



EFFICIENCY OF BAITUL MAAL WA TAMWIL AS
ISLAMIC MICROFINANCE INSTITUTION IN
INDONESIA

BY

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ABSTRACT

The primary objectives of most microfinance programmes are poverty alleviation and financial sustainability. By providing financing, Microfinance Institutions (MFI) aims to encourage the poor to become economically independent. Islamic microfinance offers financing schemes based on *shariah* principles which are different to conventional microfinance. Conventional microfinance deals with interest (*riba*) which is not allowed in Islam. Indonesia with the Muslim biggest population in the world has established the *Baitul Maal wa Tamwil* (BMT) which represents significant growth of Islamic MFIs in the country. Islamic MFI promotes Islamic values in their financial services and also optimises the charitable funds to help the needy. The effort to sustain and improve the quality life of the poor is the main objective of BMT. However, many studies show that this institution has inefficiencies on its operations, represented by the lack of expertise in the field of management. Hence, this study attempts to analyse the efficiency of BMT with the following objectives: first, to examine the efficiency of BMT as Islamic MFI in Indonesia; second, to investigate the influencing determinant factor of BMTs efficiency in Indonesia; and third, to explain issues related to BMT's efficiency in Indonesia. Both primary and secondary data are used to achieve the objectives. The Data Envelopment Analysis (DEA) approach is used to measure the technical efficiency of BMT, while determinant factors that influence BMT efficiency are measured by multiple regression analysis. This study, then, uses a case study research method to find the issues affecting BMT's efficiency. The samples for DEA method are gathered from 57 BMTs in three provinces with highest poverty rate and highest number of BMT namely, West Java, East Java and Central Java for the period of 2009 to 2011. Meanwhile, with case study research method, the study selects nine BMTs which represent the following criteria: most efficient BMTs, efficient BMTs and least efficient BMTs. The results show that the main source of technical inefficiency is pure technical inefficiency. It may indicate the lack of managerial system and resources in most BMTs. The study also finds a positive effect of profitability on technical efficiency, whereas, size and capital negative affect efficiency. The study finds that the main issue of BMTs is not related with the size or capital but rather human capital and managerial issues. Hence, focusing on the improvement of human capital and managerial system of BMTs is more important than increasing their size or capital. The study provides a significant contribution on how BMT, as an Islamic financial intermediary, can improve its efficiency. Moreover, the study provides policy recommendations for the Authority of Financial Services, the Department of Cooperatives and the BMT Centres in Indonesia concerning the development and enhancement of BMT roles in the country by increasing the quality of BMT's human capital. Therefore, BMT may support the government mission to achieve its socio economic objectives. The findings may be relevant and applicable to Islamic MFI not only in Indonesia, but in other Muslim countries and for further empirical research in this area.

ملخص البحث

إن أهم ما يستهدف إليه معظم برامج التمويل الأصغر هو التخفيف من حدة الفقر والاستدامة المالية. والمؤسسات التمويلية الأصغر ترغب في تشجيع الفقراء على الاعتماد الذاتي الاقتصادي من خلال تمويلاتها. فيقدم التمويل الإسلامي الأصغر مخططات تمويلية قائمة على مبادئ الشريعة الإسلامية التي تختلف عن التمويل التقليدي الأصغر. أما التمويل التقليدي للمشاريع الصغيرة فهي توافق الفائدة (أي الربا) المحرمة في الإسلام. وإندونيسيا باعتبارها أكبر السكان المسلمين عددا في العالم أنشئت مؤسسات مالية تسمى بيت المال والتمويل التي مثلت أعلى نسبة للنمو بين المؤسسات التمويلية الإسلامية الأصغر في البلاد. ومع ذلك، فقد أظهرت العديد من الدراسات أن هذه المؤسسات تغيب فيها الإدارة. ومن ثم تستهدف هذه الدراسة إلى ما يلي: أولاً: اختبار الكفاءة لدى بيت المال والتمويل بكونها مؤسسة تمويلية إسلامية صغيرة في إندونيسيا. ثانياً: البحث عن العوامل المحددة التي تؤثر على كفاءة بيت المال والتمويل في إندونيسيا. وثالثاً: شرح القضايا التي ترتبط بكفاءة بيت المال والتمويل في إندونيسيا. وتستخدم الدراسة البيانات الأولية والثانوية، وتنتهج نهج تحليل محفظة البيانات (DEA) لقياس الكفاءة التقنية لدى بيت المال والتمويل، بينما يتم قياس العوامل المحددة المؤثرة على كفاءة بيت المال والتمويل عن طريق تحليل الانحدار المتعدد. وعلاوة على ذلك، يتم تحليل القضايا المتعلقة بكفاءة بيت المال والتمويل بنهج دراسة الحالة. وتم جمع العينات لتحليل محفظة البيانات (DEA) من 57 بيت المال والتمويل من ثلاث محافظات ذات أكبر عدد من السكان الفقراء وأكبر عدد من مؤسسات بيت المال والتمويل المشغلة. وهي: جاوا الغربية، وجاوا الشرقية، وجاوا الوسطى، للفترة بين 2009 إلى 2011. وفي الوقت نفسه، مع دراسة هذه الحالة، تختار الدراسة تسعة مراكز لبيت المال والتمويل التي تمثل المعايير التالية: بيوت المال والتمويل الأكثر كفاءة، وبيوت المال والتمويل ذات الكفاءة وبيوت المال والتمويل الأقل كفاءة. وأشارت النتائج إلى أن السبب الرئيس لانعدام الكفاءة التقنية هو انعدام الكفاءة التقنية البحتة، وهذا قد يعود إلى غياب النظام الإداري والموارد بمعظم مؤسسات بيت المال والتمويل، كما أشارت إلى وجود التأثير الإيجابي للربحية على الكفاءة التقنية، وكذلك الحجم ورأس المال يؤثران تأثيراً سلبياً على الكفاءة. وأيدت الدراسة أن القضية الرئيسية لدى بيت المال والتمويل لا تتعلق بالحجم أو برأس المال أكثر ما يكون تعلقها برأس المال البشري والقضايا الإدارية. ومن هنا، يكون التركيز على تطوير رأس المال البشري والموارد الإدارية لدى مؤسسات بيت المال والتمويل أكثر أهمية بالنسبة لزيادة الحجم أو رأس المال. تقدم هذه الدراسة إسهاماً كبيراً في كيفية تحسين كفاءة مؤسسات بيت المال والتمويل بكونها الوسيط المالي الإسلامي. وعلاوة على ذلك، تقدم الدراسة توصيات لسلطات الخدمات المالية، ووزارة الجمعيات التعاونية ومؤسسات بيت المال والتمويل الإندونيسية لتركيز الاهتمام بشكل أكثر وتعزيز أدوار مؤسسات بيت المال والتمويل في البلاد، وبالتالي، فمن المتوقع تعزيزها لمهام الحكومة في تحقيق الأهداف الاجتماعية والاقتصادية. وقد تكون هذه النتائج ذات الصلة والقابلة للتطبيق على مؤسسات التمويل الأصغر الإسلامي ليست في البلاد الإندونيسية فحسب بل وغيرها من البلاد المسلمة، وكما يتوقع أيضاً استخدامها لبحوث تجريبية أخرى في المجال نفسه.

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DECLARATION

I hereby declare that this thesis is the result of my own investigation, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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*This thesis is dedicated to my lovely husband, children and parents for laying the
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TABLE OF CONTENTS

Abstract	ii
Abstract in Arabic	iii
Approval Page.....	iv
Declaration	v
Copyright	vi
Dedication	vii
Acknowledgements.....	viii
List of Tables	xiii
List of Figures	xiv
List of Abbreviations	xv
CHAPTER ONE: INTRODUCTION	1
1.1 Research Background	1
1.2 Research Problem	6
1.3 Research Questions.....	8
1.4 Research Objectives.....	8
1.5 Significance of the Study.....	9
1.6 Contribution of Study	9
1.6.1 Contribution to the Body of Knowledge.....	9
1.6.2 Contribution to Managerial and Practical Implications	10
1.7 Structure of the Study	10
CHAPTER TWO: MICROFINANCE AND ISLAMIC MICROFINANCE.....	12
2.1 Introduction.....	12
2.2 Microfinance.....	12
2.2.1 The Theory of Microfinance	14
2.2.1.1 Supply Lending.....	16
2.2.1.2 Imperfect Information Paradigm	17
2.2.1.3 Informal Credit Market.....	17
2.2.1.4 Savings of the Poor.....	18
2.2.2 Risk Mitigating Mechanism.....	18
2.2.3 Microfinance Models	21
2.2.4 Microfinance Programs and Products	24
2.2.5 Prior Studies on Microfinance	28
2.2.5.1 Group-Based and Individual Lending Contracts	28
2.2.5.2 MFIs across the World	30
2.3 Islamic Microfinance	34
2.3.1 Demand of Islamic Microfinance	34
2.3.2 The Principle of Islamic Microfinance	35
2.3.3 Islamic Microfinance Contract.....	38
2.3.4 Islamic Microfinance Models: Review of Islamic Microfinance Institutions in the World	42
2.3.4.1 Hodeibah Microfinance Program	42
2.3.4.2 Jabal al-Hoss the Village Banks	44
2.3.4.3 Mu'assasat Bayt Al Mal	45

2.3.4.4 Mosque-based Model	45
2.3.4.5 Islamic Financial Cooperative Concept.....	45
2.3.4.6 Amanah Ikhtiar Malaysia.....	46
2.4 Microfinance and Islamic Microfinance in Indonesia	47
2.4.1 Microfinance in Indonesia	47
2.4.2 Islamic Microfinance in Indonesia.....	49
2.5 Baitul Maal Wa Tamwil (BMT)	53
2.5.1 BMT Business Model	53
2.5.2 BMT Operation	60
2.5.3 BMT Financing Activities	62
2.6 Conclusion	70
CHAPTER THREE: A REVIEW OF STUDIES ON EFFICIENCY.....	72
3.1 Introduction.....	72
3.2 Measuring Organizational Performance	72
3.3 Theory of Efficiency.....	77
3.4 The Efficiency Measurement Techniques	82
3.5 Data Envelopment Analysis	89
3.5.1 Constant Return to Scale (CRS).....	91
3.5.2 Variable Return to Scale (VRS).....	92
3.6 Literature Review on Efficiency.....	92
3.6.1 Efficiency of Commercial and Islamic Banks Worldwide	93
3.6.2 Efficiency of Microfinance Institution.....	99
3.6.3 Efficiency of Islamic Microfinance Institutions	108
3.7 The Selection of Input and Output of DEA in MFIS.....	110
3.8 Conclusion	112
CHAPTER FOUR: RESEARCH METHODOLOGY	114
4.1 Introduction.....	114
4.2 Research Design	114
4.3 Sample Selection for BMT'S Efficiency.....	116
4.3.1 Sampling Method and Data Collection for Quantitative Analysis	116
4.3.2 Sampling Method and Data Collection for Qualitative Analysis	124
4.4 Types of Data.....	125
4.5 Research Method	126
4.5.1 Quantitative Analysis: Measuring BMT's Efficiency and Its Determinants.....	127
4.5.1.1 Efficiency Measurement Techniques	127
4.5.1.2 Determinants of BMT's Efficiency	132
4.5.1.3 Theoretical Framework	134
4.5.1.4 Hypotheses Development	136
4.5.2 Qualitative Analysis: Analyzing the Issues behind BMT Efficiency.....	139
4.5.2.1 Case Study Research	139
4.5.2.2 Data Analysis	141
4.6 Conclusion	143

CHAPTER FIVE: EFFICIENCY OF BMTS AND ITS DETERMINANTS.....	145
5.1 Introduction.....	145
5.2 Research Findings.....	145
5.2.1 Data Envelopment Analysis: Efficiency of BMTs	145
5.2.2 Determinants of BMT’s Efficiency.....	162
5.2.3 Result of Two-Stage DEA Method.....	163
5.2.4 Analyzing the Hypotheses	166
5.3 Conclusion	171
CHAPTER SIX: CASE STUDIES ON THE EFFICIENCY OF BMT	173
6.1 Introduction.....	173
6.2 Selection of BMT	173
6.3 Overview of Background and Islamic Microfinance Activities of Most - Efficient BMTS.....	175
6.3.1 BMT Berkah Madani	176
6.3.1.1 Overview and Background of BMT Berkah Madani	176
6.3.1.2 BMT Berkah Madani’s Islamic Microfinance Activities	178
6.3.2 BMT Bina Insan Mandiri.....	179
6.3.2.1 Overview and Background of BMT Bina Insan Mandiri	179
6.3.2.2 BMT Bina Insan Mandiri’s Islamic Microfinance Activities	181
6.3.3 BMT Dana Mandiri Syariah	183
6.3.3.1 Overview and Background of BMT Dana Mandiri Syariah.....	183
6.3.3.2 Islamic Microfinance Activities of BMT Dana Mandiri Syariah.....	184
6.4 Overview of Background and Islamic Microfinance Activities of Efficient BMTS	185
6.4.1 BMT Mughni Madani	186
6.4.1.1 Overview and Background of BMT Mughni Madani	186
6.4.1.2 BMT Mughni Madani’s Islamic Microfinance Activities	187
6.4.2 BMT Binama.....	189
6.4.2.1 Overview and Background of BMT Binama.....	189
6.4.2.2 BMT Binama’s Islamic Microfinance Activities	191
6.4.3 BMT Barrah	192
6.4.3.1 Overview and Background of BMT Barrah	192
6.4.3.2 BMT Barrah’s Islamic Microfinance Activities.....	194
6.5 Overview of Background and Islamic Microfinance Activities of Least - Efficient BMTS	196
6.5.1 BMT Huwaiza.....	197
6.5.1.1 Overview and Background of BMT Huwaiza.....	197
6.5.1.2 BMT Huwaiza’s Islamic Microfinance Activities.....	199
6.5.2 BMT ‘Ibaadurrahman	201
6.5.2.1 Overview and Background of BMT ‘Ibaadurrahman.....	201

6.5.2.2 Islamic Microfinance Activities of BMT ‘Ibaadurrahman	203
6.5.3 BMT Kartini.....	205
6.5.3.1 Overview and Background of BMT Kartini.....	205
6.5.3.2 Islamic Microfinance Activities of BMT Kartini	207
6.6 Issues of BMT Efficiency	208
6.6.1 Issues of Most Efficient BMTs	208
6.6.1.1 BMT Berkah Madani	208
6.6.1.2 BMT Bina Insan Mandiri	211
6.6.1.3 BMT Dana Mandiri Syariah	214
6.6.2 Issues of Efficient BMTs	216
6.6.2.1 BMT Mughni Madani	216
6.6.2.2 BMT Binama	219
6.6.2.3 BMT Barraah.....	222
6.6.3 Issues of Least Efficient BMT	224
6.6.3.1 BMT Huwaiza	224
6.6.3.2 BMT ‘Ibaadurrahman.....	227
6.6.3.3 BMT Kartini	230
6.7 Analysis of BMT Issues.....	232
6.7.1 Overview of BMTs Backgrounds and Issues.....	232
6.7.2 Analysis of Issues.....	241
6.7.2.1 Vision and Missions	241
6.7.2.2 Management	243
6.7.2.3 Business Model.....	244
6.7.2.4 Types of financing	246
6.7.2.5 Marketing and Promotion.....	248
6.7.2.6 Non-Performing Financing (NPF) and Financial Management	249
6.7.2.7 Human Resource Management.....	251
6.8 Conclusion	256

CHAPTER SEVEN: CONCLUSION AND POLICY

RECOMMENDATION	259
7.1 Introduction.....	259
7.2 Main Findings: Efficiency of BMTS as Islamic Microfinance Institutions in Indonesia	259
7.3 Efficiency of BMTS in Indonesia: The Way Forward	267
7.3.1 Department Cooperative of Indonesia	268
7.3.2 Shariah Cooperative Incubation Center (INKOPSYAH) and other Institutions at BMT Centers	269
7.4 Policy Recommendations	271
7.4.1 Policy Recommendation for BMT	272
7.4.2 Policy Recommendations for Government	273
7.5 Contributions of the Study.....	277
7.6 Limitations of the Study and Suggestions for Future Studies	280
REFERENCES.....	283
APPENDIX 1.....	295

LIST OF TABLES

Table 1.1	Interest Rates of Microfinance Institutions (MFIs) in Several Countries	2
Table 2.1	Models of Microfinance	24
Table 2.2	Comparison between Conventional Bank & Microfinance Institution	25
Table 2.3	Differences Between Conventional and Islamic MFIs	40
Table 4.1	The Extent of BMTs in Indonesia Based on Assets	118
Table 4.2	The Number and the Percentage of Poor People in Indonesia, 2011	120
Table 4.3	Number of BMTs in Selected Regions	122
Table 4.4	The List of BMTs as Sample Selection	123
Table 4.5	Inputs and Outputs of the Study	130
Table 4.6	Descriptive of Dependent Variables	133
Table 4.7	Description of Variable Used as Determinants of Efficiency	134
Table 5.1	Technical Efficiency of BMTs: 2009-2011	148
Table 5.2	DEA Technical Efficiency of BMTs (Constant Return To Scale) For Years 2009-2011	151
Table 5.3	DEA Pure Technical Efficiency of BMTs	154
Table 5.4	DEA Scale Efficiency of BMTs	157
Table 5.5	Summary of Average DEA Efficiency of BMT from 2009 – 2011	161
Table 5.6	Descriptive Statistics of Variables	164
Table 5.7	Correlation Analysis among Variables	165
Table 5.8	The Ordinary Least Square Result of BMT's Determinants	168
Table 6.1	Summary of Financial Service Activities of BMTs	235
Table 6.2	The Summary of Main Issues of BMTs	238

Table 6.3	The Score Categories of BMT Issues	252
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LIST OF FIGURES

Figure 2.1	Structure of the Microfinance Institutions in Indonesia (Seibel, 2007)	49
Figure 2.2	The Operational Principle of BMT (Suharto, 2011)	58
Figure 2.3	BMT Establishment Process (PINBUK, 2008b)	62
Figure 2.4	Cash Flow and Financial Management of BMT (PINBUK, 2008a)	64
Figure 2.5	The Beginning Financing Process in BMT	68
Figure 3.1	Categories of the Performance Measures (Carton and Hofer, 2006)	74
Figure 3.2	Production frontiers and Technical Efficiency (Coelli, et al., 2005)	77
Figure 3.3	Overall, Technical, and Allocative Efficiency (Coelli et al., 2005)	81
Figure 3.4	Theory of Efficiency (Ascarya and Yumanita, 2009)	85
Figure 4.1	Theoretical Framework	135
Figure 4.2	The Expected Relationship between Independent Variables and Dependent Variables (Source: Author's own)	138

LIST OF ABBREVIATIONS

AA	Asset Approach
ADB	Asian Development Bank
AE	Allocative Efficiency
AIM	Amanah Ikhtiar Malaysia
AO	Account Officer
BAAC	Bank for Agriculture and Agricultural Cooperatives
BCC	Banker, Charnes and Cooper
BM	Baitul Maal
BT	Baitut Tamwil
BMM	Baitul Maal Muamalat
BMT	Baitul Mal wa Tamwil
BMT BM	BMT Berkah Madani
BMT BN	BMT Binama
BMT BIM	BMT Bina Insan Mandiri
BMT BR	BMT Barrah
BMT DMS	BMT Dana Mandiri Syariah
BMT HZ	BMT Huwaiza
BMT IR	BMT 'Ibaadurrahman
BMT KR	BMT Kartini
BMT MM	BMT Mughni Madani
BPRs	Bank Perkreditan Syariah
BRAC	Building Resources Across Communities
BRI	Bank Rakyat Indonesia
BUS	Bank Umum Syariah
CE	Cost Efficiency
CRS	Constant Return to Scale
CGAP	Consultative Group to Assist the Poor
CU	Credit Union
DCI	Department Cooperative Indonesia
DEA	Data Envelopment Analysis
DFA	Distribution Free Approach
DMU	Decision Making Unit
EE	Economic Efficiency
FO	Funding Officer
FDH	Free Disposal Hull Analysis
GB	Grameen Bank
IA	Intermediation Approach
ICFA	Islamic Cooperative Finance
INKOPSYAH	Induk Koperasi Syariah
IT	Information Technology
KJKS	Koperasi Jasa Keuangan Syariah
LAS	Natural Logarithm of Asset
LCAP	Natural Logarithm of Capital
LPRO	Natural Logarithm of Profitability
MCCA	Muslim Community Co-operatives

ME	Microenterprises
MENA	Middle East and North African
MFI	Microfinance Institution
MIX	Microfinance International Exchange
NGO	Non Government Organization
NPF	Non Performing Financing
NPL	Non Performing Loans
OE	Overall Efficiency
OJK	Otoritas Jasa Keuangan
OTE	Overall Technical Efficiency
OLS	Ordinary Least Square
PA	Production Approach
PE	Profit Efficiency
PBMT	Perhimpunan Baitul Maal wa Tamwil
PLP	Parametric Linear Programming
PINBUK	Pusat Inkubasi Bisnis Usaha Kecil
PTE	Pure Technical Efficiency
RCDP	Rural Community Development Project
SE	Scale Efficiency
SFA	Stochastic Frontier Analysis
SHG	Self Help Group
SHU	Sisa Hasil Usaha
SME	Small and Medium Enterprises
TE	Technical Efficiency
TFA	Thick frontier Analysis
TFP	Total Factor Productivity
UCA	User Cost Approach
UNDP	United Nations Development Program
UUS	Unit Usaha Syariah
VAA	Value Added Approach
VRS	Variable Return to Scale

Common abbreviation

e.g	<i>(exempligratia)</i> for example
et al.	<i>(et alia)</i> : and others
etc.	and so fourth
i.e	that is
PBUH	Peace be upon him
SWT	Subhanallohu wa Ta'ala
vol.	volume

CHAPTER ONE

INTRODUCTION

1.1 RESEARCH BACKGROUND

Most developing countries in the world are facing poverty-related problems. The main cause of poverty is that the poor do not have access to financial services to improve their economic condition. Bank is one of the financial institutions that provides financial services – yet they often neglect poor customers and consider them as ‘unbankable’ due to their limited resources and conditions.

The Asian Development Bank or ADB (2004) defines poverty as a condition characterized by a lack of access to essential goods, services, assets and opportunities to which they should be entitled. It means that the poor need a tool to ease their consumption and increase their earning capacity to improve their standard of living. One way to help the poor to fight poverty is by providing them with financial assistance and services to enable them to participate actively in various economic opportunities.

In the last few years, microfinance has become an important component in reducing poverty, especially in developing countries. Microfinance is defined as the provision of a broad range of financial services such as deposits, loans, payment services, money transfers and insurance to poor and low-income households and microenterprises (ADB, 2004). Many studies have provided evidence that microfinance is an important and effective tool to eradicate poverty (Hasan and Alamgir, 2000; Zaman, 2004; Barr, 2005, Ahmed, 2009). Providing these financial services can assist the poor to establish or expand microenterprises (MEs) in the

informal sectors of economy and enhance their quality of life or release them from poverty (Widiyanto, 2007).

The objectives of most microfinance institutions (MFIs) are to achieve poverty reduction and financial sustainability (Nghiem et al., 2006; Ahmed, 2009; Qayyum and Ahmed, 2006). These two objectives represent the missions of MFIs; social and economic. To sustain, most MFIs charge high interest rates for microfinancing. The interest is calculated based on high transaction costs or default payment risk that could happen in financing the poor.

Table 1.1 Interest Rates of Microfinance Institutions (MFIs) in Several Countries

Microfinance Institution in Country	Interest Rate (per annum)
Bangladesh	20% - 35%
Cambodia	~ 45%
Nepal	18%-24%
India	20%-40%
Indonesia (BPRs, local-level microbanks)	28%-63%

Sources: Helms and Reille (2004)

Table 1.1 describes the interest rates charged by MFIs in several countries. High interest ranges from 20% per annum (MFIs in Bangladesh) to 63 % per annum by MFIs in Indonesia. As the basic principles of microfinance activity, MFIs offer small loans with high interest rates. The borrower is required to pay back the loan, including interest – regardless whether the business is successful or fail. Thus, all risks are handled by the borrowers.

On the other hand, microentrepreneurs have limited resources to expand in the economic sectors or to enhance their incomes. Charging high interest rates will be a burden for them, because it will not reduce the capital cost of microentrepreneurs

(Widiyanto, 2007). In fact, high interest rate is an obstruction to the development of MFI in the future. Mannan (2010) also argues that high interest rates bearing microcredit is not an answer for reduction of poverty, it just allows poverty to continue. Therefore, the establishment of Islamic MFI which is free from interest has become a necessity. Profit-sharing system as a mean to replace high interest rates is offered to share the risks between all parties involved.

Indonesia with the largest Muslim population in the world, also facing poverty. In 2011, the Center of Statistic Indonesia Bureau states that there are more than 30 million poor people or 12.5% of Indonesia population. But at the same time, there are approximately 55 million of small and medium enterprises (SMEs) or about 101 million active workforces in the country – as the main player in domestic economic activities. Muslim microentrepreneurs are the largest customer for microfinance program in the country, and is included in SME movement. The customer needs financial services which free from interest (read: *riba*).

In 1991, Indonesian government established the concept of Islamic Finance Institution to cater the needs of Muslim customers, especially Muslim microentrepreneurs who are expected to support the development of SMEs. Islamic finance institution comprises Islamic Commercial Bank and Banking Units, Rural Banks and Financial Cooperatives. Rural Banks and Financial Cooperatives assist and accommodate SME by providing microfinancing. It involves changing the standard of living of the people in rural areas by increasing their productivity and earning capabilities. There are very few numbers of Islamic MFI source in Indonesia that cater the needs of Muslims. Recently, the highest growth of Islamic microfinance institutions (Islamic MFI) in Indonesia is Baitul Maal wa Tamwil (BMT).

Islamic Financial Cooperative or BMT is an Islamic MFI, established by individual or group initiatives to help micronepreneurs as a strategy for eradicating rural poverty (Kholis, 2009). BMT divides its role into two functions. The functions that represent the missions of BMT are social and business. First, the social mission established by Baitul Maal is collecting and distributing charity funds to the poor as the main objective (Zakat, Infaq, Shodaqoh). Second, Baitut Tamwil is based on commercial or economic activities, upon which the funds are being distributed for productive activities. In addition, Baitut Tamwil also supports saving activities as part of the business in providing financial services to the poor or MEs in economic activities.

Several studies have been devoted to investigate the impact of BMT on poverty alleviation. Amalia (2009) finds that earning capacity of the poor is increased after they joined BMT as members. Adnan et al. (2003) finds that 83% of BMT do not offer only financial products, but also support real products such as trading, agriculture and small and home industry. It means that BMT do not only reduce poverty, but also develop the microenterprises.

Just like conventional microfinance, the argument as to whether or not the BMT have been able to positively impact the lives of the poor is still open to debate. As such, rather than attempting to prove impact which may likely also result in conclusive or opposing argument, it may be more useful to assess the ways through which BMT operation can be enhanced. In this case, the analysis of efficiency of BMT in Indonesia becomes important.

Efficient BMT should be able to fulfil its duty accountably and provide more positive impact. Instead, any form of inefficiency and ineffectiveness should be improved or eliminated to reduce obstacles in achieving BMT mission. Therefore,

measuring the efficiency of BMT is critical as it will encourage the productivity of BMT. As a result, in performing its role, more microentrepreneurs and poor can be reached, poverty can be eliminated, and at the same time, secure BMT position to be sustained in the future. These objectives are consistent and moving parallelly with dual objectives of MFI. Thus, the quality of responsibility towards financial sustainability and poverty alleviation can be achieved.

Widiyanto and Ismail (2007) explain that by increasing efficiency, it enables MFI to generate profits which will increase profit to be returned to investors, and that should encourage them to invest in MFI. Furthermore, they state that higher retained earnings will enable MFI to increase its capital internally and, therefore, it can reach more microentrepreneurs and sustain its operation. Sedzro and Keita (2009) also argue that study on efficiency is important to identify factors which is most likely to influence the performances of MFIs and to know whether MFI perform well and may survive autonomously in the long run.

There are several research articles on measuring the efficiency of microfinance institutions (MFIs) over the world. Most of them use DEA method to measure efficiency and they cover a sample period of two to five years. Among others are Qoyyum and Ahmad (2006), Sedzro and Keita (2009), Nghiem et al. (2006) and Nieto et al. (2007). Measuring efficiency is one of the indicators to measure the performance of an organization, whether it is public and non-public sectors or profit and non-profit organization.

One of objectives of this study is to support previous findings and to fill up the lacks in the literature and empirical researches by analysing the efficiency of BMT. Recently, there are only few studies that explore the efficiency of BMT in Indonesia, including Widiyanto and Ismail (2007), Ali (2009) and Akbar (2010) that find BMT

efficiency is still relatively low and lack of performance. The lack of efficiency on its operation may directly undermine BMT in attaining their desired socio economic objectives.

Different from the existing studies that only focus to analyse BMT in one area, this study attempts to analyse efficiency of BMTs from three different areas in Indonesia. The selection of area represents the role of BMT in serving grass root group of people. Furthermore, this study is also supported by applying methodology and coverage some variables that is different from the previous studies. Supporting by case study method, the study is not only expected to contribute to the literature only, but may also enrich the previous researches by providing the information about how Islamic MFI may survive as a financial sustainability and reducing the poverty by managing their efficiency. The study also expects to create a standard for efficient Islamic MFI which may help the future research to analyse the performance of this institution. Therefore, after reviewing the literature, there is a need to examine to what extent BMT is efficient by analysing the efficiency of BMTs as Islamic MFI in Indonesia.

1.2 RESEARCH PROBLEM

As the largest Muslim population in the world, poverty in Indonesia still continue to rise as the number of the poor does not decrease significantly and people still experience lack of access to finance. BMT, as one of the Islamic MFI in Indonesia, may help the needs of poor Muslim and Muslim microentrepreneurs by providing microfinancing and assisting them to achieve a better life.

Despite the problems during the development of BMT, the opportunity to develop BMT is quite large. BMT may reach poor Muslim population as a means to

increase welfare. This is congruent with government mission to develop the function of Islamic MFI in Indonesia. In fact, BMT roles and tasks are also seen in developing human resources and supporting small and micro enterprises (SMEs) that can support economic activities.

On the other hand, the inefficiency of BMT as reported by previous studies, indicates sign of limited ability of BMT in running their activities. The main problem faced by BMTs is mostly due to the absence of good management (Adnan, et al., 2003; Widiyanto and Ismail, 2007; Ali, 2009; Akbar, 2010) and less understanding on the concepts of Islamic microfinance, especially in the rules of Islamic products and contracts (Amalia, 2009). The problems which posed as a challenge faced by BMT have affected the institution performance as a whole. The consequences include inefficiency and it may cause problems and difficulties relating to its sustainability. There is, therefore, a need to analyse BMT efficiency in order to assess its performance.

There is a public concern over the efficiency of BMT in Indonesia. During the growth of Islamic MFI, BMT's role is important for several stakeholders. Stakeholder is any group within or outside an organization that has a stake in the organization's performance (Daft, 2001). Stakeholders can be creditors, employees, suppliers or owners. The satisfaction of each group can be different depends on interest in the organization. In the case of BMT, stakeholders include board members, government institutions, BMT Centers and customers. They are concerned with financial and social performance of BMTs.

Hence, it is important to analyse the efficiency of BMT. There is also a need to examine influencing factors and the issues which affect BMT efficiency. Therefore, this study aims to analyse the efficiency of BMTs in order to find acceptable solutions

for stakeholders and at the same time to strengthen the sustainable growth of BMT as an Islamic MFI in Indonesia.

1.3 RESEARCH QUESTIONS

The objectives of this study is to examine the efficiency of BMT as Islamic MFI in Indonesia. The approach to understand this problem will be evaluated by using DEA (Data Envelopment Analysis). In addition, this study attempts to ascertain the sustainability of BMT activities. The following are the main research questions of this study;

1. To what extent BMT is economically efficient in disbursing Islamic microfinance in Indonesia?
2. What are the influencing factors of BMT efficiency?
3. What are the issues affecting BMT efficiency and under what conditions such institution is sustainable?

1.4 RESEARCH OBJECTIVES

The purpose of this study is to examine the efficiency of BMT as an Islamic MFI in Indonesia. According to the research questions, the objectives include:

1. To examine the efficiency of BMT in Indonesia and their performance over a period of three years (2009 – 2011).
2. To investigate the determinant factors that influence the efficiency of BMTs in Indonesia.
3. To explain the managerial issues related to BMTs efficiency in Indonesia and how they can be sustained in handling the issues.