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## Performance and Sharia Complience in Performance Measurements in the Province of Special Region of Yogyakarta

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### Abstract

Baitul Maal Wat Tamwil (BMT) is an institution that was established with the aim to promote and develop the implementation of the principles of Islam, sharia and its traditions into financial transactions and business which related to the members. The development of the BMT in province of DIY from 2013-2015 grows rapidly each year. The purpose of this research is to analyse the development of Sharia implementation performance and complience in Baitul Maal Wat Tamwil's performance measurement. The type of this research is descriptive-quantitative with BMT in Yogyakarta as subject. The sample in this research are mostly BMT in Yogyakarta. Results of this research prove that BMT has a clear market share and the community has a high financial performance and adhere to the Sharia.

Keywords: Baitul Maal Wat Tamwil (BMT), performance and sharia complience, BMT performance

### 1. Introduction

In Indonesia, Islamic economy development has taken a major part in empowering and moving the wheels of small, micro and medium enterprises economy (Muafi, 2017). This is proven by the interests of society that wants to be served by the syariah-based financial institutions. As it known that Baitul Maal Wat Tamwil (BMT) is the merger of the two institutions; (1) Baitul Maal institution which karikatif social-oriented with its task is raise funds from the community-based ZISWAF (Zakat, Infaq, Shodaqoh, and Wakaf), (2) Baitul Tamwil institutions which commercial-profit oriented by utilizing Shariah-based transactions as contained in canonical jurisprudence bookwhich has various modifications so it can be applied in an formalinstitution. The main principle of BMT is the prohibition of riba in various forms of transactions, conduct business activities and trade based on the acquisition of a legitimate profit, and give zakat. The BMT's growth in Yogyakarta is increases each year. Consecutive from 2013, 2014, 2015, there are 73 BMT, 81 BMT and 89 BMT(Centre of Islamic Cooperative, Yogyakarta, 2015).

Other important activity in BMT's the management is provide funds or financing which often called lending-financing. This term in a conventional finance known as credit.Beside have business functions, BMT is also given the mandate to run social functions by receiving zakat, infak, shadaqah and wakaf, and provided financing with the social alqord concept.Thus, BMT has two functions, such as business functions for profit and social functions to help people who have no financial ability (*dhuafa'*). BMT must be operate in accordance with the objectives of Shari'ah (maqassid Shari'ah) (Ridwan, 2014). *Model Performance* and *Sharia Complience* is very important in measuring Baitul Maal Wat Tamwil's performance so the performance of the BMT in province of DIY-improving and increasingly give the benefit to the community. The previous research which are focused on Islamic

banking in Indonesia has made trigger for researchers to do so. This research is not only relates to the financial aspects but also suitability of the Sharia.

## 2. Literature Review

In terms Baitul Maal is a financial institution of religious social-oriented activities which accommodate and distribute public funds in the form of zakat, infak, shodaqoh (ZIS) based on the provisions specified in the Qur'an and as-Sunnah. While the Baitul tamwil is a financial institution which mustering community's fund to the form of savings or deposits and transmit it back to the community in the form of financing based on sharia principles through a usual mechanism in World Bank (Ilmi, 2002). As a financial institution, BMT seek and obtain funds through partnership activities with the members, in the form of collecting, financing, and complementary services.While as a social institution, BMT perform social duties by collecting and distributing public funds in the form of zakat, infaq, shodaqoh (ZIS) without taking advantage. The basic principle of Islamic economic law is the prohibition against business practices which contain the elements of gambling (masyir), elements of uncertainty (gharar), elements of usury, the elements of bribery (ryswah), and the element of bathil. Therefore, as a way out in Islam, there are traditional Islamic contracts that can be implemented on the operational of sharia financial institutions and financing institutions based on sharia principles. Traditional Islamic covenants include but are not limited to deposit agreement, trade agreements, profit-sharing agreements, lease agreements, loan-borrowing agreements without interest and services agreement (Umam, 2002). According to Chapra (2001), the main purpose of sharia is to encourage human welfare and do not injure five things such as; faith (din), soul (nafs), intellect (aqli), descendants (nasl), and their property (mal). Islamic scholars (Ulama) have agreed that these five aspects have become the main objective.

Ridwan (2014) says that BMT has a vision such as trying to embody BMT to become an institution that is able to improve the worship quality of its members. In the broad sense, worshipness is worship that covers all aspects of life, so being able to be representatives of Allah SWT's servants, and welfare member's life in particular and society in general. It is intended that every BMT's activity able to actualize a fair and prosperous economy. While BMT's mission are to build and develop the economic order and civil society structure which is fair and prosperous-progress, alsoprosper-forward justice based on sharia and Allah SWT's ridho. In addition, Ridwan (2004) says that BMT have a purpose to overcome operational obstacles in the region or enhance the economic quality of enterprises for the members's welfare in particular and society in general. While in carrying out its activities, BMT has main principles that must be executed, i.e:

- 1. Faith and devotion to Allah SWT by implementing sharia principles and muamalah into real life
- 2. Integrity, which is spiritual and moral values that move and direct business ethics that is dynamic, proactive, progressive, fair, and noble.

- 3. Togetherness, prioritizing common interests above personal interests. In this case all the managers and members should build kinshipsense so that will grow a sense of mutual protection and support.
- 4. Togetherness, which is the unity between mindset, goal, and attitude of all of BMT's elements such as the manager and the board.
- 5. Independence, which is not depend on donation but BMT must be proactive to raise funds from the community.
- 6. Professionalism, which is BMT must have high morale based on faith.
- 7. Istiqomah, which is BMT must consistent and always going concern.

### **BMT Operational Principles**

- 1. Legally, BMT include on cooperative, but the operational system is not much different from Sharia banks so that products that grow on BMT same with sharia bankingproducts.
- 2. BMT works with professionalism, maintaining trust and honesty, and maintaining good relationships with customers or employees like a family so that the optimistic feeling to achieve of the BMT economic success, employees, and customers will be realized and gain blessings of Allah SWT because ofIslamic values which we cultivate in ourselves when running the BMT program.
- 3. In general, to run the operational functions, BMT products can be classified into four things, such as: funding products, lending products, service products and tabarru products: ZISWAH (Zakat, Infaq, Sadaqah, Wakaf and Grant). As the name implies, BMT runs two missions, such as: social mission (tabbaru') and gain profitmission (tamwīl).

### **BMT Function**

According to Tahlil (2013), in order to achieve its objectives BMT serves as:

- 1. Identify, mobilize, organize, encourage, and develop potency and economic potential's member.
- 2. Improving the quality of human resourcesmember to become more professional and Islamic so that intact and strong of face the global competition.
- 3. Mobilize community potency in order to improve member welfare.
- 4. Being a financial intermediary between fundowner with dhuafa especially for social fund such as zakat, infaq, alms, grants and others.
- 5. Being a financial intermediarybetween the fundowner, either as a financier or as a deposit with the funduser for productive development efforts.

### **BMT Role**

According to Ridwan (2014), the general role of BMT is to conduct guidance and financing based on sharia system. BMT has an important task in carrying out Islamic mission in all aspects of community life. Under these circumstances, the existence of BMT at least has several roles:

1. Keep away the community from non-Sharia economic practices. Active to socialize the importance of Islamic economic system to the community. This can be done by conduct training

about Islamic transactions, such as: proof of transaction, prohibition of fraud in weighing goods, honest with consumers and so on.

- Coaching and funding the small businesses. BMTs should be active in performing their functions as microfinance institutions, such as: mentoring, coaching, counseling, and supervising the customer bussiness.
- 3. Releasing the dependency on loan sharks.Communityare depend onmoneylender because loan sharks able to meet the community's desire to provide funds immediately. But actually, the community is not aware of the riba/large interest when borrowing on loan sharks. Therefore, BMT should be able to serve the community better, for example, always provide funds at all times, simple bureaucracy and so on.
- 4. Maintain economic justice of society with equal distribution. BMT function which directly face with complex community is required to behavesmartly. Therefore, the steps to conduct evaluation in order to mapping the priority scale have to considered.

BMT also serve as an institutional economy. According to Nur Endah (2008), the institutional economiccharacterized by the following:

- 1. There is general criticism of the preconception and hidden normative elements from traditional economic analysis(conventional)
- 2. The general view of economic process as an open system and as part of a socio-cultural network of relationships
- General acceptance of 'causal flow' principle (circular causation) as the main hypothesis to explain the dynamics of economic processes, including backwardness and development process.

There aremany studies that focus on the assessment of Islamic bank's performance (Sufian 2007; Dusuki 2008; Khan, 2010; Khan and Bhatti, 2008a; 2008b; Antonio et al., 2012; Muafi et.al., 2017) instead of BMT. Antonio et.al. (2012) researching on the performance of Islamic banking Indonesia and Jordan by using Maqashid Index implementation approach.As a business institution, Islamic banking was not supposed to apply the conventional bankprinciple like seeking profits, butshould aim to attain maqashidsyariah. The level of complience to the banking products offered should be based on the Sharia. The results concluded that musyarakat and mudharabah financing is not muchin Indonesia and Jordan. In Malaysia, the performance of Islamic financial institutions have a great impact on Malaysia's economic environment. The level of compliance of Islamic institutions has significant difference compared to non Islamic financial institutions (Mansor and Bhatti, 2011; Mansor et al., 2012; Bakar and Ali, 2014). Meanwhile, research by Mohamed et. al (2008) examined the growth of Islamic banks are seen from the perspective of maqashid syariah. There are six banks that were examined from six countries. The evaluation is looking at the indicator: 1) performance ratios, 2) performance indicators and 3) the overall Maqasid Index. The result shows that the growth of Islamic banks in six countries is rapid and have a good financial performance. Ratnaputri (2013) examined the financial performance using CAMEL method, Shari'ah compliance and profitability in 6 syariah banks at Indonesia including: Bank Muamalat, Bank SyariahMandiri (BSM), BCA Syariah Bank, BRI Syariah, PaninSyariah and Mega Syariah. The CAMEL model has five variables, which are: capital using CAR proxy, asset quality using RORA proxy, management using NPM proxy, earning using ROA proxy and liquidity using FDR proxy. The SCnP model has two variables, such asShariah Conformity and Profitability. The results of this study shows that CAR, RORA and FDR ratios have met BI-determined standards, while the NPM and ROA ratios have not met the standards. The analysis of SCNP results is sharia bank spread in four quadrants (ULQ, LLQ, URQ and LRQ) and recommends Bank SyariahMandiri as investment target because it can survive during 2009-2012 period. Research with different method of maqashidsyariah and camel is done by Roza (2015) at Bank Muamalat Indonesia, Bank Syariah Mandiri, Bank Mega Syariah, BRI Syariah, and BukopinSyariah. The results of sharia banking financial performance using the index of maqashid sharia in a healthy position with the value of 84-99 in the period 2010-2013. Measurements are not only on the maqashidsyariah index but also the financial ratio aspect.

Research that uses BMT as an object is conducted by Saiban (2011) which analyzes the health level of the BMT RAMA using the CAMEL method. The results of the research concluded that BMT is in health category. Its strength is in low riskfinancing, liquid funds, enable public to deposit funds and optimizeportfolio finance through financing. Likewise, the research of the Nornita (2012) concluded that the health level of the BMT BIF by using the standard PINBUK of the jasadiyah 2000-2011 got the less healthypredicate. But in the aspect of ruhiyah which use vision factor and implementation of syariah principles got the healthy predicate.

### 3. Research Methods

This study used a descriptive quantitative methods with the case study approach. Case study research is a suitable strategy to answer the "how" formulation problem. In addition, case study research is relevant in contemporary research (Zed, 2004). The sampling technique used stratified random samplingtechnique with a purposive sampling. The purposive sampling is the determination of the sample with a particular consideration by:1) BMT which have most branches in Yogyakarta for large category, (2) BMT which grow and develop due to the community for the middle category, and (3) the new BMT which is grow between from 1-10 year. Population in this research is BMTs in Yogyakarta based on; (1) Large BMT category which has asset above 50 Billion, (2) Middle category which has asset between 15 - 50 Billion and (3) medium category which has assets below 15 Billion. In Yogyakarta there are 21 BMTs which have been mapped by Asset. For the large asset categoriessampling,there are 1 BMT from 2 BMT, middle categoriessampling are 3 BMT from 4 BMT and mediumasset categoriessampling are 7 BMT from 15 BMT. BMT which is being an object of research are: big category BMT is BMT BIF; middle categories are BMT Work, BMT BRS and BMT MitraNugraha; medium categories are BMT Batik Mataram, BTM Kotagede, BMT

BumiMizanSejatera, BMT IKA PLN, BMT An'nima, BMT BarokahPadiMelati, and BMT KOMPAK. To obtain information or data about interpersonal communication, this research used interview and literature study.

### 4. Data Analysis And Discussion

### **Analysis of Financial Performance**

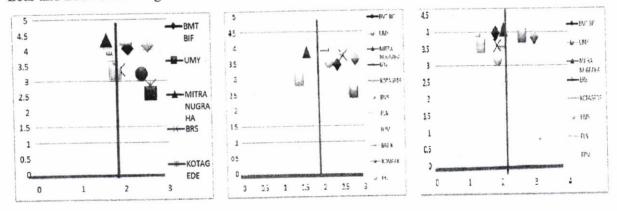
Based on the value of CAR (*Capital Adequacy Ratio*), the highest capital BMT in 2014 and 2015 is KopsyahKOMPAK 42%; 24.9%. While the highest capital in 2013 is BMT IKA PLN 20.57%. Based on the value of ROA (*Return on Asset*) in 2015, 2014 and 2013, the capital BMT with the highest ROA is Kopsyah KOMPAK with consecutive values of 4.4%; 5.46% and 6.21%. The highest ROE (*Return on Equity*) value in2015 and 2014 is BTM Kotagede 22,3333,71 %. While in 2013 is a Kopsyah KOMPAK with 36.38%. Based on the value of BOPO (operational revenue) value in 2015, thelowest efficiency value of BMT is BMT UMY 82.12. While in 2013 and 2014 is Kopsyah KOMPAK with 80.9% and 76.72%. Based on the value of FDR (*Financing to Deposit Ratio*) in 2015, the best liquidity BMT is BMT UMY with 73.69. While in 2014 is BMT BIF with 78% and in 2013 is BMT Mitra Nugraha with 87.89%.

### **Shariah Compliance Analysis**

The value of the highest years of EGRT (*Education Grant, Research Expense and Training*) in 2015, 2014, and 2013 is BMT IK PLN with a consecutive valueare 8, 86; 12,31 % and 14.8%. The value of the highest PSR in 2015, 2014 and 2013 is Kopsyah KOMPAK with 100%. The value of the highest ZSR (*Zakat Shodaqoh Ratio*) in 2015 and 2014 is BRS BMT with 37.7; 22.64%; 28.6%. The value of the highest IIR (*Islamic Investment Ratio*) in 2015, 2014 and 2013 with the highest value is Kopsyah KOMPAK with each value of 100%.

### SCnp Graph Model

The result of the 2015 graph SCnP (*Syariah Conformity and Probability*) model shows that BMT occupying *quadrant 1* (high performance and high sharia compliance) is a Kopsyah KOMPAK, BMT UMY, BMT BPM, BMT BIF, BTM Kota Gede, BMT BMS and BMTBatik Mataram. While BMY is occupying *quadrant 2* (low performance and high sharia compliance) is the BMT IK PLN, BMT HU, BRS and BMT Mitra Nugraha.



2015

2013

The result of the 2014 graph model SCnP shows that BMT which occupying *quadrant* 1 (high performance and high sharia complience) is a Kopsyah KOMPAK, BMT UMY, BMT BPM,BMT BIF, BTM Kotagede, BMT BMS, BMT BRS and BMT Batik Mataram. While BMT which are occupying *quadrant* 2 (low performance and high sharia complience) is the BMT IK PLN, HU and BMT Mitra Nugraha.

The result of the 2013 graph model SCnP shows that the BMT which occupying *quadrant 1* (high performance and high sharia compliance) is a Kopsyah KOMPAK, BMT UMY, BMT Mitra Nugraha, BMT Kotagede and BMT Batik Mataram. While BMT which are occupying *quadrant 2* (low performance and high sharia compliance) is the BMT IK PLN, BMT HU, BMT BPM, BMT BMS, BMT BRS dan BMT BIF.

This research shows that BMT in Yogyakarta from year-to year has held Islamic or shariah compliance compliance, but seen from the financial performance, value ratio was still up and down. This corroborate the previous research that the degree of Islamic institutions compliance have significant difference compared to non Islamic financial institutions (Mansor and Bhatti, 2011; Mansor et al., 2012; Bakar and Ali, 2014; Muafi, et. al, 2017). This means BMT are expected to have a function and role which gives a benefit to the wider community.

#### **Conclusions and Suggestions**

The assessment of performance and sharia compliance shows that each BMT have their own advantages in applying those elements. This research shows that BMT in Yogyakarta from year-to year has held Islamic or shariah compliance, but seen from the financial performance, value ratio was still up and down from 2013–2015. From 2013 – 2015, there are 4 BMT rated by kuppusamy methods are on the *quadrant I*which hold high sharia compliance and high performance such as Kopsyah KOMPAK, BMT UMY, BTM Kotagede and BMT Batik Mataram. Four BMT have very affecting and very clearmarket segment, namely the Kopsyah KOMPAK with market segments of the community of peoples 'klitikan' which open his office at the same time with the public klitikan's marketat night, BMT UMY with the segments of majority of its students and campus employees, BTM Kotagede with segments of the citizen of Muhammadiyah Kotagede and BMT Batik Mataram withmarket segment of mostly batik enterpreneur in Yogyakarta. All BMT regulators should using kuppusamy method in assess performance and sharia complience though it requires a high cost, but it will gives a benefits feedback for BMT growth. BMT who has already a clear segment should be reinforced again so that the performance is growing better, and BMT which do not have a clear segment could create pockets of community in members area.

#### References

- Antonio, M. S., Sanrego, Y.D., and Taufiq, M. (2012), Analysis of Islamic Banking performance: Maqashid Index Implementation in Indonesia and Jordania, *Journal of Islamic Finance*, Vol 1, 910, p. 2289-2109.
- [2] Bakar, M.A.A.A., and Ali, N. (2014), performance measurement analysis: shariah-compliant vs. non shariah-compliant securities, *Malaysian Accounting Review* Vol. 13 NO.1 June, p. 75-108.
- [3] Chapra, U. (2001), Masa Depan Ilmu Ekonomi, Sebuah Tinjauan Islam, Jakarta; Gema Insani
- [4] Dusuki, A. W. (2008). "Understanding the objectives of Islamic banking: a survey of stakeholders' perspectives". *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 1, No. 2, p.132-148.
- [5] Ilmi, M.S.M. (2002), Teori dan Praktek Lembaga Keuangan Mikro Syariah. UII press, Yogyakarta
- [6] Khan, F. (2010). "How 'Islamic' is Islamic Banking?". Journal of Economics Behavior & Organization, Vol. 76, No. 3, pp. 805-820.
- [7] Khan, M. M., and Bhatti, M. I. (2008a). "Islamic banking and finance: on its way to globalization". *Managerial Finance*, Vol. 34, No. 10, pp. 708-725.
- [8] Khan, M. M., and Bhatti, M. I. (2008b). Development in Islamic banking: a financial risk-allocation approach. *The Journal of Risk Finance*, Vol. 9, No. 1, pp. 40-51.
- [9] Mansor, F., and Bhatti, M. I. (2011). Islamic Mutual Funds Performance for Emerging Market, During Bullish and Bearish: The Case of Malaysia, 2nd International Conference on Business and Economic Research (2<sup>nd</sup> ICERB 2011) Proceeding
- [10] Mansor, F., Bhatti, M. I., and Khan, H. (2012), *Islamic Mutual Funds Performance: A Panel Analysis*. 2nd Malaysian Postgraduate Conference (MPC2012), July, 7-9, Bond University, Gold Coast, Queensland, Australia.
- [11] Mohammed, M. Omar., Razak, D.A., and Taib, F. Md. (2008). "The Performance Measures of Islamic Banking Based on the Maqasid Framework". Paper of *IIUM International Accounting Conference* (INTAC IV) held at Putra Jaya Marroitt.
- [12] Muafi (2017), Is there a relationship pattern between small medium enterprise strategies with performance in technology business incubator?, *International Journal of Public Sector Performance Management*, 3, (1), p. 18-39.
- [13] Muafi., Suwitho., Purwohandoko and Salsabil, I. (2017), Human Capital in Islamic Bank and Its Effect on The Improvement of Healthy Organization and Employee Performance, *International Journal for Quality Research*, Vol. 11, No.4, pp. 849-868.
- [14] Nornita, L.M. (2012). Skripsi: Analisis Tingkat Kesehatan Lembaga Keuangan Syariah di BMT Bina Ihsanul Fikri. Universitas Islam Negeri Sunan Kalijaga. Yogyakarta.
- [15] Nur Endah, K. (2008). Peningkatan Peran Kelembagaan Pemuda dalam Mengatasi Ekonomi Keluarga. IPB, Bandung.
- [16] Pusat Koperasi Syariah Yogyakarta (2015).Pertumbuhan BMT di Daerah Istimewa Yogyakarta
- [17] Ratnaputri, W. (2013), The Analysis of Islamic Bank Financial Performance by Using CAMEL, Shariah Conformity and Profitability, September, Jurnal Dinamika Manajemen, september, Vol 4, no 2, pp. 220-232.
- [18] Ridwan, M. (2014), Manajemen Baitul Mal Wa Tamwil (BMT). UII press, Yogyakarta
- [19] Saiban, Z. (2011). Analisis Tingkat Kesehatan KSPS BMT RAMA dengan metode Camel. TugasAkhir, Sekolah Tinggi Agama Islam Negeri Salatiga.
- [20] Sufian, F., and Habibullah, M. S. (2010), "Does economic freedom fosters banks' performance? Panel evidence from Malaysia". *Journal of Contemporary Accounting & Economics*, Vol. 6, No. 2, p. 77-91.
- [21] Tahlil, M. (2013). Implementasi Penawaran Produk BMT dalam Perspektif Hukum Islam. UMS, Surakarta
- [22] Umam, K. (2009). Hukum Ekonomi Islam Dinamika dan Perbankan di Indonesia. Yogyakarta: Instan Lib
- [23] Zed, M. (2004). Metode Penelitian Kepustakaan. Yayasan Obor Indonesia