profits to exceed the profits of selling the cash but the magnitude of the determination of remuneration is different from what happen in borrowing money transactions. According to Islamic banking, money has no intrinsic value so that the borrowing and lending of money transactions, compensation in excess over the principal loan repayment occurs solely because of the time factor.

Agency Theory in Conventional Banking versus Trust-Based Financing in Islamic Banking

Agency theory explains that the agency relationship arises when one or more principal employ another person (the agent) to provide a service and then delegate decision-making authority to the agent (Muyassaroh, 2008). Agency theory implies the existence of information asymmetry between the agent and the owner of the company as a principal. Information asymmetry

arises when the agent is better informed on the company's internal and prospects for the future than the owner of the company. Conflicts of interest between the owner of the company and the agent cause agency costs that are not small. In conventional banking, the conflict of interest due to agency theory is prevalent. This phenomenon, among others, is seen with the many actions of earnings management in banking companies. This is actually quite reasonable because conventional banking based on the capitalist economic system further accentuates the role of the individual (Widodo, 2014). Instead of Islamic banking based on Islamic economic system, all human activity is well within the scope of religious worship *mahdhoh* (ritual) nor worship *muamalah* (social) so should not arise a conflict of interest due to the agency theory. With the spirit of worship *muamalah*, transactions carried out by the Islamic banking do not need agency cost. Since the basis of trust-based financing is trust, the trusted party that is the business manager (*mudharib*) should carry out the mandate from capital owner.

Credit in Conventional Banking versus *Musyarakah* Financing and *Mudharabah* Financing in Islamic Banking

Mudharabah is a contract between a capital provider and an entrepreneur or a fund manager. The entrepreneur or fund manager can mobilize the funds of the former for its business activity within the *sharia* guidelines, then profits made are shared between the parties according to a mutually agreed ratio, while the costs are born by the investors. While the definition of *Musyarakah* is a contract between two parties whereby both parties provide capital and both may be active in managing the venture, losses are shared on the basis of how much capital has been contributed but profits are shared in any way the partners decide (<https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah>). Table 2 below provides a brief explanation of it (Widodo, 2014) :

Table 2.
Comparison of Credit in Conventional Banking with *Musarakah*
Financing and *Mudharabah* Financing in Islamic Banking

Subject	Credit Conventional Banks	<i>Musarakah</i> Financing	<i>Mudharabah</i> Financing
The parties	Creditor and debtor	The financiers (<i>shahibul mal</i>)	Owners of capital with business managers (<i>mudharib</i>)
Nature of Financing	The creditor credits the debtor	Islamic banks provide capital instead of giving debt so that it includes equity financing	Islamic banks provide capital instead of giving debt so that it includes equity financing
Origin of Capital	Bank as creditor	The parties	Only the owner of capital
The Nature of Rewards	<i>Fixed rate</i>	<i>Floating rate</i>	<i>Floating rate</i>
Assumption of Business Results	It definitely profit	It could be loss, principal return, or profit	It could be loss, principal return, or profit
Basis for Distribution of Rewards	Interest based on the expected return specified by the creditor and is certain. Interest is based on the business assumption that the debtor must have benefited	Based on the actual profit that is real is from: results of operations the increase in the value of assets of the company (example: land and buildings)	Based on the actual profit that is real as the results of operations
Profit and Loss Distribution of Business	The profit and loss of the business is wholly owned	Because the nature of Profit/ Loss Sharing, then the profit is divided	Because it is a Profit Sharing, when businesses generate profits it will be

Subject	Credit Conventional Banks	<i>Musarakah</i> Financing	<i>Mudharabah</i> Financing
	by the debtor. When the debtor suffers a loss, the debtor is still required to pay interest in exchange for the use of capital to the creditor. The creditor must be profitable and no loss.	according to the portion of capital. If losses are caused by calamities and business risks, then the losses are borne by the parties according to the capital ratio. If the loss is caused by the negligence/mistake of the business manager, the loss shall be borne by the business manager. If the loss exceeds the value of the capital investment, then the excess losses are borne pro rata	divided according to the agreement. When business losses are due to business risks and/or calamities/disasters, losses will only be borne by the owners of capital that are limited to the amount of capital.
Business Owner ship	Belong to the debtor	Shared together	Only belong to the owners of capital
Business Management	Debtor	There are several alternatives to choose from: the parties/ owners of capital, one of them, or the parties can appoint a professional	Only business managers (<i>mudharib</i>)
The increase in the value of assets	Belong to the debtor	Belong together	Only belong to the owners of capital

Credit in Conventional Banking versus *Murabahah* Financing in Islamic Banking

Murabahah is a financing agreement in the form of buying and selling of goods at cost plus margin items agreed upon by the parties, in which the seller inform in advance the acquisition price to the buyer (<https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah>). *Murabahah* is basically not a financing instrument but it is one type of transaction of goods and services that can be paid cash or credit because actually the most ideal financing instruments in Islamic banking is *Mudharabah* and *Musyarakah* (Usmani, 2002). However, *Murabahah* is allowed to be used as a financing instrument with 2 terms as follows: a) The use of *Murabahah* as a financing instrument as the last step in order to avoid interest, namely when *Mudarabah* and *Musharakah* cannot be implemented; b) The use of *Murabahah* as a financing instrument not only replaces the word "interest" with "margin" but it must also clear the difference between "loan/debt based on interest" and "Murabahah transaction". According to Widodo (2014), the credit equation in conventional banking with *Murabahah* financing in Islamic banking is the same as a means of exchange transactions, recorded as "debt" for the customer, recorded as "receivable" for the bank, and there is a penalty for late repayment of the instalment.

Table 3. Comparison of Credit in Conventional Banking with *Murabahah* Financing in Islamic Banking (Widodo, 2014)

Subject	Credit	<i>Murabahah</i>
Objects	Money	Goods
Intrinsic Value	Money objects have no usability	Objects of goods have usability
Time Dimension	Delay payment	Originally cash
Treatment of funds deposited by the customer (before any transaction certainty)	Directly reducing the customer's debt principal (the selling price of the customer's funds store)	As a security deposit

Subject	Credit	<i>Murabahah</i>
Treatment of funds deposited by the customer (after transaction certainty)	-	As a down payment as the first payment money will reduce the principal debt of goods (= Goods Selling price minus down payment)
Step Bank after receiving funds from customers	-	Buying Goods
Time period	Short term: $n \leq 1$ year Medium term: $n > 1$ year– $n = 3$ years Long term: $n > 3$ years	Short term: $n \leq 1$ year Medium term: 1 year $< n = 3$ years Long term: -----
Essence	Borrowing money	(Instruments) buying and selling of goods
Recording of Transactions for the Customer	Debt "money"	Debt "goods"
Recording of Transactions for Banks/Financial Institutions	Receivables "money"	Receivables "goods"
Customer's Position in Transaction	Debtors / debtors	Buyers of goods
Position of Bank / Financial Institution in Transaction	Money / Financier creditors	Seller
The risk of loss and damage to goods	-	Borne Banks / Islamic Financial Institutions
The risk of the customer rejected goods	-	Borne Banks / Islamic Financial Institutions
Discount on purchases of goods (payable	-	The right of the buyer's customer (end user) thereby reducing the purchase price of the goods

Subject	Credit	<i>Murabahah</i>
prior to realization of facilities)		
Discount on purchases of goods (payable after facility realization)	Debtor's customer rights	Customer rights of buyers (end user)
Realization	Funds for debt of the customer (the selling price minus customer funds)	Goods worth the sale price (at cost plus a margin agreed by the bank / financial institution customers <i>sharia</i> buyer)
Realization (Control of the use of the facility)	Less, for example there is the possibility of buying used goods or even not bought goods at all	Total (100%)
Insurance of goods after the realization of financial institution facilities	The responsibility of the debtor	Responsibility of buyer customer as new owner
The Nature of Rewards	<p>a. Growing (the longer the loan term the money increases the interest rate)</p> <p>b. Early repayment will reduce interest. Late repayment will add interest. Timely repayment then the interest remains like the initial agreement</p>	<p>a. Margin size is fixed, and not related to time</p> <p>b. Early, late, or timely repayment does not change the margin amount</p>
Reward calculation	Interest % X Principal Debt	Margin % X Cost of Goods

Subject	Credit	<i>Murabahah</i>
The function of goods purchased with funds from the facility	Collateral/principal collateral	Representation of debt that can not be used as collateral/collateral facilities
The cost of providing facilities	Credit provision	-
Notary fees and collateral binding	Customer Charges	The parties, banks or Islamic financial institutions and customers
Fine for late repayments	Fine % X Remaining Payable	Nominal (not allowed in percentage)
Decision makers fines	Conventional banks or financial institutions unilaterally, of any size	The agreement at the beginning of the contract
Imposition of fines	All customers who are late paying installments	Only charged to customers who are financially capable
The accounting treatment for fines	As legitimate income of a Bank or a conventional financial institution (excluding credit and interest provisions)	Go to "the social fund" that would in time be distributed to the poor (economically weak groups)

THE ECONOMIC IMPACT OF ISLAMIC BANKING

Whereas the conventional economic sight focuses basically on the economic and financial aspects of operations, the Islamic economic sight focuses on the ethical, moral, social, and religious dimensions, to improve equality and justice which are the values of Islamic commandment and its practical application through the development of Islamic economics (Daly, S. & Frikha, M., 2016). Pappas, Ongena, Izzeldin, et al.'s (2017) study which was based on the Cox proportional hazard model using samples of 421 banks in 20 Middle and Far Eastern countries from 1995 to 2010 found that Islamic banks had a significantly lower risk of failure, based both unconditionally

and conditionally on bank-specific (microeconomic) variables as well as macroeconomic and market structure variables, than conventional commercial banks. Nevertheless, Haniffa and Hudaib's (2007) longitudinal survey indicated that only one Islamic Banks (IBs) from seven surveyed to be above average the overall mean *Ethical Identity Index (EII)*. Furthermore, they found the largest discrepancy related to the following dimensions: commitments to society; disclosure of corporate vision and mission; contribution to and management of *zakah*, charity and benevolent loans; and information regarding top management.

Chowdhury, Haque, Alhabshi, and Masih's (2016) study using samples from 55 full-fledged Islamic Banks from 24 countries found that the socioeconomic factors particularly political stability and investment license had positive and significant relation to the Islamic bank performance. Mertzanis (2017) examined 36.135 firms in 41 Islamic countries then found that firm age, size, sector of activity, export and ownership status of firms appeared to be strong predictors of access to finance in low-income countries, while only a few of these determinants were found to be significant in high-income Islamic countries. Furthermore, country-level indicators that measure economic development, income distribution, and financial infrastructure also affect the role of firm-specific characteristics on financial constraints.

The Islamic Banking sector is growing at about 10–15% per year, especially with approximately 1.5 billion Muslims worldwide, including numerous oil and gas producing nations, the Islamic banking growth potential is terrific (Jaufeerally, 2012). Although the Islamic banking growth potential is terrific, however based on The Global Financial Development Report 2014, Islamic microfinance scope are not even reach out the 1 % of the poor people in the Organization of Islamic Countries (OIC). Furthermore, not even 10 % of the poor people in 26 out of 36 countries are under the microfinance scope so it presents a challenge as well as an opportunity for Islamic banking to increase their span. Although the percentage is very small but the study of Yaumidin, Suhodo, Yuniarti, and Hidayatina (2017) showed that women involved in the Islamic microfinance escalated their position within the household by means of access to independent income, control over savings and credit usage, and ability to bring productive asset to

household economy. Thus, we can conclude that the Islamic microfinance gives significant socio-economic impact for the women.

CONCLUSION

The fundamental difference between conventional banking and Islamic banking is the conventional banking in running its operations based on economic democracy and the principle of prudence, while Islamic banking is based on the principles of Islamic law, economic democracy, and the precautionary principle. In the dual banking system that is implemented in Indonesia, both conventional banking and Islamic banking have an equal juridical position as an agent of development and as a financial intermediary institution.

REFERENCES

- Alaabed, A., Masih, M. & Mirakhor, A. (2016). Investigating Risk Shifting In Islamic Banks In The Dual Banking Systems Of OIC Member Countries: An Application Of Two-Step Dynamic GMM. *Risk Management*, 18: 236. <https://doi.org/10.1057/s41283-016-0007-3>. DOI <https://doi.org/10.1057/s41283-016-0007-3>. Palgrave Macmillan UK. Print ISSN1460-3799. Online ISSN1743-4637
- Ali M., and Azmi W. (2017). *Impact of Islamic Banking on Economic Growth and Volatility: Evidence from the OIC Member Countries*. In: Alam N., Rizvi S. (eds) *Islamic Banking*. Palgrave CIBFR Studies in Islamic Finance. Palgrave Macmillan, Cham. DOI https://doi.org/10.1007/978-3-319-45910-3_2. Print ISBN978-3-319-45909-7. Online ISBN 978-3-319-45910-3
- Antonio, Muhammad Syafii (2001). *Bank Syariah Dari Teori ke Praktik*. Jakarta: Gema Insani Press, Jakarta.
- Article 1 paragraph 7 of Rule No. 21 The Year 2008 on Islamic Banking
- Article 1 point 10 of Rule No. 21 The Year 2008 on Islamic Banking
- Ascarya, Karim A.A., Rahmawati S., Muqorrobin M., Wiranatakusuma D.B. (2016). *Conceptual Proposal for Future Macroprudential Framework Under a Dual Financial System in Indonesia*. In: Zulhibri M., Ismail A.,

-
- Hidayat S. (eds) *Macroprudential Regulation and Policy for the Islamic Financial Industry*. Springer, Cham. DOI https://doi.org/10.1007/978-3-319-30445-8_3. Print ISBN978-3-319-30443-4. Online ISBN 978-3-319-30445-8
- Chowdhury M.A.F., Haque M.M., Alhabshi S.O., Masih A.M.M. (2016). *Socioeconomic Development and Its Effect on Performance of Islamic Banks: Dynamic Panel Approaches*. In: Zulkhibri M., Ismail A., Hidayat S. (eds) *Macroprudential Regulation and Policy for the Islamic Financial Industry*. Springer, Cham. DOI https://doi.org/10.1007/978-3-319-30445-8_14. Print ISBN978-3-319-30443-4. Online ISBN978-3-319-30445-8
- Čihák, M. & Hesse, H. (2010). Islamic Banks and Financial Stability: An Empirical Analysis. *Journal of Financial Services Research*, 38: 95. <https://doi.org/10.1007/s10693-010-0089-0>. DOI <https://doi.org/10.1007/s10693-010-0089-0>. Publisher Name Springer US. Print ISSN0920-8550. Online ISSN1573-0735
- Cupian, Abduh M. (2016). *Competitive Condition and Market Power of Islamic and Commercial Conventional Banks in Indonesia*. In: Zulkhibri M., Ismail A., Hidayat S. (eds) *Macroprudential Regulation and Policy for the Islamic Financial Industry*. Springer, Cham
- Daly, S. & Frikha, M. (2016). Islamic Finance: Basic Principles and Contributions in Financing Economic. *Journal of The Knowledge Economy*, 7: 496. <https://doi.org/10.1007/s13132-014-0222-7>. DOI <https://doi.org/10.1007/s13132-014-0222-7>. Springer US. Print ISSN1868-7865. Online ISSN1868-7873. DOI https://doi.org/10.1007/978-3-319-30445-8_5. Print ISBN 978-3-319-30443-4. Online ISBN 978-3-319-30445-8
- Djumhana, Muhammad (2000). *Hukum Perbankan di Indonesia*. Bandung: Citra Aditya Bakti
- Haniffa, R. & Hudaib, M. (2007) Exploring the Ethical Identity of Islamic Banks via Communication in Annual Reports. *Journal of Business Ethics* 76: 97. <https://doi.org/10.1007/s10551-006-9272-5>. DOI <https://doi.org/10.1007/s10551-006-9272-5>. Springer Netherlands. Print ISSN0167-4544. Online ISSN1573-0697

- Jaufeerally, R.Z. (2012). Islamic Banking and Responsible Investment: Is a Fusion Possible?. In: Vandekerckhove W., Leys J., Alm K., Scholtens B., Signori S., Schäfer H. (eds) *Responsible Investment in Times of Turmoil. Business Ethics*, vol 31. Springer, Dordrecht. DOI https://doi.org/10.1007/978-90-481-9319-6_9. Print ISBN 978-94-007-4070-9. Online ISBN 978-90-481-9319-6
- Levent A., Ustaoglu M., Tatoğlu F.Y. (2017). *A Quantitative Reassessment of the Dual Banking–Growth Nexus in Indonesia: Comparative Analysis*. In: USTAOĞLU M., İNCEKARA A. (eds) *Balancing Islamic and Conventional Banking for Economic Growth*. Palgrave Macmillan, Cham. DOI https://doi.org/10.1007/978-3-319-59554-2_6. Print ISBN 978-3-319-59553-5. Online ISBN 978-3-319-59554-2
- Mertzanis, C. (2017). *Financial Intermediation, Development, and Access to Finance in an Islamic Environment*. In: Zulkhibri M., Ismail A. (eds) *Financial Inclusion and Poverty Alleviation. Palgrave Studies in Islamic Banking, Finance, and Economics*. Palgrave Macmillan, Cham. DOI https://doi.org/10.1007/978-3-319-69799-4_2. Print ISBN 978-3-319-69798-7. Online ISBN 978-3-319-69799-4
- Muyassaroh, Siti (2008). Analisis Faktor-Faktor yang Mempengaruhi Kelengkapan Pengungkapan Sukarela Laporan Keuangan pada Perusahaan yang Go Public di BEI. *Skripsi Tidak Dipublikasikan*. Fakultas Ekonomi Universitas Diponegoro Semarang.
- Otoritas Jasa Keuangan (2018). Perbankan Syariah <https://www.ojk.go.id/id/kanal/syariah/tentang-syariah/Pages/Perbankan-Syariah.aspx>. Accessed at 31 st Mei 2018.
- Otoritas Jasa Keuangan (2018). Statistik Perbankan Syariah. <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Documents/Pages/Statistik-Perbankan-Syariah---Maret-2018/SPS%20Maret%202018.pdf>. Accessed at 31st Mei 2018.
- Pappas, V., Ongena, S., Izzeldin, M. et al. (2017). A Survival Analysis of Islamic and Conventional Banks. *Journal of Financial Services Research*, 51: 221. DOI <https://doi.org/10.1007/s10693-016-0239-0>. DOI <https://doi.org/10.1007/s10693-016-0239-0>. Springer US. Print ISSN0920-8550. Online ISSN1573-0735

-
- Sadique, Muhammad Abdurrahman (2009). Profit and Loss Allocation among Islamic Bank and Client Partner in Equity Financing: Practice, Precepts and Alternatives. *Jurnal King Abdul Azis University*, Saudi Arabia, Vol 22 No. 1, page 29-52
- Salim D.P. (2015). *Islamic Finance*. In: The Transnational and the Local in the Politics of Islam. Springer, Cham. DOI https://doi.org/10.1007/978-3-319-15413-8_3. Print ISBN 978-3-319-15412-1. Online ISBN 978-3-319-15413-8
- Şimşek H., Bayındır S., Ustaoglu M. (2017). *Dual Banking Systems' Dynamics and a Brief Development History of Islamic Finance in Select Emerging Islamic Economies*. In: USTAOĞLU M., İNCEKARA A. (eds) Balancing Islamic and Conventional Banking for Economic Growth. Palgrave Macmillan, Cham. DOI https://doi.org/10.1007/978-3-319-59554-2_2. Print ISBN 978-3-319-59553-5
- Sumarti, Novriana, Hayati, Millati M., Cahyani, Ni Luh P.A., Wahyudi, Robby R., Trisanti, Dwi P., and Meylani, Reny (2017). *4th IEEE International Conference on Engineering Technologies and Applied Sciences (ICETAS)*. **Date of Conference:** 29 Nov.-1 Dec. 2017. **Date Added to IEEE Xplore:** 01 February 2018. **INSPEC Accession Number:** 17559236. **DOI:** [10.1109/ICETAS.2017.8277873](https://doi.org/10.1109/ICETAS.2017.8277873). **Publisher:** IEEE. **Conference Location:** Salmabad, Bahrain. Online ISBN 978-3-319-59554-2
- Usmani, Muhammad Taqi (2002). *An Introduction To Islamic Finance*. Karachi: Maktaba Ma'arifur Qur'an
- Weill, L. (2011). Do Islamic Banks Have Greater Market Power?. *Comparative Economic Studies*, 53: 291. <https://doi.org/10.1057/ces.2011.1>. DOI <https://doi.org/10.1057/ces.2011.1>. Palgrave Macmillan UK. Print ISSN 0888-7233. Online ISSN 1478-3320
- Widodo, Sugeng (2014). *Moda Pembiayaan Lembaga Keuangan Islam*. Yogyakarta: Kaukaba
- Yaumidin U.K., Suhodo D.S., Yuniarti P.I., Hidayatina A. (2017). *Financial Inclusion for Women: Impact Evaluation on Islamic Microfinance to Women's Empowerment in Indonesia*. In: Zulkhibri M., Ismail A. (eds) Financial Inclusion and Poverty Alleviation. Palgrave Studies in Islamic Banking, Finance, and Economics. Palgrave Macmillan, Cham. DOI

https://doi.org/10.1007/978-3-319-69799-4_3. Print ISBN 978-3-319-69798-7. Online ISBN 978-3-319-69799-4

Zulhibri M., Naiya I. (2016). *Macroprudential Policy and Regulation in a Dual Banking System: An Exploratory Perspective*. In: Zulhibri M., Ismail A., Hidayat S. (eds) *Macroprudential Regulation and Policy for the Islamic Financial Industry*. Springer, Cham. DOI https://doi.org/10.1007/978-3-319-30445-8_1. Springer, Cham. Print ISBN 978-3-319-30443-4. Online ISBN 978-3-319-30445-8

CONTRIBUTORS

M. Fuad Hadziq was born in Banyuwangi, March 27, 1984. He obtained a bachelor's degree at the Syarif Hidayatullah State Islamic University. The master program was taken at the University of Indonesia in 2012. The author is actively involved in various organizations such as: Permadi, PMII, FOSSEI and IAEI. He has work experience from several agencies such as: Bank Permata; City Bank, UIN, UMJ and University of Mercubuana. The author has expertise in the field of Islamic banking and Islamic fiqh. Since joining as a teaching staff in the FE-UT, in 2015, the author began actively conducting research and community service activities.

Yosi Mardoni Born in Padang City, March 30, 1984. He obtained a Bachelor of Economics degree in the Department of Economics, Andalas University in 2007 and Master of Science in the Postgraduate Program at the Center for Middle Eastern and Islamic Studies at the University of Indonesia (PSKTTI-UI) in 2012. He is currently active as a lecturer in the Open University Islamic Economics Study program. He is currently active in various research activities related to Islamic Economics and community engagement programme. Some research results are published in indexed national and international journals. Some books that have been published are: (1) Zakat Micro-Macro Perspective Research Approach (2) Baitul Mal Wa Tamwil A Theoretical Review.

Any Meilani was born in Bandung, May 9, 1963. A bachelor's degree was obtained from the Indonesian Cooperative Management Institute (IKOPIN) in 1987 and obtained a Master of Science degree in 2008 from the University of Indonesia (UI). The author of this Taurus star, the fourth child of nine siblings was quite active as a speaker at various seminars. At this time the author carried out the duties as Deputy Dean of Finance and General Affairs at the Faculty of Economics, Open University.

Afrida Puritama is a junior lecturer at Yogyakarta State University with a functional position as expert assistant. He is a graduate of the Solo State University and a master at Gajah Mada University. His area of expertise is

the accounting system and accounting information system. In addition to teaching, he is also a writer in several journal articles on auditing, and business ethics.

Rini Efrianti is a senior lecture at baturaja university with a functional position as a lecturer. He currently serves as Deputy Dean 3 at the baturaja university. He has taken a bachelor and master program at the Sriwijaya University. While his scientific specialization in the field of economic development. She teaches several courses such as development economics, regional finance, and international economics. Currently he is actively researching financial performance, economic growth. In addition to researching, as a lecturer he was also active in conducting community service in South Sumatra.

Lutfi Ibnu Tsani is currently a master's degree student at the last semester of Diponegoro University who has completed his thesis. He took a development economics study program. His research discusses about investment in the industry.