Developing Inclusive and Sustainable Economic and Financial Systems

# *Access to Finance and Human Development—Essays on Zakah, Awqaf and Microfinance*

**Volume 1**



SELECTED PAPERS PRESENTED TO THE 8TH AND 9TH INTERNATIONAL CONFERENCE ON ISLAMIC ECONOMICS AND FINANCE

Developing Inclusive and Sustainable Economic and Financial Systems

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# Access to Finance and Human Development — Essays on *Zakah*, *Awqaf* and Microfinance



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# Foreword

**Hatem A. El-Karanshawy**
Founding Dean, Qatar Faculty of Islamic Studies, Hamad bin Khalifa University, Qatar Foundation, Doha

The International Conference on Islamic Economics and Finance (ICIEF) is the leading academic conference in the discipline organized by the International Association for Islamic Economics (IAIE) in collaboration with other key stakeholders, including the Islamic Research and Training Institute, Islamic Development Bank. It is the pioneering international conference on Islamic economics organized first in Makkah Al Mukaramah, Kingdom of Saudi Arabia, in 1976 under the auspices of King Abdulaziz University and has since been held in numerous locations around the world. The conference as such has contributed immensely to the promotion of Islamic economics and finance. Since 2011, the Qatar Faculty of Islamic Studies (QFIS), of Hamad bin Khalifa University, Qatar Foundation, has also become a key partner in organizing the conference.

The global economy continues to face the perennial problems of poverty, persistent youth unemployment, excessive inequalities of income and wealth, high levels of inflation, large macroeconomic and budgetary imbalances, exorbitant debt-servicing burdens, inadequate and aging public utilities and infrastructure, skyrocketing energy prices, and growing food insecurity. The reoccurring regional and global financial crises further intensify and magnify these problems, particularly for the underprivileged segments of the world population. As a result, many countries are at the risk of failing to achieve by 2015 the Millennium Development Goals (MDGs) set by the United Nations. Hence the achievement of an inclusive and sustainable economic and financial system has remained highly illusive.

The ICIEF presents an excellent opportunity for those interested in Islamic economics and finance to present their research and contribute to the development of an inclusive and sustainable global economic and financial system. It is through such a setting that thoughts can be debated with the objective of advancing knowledge creation, facilitating policymaking and promoting genuine innovation for the industry and the markets. Disseminating research presented at ICIEF to the greatest number of researchers interested in the topic is important. It not only advances the discourse, but also grants those who did not have the privilege of attending the conference to partake in the discussion.

To this end, this series of five volumes (two in Arabic to follow) presents the proceedings of 8th and 9th conferences, which were held in Doha and Istanbul respectively in 2011 and 2013. Each volume focuses on a particular sub-theme within the broader theme of *Developing Inclusive and Sustainable Economic and Financial Systems*.

The volumes are as follows:

Volume 1: Access to Finance—Essays on Zakah, Awqaf and Microfinance
Volume 2: Islamic Economics and Social Justice—Essays on Theory and Policy
Volume 3: Islamic Banking and Finance—Essays on Corporate Finance, Efficiency, and Product Development
Volume 4: Ethics, Governance, and Regulation in Islamic Finance
Volume 5: Financial Stability and Risk Management in Islamic Financial Institutions

We hope that this academic endeavor in partnership with the Bloomsbury Qatar Foundation Publishing will benefit the Islamic economics and finance community and policy makers and that it will promote further academic study of the discipline.

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# Acknowledgements

**Tariqullah Khan**
President, International Association for Islamic Economics

At the International Association for Islamic Economics (IAIE), we are grateful to acknowledge the unprecedented success of the 8th and 9th International Conferences on Islamic Economics and Finance, which were respectively organized in the Qatar National Convention Centre, Doha, December 19 - 21, 2011, and in the WoW Convention Centre Istanbul, September 9-10, 2013. We greatly appreciate the financial, academic and logistic support provided by the Qatar Faculty of Islamic Studies, Hamad bin Khalifa University at Qatar Foundation; Islamic Research and Training Institute at the Islamic Development Bank; and the Statistical, Economic and Social Research and Training Centre for Islamic Countries.

We offer our sincere thanks to the sponsors of the 8th International Conference on Islamic Economics and Finance in Doha. Without their partnership and generous contributions, the conference would not have been possible. In addition to the Qatar Foundation and the Islamic Development Bank, other sponsors included: Qatar Central Bank (QCB), Qatar Financial Centre Authority (QFCA), Qatar National Research Fund (QNRF), Qatar National Bank, Qatar Islamic Bank, Qatar International Islamic Bank, Masraf Al Rayan, and Qatar Airways.

We owe our deepest gratitude to the highly-esteemed panel of reviewers who volunteered to dedicate their time and energy in reviewing all the thousands of abstracts and papers that were submitted to the conferences. The reviewers of the English papers and abstracts included: Abdallah Zouache, Abdel Latef Anouze, Abdelaziz Chazi, Abdul Azim Islahi, Abdullah Turkistani, Abdulrahim AlSaati, Ahmet Tabakoğlu, Anowar Zahid, Asad Zaman, Asyraf Dusuki, Ercument Aksak, Evren Tok, Habib Ahmed, Hafas Furqani, Hafsa Orhan Astrom, Haider Ala Hamoudi, Hossein Askari, Humayon Dar, Ibrahim Warde, Iraj Toutounchian, Jahangir Sultan, John Presley, Kabir Hassan, Karim Ginena, Kazem Yavari, Kenan Bagci, Mabid Al-Jarhi, Maliah Sulaiman, Marwan Izzeldin, Masooda Bano, Masudul Alam Choudhury, Mehdi Sadeghi, Mehmet Asutay, Moazzam Farooq, Mohamad Akram Laldin, Mohamad Aslam Haneef, Mohamed Ariff Syed Mohamed, Mohammed Benbouziane, Mohammed El-Komi, Monzer Kahf, Muhammad Syukri Salleh, Murat Çizakça, Nabil Dabour, Nafis Alam, Nasim Shirazi, Nazim Zaman, Necdet Sensoy, Nejatullah Siddiqi, Rifki Ismal, Rodney Wilson, Ruhaya Atan, Sabur Mollah, Salman Syed Ali, Savas Alpay, Sayyid Tahir, Serap Oguz Gonulal, Shamim Siddiqui, Shinsuke Nagaoka, Simon Archer, Tariqullah Khan, Toseef Azid, Turan Erol, Usamah Ahmed Uthman, Volker Nienhaus, Wafica Ghoul, Wijdan Tariq, Zamir Iqbal, Zarinah Hamid, Zeynep Topaloglu Calkan, Zubair Hasan, and Zulkifli Hasan. The reviewers of the Arabic papers and abstracts included Abdelrahman Elzahi, Abdulazeem Abozaid, Abdullah Turkistani, Abdulrahim Alsaati, Ahmed Belouafi, Ali Al-Quradaghi, Aly Khorshid, Anas Zarqa, Bahnaz Al-Quradaghi, Layachi Feddad, Mabid Al-Jarhi, Mohammed El-Gamal, Nabil Dabour, Ridha Saadallah, Sami Al-Suwailem, Seif El-Din Taj El-Din, Shehab Marzban and Usamah A. Uthman.

The primary objective of the conferences is to further the frontiers of knowledge in the area of Islamic economics and finance. Without the hard work and creativity of the researchers who shared their work with us, the pool of knowledge generated in the form of the conference papers and presentations would not have been possible. We thank all the authors who submitted their abstracts and papers to the two conferences.

The IAIE has always endeavored to publish most of the significant research papers contributed to its conferences. Currently the selected papers of the 8th and 9th conference are being published in five volumes under the common theme of *Developing Inclusive and Sustainable Economic and Financial Systems*. On behalf of the Editorial Board we acknowledge that the partnership with the Bloomsbury Qatar Foundation Publishing in this regard will be highly beneficial in disseminating research output and in promoting the academic cause.

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# Preface

**Dr. Mohammad Azmi Omar**
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Promoting access to financial services has recently been recognized as a sustainable means of addressing poverty alleviation and enhancing inclusive economic development. There are a number of areas where the effectiveness of microfinance can be improved. First, the services may be made consistent with religious beliefs and hence relevant for use by those who are excluded from the conventional services. Second, due to high cost factors and inability of governments to offer subsidies, the rate on micro-lending has been exorbitantly high. There is a potential role for the Islamic social finance institutions such as Qard (interest-free loans), forbearance, *Zakah* (obligatory religious charity), Awqaf (voluntary and organized religious charity), and *Sadaqat* (unorganized and voluntary religious charity). If these institutions can be organized through policy recognition and support, microfinance and the required services can be provided at affordable and sustainable cost.

This volume titled *Access to Finance and Human Development – Essays on Zakah, Awqaf and Microfinance* aims to bring together papers on these themes. The volume consists of selected papers from the 8th International Conference on Islamic Economics and Finance held in Doha from 19 to 21 December 2011 and from the 9th International Conference on Islamic Economics and Finance held in Istanbul from 9 to 11 September 2013. The papers are presented here in their original form as presented at the conferences, with changes limited to copyediting and correcting typographical errors. The conferences were organized by the Center for Islamic Economics and Finance, Qatar Faculty of Islamic Studies (QFIS), Hamad bin Khalifa University; Islamic Research and Training Institute (IRTI), Islamic Development Bank (IDB); International Association for Islamic Economics and Finance (IAIE); and Statistical, Economic, and Social Research and Training Centre for Islamic Countries (SESRIC). In recent years there has been significant progress in the development of modalities and practices of Islamic microfinance services. The papers included in this volume only partially cover those theories and practices.

The main focus of our work – in the Islamic Research and Training Institute (IRTI), Islamic Development Bank (IDB) and our partner institutions in the current initiative, the Qatar Faculty of Islamic Studies, Hamad bin Khalifa University and the International Association for Islamic Economics – has been in understanding the realities in the member countries of the IDB. A significant part of the world population who are at the threshold of missing the MDGs live in these countries where Islam is a strong motivating force. It is hoped that the basic ideas emerging from this volume specifically, and all the 5 volumes in general, will be instrumental in making policies more effective in achieving the Sustainable Development Goals, beyond 2015.

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# Access to finance and human development — Essays on *zakah*, *awqaf* and microfinance:

## An introduction to the issues and papers

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Qatar Faculty of Islamic Studies, Hamad bin Khalifa University

Access to financial services is the key to accessing other vital services and potential business opportunities. Hence the year 2005 was celebrated by the United Nations as the "International Year of Microcredit: Building Inclusive Financial Sectors to Achieve Millennium Development Goals (MDGs)" (UN 2006). The goal was to create a market driven and sustainable institutional environment that can be instrumental in achieving the MDG targets. The timeframe for the MDG targets ends with the year 2015, and despite progress in a number of areas, the most important target of reducing absolute poverty remains distant in a number of Islamic Development Bank (IDB) member countries (IDB 2009). In preparing for concerted global development efforts beyond 2015, the United Nations has redesigned the MDG targets in the form of Sustainable Development Goals (SDGs).

The schematic summary of the SDGs elements presented in Fig. 1 is something akin to the *Maqasid Al Shariah* (goals of public governance) for achieving an inclusive and sustainable society. The *Maqasid* comprise of the promotion and preservation of: a) religion, b) intellect, c) dignity, d) interests of future generations and e) wealth and prosperity (see, Chapra 2008). In the context of the IDB member countries, a convergence between the SDGs and the Maqasid can be achieved by properly addressing the positive role that religion can play in enhancing effectiveness of policies. This factor drives Islamic finance and development in Muslim societies but it was either ignored or misrepresented in the MDGs target studies during the last decade.

The 2006 United Nations publication *Building Inclusive Financial Sectors for Development* (UN 2006) documented the barriers to accessing financial services and the options that the various stakeholders could possibly work out in their areas and jurisdictions to remove the barriers and enhance access to financial services. Among the many barriers identified were religious beliefs, social norms and usury ceilings prohibiting lending rates commensurate with the high cost of micro-credit. Since then several initiatives have been put in place, numerous experiences documented and dialogue papers and research publications have been released addressing the promotion of financial inclusion. The most significant and recent of these efforts is the World Bank's *Global Financial Development Report 2014 – Financial Inclusion* (World Bank, 2014). Most of what is reported and analyzed in this report is also highly relevant for enhancing financial inclusion through Islamic microfinance. CGAP (2008) also recognizes the role of Islamic finance in financial inclusion. However, there are a number of pending issues as summarized in Table 1, the proper resolution of which will contribute to ensuring effective interventions to achieve the SDGs targets.

The mainstream literature on financial exclusion (especially, World Bank 2014) treats religious beliefs as a *voluntary* cause of exclusion. As a result of this approach, the removal of the faith-based barriers to accessing financial services does not become a target of policies.

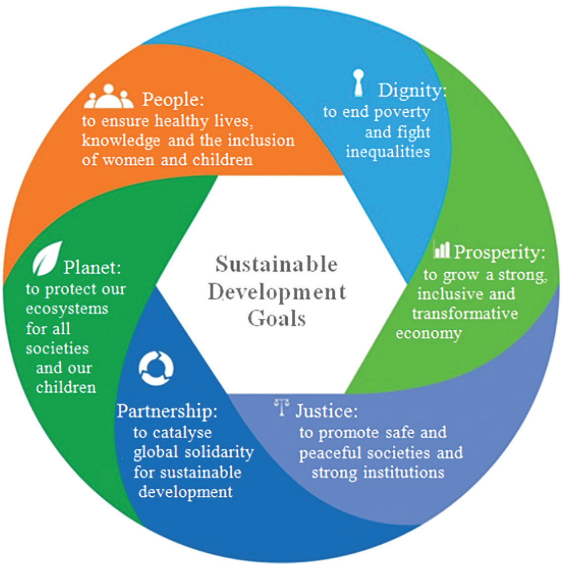


**Figure 1.** Elements of SDGs.
Source: UN 2014.

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On the other hand, Islamic finance treats such barriers as *involuntary* and hence tries to remove these through direct action by providing religiously compliant financial services.

Due to the high cost of micro-lending, most mainstream literature calls for removing the usury ceilings for microcredit so that the services can be provided by the markets in a sustainable manner. As a result, the main criticism of the experience of microfinance practices emerges from often exorbitantly high lending rates. Furthermore, Islamic finance treats the commercialization of lending as strictly prohibited by explicit religious injunctions.

Keeping the high cost of micro-lending in consideration, it is neither feasible nor sustainable for governments to subsidize the large-scale needs for microfinance. The Islamic microfinance approach (IRTI 2008) addresses this dual challenge through a potential alternative service. The service is subsidized by bringing together the not-for-profit *institutions of compassion* such as Qard (interest-free loans), Forbearance, *Zakah* (obligatory religious charity), Awqaf (voluntary and organized religious charity), *Sadaqat* (unorganized and voluntary religious charity) and the for-profit Islamic financial contracts.

The significant potential of faith-based institutions in funding the pro-poor health, educational and other services is growingly being recognized in the mainstream literature. However, the literature does not adequately recognize the risk of irrelevance of such services for people who may have been excluded due to the services being inconsistent with their religious beliefs. It needs to be recognized that educational, health and financial services will be more relevant if these can be perceived by people as consistent with their religious beliefs. This phenomenon is the *raison d'etre* of Islamic finance, and its broader recognition in the mainstream policy studies could contribute to the effectiveness of policies.

Furthermore, the literature on financial development and economic growth is vast, and we will not attempt to cover it in this introduction. Most studies appear to support the hypothesis that financial development and economic growth are positively related. Whilst the size and depth of financial services is important, in recent times focus has also

**Table 1.** Convergence of perspectives.

| **Areas in which convergence is needed** | **Perspective of mainstream literature** | **Perspective of Islamic finance literature** | **Implications for policy effectiveness** |
|---|---|---|---|
| Financial exclusion if caused by religious reasons | Voluntary | Involuntary | Involuntary causes of exclusion can be made policy targets like providing financial services compliant with religious requirements |
| Usury ceilings and micro-lending | Usury ceilings shall not be applied to micro-lending so that supply can be sustained by markets | Commercialization of lending is often exploitative and is prohibited in all religions including Islam | Compassion instead of commercialization of lending wherever possible can be institutionalized by making it a policy target |
| Subsidizing microfinance | Subsidizing microfinance by governments is too costly and is neither feasible nor sustainable | The institutions of compassion – *Zakah*, Awqaf, Sadaqat, Qard, Forbearance can be the basis for subsidizing microfinance | Financial sector reform policies can address the institutionalization of such a system of subsidies and mixing it with the market-based for profit financial contracts |
| Role of faith-based institutions | Faith-based institutions can generate funds for supplying pro-poor health, educational and financial services | Relevance of pro-poor services can be enhanced by supplying these services in compliance with the religious requirements | Policies can be effective by addressing the relevance of services supplied through compliance with religious sensitivities and aspirations of the beneficiaries |
| Social responsibilities of the for-profit-sector | The for-profit sector's voluntary adherence to social responsibility can significantly contribute to enhancing inclusion | Social responsibility needs to be incorporated in the business model through rigorous internal self-regulation like Shariah supervision and enforcing standards for genuine instead of virtual businesses | Moral/ethical screening could be addressed through policies to empower investors to introduce discipline in the markets through their informed investment decisions |

been given towards greater financial inclusion. It is often questioned whether increased access to finance by the poor results in an increase in their welfare. In fact, many of the papers in this volume explore this very question. A cursory look at the prominent literature on this question would help inform the reader of this volume. Beck, Demirgüç-Kunt, and Levine (2007) present robust evidence that shows that financial development decreases income inequalities. In fact, the relationship that they report is very strong – approximately 30% of variations in poverty rates between countries from 1960 to 2005 can be explained by variations in financial development. Interestingly, evidence suggests that financial development leads to reduction in income inequalities due to the consequent rise in output; the subsequent demand for unskilled labor results in an increase in the incomes of the unskilled section of the labor force (Beck, Levine, and Levkov, 2007). The prevailing evidence on the nature of the relationship between financial development and income inequality contrasts intuitive claims that assume that access to credit by the poor is what reduces income inequalities. The truth at which the evidence hints is that the relationship between financial development and income inequalities is an indirect one: greater financial development increases demand for labor, which subsequently has an effect of rising incomes, especially for the low-income unskilled groups. The important implication of all this is that increasing financial access to the under-represented non-poor groups, such as small- and medium-sized entrepreneurs and enterprises, may achieve poverty reduction targets perhaps more effectively than targeting the ultra-poor.

The papers contained in this volume should be read bearing the above in mind. The poverty-reduction claims made by conventional microfinance providers have been critiqued by many authors in this volume and beyond. However, here we would caution that if Islamic microfinance-related schemes replicate the same model of conventional microfinance, i.e., providing financial access to the ultra-poor, it may be equally disappointed despite providing a *Shariah*-compliant option for the poor members of society. It is perhaps by increasing greater financial inclusion in the small- to medium-sized sector where Islamic finance might make the greatest impact in terms of addressing society's poverty-reduction ambitions.

## 1. The papers in this volume

While organizing these conferences and selecting papers for this volume series, a deliberate attempt was made at highlighting policy-relevance of research where possible. This first volume covers issues related to access to finance and human development including essays on *Zakah*, Awqaf, and microfinance. The second volume is a selection of papers on economic thought from an Islamic perspective with discussions on topics such as fiscal and monetary policy, among others. The third volume presents a wealth of empirical evidence on issues related to Islamic banks such as profitability, efficiency, product development, and Islamic corporate financing. The fourth volume touches upon ethical, governance, and regulatory issues in Islamic finance. The fifth volume is about financial stability and risk management in Islamic financial institutions. In this section, we briefly introduce the papers in this volume.

The first paper by Salleh argues that *Zakah* and Awqaf institutions may need to study and adapt to the contemporary financial planning knowledge. In particular, Salleh explores financial exclusion issues and saving motives of welfare recipients in Brunei to help inform *Zakah* and Awqaf institutions with the view of achieving greater financial inclusion. Through structured and semi-structured interviews, the author uncovers a number of interesting insights. For instance, it was observed that recipients of *Zakah* disbursements require a bank account in order to receive their disbursement. However, in order to open a bank account, a minimum deposit of 50 Brunei Dollars is required – *Zakah* recipients do not always have this amount. Another insight was that the main savings motivation for net deficit respondents is for their children and grandchildren's education. The author suggests that the implications for *Zakah* institutions is that they can use such findings to assist welfare recipients to achieve financial inclusion (e.g., by facilitating the opening of bank accounts) and their saving goals (e.g., by facilitating credit facilities that assist recipients to meet their children's education costs). Other implications for *Zakah* funds include conducting a "financial inclusion compliance test" and incentivizing savings programs.

The second paper by Nagaoka is a historical analysis of the evolution of Islamic economics, banking and finance. In the first part of the paper, the author concisely summarizes the evolution of Islamic banking over the decades, with a focus on its more controversial aspects. The author argues that Islamic finance as an industry, and Islamic economics as a discipline, have responded to these criticisms over the years in the form of new Islamic finance sectors that focus on social objectives (e.g., Islamic microfinance, Islamic socially responsible investments, etc.). The main section of the article is the discussion on the revitalization of traditional Islamic economic institutions, namely, *Waqf* and *Zakah*, using the scheme of Islamic finance. The author presents a short, useful case study of innovative techniques used in Singapore to finance the revitalization of *Waqf* properties using *sukuk*. In addition, the description of the "*Zakah* fund" in the United Arab Emirates serves as a useful example of how a modern *Zakah* collection and disbursement entity operates. Readers will find this article worthwhile in terms of understanding the tensions between what the author calls "Sharia legitimacy condition" and the "economic feasibility condition," and recent attempts at integrating Islamic finance with the traditional Islamic economic institutions that may lead to embedding the economy into society.

The third paper, by Mahmud, Hassan, Sohag and Alam, is an empirical analysis of the impact of *Zakah* on the living standards of the poor in Bangladesh. Data was collected from 179 households that received *Zakah* from the Masjid Council for Community Advancement (MACCA), a faith-based development organization operating in Bangladesh since 1999. According to the authors, MACCA provides *Zakah* to the rural poor along with training programs. The study measures living standard in terms of household income, expenditure and savings. The results of the econometric analysis did not find any statistical significance for the effects of *Zakah* received on measures of living standards. Even the training that they received from MACCA did not have any significant effect. Instead, the authors report that education, land ownership, and proximity of rural banks portrayed statistically significant relationships with income, expenditure and savings. Similar to the suggestions in the paper by Hasnol Salleh, the authors of this paper also call for greater focus on provision of education by governments and *Zakah* providers in order to have an impact on raising living standards.

The fourth paper by Abdul Wahab and Abdul Rahman is perhaps one of the first studies that analyzes traditional *Zakah* institutions in Malaysia using modern statistical tools such as Data Envelopment Analysis (DEA) and the Tobit model. The paper aims to measure the efficiency of traditional *Zakah* institutions in Malaysia from 2003 to 2007. Data was collected from a total of 14 *Zakah* institutions that are all the State Islamic Religious Councils (SIRCs) in Malaysia. The DEA analysis gives an indication of the efficiency of these institutions, whilst the Tobit analysis explores the determinants of efficiency; in this way, the Tobit analysis serves to substantiate the DEA results. The results suggest that efficiency varies greatly among the *Zakah* institutions. Specifically, it appears that efficiency of these *Zakah* institutions is due to scale efficiency, i.e., efficiency due to the size of the institutions. Inefficiencies appear to be due to pure technical inefficiencies. Exploring the determinants of efficiencies, the authors report that total *Zakah* payment system offered, presence of a computerized *Zakah* system, board size, existence of audit committee and decentralization are positively associated with pure technical efficiency. Interestingly, the presence of a computerized *Zakah* systems is negatively associated with pure technical efficiency. As with any observational study, we would caution against making any causal claims using these results. Nonetheless, as one of the first studies on the topic, it is expected that this paper may inspire further research in this area, in particular to explore is why these factors affect efficiency of *Zakah* institutions in the way that they do.

The fifth paper in this volume is by Sulaiman and Zakari. It is an exploration of the efficiency and effectiveness of *Waqf* institutions in Malaysia. *Waqf* institutions in Malaysia are managed by State Islamic Religious Councils (SIRCs). Each SIRC has a dedicated *Waqf* division or an independent agency to carry out *Waqf* related duties. The audited financial statements of seven of these SIRC *Waqf* institutions (SWIs) – out of a total of fourteen that exist in Malaysia – are explored in this paper through content analysis. In particular four measures were used to determine financial sustainability of the *Waqf* organizations: ratio of equity to revenue, concentration of revenue sources, ratio of administrative costs to total costs, and operating margin (ratio of net income to total revenue). To further investigate the findings, the authors relied on interviews with *Waqf* managers. Although the paper is a descriptive analysis of the financial health of *Waqf* institutions in Malaysia and hence no inferential claims can be deduced, it is a useful study for three reasons. Firstly, it raises awareness among *Waqf* managers on the importance of adequate and professional financial reporting. The authors found it puzzling that even though the *Waqf* institutions were audited and certified, the level of disclosures was far from adequate. The authors argue for the benefits and importance of better accounting practices in *Waqf* institutions. Secondly, although the financial statement analysis is rather basic, it would serve as a useful introduction to the topic of financial sustainability for *Waqf* managers. Thirdly, the paper has a comprehensive discussion on the management of *Waqf* institutions in Malaysia.

The sixth paper by Riwajanti and Asutay is an empirical study of the impact of microfinancing on the micro-enterprises that borrow from the two types of microfinance institutions in Indonesia: the Baitul Maal wa Tamweel (BMT) and Shariah People Credit Bank (BPRS). While the BMT is a cooperative with limited government intervention and support, the BPRS is a bank under the supervision of the Central Bank of Indonesia (Bank Indonesia). The primary objective of the authors is to compare the two different types of Islamic microfinance institutions in terms of their impact on borrowers by comparing the status of borrower before and after financing. The authors perform a series of univariate statistical tests based on questionnaire responses from a sample of 348 borrowers. Comparisons were made on different characteristics before and after financing, such as annual sales, net income, business expenditure, household expenditure, and number of workers. To supplement the absolute changes in the values of these variables, qualitative data was also collected to measure the perception of the borrowers. Overall, it was shown that both types of institutions are associated with a positive change in economic variables of the borrowers. The evidence also suggested that the BPRSs had a greater impact on micro-enterprises than the BMTs, perhaps due to their larger size and due to the support and supervision from the central bank of Indonesia.

The seventh paper is by Iqbal and Roy and it is on the topic of securitization in Islamic finance with a particular focus on Islamic housing microfinance. The authors provide a concise overview of the issues that arise in Islamic securitizations, especially with respect to credit enhancement. Credit enhancement is an important part of conventional securitizations, and it becomes even more important if the securitization is related to microfinance. The authors propose an innovative securitization model for financing Islamic housing microfinance with credit enhancements that use *qard hasan* (interest-free benevolent loans) and *Waqf* (endowments) as subordinate securities that would protect the senior securities. The paper discusses the feasibility of such a structure and the issues that would arise. It is a welcome proposal on a topic of enormous importance, particularly in many parts of the Muslim world where affordable housing has become a critical issue. Although the paper proposes this model for Islamic housing microfinance, it can conceivably be applied to Islamic securitization in general, and also to securitization for any other social infrastructure projects that intend to use Islamic finance.

The eighth paper in this volume is by Alonso, and it is on the topic of crowdfunding. Crowdfunding is a modern financing arrangement that relies on an innovative adoption of technology. As the name suggests, it allows a “crowd” or any member(s) of the public to finance a borrower using an online platform. Crowdfunding is a rapidly growing movement and is particularly known for its use in financing meso- and micro-borrowers. Size of contributions from the crowd is often flexible, which allows for a greater spectrum of financiers. This paper presents two case studies of crowdfunding platforms in Egypt that utilize Islamic financing arrangements: Shekra and Yomken. The author first briefly describes the history of Islamic finance in Egypt. Readers uninitiated in the topic will find this introduction helpful in order to learn about Mit Ghamr – the first Islamic banking experiment based in Egypt – and its founder Ahmed El-Najjar. The Egyptian Islamic Finance Association (EIFA), established in 2010, is also introduced. The paper then concisely describes conventional crowdfunding, before moving on to present the case studies on Shekra and Yomken. The author collected primary data for these case studies by conducting detailed semi-structured interviews with the respective founders and supplemented this information using secondary data from reports. Shekra and Yomken differ from one another in that Shekra is an equity-based crowdfunding initiative whilst Yomken is rewards-based. After presenting the case studies, the author attempts to conceptualize a definition of Islamic crowdfunding and how it differs from conventional crowdfunding. As the use of Islamic crowdfunding techniques to finance micro- and meso- borrowers in the Arab world is expected to increase, particularly with the support of influential non-profit regional institutions such as Silatech based in Qatar, readers will find this paper a useful introductory reference on the subject, as it is one of the first contributions in this area that documents the growth of the Islamic crowdfunding movement.

## 2. Conclusion

The views and analysis covered in this volume and those offered in the accompanying 4 volumes are related. A proper mix of the *institutions of compassion,* namely, a) *Zakah*, b) Awqaf, c) Sadaqat, d) Qard and f) Forbearance on one hand, and the *genuine market driven profit motive* on the other hand, is the common theme in all the 5 volumes. A balance between the two is needed to achieve and preserve inclusive and sustainable local, regional and global societies and markets. This volume focuses on financial inclusion. This introduction started with reference to the MDGs, SDGs and the Maqasid Al Shariah. It was suggested that there are opportunities to fill certain existing gaps in order to contribute to effectiveness of policies in achieving the SDGs. The Islamic financial services have already gone a long and fruitful way, but there is a need to formalize the institutions of compassion through policy recognition and support. This volume offers some basis for a dialogue in that direction.

## References


Beck T, Demirgüç-Kunt A, Levine R. (2007) Finance, inequality, and the poor: Cross-country evidence. *Journal of Economic Growth*. 12(1):27–49.

Beck T, Levine R, Levkov A. (2007) *Big bad banks? The impact of U.S. branch deregulation on income distribution.* Policy Research Working Paper, 4330. World Bank, Washington DC.

CGAP (the Consultative Group to Assist the Poor) (2008) Islamic Microfinance: An Emerging Market Niche. Available at: http://www.cgap.org/publications/islamic-microfinance-emerging-market-niche.

Chapra MU. (2008) The Islamic Vision of Development in the Light of the Maqasid Al-Shari'ah. IRTI. Jeddah.

IDB (Islamic Development Bank). (2009) The Challenge of Achieving the Millennium Development Goals in IDB Member Countries in the Post-Crisis World. Available at: http://www.isdb.org/irj/go/km/docs/documents/IDBDevelopments/Internet/English/IDB/CM/Publications/Occasional%20Papers/OccasionalPaperNo16.pdf.

IRTI (Islamic Research and Training Institute). (2008) Islamic Microfinance Development: Challenges and Initiatives. Policy Dialogue Paper # 1.

UN (United Nations). (2006) *Building Inclusive Financial Sectors for Development*. United Nations. New York. Available at: http://www.uncdf.org/sites/default/files/Documents/bluebook_1.pdf.

UN (United Nations). (2014) The Road to Dignity by 2030: Ending Poverty, Transforming All Lives and Protecting the Planet–Synthesis Report of the Secretary-General on the Post-2015 Sustainable Development Agenda. 4 December 2014. Available at: http://www.un.org/ga/search/view_doc.asp?symbol = A/69/700&Lang = E.

World Bank. (2014) *Global Financial Development Report 2014 – Financial Inclusion*. World Bank. Washington DC. Available at: https://openknowledge.worldbank.org/bitstream/handle/10986/16238/9780821399859.pdf?sequence = 4.

# Financial exclusion and saving motives in Brunei: A need to re-define *zakat* & *awqaf* institutions

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**Abstract** - In the past, *zakat* and *awqaf* institutions have played significant roles towards mitigating poverty in Islamic societies. Meanwhile, the current era has witnessed numerous changes in personal finance, with the proliferation of financial products and contemporary financial issues such as financial exclusion and retirement planning. In this paper, I contend that *zakat* and *awqaf* institutions need to refine their approaches in line with the personal financial issues of today. More specifically, this study looks at the financial exclusion issues and saving motives of welfare recipients in Brunei, to ascertain how best *zakat* and *awqaf* institutions can facilitate financial inclusion and their saving needs. The findings are based on analysis of structured interviews with 431 individuals (215 welfare recipients and 216 non-welfare recipients). Further insights on financial exclusion are sought from semi-structured interviews with 39 welfare recipients. The findings suggest the existence of a hierarchical structure, where financial exclusion and saving motives are concerned. The findings also highlight the need for bank accounts and credit facilities that meets the needs of welfare recipients – their daily needs as well as saving for children's/grandchildren's education, i.e., for welfare recipients whom save. The implications of these findings points out that poverty alleviation solutions created by *zakat/awqaf* institutions will need to adapt to contemporary challenges and avoid a one-size-fits-all solution, tailored instead to fit financial needs, in line with the contemporary nature of personal finance.

*Keywords: zakat/awqaf* institutions, zakat, awqaf, financial exclusion, saving motives

## 1. Introduction

In the past, *zakat* and *awqaf* practices had played significant roles in Islamic societies. For instance, during the time of *Khalifah* Umar, who although stated that *zakat* must be disbursed in the same locality at which they were collected, did accept transfers to the central government when Muath, the governor of Yemen, explained that no deserving beneficiaries existed in the area (al-Qardawi n.d.). In terms of *awqaf*, prior to the twentieth century, public services and facilities such as roads, schools and libraries in some Islamic states were generally created by *awqaf* institutions and not the government (Boudjellal 2008; Cizakca 1998; Hoexter 1998).

Unfortunately, the strength of *zakat* and *awqaf* has suffered setbacks throughout history, due to internal crises and colonialism, among others (Ahmed 2004; Cizakca 1998; Kahf 2000b, 2003). Despite these setbacks, the second half of the 20th century has witnessed a form of revival, with governments taking the primary role in collecting and disbursing *zakat*, as well as administering *awqaf* matters in some countries (Ahmed 2004; Kahf 2000a as cited in Ahmed 2004).

In Brunei, the importance of *zakat* and *awqaf* is exemplified by the creation of the Religious Council and Kadis Court Act in 1955. Within the Act, the Majlis Ugama Islam Brunei (MUIB), or the Brunei Islamic Religious Council, is considered the body responsible for aiding and advising His Majesty on all aspects relating to Islam in Brunei. For instance, MUIB holds responsibility for the collection and disbursement of *zakat* in Brunei, as stated in Section 114 of the Act, extracted below:

> 'The Majlis shall have the power, and shall be under the duty, to collect on behalf of His Majesty, and to dispose of as His Majesty may, subject to the provisions of this Act direct, all *zakat* and *fitrah* payable in Brunei Darussalam in accordance with Muslim law…'

In addition to the revival of *zakat* and *awqaf* in some Muslim countries, the current era has also witnessed changes in the realm of personal finance. The contemporary financial customer is likely to be inundated with various types of financial products. Being excluded from accessing or using the financial products means that he/she will resort to

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alternative or informal financial products that incur higher prices or include unfavorable conditions. The changing personal financial world also views the importance of savings, as numerous governments are gradually pushing individuals to save for future events, such as retirement.

This paper attempts to demonstrate the need for *zakat* and *awqaf* institutions to review their approaches in line with contemporary personal financial issues. More specifically, this study looks at the financial exclusion issues and saving motives of welfare recipients in Brunei, to establish how best *zakat* and *awqaf* institutions can adapt to their saving needs and achieve financial inclusion.

In Section II, selected literature on financial exclusion and saving motives are described. Section III introduces the research design of the study, while Section IV provides a summary of research findings/statistics as well as some background information on Brunei. Section V and VI show the findings on financial exclusion and saving motives, respectively. Section VII analyzes these findings, in the context of how *zakat* and *awqaf* institutions in Brunei and how the country can assist welfare recipients to achieve financial inclusion and facilitate their saving goals – all of this before concluding on the paper.

## 2. Review of literature

Financial exclusion refers to "a process whereby people encounter difficulties accessing and/or using financial services and products in the mainstream market that are appropriate to their needs and enable them to lead a normal social life in the society in which they belong" (European Commission 2008, p. 9). Financial exclusion does not exclusively refer to being denied access to financial services, as it may also refer to excluding oneself from using a financial product due to its inappropriate features or conditions (Kempson and Whyley 1999). Below are some of the main causes of financial exclusion, categorised from a demand and supply perspective.

From a supply perspective, exclusion may arise due to:

a) *Access exclusion*: Excluded due to risk assessment processes, such as being refused access to open a bank account due to insecure, part-time or temporary employment or failing a credit scoring system (Financial Services Authority 2000).
b) *Condition exclusion*: Excluded from using financial products that have unattractive conditions, which do not appeal to some individuals. For example, insurance policies may contain clauses that make them unattractive for low-income households (Financial Services Authority 2000; Kempson and Whyley 1999).
c) *Geographical access*: A historical form of financial exclusion, where, for instance, bank branch closures led to financial exclusion in poor communities or rural areas (Leyshon and Thrift 1995).
d) *Marketing exclusion*: Excluded due to selective marketing of financial products. Current customers of mainstream financial markets are likely to be kept abreast of financial products through marketing information, subsequently increasing their understanding of the product, or at least its existence. Meanwhile, those who have never or for a prolonged period had not taken up mainstream financial products are less likely to know of its existence (Financial Services Authority 2000; Kempson and Whyley 1999).
e) *High costs to providers*: Refers to the reluctance of financial providers to provide products, such as basic banking services, to the poor. The high costs involved with providing banking facilities to low-income customers equates to small amounts of savings and credit needs, which are unlikely to yield high profits (Hogarth and O'Donnell 2000).
f) *Complexity of choice*: Includes instances whereby, with too many products to choose from, the target market becomes overwhelmed when trying to decide on the optimal product (European Commission 2008).

Aside from the above factors, financial exclusion may also occur from the demand or consumer perspective, which may fall within the following categories:

a) *Price exclusion*: Excluded due to affordability of financial products such as high costs of credit for low-income households, or high insurance premiums of home contents' insurance, notably for those living in crime-ridden neighborhoods (Financial Services Authority 2000; Kempson and Whyley 1999).
b) *Self-exclusion*: Refers to a tendency to exclude oneself from taking up financial products because of a belief that the application will be refused due to previous personal history, or knowledge of a person with similar circumstance being refused (Financial Services Authority 2000; Kempson and Whyley 1999). Additionally, this form of psychological exclusion from the mainstream financial market may pertain to a lack of geographical access, bringing about low self-esteem or a belief that mainstream financial products are not for households with low incomes. Mistrust of financial institutions due to a lack of confidence with financial institutions or concerns of bankruptcy, as well as a fear of loss of financial control, also leads to self-exclusion (European Commission 2008; Kempson and Whyley 1999). Another form of self-exclusion relates to cultural or religious beliefs, such as the prohibition of bank interest held by Muslims, which self-excludes Muslims from using interest-bearing financial instruments (Financial Services Authority 2000).

Aside from financial exclusion, saving motives is another dominant concept in this paper. Within behavioral research, the study of saving motives goes back to Keynes (1936), who outlined eight motives explaining why individuals save.

1. Precaution: saving for unknown events or contingencies
2. Foresight: saving for known events such as children education and retirement
3. Calculation: saving to enjoy a higher consumption in the future, due to interest and appreciation of wealth
4. Improvement: saving to enjoy a gradually, higher standard of living in the future
5. Independence: saving for the intention of attaining a sense of power to perform certain actions, or to attain some form of independence
6. Enterprise: saving for business or speculative intentions

7. Pride: saving for bequest
8. Avarice: saving due to miserliness

In acknowledging that households have numerous saving motives, Xiao and Noring (1994) analyzed the perceived savings motives of a representative US sample and the extent of variation of these saving motives with respect to demographic, life cycle and financial variables. In their study, the conceptual framework used was that of Maslow's Hierarchy of Needs.

Maslow (1954) argued that individuals were motivated by a hierarchy of needs, categorized within two sets of biological needs: basic needs and growth needs. Basic needs, also known as deficiency needs, reflect the notion that needs at the bottom of the hierarchy must be satisfied first, before other needs take a higher priority. These deficiency needs include physiological needs, safety needs, belongingness and love needs, and esteem needs.

At the base of the hierarchy lie the physiological needs, which generally relate to the need to satisfy hunger, thirst and sex. After fulfillment of physiological needs, safety needs become prevalent. The third deficiency need, belongingness and love, relates generally to the need for establishing affection with people, and specifically, to establish a place in his/her group. Esteem needs representing the final category within the context of basic or deficiency needs (dependent on external factors), involve two types of esteem needs: one that relates to a desire for adequacy, achievement, mastery, confidence and freedom. The other type involves the desire for reputation, status, recognition, attention, importance, or appreciation. The self-actualization needs, representing growth needs, comprise the desire to achieve one's potential and drives individuals towards a sense of self-fulfillment (Maslow 1954).

Xiao and Noring (1994) using responses to the question, "What were the household's most important reasons for savings?" They analyzed, after a series of coding, six dummy variables that the authors named:

1. Daily: saving for daily expenses
2. Purchase: saving for purchases
3. Emergency: saving for emergencies
4. Retire: saving for retirement
5. Child: saving for children or grandchildren
6. Grow: saving for a higher standard of life, better life or other intangible reasons

Their analysis shows that financial resources such as income and net worth, displayed a particular pattern with respect to the more prevalent saving motives, as shown in Table 1 below.

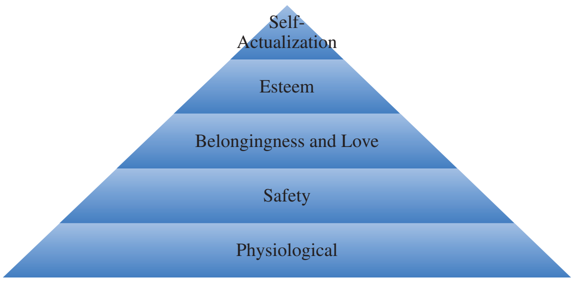


**Figure 1.** Maslow's hierarchy of needs.

**Table 1.** Financial resources and perceived saving motives.

| Income | Saving Motives | Net Worth | Saving Motives |
|---|---|---|---|
| Low | Daily | Lowest 25% | Daily, Purchase |
| Medium | Emergency | Mid 50% | Emergency |
| High | Retire, Child, Grow, Purchase | Highest 25% | Retire, Child, Grow |

With the exception of "purchase," the study appears to indicate that as financial resources increased, the perceived saving motives shift from saving for daily expenses, to saving for emergencies, and further on towards saving for retirement, children and growth. If the perceived saving motives in this study are seen as indicators of a households' financial needs, the results reflect a form of hierarchical needs, in line with Maslow's Hierarchy of Needs.

Xiao and Anderson (1997) also included Maslow's Hierarchy of Needs within their conceptual framework in attempting to understand the types and levels of financial assets held by households. The authors divided financial needs into three groupings: survival, security and growth needs. They then posited that as financial resources increased households would become interested in financial assets with a higher risk-reward structure.

In such a case, the survival needs (represented by checking accounts) and growth needs (represented by shares and bonds) would fall in line with Maslow's deficiency and growth needs respectively. Their findings highlighted the presence of a hierarchy of financial needs, assuming that shares of financial assets are taken as a proxy for financial needs. In other words, as financial resources increase, consumers appear to pursue higher-level needs, and the respective financial assets.

## 3. Research design

The research takes the form of a cross-sectional design, using a mixed-methods approach. More specifically, this involves the use of structured interviews and semi-structured interviews on Muslim heads of households, in the Brunei-Muara district.[1] The semi-structured interview involved 39 welfare recipients – answers were attained using purposive sampling. Meanwhile, the structured interview involves 431 respondents (215 welfare recipients and 216 non-welfare recipients) using non-random sampling; more specifically, quota sampling and purposive sampling. In both interviews, the majority of welfare recipients comprise *zakat* recipients. Further, in this study, welfare recipients and non-welfare recipients are denoted as net deficit respondents and net surplus respondents, respectively.

In terms of the semi-structured interviews, two cycles of coding were involved to analyze the transcribed interviews; In Vivo Coding and Initial Coding were used in the first cycle, whilst Focused Coding was used in the second cycle. In terms of structured interviews, to gauge financial exclusion, sixteen financial products were presented to the respondents, which fall under the category of bank accounts, credit facilities, insurance/*takaful* products and investment products. Further, two questions related to financial exclusion were posed:

1. Have you ever applied for any of these financial products/services, but were not successful in your application?
2. Have you ever **considered** applying for any of these financial products/services but **decided not to**, due to the high costs or difficulty in meeting the bank's requirements?

To gauge saving motives, a filter question was posed to the respondents: Do you save on a regular basis? Respondents were given the option to answer (1) 'Yes', (2) 'No, but I save whenever I can' or (3) 'No, I don't/can't save.' Out of the respondents who stated they either save regularly or save whenever they can, they were further questioned about their reasons to save. Further, if they provided more than 1 saving motive, their top three reasons for saving were also identified. Their responses were coded and grouped into several categories:

1. Saving for daily/living expenses
2. Saving for emergency/risk mitigation
3. Saving for purchase of goods/services
4. Saving for purchase of assets
5. Saving for children/grandchildren's education
6. Saving for retirement
7. Saving for charity/religious donation

To assess differences in financial exclusion on the four categories of financial products, and differences in savings on the seven categories of saving motives, Pearson's chi-square test was used to determine significant association between:

1. Financial exclusion and whether the respondent fell into the net surplus vis-à-vis net deficit categorization
2. Financial exclusion and grouping of high-, middle- and low-income earners
3. Saving motives and whether the respondent fell into the net surplus vis-à-vis net deficit categorization
4. Saving motives and grouping of high-, middle- and low-income earners

The use of Pearson's chi-square test is especially pertinent considering that categorical variables were involved.

## 4. Understanding Brunei and summary profile of respondents

With a population size of 406,200 and natural reserves of oil and gas, Brunei Darussalam has one of the highest GDP per capita within the region at $48,194[2] in 2009 (Asian Development Bank 2010; Department of Statistics 2009a). Two-thirds of the population are Muslim, Islam being the official religion in the Sultanate (Brunei Economic Development Board n.d.).

The country is also blessed with a relatively high literacy rate at 94.9 percent, and a Human Development Index (HDI) of 0.805 in 2010, ranking Brunei 37th globally (Brunei Economic Development Board n.d.; United Nations Development Programme 2010). In the context of poverty, three institutions are generally involved in poverty alleviation efforts, namely Majlis Ugama Islam Brunei (MUIB)/Brunei Islamic Religious Council, Jabatan Pembangunan Masyarakat (JAPEM)/Community Development Department and the Sultan Haji Hassanal Bolkiah Foundation.

To understand the Bruneian respondents involved in the study, a summary profile of the participants is shown in Table 2. In terms of similarities, the median figures indicate that both groups (net surplus and net deficit) appear to be in their mid-forties, with a family size of 6–7 individuals. A majority of the respondents in both groups are male and married.

With regards to differences, the net deficit group earns distinctively less than the net surplus group, with the former

**Table 2.** Summary profile of respondents.

| Variable | | N* | Mean | Median |
|---|---|---|---|---|
| (i) Age | Net Surplus | 216 | 43.51 | 44 |
| | Net Deficit | 215 | 46.41 | 43 |
| (ii) Years in formal education | Net Surplus | 206 | 12.65 | 12 |
| | Net Deficit | 214 | 7.70 | 8 |
| (iii) No. of individuals living in household | Net Surplus | 215 | 6.44 | 6 |
| | Net Deficit | 215 | 7.60 | 7 |
| (iv) Total monthly earnings** | Net Surplus | 214 | 3,789.21 | 3,000 |
| | Net Deficit | 211 | 425.35 | 300 |
| (v) Gender | | Male | Female | Total |
| | Net Surplus | 177 (82%) | 39 (18%) | 216 (100%) |
| | Net Deficit | 147 (68%) | 68 (32%) | 215 (100%) |
| | Total | 324 (75%) | 107 (25%) | 431 (100%) |

(*Continued*)

**Table 2 -** *Continued*

| (vi) Marital Status | | Single | Married | Divorced | Widowed | Total |
|---|---|---|---|---|---|---|
| | Net Surplus | 21 (10%) | 186 (86%) | 4 (2%) | 5 (2%) | 216 (100%) |
| | Net Deficit | 2 (1%) | 162 (75%) | 22 (10%) | 29 (14%) | 215 (100%) |
| | Total | 23 (5%) | 348 (81%) | 26 (6%) | 34 (8%) | 431 (100%) |

| (vii) Employment Status | | Government | Non-Government Employee | Student, Retiree, Housewife, Actively looking for work | Total |
|---|---|---|---|---|---|
| | Net Surplus | 141 (65%) | 38 (18%) | 37 (17%) | 216 (100%) |
| | Net Deficit | 36 (17%) | 65 (30%) | 114 (53%) | 215 (100%) |
| | Total | 177 (41%) | 103 (24%) | 151 (35%) | 431 (100%) |

| (viii) Home Ownership | | Live in own home | Live with family members | Live in rental property/others | Total |
|---|---|---|---|---|---|
| | Net Surplus | 146 (68%) | 33 (15%) | 37 (17%) | 216 (100%) |
| | Net Deficit | 124 (58%) | 73 (34%) | 18 (8%) | 215 (100%) |
| | Total | 270 (63%) | 106 (25%) | 55 (13%) | 431 (100%) |

earning a median amount of BND300 compared to BND3000 earned by the latter. In terms of employment, the size of the net surplus group that are employed is nearly double (83 percent) that of the net deficit group (47 percent). Another difference lies in education; the net deficit respondents were likely to have spent 4 years less in formal education than the net surplus group. Meanwhile, in terms of home ownership, although the majority of respondents in both groups live in their own homes, there is twice the number of net deficit respondents (34 percent) who live with other family members than net surplus respondents (15 percent).

## 5. Financial exclusion

### *Analysis on structured interviews*

In this paper, a financial hierarchy is sought to better understand the issue of financial exclusion; it would be insightful to ascertain if certain households are more likely to have difficulty in accessing certain financial products/services than other households, notably in a hierarchical context. Figure 2 illustrates an example of how a hierarchy of financial needs may look within the realm of financial exclusion. Bank accounts are generally seen as pre-requisites to other financial products and therefore such accounts should be seen as a basic need to be satisfied first. Meanwhile, investment products can be viewed as high-level needs, as the cost of investment products are relatively high. To the extent that a hierarchy exists, the intention is to move net deficit households up from meeting survival needs (for instance, having a bank account to receive one's salary) onto higher-level needs (for instance, having access to investment products, to save for retirement).

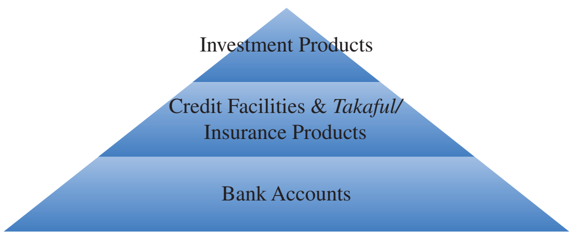


**Figure 2.** A hierarchical form of financial products/services.

Using Pearson's chi-square test, the respondent's exclusion to the four categories of financial products were analysed against earnings and whether the respondent was in the net deficit or surplus category.

### Net surplus/deficit categorization

Table 3 shows the results of the Pearson's chi-square tests, when financial exclusion is tested against those receiving financial assistance (net deficit households) vis-à-vis those not receiving financial assistance (net surplus households). Note that the results highlighted in bold represent those found to be statistically significant.

The table highlights that all the categories of financial products, with the exception of *takaful*/insurance, are statistically significant. Figure 3 below illustrates the percentage of households that is more likely to have difficulties accessing financial products or is more likely to be financially excluded, within each financial category.[4]

**Table 3.** Chi-Square results[3]—Financial exclusion, vis-à-vis net surplus/deficit categorization.

| No. | Financial Products | Results |
|---|---|---|
| 1. | Bank Accounts | **p < .05** |
| 2. | Credit Facility | **p < .05** |
| 3. | *Takaful*/Insurance Products | p > .05 |
| 4. | Investment Products | **p < .05** |

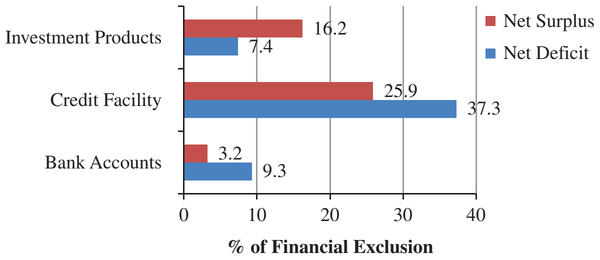


**Figure 3.** Percent of households with financial exclusion, vis-à-vis net surplus/deficit categorization.

Not surprisingly, net deficit households are more likely to be financially excluded, where bank accounts and credit facilities are concerned, compared to net surplus households.

As for investment products, the diagram shows that net surplus households are more likely to be financially excluded than net deficit households. From one perspective, this is intriguing, as it is more intuitive for net deficit households to be excluded than net surplus households, in terms of accessing investment products. However, from another perspective, one may contend the reason for such findings may be due to the fact that net deficit households have more pressing needs. With the need to have bank accounts and credit facilities to stabilize their personal finances, investment products are the least of their priorities or 'financial needs.' Therefore, net deficit households are less likely to report that they face difficulties accessing investment products, because their financial needs, where financial products are concerned, lie elsewhere.

### *Earnings*

Table 4 shows the results of Pearson's chi-square test, when financial exclusion is tested against earnings.

The above table illustrates financial exclusion compared against three income groups,[6] that is, low income (under BND300), middle income (BND300-BND3,000) and high income (over BND3,000), with the results highlighting bank accounts and investment products as being statistically significant.

**Table 4.** Chi-square results[5]—Financial exclusion, vis-à-vis earnings.

| No. | Financial Products | Results |
|---|---|---|
| 1. | Bank Accounts | **p < .10** |
| 2. | Credit Facility | p > .05 |
| 3. | *Takaful*/Insurance Products | p > .05 |
| 4. | Investment Products | **p < .05** |

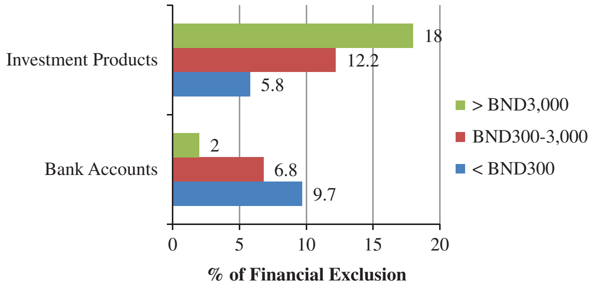


**Figure 4.** Percent of households with financial exclusion, by earnings.

Below, Figure 4 shows that similar to the previous figure, households on low incomes are more likely to be excluded from accessing bank account facilities than higher income groups. Meanwhile, in terms of investment products, high-income earners report that they are excluded from accessing these products, more so than low-income earners.

Taking the results of earnings and net surplus/net deficit categorization into context, it appears there is a hierarchical structure of financial exclusion, whereby those at the bottom of the hierarchy are more likely to be excluded from accessing bank accounts and credit facilities.

Meanwhile, those at the upper level are more likely to be excluded from investment products, possibly due to the lack of "financial need" for investment products by those at the lower levels of the hierarchy. In other words, those on the lower tiers of the hierarchy have more pressing "financial needs," which essentially advocates further the existence of a hierarchy of financial needs within the realm of financial exclusion; such basic needs must be satisfied first before other needs (such as investment products) are taken into consideration.

### *Analysis on semi-structured interviews*

Having identified that net deficit households and, to a certain degree, low-income earners are likely to be excluded from bank accounts and credit facilities, results of the semi-structured interviews were analyzed to further understand the reasons for exclusion or factors that contributed to financial exclusion. Table 5 shows the responses of interviewees who highlighted issues or challenges in accessing savings or current accounts.

The issue of financial exclusion where bank accounts are concerned pertains to affordability in general. The main subtheme relates to opening a bank account for the purpose of receiving *zakat* disbursements. To receive *zakat* disbursements in Brunei, recipients are required to open at least a basic bank account with an Islamic bank,[7] which generally requires a minimum opening deposit of BND50. For certain respondents, such as those who already have an existing Islamic bank account from their previous employment, this does not pose a problem. However, for others who neither have an existing Islamic bank account

**Table 5.** Financial exclusion on bank accounts.

| **Research Question** | **What are the factors affecting the accessibility and usage of bank accounts?** | |
|---|---|---|
| **Focused Coding** | **Subtheme/Remarks** | **Interview No.** |
| 1 | Affordability, when opening a bank account in order to receive *zakat* disbursement | NS1, HS12, HS15, HS18, HS26, HS37, HS40, NH26 |
| 2 | Affordability, when opening a bank account to save for goals | HS39 |
| **Concluding theme** | The main issue with accessing a bank account lies in affordability, notably towards opening a bank account in order to receive *zakat* disbursements from MUIB | |

nor have sufficient funds to open one, this provides certain difficulties on the eve of receiving any *zakat* disbursements. Respondents who highlighted such difficulties would often borrow[8] the required amount from family members or friends, and repay the amount once the *zakat* disbursement had been made. In other cases, the would-be recipient would have to wait for payday before opening an account.

Out of the four categories of financial products, it is important to note that credit facilities were the most widely discussed category during the interviews. This signifies not only the importance of credit to those who applied for it, but also underlines the need to understand the challenges faced in attaining it. In terms of accessing credit, the reasons for not having a particular credit facility can be grouped into three main factors, as highlighted in Table 6.

One of the most persistent, if not the main reason, as to why a particular credit facility was not obtained relates to affordability. This subtheme is elaborated further in Table 7, to provide a better understanding of affordability in acquiring credit.

The issue of affordability involves both accessing as well as maintaining credit facilities. For instance, those who considered applying for a facility, but decided not to, highlighted affordability in the context of having no regular source of funds, low salary levels or concerns on meeting the monthly repayment amounts. For those who did apply but were unsuccessful, stated their low salary level or the fact that he/she was a daily paid employee, as the reasons for the application to be rejected. For those who successfully applied for credit facility, problems in maintaining the loan arose due to a loss of employment or their retirement. In another instance, the interviewee was employed but the repayment amount was too high.

## 6. Saving motives

Before coding and grouping the saving motives into seven categories, weighted scores[9] of the ranked saving motives were assessed to provide an initial description of the saving motives, as shown in Table 8.

The above table highlights the importance of saving for emergencies and children's/grandchildren's education for both groups of respondents, although the emphasis on saving for children/grandchildren's education is distinctly higher for net deficit respondents, as shown in the scores.

For net surplus respondents, three other saving motives are found to have a score higher than 1, these being saving for ordinary living expenses, liquidity and retirement. Meanwhile, for net deficit respondents, saving for ordinary

**Table 6.** Financial exclusion on credit facilities.

| **Research Question** | **What are the factors affecting the accessibility and usage of credit facilities?** | |
|---|---|---|
| **Focused Coding** | **Subtheme/Remarks** | **Interview No.** |
| 1 | Affordability or cost concerns, towards acquiring credit. | HS4, HS6, HS11–15, HS18–19, HS21, HS23–28, HS31, HS36–37, HS39, HS41, ZA31, NH26, NS1 |
| 2 | Existence of outstanding loans, which restricts ability to acquire credit. | HS14, HS29, HS42 |
| 3 | Conditions of the credit facility. | HS16–18, HS28, HS38–39, HS41, NH26, NS1, HF16 ZA31 |
| Concluding theme | Affordability is the main factor contributing towards exclusion from credit facilities, followed closely by conditions related to the credit facilities and existence of outstanding loans. | |

**Table 7.** Focused coding No. 1 (Financial exclusion on credit facilities).

| **Subtheme** | **Affordability, or costs concerns towards acquiring credit.** |
|---|---|
| **Interview No.** | **Remarks** |
| HS4, HS12, HS18–19, HS24–25, HS27, HS39, HS41, ZA31 | Considered applying for credit but decided not to, due to a lack of a regular source of income/funds, low salary levels, or concerns on meeting high monthly payments |
| HS6, HS14, HS21, HS23, HS31 | Applied for credit but was unsuccessful, due to low salary levels or being a daily paid employee |
| HS4, HS11–15, HS26, HS28, HS31, HS36, ZA31 | Considered a credit facility as being important, but never applied, due to insufficient funds or lack of earnings |
| HS14, HS37, HS39, NH26, NS1, ZA31 | Faced issues maintaining credit, due to loss of employment or being retired |
| HS6 | Faced issues maintaining credit, although still in employment but the repayment amount is deemed too high |

**Table 8.** Excerpt of weighted scores of ranked saving motives.

| No. | Net Surplus | Score | Net Deficit | Score |
|---|---|---|---|---|
| 1. | Emergencies/Unexpected needs | 2.06 | Children's/Grandchildren's Education | 2.52 |
| 2. | Children's/Grandchildren's Education | 1.69 | Emergencies/Unexpected needs | 1.79 |
| 3. | Retirement/Old Age | 1.47 | Ordinary living expenses/bills | 1.41 |
| 4. | Liquidity | 1.07 | Buy things when needed/wanted | 0.59 |
| 5. | Ordinary living expenses/bills | 1.04 | Retirement/Old Age | 0.54 |
| 6. | Buy own house | 0.88 | Liquidity | 0.52 |
| 7. | Reserves in case of unemployment | 0.53 | Buy own house | 0.43 |
| 8. | Buy things when needed/wanted | 0.38 | Reserves in case of unemployment | 0.30 |
| 9. | Charitable/religious contribution | 0.28 | Own/Spouse's education | 0.27 |
| 10. | Home improvement/repairs | 0.25 | Buy durable goods | 0.27 |

living expenses is the only other saving motive with a score higher than 1, reflecting the considerable importance of this saving motive for net deficit respondents.

In view of Xiao and Noring (1994) described in Section II, a similar hierarchical pattern is investigated, inquiring whether, in the case of the Brunei sample, as financial resources increase, the types of saving motives change accordingly, such as those illustrated in Figure 5 below.

To establish if a hierarchy of financial needs exists, the seven categories of saving motives listed in Section III, were analysed against earnings and whether the respondent was in the net deficit or surplus category.

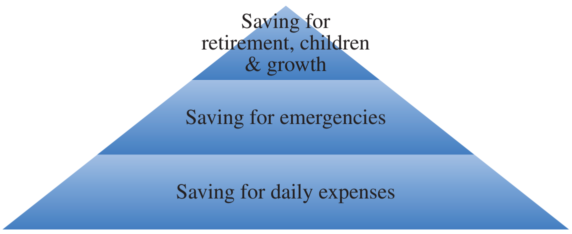


**Figure 5.** A hierarchical form of perceived saving motives.

### *Net surplus/deficit categorization*

Table 9 shows the results of the Pearson's chi-square computation, when the saving motives are tested against those receiving financial assistance (net deficit households) vis-à-vis those not receiving financial assistance (net surplus households).

**Table 9.** Chi-square results-ranked saving motives, vis-à-vis net surplus/deficit categorization (n=287).

| No. | Saving Motives | Results |
|---|---|---|
| 1. | Daily/Living Expenses | $p < .05$ |
| 2. | Emergency/Risk Mitigation | $p < .05$ |
| 3. | Purchase – Goods/Services | $p < .10$ |
| 4. | Purchase – Assets | $p < .05$ |
| 5. | Children/Grandchildren's Education | $p < .05$ |
| 6. | Retirement | $p < .001$ |
| 7. | Charity/Religious Donation | $p > .05$ |

In terms of net surplus/deficit categorisation, with the exception of 'charity/religious donation,' the table shows that there is a significant association between the net surplus/deficit categorization and whether or not one saves for a particular motive. Figure 6 illustrates the percentage of saving motives for net surplus and net deficit households.

As the diagram highlights, net surplus households are more likely to save for retirement, emergencies and purchase of assets, while net deficit households are more likely to report saving for purchase of goods/services, saving for their children/grandchildren's education and daily expenses.

### *Earnings*

Table 10 shows the results of the chi-square test, when saving motives are tested against earnings. The table illustrates saving motives compared against three income groups[10], that is low income (under BND675), middle income (BND675-BND4,000) and high income (over BND4,000), with the results indicating that three saving motives are found to be statistically significant: daily/living expenses, children/grandchildren's education and retirement.

Figure 7 compares the saving motives that are found to be statistically significant against the respective income group. Low-income households or those earning less than BND675 are more likely to save for daily expenses as well as education for their children/grandchildren than the relatively higher income groups. Meanwhile, high-income households are more likely to save for retirement than the middle-income households, and more so than the low-income households.

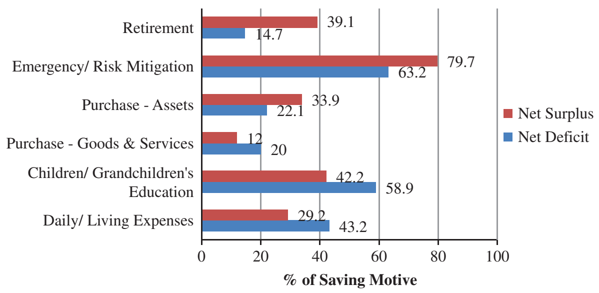


**Figure 6.** Percent of households with ranked saving motives vis-à-vis net surplus/deficit categorization.

**Table 10.** Chi-square results-ranked saving motives against earnings (n=282).

| No. | Saving Motives | Results |
|---|---|---|
| 1. | Daily/Living Expenses | **$p < .05$** |
| 2. | Emergency/Risk Mitigation | $p > .05$ |
| 3. | Purchase – Goods/Services | $p > .05$ |
| 4. | Purchase – Assets | $p > .05$ |
| 5. | Children/Grandchildren's Education | **$p < .05$** |
| 6. | Retirement | **$p < .001$** |
| 7. | Charity/Religious Donation | $p > .05$ |

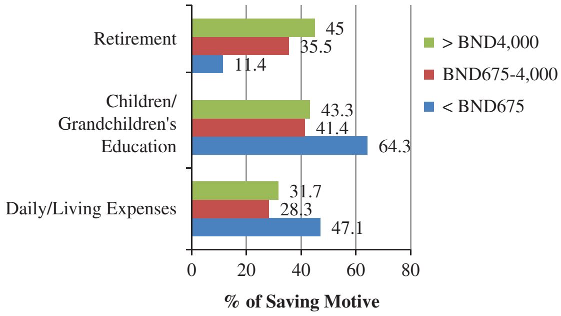


**Figure 7.** Percent of households with ranked saving motives, by earnings.

Taking both earnings and net surplus/deficit categorisation into account, although not all saving motives are found to be significant, it does point out there is a hierarchy of financial needs, where saving motives are concerned. In summary, savers in the upper echelons of the hierarchy are more likely to save for retirement, emergencies and purchase of assets. Meanwhile, those in the lower levels of the hierarchy are more likely to save for daily expenses, children/grandchildren's education and goods/services.

## 7. Implication of findings: Role of *Zakat* & *Awqaf* institutions on financial inclusion and savings

The findings in the previous section highlights three main areas of interest that *zakat* and *awqaf* institutions in Brunei should consider to assist welfare recipients or net deficit households to achieve financial inclusion and their saving goals.

### *Facilitate creation of bank accounts and credit facilities*

Understanding the financial needs of net deficit households are important, to effectively enhance their financial situation. Section V highlighted that when financial exclusion (or difficulties in accessing financial products) is taken as a proxy of financial needs, there are two categories of financial products, from which net deficit households are more likely to be excluded, compared to net surplus households: bank accounts and credit facilities.

Another proxy of financial need is saving motives. Here, two analyses related to saving motives are highlighted. Firstly, results from Table 8 (Section VI) showed that for net deficit households, the top three reasons for saving are in order to deal with:

1. Children's/grandchildren's education
2. Emergencies/unexpected needs
3. Ordinary living expenses/bills

Secondly, in Figure 6 (Section VI), when the ranked saving motives were re-coded and analysed vis-à-vis net surplus respondents, it was found that there are three categories where net deficit respondents are more likely to save, compared to net surplus respondents. In no particular order, these categories are:

- Saving for children's/grandchildren's education
- Saving for purchase of goods and service
- Saving for daily/living expenses

From the above, it is clear that there are some saving motives that appear in both forms of analysis. One of the saving motives that appears in both analyses is saving for children or grandchildren's education. On one hand, it is comforting to know that those in poverty or with low incomes acknowledge the importance of education for their children or grandchildren. On the other hand, it would be particularly worrying should their attempts to save for their children or grandchildren fall short of expectations, or were insufficient to meet the cost of education. Aside from children's/grandchildren's education, another persistent need highlighted is saving for daily/living expenses.

Taking both proxies of financial needs (saving motives and financial exclusion) into account, one may state that *zakat* and *awqaf* institutions can assist welfare recipients to improve their financial situation and fulfill their needs, by the provision of bank accounts and credit facilities that assist to meet living expenses and children's/grandchildren's education needs. In other words, *zakat/awqaf* institutions should consider facilitating the creation of the following:

1. Bank accounts, for the purpose of saving for daily/living expenses
2. Bank accounts, for the purpose of saving for children's/grandchildren's education
3. Credit facilities, which assist consumers to meet their daily/living expenses
4. Credit facilities, which assist consumers to meet their children's/grandchildren's education costs

Aside from the above types of financial products and their intended usage, two additional types of products are:

5. Bank accounts, for the purpose of saving for emergencies
6. Credit facilities, which assist consumers to meet their emergency needs

These latter two types should be included, as Table 8 (Section VI) showed that saving for emergencies is ranked as the second most important reason for saving, by net deficit respondents.

### *Need for 'Financial Inclusion Compliance Test'*

The analysis on financial exclusion of bank accounts in Table 5 (Section V) described a situation where *zakat* recipients are required to open at least a basic bank account with an Islamic bank before receiving *zakat* disbursements. And this posed a problem for some respondents who did not have an existing Islamic bank account or do not have sufficient funds readily available to open the bank account. This instance highlights the need for *zakat/awqaf* institutions to establish a 'financial inclusion compliance test' when designing financial solutions or products for welfare recipients.

Such a compliance test should involve a holistic review of the process, whereby during the product design stage, aspects that may contribute to exclusion, such as that of access exclusion and condition exclusion, described in Section II, are mitigated. This firstly ensures that *zakat* recipients do not face difficulties in acquiring *zakat* funds, on top of their current financial difficulties. And secondly, this ensures the efficacy of the financial solution/product, in the sense that its usage or access is not hindered by any affordability or condition concerns, that contributes to financial exclusion.

### *Incentivising saving programmes using Zakat funds and/or Awqaf proceeds*

Another aspect for *zakat/awqaf* institutions to consider is the creation of saving products or mechanisms that incentivizes welfare recipients who attempt to save. For instance, the findings highlighted the importance of saving for children/grandchildren's education for net deficit households. In that regard, to assist them to expedite their savings and encourage or reward a saving behavior, *zakat/awqaf* institutions could equitably match the household's savings during the year, using a matched saving scheme. In other words, for any saving made by the household for next year's schooling or education costs, the welfare institution could match or through other saving mechanism assist to expedite their savings and reward the household towards cultivating a saving habit.

This approach could be contended as being more beneficial than welfare approaches that simply provide cash without observing the needs of welfare recipients. By ascertaining the financial needs of net deficit households in general and their saving motives in particular, a more effective poverty alleviation program could be designed, whilst at the same time inculcating households to nurture a saving behavior.

## 8. Conclusion

Financial situations and challenges change from era to era, and there is a need for welfare institutions to continuously adapt and innovate their approaches. This paper contends that welfare institutions in Islam – *zakat* and *awqaf* institutions – need to refine their approaches in line with the personal financial issues of today. This paper attempts to provide one particular approach through understanding the contemporary financial needs of welfare recipients. Taking financial exclusion and saving motives as proxies of financial needs, the findings suggest the existence of a hierarchical structure, where needs at the bottom need to be considered first before higher order needs can be fully considered.

Taking both proxies together, this means that there is a need for bank accounts and credit facilities that meet the needs of welfare recipients. More specifically, these financial products must be designed to fulfill the daily needs or ordinary living expenses of recipients, and for their children's/grandchildren's education. Further, the findings also point out the need for a "financial inclusion compliance test" during the design phase of financial solutions or products. In addition, the findings also highlight the opportunity for *zakat/awqaf* institutions to establish new poverty alleviation solutions such as saving programs that directly relate to the financial needs of the recipients.

**Notes**

1. The Brunei-Muara district has the largest population size, with about 70 percent of the Brunei population residing in the district. For instance, in 2008, the Brunei-Muara district had a population size of 276,600, relative to the total population figure of 398,000 (Department of Statistics 2009b).
2. Units pertain to current international dollars, and purchasing power parity.
3. The number of sample (n) analysed for all types of financial products are 431, with the exception of credit facilities where n = 428.
4. Note that only the financial products that are statistically significant are depicted in the diagram. This also applies to other similar diagrams shown in the following pages.
5. The number of sample (n) analysed for all types of financial products are 425, with the exception of credit facilities where n = 422.
6. Categorisation of income groups are based upon dividing respondents into the bottom 25% (low income), middle 50% (middle income) and top 25% (high income) category. The categorisation of the groups into these three distinct levels is aimed at ascertaining valuable insights, notably as the high-income group and low-income group are restricted to the top and bottom 25% respectively. This approach is also used by Xiao and Noring (1994).
7. As stated by numerous respondents during the interviews, it is a requirement to have an account in an Islamic bank to receive *zakat* disbursements.
8. In instances where borrowing is undertaken, once the monthly *zakat* disbursement is received in the account, the individual is left with the *zakat* amount less BND100, available for immediate use. The reduction in the net amount is because BND50 has to be repaid to the family member or friend while another BND50 is locked into the account, as the opening deposit cannot be withdrawn unless the account is closed. For example, a household receiving a *zakat* disbursement of BND250 per month would essentially be left with only BND150 in that first month, to spend for household needs. This example serves to illustrate the issue of affordability relating to the opening of a bank account.
9. For each saving motive, a score of 3 is given if the saving motive was ranked number 1, a score of 2 for rank number 2 and a score of 1 for rank number 3. The weighted scores are computed by utilizing the SUMPRODUCT function in Excel and dividing the respective scores by the highest possible score, before multiplying by 3.
10. Similar to Section V, the categorisation of income groups are based upon dividing respondents into the bottom 25% (low income), middle 50% (middle income) and top 25% (high income) categories. Note that the specific amounts related to the upper, middle and lower income groups in this section differ from Section V. This is because the analysis related to this particular section refers to a subgroup of the respondents, since not all respondents were required to answer questions related to the saving motives. Meanwhile, the analysis in Section V includes all respondents. Hence, the differences of the earnings amount, within the income groups.

## References


Al-Qardawi Y (n.d.). *Fiqh Al Zakah (Volume 2)*. Available at: <URL:http://monzer.kahf.com/books/english/fiqhalzakah_vol2.pdf>.

Asian Development Bank. (2010) *Key Indicators For Asia And The Pacific 2010*. Available at: <URL: http://www.adb.org/Documents/Books/Key_Indicators/2010/pdf/Key-Indicators-2010.pdf> Access Date: 18th November, 2010.

Boudjellal M. (2008) "The Need for a New Approach to the Role in Socioeconomic Development of Waqf in the 21st Century". *Review of Islamic Economics*, 12(2), 125–136.

Brunei Economic Development Board (n.d.). *Introducing Brunei*. Available at http://www.bedb.com.bn/why_intro.html Accessed on: 24th November, 2010.

Cizakca, Murat. (1998) Awqaf in History and its Implications for Modern Islamic Economies. *Islamic Economic Studies*. 6(1); 43–70.

Department of Statistics, Department of Economic Planning and Development (2009a). *Brunei Darussalam Key Indicators 2009*. Available from http://www.bedb.com.bn/documents/bdki_2009.pdf.

Department of Statistics, Department of Economic Planning and Development (JPKE) (2009b). *Brunei Darussalam Statistical Yearbook 2008*.

European Commission. (2008) *Financial Services Provision and Prevention of Financial Exclusion*. Available at: <URL:http://ec.europa.eu/social/BlobServlet?docId=760&langId=en>.Accessed: 28th August 2010.

Financial Services Authority. (2000) *In Or Out? Financial Exclusion: A Literature and Research Review*. London.

Habib A. (2004) *Role of Zakah and Awqaf in Poverty Alleviation*. Jeddah: Islamic Development Bank Group, Islamic Research & Training Institute.

Hoexter, Miriam. (1998) Waqf Studies in the Twentieth Century: The State of the Art. *Journal of the Economic and Social History of the Orient*. 41(4); 474–495.

Hogarth JM, O'Donnell KH. (2000) If You Build It, Will They Come? A Simulation Of Financial Product holdings Among Low-to-Moderate Income Households. *Journal of Consumer Policy.* 23; 409–444.

Kahf M. (2000a). *Al Waqf al Islami, Tatawwuruh, Idaratuh, Tanmiyatuh (Islamic Waqf, its Growth, Management and Development)*. Damascus: Dar al Fikr. Cited in Ahmed, Habib (2004). *Role of Zakah and Awqaf in Poverty Alleviation*. Jeddah: Islamic Development Bank Group, Islamic Research & Training Institute.

Kahf M. (2000b) *Zakah Management in Some Muslim Countries*. Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Kahf M. (2003) *The Role of Waqf in Improving the Ummah Welfare (First Draft)*. Paper presented at the International Seminar on "Waqf as a Private Legal Body," organized by Islamic University of North Sumatra on 6th-7th January 2003, Medan, Indonesia.

Kempson E, Whyley C. (1999) *Kept Out Or Opted Out? Understanding And Combating Financial Exclusion*. Bristol: Policy Press.

Keynes JM. (1936) *The general theory of employment, interest and money*. London: Macmillan.

Leyshon A, Thrift N. (1995) Geographies of Financial Exclusion: Financial Abandonment in Britain and the United States. *Transactions of the Institute of British Geographers.* 20(3); 312–341.

Maslow AH. (1954) *Motivation and Personality*. New York: Harper and Brothers.

United Nations Development Programme (2010). *Human Development Report 2010*. Available at http://hdr.undp.org/en/reports/global/hdr2010/chapters/en/. Accessed: 25th January, 2011.

Xiao JJ, Anderson JG. (1997) Hierarchical Financial Needs Reflected by Household Financial Assets Shares. *Journal of Family and Economic issues.* 18(4); 333–355.

Xiao JJ, Noring FE. (1994) Perceived Saving Motives and Hierarchical Financial Needs. *Financial Counseling and Planning.* 5; 25–45.

# Revitalization of the traditional Islamic economic institutions (*waqf* and *zakat*) in the twenty-first century: Resuscitation of the antique economic system or novel sustainable system?

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**Abstract -** The rapid growth of Islamic finance after 2000 has led to a new question of its practice. Critics of the current situation of Islamic finance contend that the newly developed Islamic financial products are not compatible with the ideal of Islamic economics, because these products are approved at patchwork screenings by a Sharia advisory board. After the middle of the first decade of the twenty-first century, in order to overcome this situation, several new ideas were proposed by those who aspire to the ideal of Islamic economics. First, they try to exploit the new areas of the practice of Islamic finance, where conventional finance could not ensure enough service or could cause negative effects. They focuses on microfinance lending and socially responsible investment (SRI) as concrete areas for applying Islamic finance. Second they recently focused on traditional Islamic economic institutions like waqf and zakat. The practices of these institutions are still alive in the contemporary Islamic world, although they are getting scarce in many regions. They are trying to activate these institutions using the scheme of Islamic finance, tapping a new market. This paper identifies new trends in Islamic finance and considers the characteristics of the trends and their historical implications. In particular, it examines whether this revitalization can be regarded as the resuscitation of the antique Islamic economic system or the emergence of a novel system.

*Keywords:* new horizons in Islamic economics, revitalization of waqf, revitalization of zakat, sustainable development, Islamic economic system

## 1. Introduction

After its boom in the 2000s, the practice of Islamic finance faced criticism by those who aspired toward the ideal of Islamic economics. They contended that the newly-developed Islamic financial products are not compatible with the ideal of Islamic economics, because these products are approved as patchwork screenings by an internal Sharia advisory board. In the next section, this paper firstly clarifies the theoretical framework and historical background of the criticism by picking up two prominent previous instances, which were found in the history of Islamic finance since the 1970s.

After the middle of the first decade of the twenty first century, in order to overcome this situation, several new ideas were proposed by both bankers and scholars. These ideas can be divided into two trends: 1) development of the new areas of the practice of Islamic finance, where conventional finance could not ensure enough service or could cause negative effects, 2) revitalization of the traditional Islamic economic institutions like *waqf* and *zakat* by utilizing the scheme of Islamic finance. In the subsequent section, this paper identifies new trends in Islamic finance and attempts to clarify the theoretical and practical issues. As for the second trend, the paper especially clarifies the following issues with concrete case studies. 1) How does the scheme for revitalizing these traditional institutions work in practice? 2) How does the contemporary Islamic jurisprudence innovate the interpretations in order to implement the scheme of Islamic finance into the *waqf* and *zakat*?

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Finally, based on these analyses, this paper analyzes the characteristics of the trends and considers the historical implications of revitalization of these traditional institutions and, in particular, examines whether this revitalization can be regarded as the resuscitation of the antique Islamic economic system or the emergence of a novel sustainable system, which can provide an alternative to the current capitalistic system.

## 2. Islamic finance and the criticism of its practice

### *Theoretical framework for the criticism*

Since the rise of its commercial practice in the 1970s, Islamic finance has confronted inherent problems related to its practical survival that are not observed in conventional finance. As unanimously agreed by the bankers and the researchers in this field, all the services of Islamic finance must be compliant with the teachings of Islam; the existing Islamic financial institutions certainly attach high importance to this condition, which this paper calls "Sharia Legitimacy Condition (SLC)." In order to be commercially successful in a situation where its practice coexists with conventional finance, Islamic finance needs to provide competitive financial products that are acceptable by all customers (both Muslims and non-Muslims); this condition is called the "Economic Feasibility Condition (EFC)" by this paper. Thus, the practice of Islamic finance must maintain a balance between the above two conditions in order to survive as a financial practice.

However, most practices of Islamic finance do not necessarily satisfy both the conditions. Many controversies regarding this matter – for example, determining which condition must or should be considered more important by Islamic finance – have been observed throughout the history of this field. In order to understand tension between the two conditions (SLC and EFC) with concrete examples, the following section overviews the most prominent cases at the early and middle stages of Islamic finance: the *murabaha* issue in the 1980s, the *bay ina* & *bay dayn* issue in the 1990s.

### *Conflict and coordination between the two conditions (SLC and EFC)*

#### Murabaha issue in the 1980s

Before the rise of the commercial practice, there appeared to be a consensus in Islamic economics regarding preferable financial products for Islamic finance operations. Most Islamic economists (for example, Mahmud Ahmad, Muhammad Uzair and Muhammad Nejatullah Siddiqi) encouraged profit-sharing-based financial products such as *mudaraba* and *musharaka.*[1] The author calls this consensus the "*Mudaraba* Consensus" [Nagaoka, 2012: 118]. However, from the 1970s onward, the practice of Islamic finance did not necessarily reflect the theoretical suggestions made by Islamic economists prior to that period. Most Islamic banks mainly adopted *murabaha* on their asset side as an alternative financial product for interest-based loans in conventional finance. With regard to the share of *murabaha*, the majority of Islamic banks in both the Gulf countries and Malaysia have shown a widespread preference for *murabaha.*[2] Such a preference can be observed almost throughout the period beginning from the 1980s until now. According to al-Harran's aggregate calculation, it is estimated that 80–90% of financial product instruments on the asset side of Islamic banks were based on *murabaha,* from the 1970s through the first half of the 1990s. This implies that the share of profit-sharing-based instruments was meager [al-Harran, 1995: xi].

In response to this situation, many criticisms and arguments against *murabaha* were advanced in the 1980s, not only because profit-sharing-based financial instruments were rarely used on the asset side of Islamic banks but also because *murabaha* involved certain contentious issues from the viewpoint of Islamic jurisprudence. Many Islamic economists, who emphasized their ideal of the Islamic economic system – where a profit-sharing-based system achieves desirable economic performance from the aspect of Islam (therefore, they attached importance to Sharia Legitimacy Condition, SLC) – were skeptical about the legitimacy of *murabaha* from the viewpoint of its similarity to transactions such as interest-based loans where *riba* (almost equal to "interest" in a modern sense) is charged.[3]

On the other hand, Islamic economists who emphasized the economic feasibility of Islamic finance practice (therefore, they attached importance to Economic Feasibility Condition, EFC), promoted *murabaha* with approvals by Sharia scholars who belong to the Sharia supervisory board in Islamic banks. Many supportive Sharia scholars acquired the legitimacy of *murabaha* by explaining that unlike the profits (interest receipts) in conventional loans, any profits should be expressed as a function of supply and demand in the real goods market, not in the monetary market.[4]

#### Bay ina & bay dayn issue in the 1990s

Generally in banking operations, there is a liquidity gap between the liability side and asset side of banks. Therefore, all the banks need to manage their liquidity in the interbank market. However, Islamic banks cannot work in such a market because the products there involve the element of *riba*. In the 1980s, there were limited opportunities for Islamic banks to manage liquidity owing to the lack of useful tools. As for the experience of Islamic banks in both the Gulf countries and Malaysia, most Islamic banks must maintain substantial liquidity in order to be prepared for a potential liquidity crisis. In the 1990s, Malaysia became proactive about the liquidity issue and led innovation in liquidity management tools (LMTs) in Islamic finance. In 1993, it established the Islamic Interbank Monetary Market (IIMM) and introduced various LMTs for Islamic banks. Although *mudaraba* Interbank Investments (MII) attracted interest among the LMTs, they faced the same inherent problem as an original *mudaraba* and failed to gain popularity. As a result, most Islamic banks and Islamic windows in Malaysia began using other LMTs, particularly *bay ina* & *bay dayn* based tools. *Bay ina* & *bay dayn* tools have two practical advantages over MII. The first is a high tradability, which means it is "easy to sell the title of liquidity in the secondary market." The other is that these tools enable Islamic banks to calculate their profit in advance.

However, like *murabaha* in the early stage of Islamic finance, *bay ina* & *bay dayn* based tools also faced controversy in the 1980s. Although these tools were approved by Malaysian

Sharia scholars through several legal resolutions (Sharia Advisory Council at both Securities Commissions Malaysia and Bank Negara Malaysia),[5] most Sharia scholars in the Gulf countries did not approve of these tools from the aspect of legitimacy. With regard to *bay ina*, they criticized that its form is that of fictitious double trades targeted at raising funds, which is very similar to interest-based loans.[6] As for *bay dayn*, they were skeptical about the sales of debts at a discounted price, which are similar to exchanges of money[7]. In accordance with the objection by Sharia scholars, most Islamic Banks in the Gulf countries in the 1990s did not adopt *bay ina* & *bay dayn* based LMTs, and continued to face a liquidity management problem.

Interestingly, the case in the 1990s shows that the controversy emerged as "regional" theoretical differences. While Sharia scholars, Islamic economists and bankers in the Gulf countries put a high priority on Sharia Legitimacy Condition (SLC), those who are in Malaysia put a high priority on the Economic Feasibility Condition (EFC). Based on these regional theoretical differences, the practice of Islamic finance in the 1990s diverged in two directions; the Gulf and Malaysian practices.

### *Rapid growth of Islamic finance and the criticism to "Sharia-Compliant Finance"*

The commercial practice of Islamic finance rapidly grew after 2000 in terms of both numbers and spread. The average annual growth rate after 2000 was over 20%, and the total assets of the Islamic financial industry reached one trillion USD at the end of 2009 [TheCityUK, 2011]. Although the market share of Islamic finance in the world is under 1%, its share in developing and emerging countries is 15%.[8] Therefore, the practice of Islamic finance is expected to expand worldwide in the near future if we consider its potential economic growth.

One of the key factors in the rapid growth of Islamic finance is the development of new financial products, some of which have been mentioned above: *sukuk*, commodity *murabaha,* and Islamic derivatives. These products were developed to match the development of conventional finance and maintain competitiveness. Since their development, Islamic finance has succeeded in taking a certain portion of market share.

However, the situation of Islamic finance in the 2000s stimulated the tension between the two conditions (SLC and EFC) because the new products mentioned above were developed giving high priority to marketability. Generally speaking, each Islamic bank has its own Sharia Supervisory Board consisting of prominent Muslim jurists that judges the compatibility of the products with the teachings of Islam. Of course, these controversial products are also approved by the board. However, criticisms have been raised against the focus of Muslim jurists on the Sharia compliance of each product, on an individual basis, and not considering the compatibility of Islamic financial products as a whole and their purpose. Mahmoud El-Gamal who radically criticizes the current situation of Islamic finance calls such a process of approving products "Sharia Arbitrage" [El-Gamal, 2006: 174], and the critics generally use the term "Sharia-compliant finance" to criticize the current situation of commercial Islamic finance.

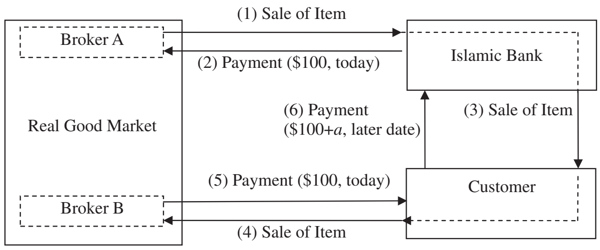


**Figure 1.** Scheme of *Tawarruq* in Islamic finance.
*Source*: Author's own.

The most controversial case of Sharia-compliant finance is *tawarruq*.[9] *Tawarruq* is a form of contract for monetary liquidization. In the practice of Islamic finance (See Figure 1), an Islamic bank primarily buys a real good from the commodity market at the current market price on behalf of its customer who needs instant liquidity. Then, the Islamic bank sells it to the customer using a *murabaha* scheme. Subsequently, the customer sells it back to the commodity market at the current market price to gain monetary liquidity. Finally, the customer pays the amount specified by the *murabaha* agreement on the date of maturity.

According to a concise review by Salah Fahd Al-Shalhoob [al-Shalhoob, 2007] and the author's independent field survey regarding the current practice of *tawarruq* in Islamic finance, the National Commercial Bank (NCB) in Saudi Arabia is a pioneer in using *tawarruq* as a financial product under the brand of "*taysir*" in 2000. After this launch, several Islamic banks in the Gulf countries began to adopt *tawarruq*, and presently it is a very popular financial product for consumer loans.[10]

The controversy is raised over the legitimacy of *tawarruq* bundling and stipulating the "resale and liquidization process" (Nos. 4 and 5 in Figure 1) with the original sale. In most cases, Islamic banks arrange and manage the whole process of *tawarruq* and only receive the difference between the price for the *murabaha* scheme and the market price. Critics of *tawarruq* mention that this stipulation makes *tawarruq* merely a fictitious instrument to avoid interest-based loans because, in such a practical application of *tawarruq*, the actual transactions of the real good tends to become just nominal on paper. They consider that such applications ignore the real purpose of *tawarruq*. For example, Siddiqi emphasizes that *tawarruq* is identical to interest-based loans, not only at the functional level, but also from the macroeconomic perspective [Siddiqi, 2006: 16]. Furthermore, Kahf insists that the use of *tawarruq* must be limited because it may be economically worse than the practice of interest-based loans [Kahf, 2004: 6].

The revision of the legal resolution issued by the Fiqh Academy at the Muslim World League (MWL, *Rabita al-Alam al-Islami*) reflects this tendency of critique of recent practical applications of *tawarruq* in Islamic finance. Until recently, the Fiqh Academy at MWL issued two legal resolutions on *tawarruq*. In the first resolution issued at the fifteenth meeting held on October 31, 1998, the Fiqh Academy approved *tawarruq* with no reservations (No. 5 resolution of the meeting) [MWL, 1999: 161–162].

However, along with the prominence of *tawarruq* in Islamic banks, particularly in the Gulf countries, the Fiqh Academy revised the former resolution and divided *tawarruq* into two types: *tawarruq haqiqi* (intrinsic *tawarruq*) and *tawarruq munazzam* (organized *tawarruq*). In a resolution issued at the seventeenth meeting held December 13–17, 2003, the Fiqh Academy approved *tawarruq haqiqi*, while it disapproved *tawarruq* practiced in Islamic finance – the so-called *tawarruq munazzam* (No. 3 resolution of its meeting) [MWL, 2004: 287–288]. According to this resolution, the Fiqh Academy defines *tawarruq munazzam* as including the following three impermissible factors:

1. An Islamic bank is involved in a resale and liquidization process (Nos. 4 and 5 in Figure 1) as an agent of its customer.
2. The involvement of Islamic bank in the entire process of *tawarruq* makes the transfer of the title of the relevant good unclear.
3. Providing *tawarruq* becomes merely a stable way for the bank to earn profits.

Most recently, the Fiqh academy at the Organization of Islamic Cooperation (OIC) issued a new resolution on *tawarruq* at the nineteenth meeting, held on April 26–30, 2009, under the auspices of the MWL. Although this resolution fundamentally confirms the second resolution by the Fiqh Academy at the MWL, it adds one more condition for defining impermissible *tawarruq munazzam*. In the second resolution by the MWL, the involvement of an Islamic bank in any part of the process of *tawarruq* is not allowed, as this is the impermissible *tawarruq munazzam*. The latest resolution by the OIC reinforces this rule by defining *tawarruq munazzam* more clearly:

> The contemporary definition on organized *tawarruq* is: when a person (*mustawriq*) buys merchandise from a local or international market on a deferred-price basis. The financier arranges the sale agreement either himself or through his agent (*tawkil*). [OIC, 2009: 12–13].

The important point in this statement is that even the involvement of the agent of an Islamic bank is impermissible. This resolution causes many arguments among bankers in the Gulf countries because many Islamic banks in the Gulf countries use the scheme of *tawarruq* with their agents. Most Islamic bankers and Muslim jurists at the Sharia Supervisory Board do not feel pessimistic about the latest resolution. For example, Nizam Yaquby comments that because all these Islamic finance tools are organized (*munazzam* in the Arabic, noted by the author) to a certain extent, it is very difficult to do something that is not organized. He concludes that if proper procedures are implemented, then *tawarruq munazzam* is a useful tool and can be used.[11] It seems that although the scope of *tawarruq* that satisfies such conditions as mentioned in the above resolutions continues to narrow, bankers and Muslim jurists will search for a prudent way to utilize *tawarruq* in the practice of Islamic finance; therefore, the controversy over Sharia-compliant finance will continue.

## 3. New horizon's' in Islamic finance

After the middle of the first decade of the twenty first century, new trends that put a high priority on Sharia Legitimacy Condition (SLC) emerged in Islamic economics in order to overcome the current situation faced by Sharia-compliant finance. This paper defines two such trends: the first trend, called "New Horizon 1.0," pertains to the development of new areas in the practice of Islamic finance; the second trend, called "New Horizon 2.0," pertains to the revitalization of the traditional Islamic economic institutions by utilizing Islamic finance.

### *New horizon 1.0: Development of new areas in Islamic finance*

The incubators of this trend attempt to exploit new areas in the practice of Islamic finance, where conventional finance cannot ensure enough service or may create negative effects [Asutay, 2007: 16]. In order to provide representative examples, this paper focuses on microfinance lending and socially responsible investment (SRI) as concrete areas for the application of Islamic finance.

#### Islamic microfinance

Since the resounding success of Grameen Bank during the 1980s, many microfinance institutions have been established across the world. Therefore, the idea of microfinance does not originate from Islamic finance. However, the scheme of microfinance shares common aspects with *mudaraba* and *musharaka*, in terms of the mechanism that makes a lender responsible for the business of a borrower. It is worth noting that the pioneering Islamic banker Ahmad al-Najjar, who established the Mit Savings Ghamr Bank in Egypt in 1963, had proposed an idea similar to microfinance [al-Najjar, 1972].

Islamic microfinance is practiced very actively in several Muslim countries such as Indonesia and Iran. In the case of Indonesia, although the authorities concerned have not established a formal category for "microfinance institutions," "Bank Perkreditan Rakyat" (BPR, rural banks), under the supervision of the Bank Indonesia (Central Bank of Indonesia), and "financial cooperatives," under the supervision of the Ministry of Cooperatives and Small-Medium Enterprises, can be considered as microfinance institutions owing to the nature of their services. Amongst these institutions, BPR Syariah (BPRS) and BMT (Baitul Maal wat Tamwil, Islamic cooperatives) provide Islamic financial services. Both BPRS and BMT were first established in the early 1990s [Seibel, 2012: 149–151] and have grown rapidly ever since. Currently there are 158 BPRS[12] and over 3,500 BMT[13] branches in Indonesia. Although the percentage share of each institution (BPRS in all BPRs, BMT in all financial cooperatives), in terms of number of branches, is still small (BPRS: 4%, BMT: 7.2%) [Seibel, 2012: 150–151], the potential of BPRS and BMT in the Indonesian economy and society seems significant in relation to the world's largest Muslim population in Indonesia as well as the current government policy for promoting Islamic finance [Ismal, 2013: 15–28].

Askari et al. [2009] and Hitoshi Suzuki [2010] demonstrate the experience of Islamic microfinance in Iran. According to their works, many Islamic microfinance institutions under the name of Gharzul-Hasaneh Funds (GHFs) have been in existence since 1969,[14] implying that GHFs were functional long before the Iranian Islamic Revolution of 1979 [Askari et al., 2009: 202; Suzuki, 2010: 132]. After the revolution, the number of GHFs started to increase owing to the religious motives and complementary functions of nationalized commercial banks. Although the deposit share of GHFs decreased during the late 1980s and early 1990s, the situation subsequently improved and the number of GHFs started to increase again in the late 1990s. One of the reasons was that GHFs fulfilled the financial demand of the emerging small and medium enterprises in rural areas during President Hatami's reforms [Suzuki, 2011: 133]. Although the operations of GHFs are highly dependent on the political situation, as mentioned by Suzuki [2011: 136], currently GHFs not only have an established role in the financial sector of Iran, but also provide a role model for the newly-branded Islamic commercial banks in Iran.[15]

Based on its recent growth, Islamic microfinance has started to attract increasing attention of both academic researchers and practitioners. Recently, several benchmark works in Islamic economics have been published.[16] Along with widespread recognition, we can find some recent examples of countries, such as sub-Saharan African countries, where the practice of Islamic microfinance preceded the commercial practice of Islamic finance.[17]

## Islamic SRI

The proposal for Islamic SRI is in line with the global trend in SRI, that is, corporate stakeholders assign a higher priority on companies that are engaged in social welfare activities. However, unlike conventional SRI, Islamic SRI includes religious aspects of corporate activities and social action programs, such as educational, welfare, and medical services, through the payment of *zakat*. Most Islamic banks are very positive in contributing towards these sectors.

In addition, the exclusion of incompatible businesses in the light of Islamic teachings is also a distinctive feature; for example, gambling (casinos, horse racing), unethical businesses (military, pornography industry), and un-Islamic transactions (deals involving alcohol and pork, issuing interest-bearing corporate bonds) are forbidden.

Recently, Sharia indices for the stock market have been developed in order to identify companies that keep their businesses compliant with Islamic teachings. Here, rating agencies such as FTSE and S&P screen corporate activities and disclose the results of screening in the form of Sharia indices. For example, FTSE began releasing the FTSE Global Islamic Index in 1998; Dow Jones and the Kuala Lumpur Stock Exchange (now Bursa Malaysia) began releasing their own Sharia indices in 1999. These indices select companies that are compliant with Islamic teachings based on their own respective criteria (see Table 1).

**Table 1.** Scheme of *Tawarruq* in Islamic finance.

| | Sharia Criteria of Core Activities | Financial Ratio Filtering |
|---|---|---|
| Dow Jones Islamic Index | Alcohol, tobacco, port-related products, conventional financial services (banking, insurance, etc), weapons and defense, entertainment (hotels, casino/gambling, cinemas, pornography, music, etc) | ***Less than 33%:***<br>Total debt divided by trailing 12-month average market capitalization, the sum of company's cash and interest bearing securities divided by trailing 12-month average market capitalization, account receivables divided by trailing 12-month average market capitalization |
| FTSE Islamic Index | Conventional finance (non Islamic banking, finance and insurance, etc), alcohol, pork-related products, entertainment (casinos/gambling, pomography, cinemas, music, hotels, etc), tobacco, weapons and defense | ***Less than 5%:***<br>Non-compliant income other than interest, total interest income<br>***Less than 33%:***<br>Debt divided by total assets, cash and interest bearing items<br>***Less than 50%:***<br>Account receivables and cash<br>***Purification ratio:***<br>5% of dividends |
| Bursa Malaysia | Financial services based on *riba*, gambling, manufacture or sale of non-*halal* products, conventional insurance, entertainment activities than are non-permissible according to Sharia, manufacture or sale of tobacco-based products or related products, stock-broking or share trading in Sharia non-approved securities, other activities deemed non-permissible according to Sharia | ***5% criteria:***<br>Clearly prohibited activities (*riba*, gambling, selling pork or liquor<br>***15% criteria:***<br>Prohibited element affecting most people and difficult to avoid (*umum balwa*)<br>***20% criteria:***<br>Mixed rentals, rental from premises used in gambling, sale of liquor, etc<br>***25% criteria:***<br>Generally permissible and would bring benefits, hotel and resort operations, stock-broking, share trading |

*Source*: [SC, 2009: 20–21] with the author's revision.

FTSE and Dow Jones provide more detailed indices that are customized for each region, including not only Islamic but also non-Islamic countries. As in the case of Japan, a representative non-Islamic country, both FTSE and S&P have disclosed indices targeting Japanese companies as "FTSE Shariah Japan 100 Index" (since 30 July, 2007) and "S&P/TOPIX 150 Shariah Index" (since 3 December 2007), respectively. Therefore, Japanese companies have already screened from the viewpoint of Islamic finance.

### *New horizon 2.0: Revitalization of the traditional Islamic economic institutions*

In addition to the trend of "New Horizon 1.0" (development of new areas in the practice of Islamic finance, as discussed previously), recently a fresh trend (called "New Horizon 2.0" in this paper) has emerged which attempts to revitalize the traditional Islamic economic institutions, such as *waqf* and *zakat,* using the scheme of Islamic finance. Although the practices of these institutions are still functional in the contemporary Islamic world, their respective roles in each national economic system are decreasing. This attempt at revitalizing these institutions aims to re-evaluate their roles for the sustainable development of the Muslim community, as well as for tapping new markets for Islamic finance. Through providing representative examples, this paper focuses on both *waqf* and *zakat* as concrete areas for the application and utilization of Islamic finance.

### Waqf

*Waqf* is a property donated by the owner (*waqif*). The administrator (*nazir*) is entrusted by the *waqif* to manage the property and to distribute the revenues to specific or charitable purposes. *Waqf* was prevalent throughout the majority of the Islamic world in the pre-modern era, and played an important role in the Islamic economy and society. After the advent of the modern era, the practice of *waqf* has been declining in many regions owing to colonization and westernization. Some of the Middle Eastern countries abolished the family *waqf* (*waqf ahli*) during the middle of the twentieth century,[18] and many Islamic countries nationalized the charity *waqf* (*waqf khayri*), resulting in inefficient administration [Rashid, 2003: 9–14].

Recently, several countries have attempted to revitalize *waqf* properties in order to generate additional revenues for the socio-economic betterment with sustainable development of the Muslim community. The typical way of revitalizing is through rebuilding and renovation of *waqf* properties. Here, two issues arise in the rebuilding and renovation of *waqf* properties; the first issue is a legitimacy problem, that is, how such rebuilding and renovation activities can be legitimized from the Islamic viewpoint; while the second issue is a funding problem, that is, how to raise funds for such rebuilding and renovation activities. Regarding these issues, this paper selects the case of Singapore as an innovative example.

Singapore is one of the pioneering countries in the revitalization of *waqf* properties, in terms of both practice and development of institutional infrastructure. In Singapore, the Islamic Religious Council (Majlis Ugama Islam Singapura, MUIS) mainly undertakes the revitalization of *waqf* properties in the country, while the *fatwa* committee at MUIS develops a theoretical framework for it.[19]

Regarding the first issue (legitimacy problem) as mentioned above, the *fatwa* committee uses the concept of *istibdal* for the rebuilding and renovation of properties. The term *istibdal* stems from *ibdal*, which means to take out a consecrated substance from the original stipulation of the *waqif* in exchange for another substance, which makes the latter a *waqf* in place of the former [Mahamood, 2006: 49]. MUIS uses this basic idea of *istibdal* for rebuilding, renovation, and relocation of the *waqf* properties under the following four conditions stipulated by the *fatwa* committee: 1) the assets are in a dilapidated state, 2) the assets are in danger of acquisition, 3) the assets are located in an unsuitable location such as a promiscuous area, and 4) the assets can yield better returns through relocation and redevelopment [Abdul Karim, 2010: 148].

As for the second issue (funding problem), MUIS raises funds for rebuilding and renovation through several ways; internal funding through Baitulmal fund[20]; long lease (*hukr*)[21], sale of existing properties, and external financing [Abdul Karim, 2010: 149–154]. A third way of raising funds is that Islamic finance can engage in the revitalization of *waqf* properties. Shamsiah Bte Abdul Karim shows the prototype case of raising funds through *sukuk* scheme (see Figure 2) [Abdul Karim, 2010: 152–154]. First, MUIS, Warees (a subsidiary of MUIS to handle *waqf* properties), and the *nazir* (administrator of the *waqf*) enter into a joint venture agreement (*musharaka*) to construct a mixed-use complex comprising a mosque, commercial complex and apartments. While MUIS provides funds collected from investors who receive certificates (*sukuk*), Warees provides its professional expertise, and the *nazir* contributes land and some capital. After completion of construction, the special purpose vehicle (SPV) of this joint venture enters into an *ijara* (leasing) contract for the apartments with a service management company. Here, the rent of the apartments is paid to the SPV, which is then subsequently distributed

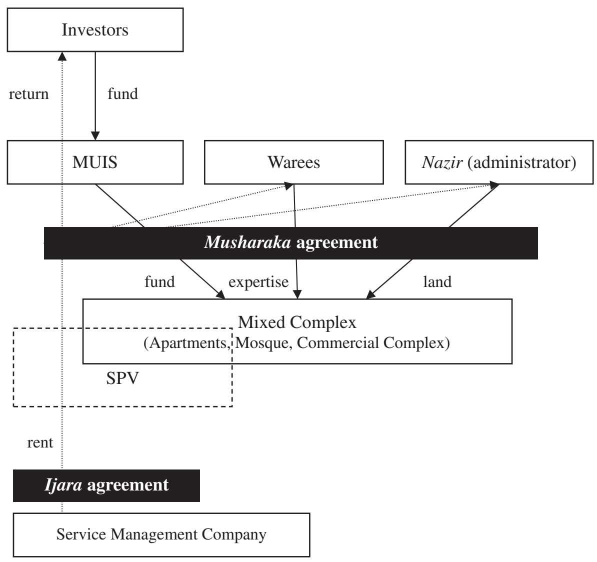


**Figure 2.** Fund raising for revitalization of *Waqf* properties through *Sukuk* scheme.
*Source*: Author's own based on information at [Abdul Karim, 2010].

among the three parties of the *musharaka* agreement in accordance with their respective contributions.

In addition to utilizing Islamic finance for raising funds to revitalize *waqf* properties, a new idea of creating a linkage between *waqf* and Islamic finance is currently being proposed, namely, that Islamic finance utilize the funds of cash *waqf* (*waqf nuqud*) through its schemes (*mudaraba*, *musharaka*) and generate revenues for the socio-economic development of the Muslim community [Lahsasna, 2010; ÇizakÇa, 2011]. Although this idea has not yet been implemented, it implies a great potential for collaboration between *waqf* and Islamic finance in the contemporary world.

### Zakat

*Zakat* payment, as one of the most important obligatory deeds, has been performed by every eligible Muslim all across the Islamic world. However, the role of *zakat* is not necessarily significant in terms of a national economy in aggregate in the modern age. This is because, with the exception of a few countries, there are no official entities responsible to comprehensively collect and disburse *zakat* payments; the management of *zakat* (collection and disbursement) in most Islamic countries is segmented and is performed by the respective local Muslim communities. Since the rise of Islamic finance in the 1970s, Islamic banks and financial institutions have been very positive in opening specific accounts for *zakat* payments. They collect *zakat* funds not only from their own revenues, but also from customers' dividends earned on *mudaraba* deposit accounts under the agreement. This implies that the role of *zakat* can be significant in terms of a national economy in accordance with the growth and expansion of Islamic finance in the country.

Recently, the United Arab Emirates (UAE) commenced innovative attempts at collaboration between *zakat* and Islamic finance.[22] There is a sovereign entity called the "Zakat Fund" (ZF, *Sunduq al-Zakat*) for collecting and disbursing *zakat* in the UAE. In 2010, Abu Dhabi Islamic Bank launched a new service to collect *zakat* on behalf of ZF through the bank's ATMs, mobile phones and the bank counters at its branches. In addition, ZF installed its own ATM machines for collecting *zakat* in 2011. Using these ATMs, customers can not only pay *zakat* but can also indicate the category of disbursement of *zakat*. It seems that these attempts would make the management of *zakat* more efficient and comprehensive.

According to the author's own field research, ZF has several plans in place for further development of the management of *zakat*. First, ZF plans to add a function for receiving *zakat* money using ATMs. Here, ZF annually screens the *zakat* recipients and grants these recipients a card. The recipients insert the card into the ATMs to receive *zakat* at any time they wish. Second, ZF also plans to utilize *zakat* funds for financing development projects and trade ventures in order to expand its disbursement base. Regarding this matter, there is controversy on the legitimacy of turning over *zakat* funds. According to a brief survey conducted by Shah Haneef and Mahmud [2011: 75–77], those who contest the utilization of *zakat* funds insist that *zakat* is not supposed to be reserved for future needs, rather it is primarily designed to alleviate the present economic needs of the recipients; therefore, the collected *zakat* should be promptly distributed to its recipients. On the other hand, those who support the utilization of *zakat* funds state that the disbursement of *zakat* does not have to be prompt; therefore, investing *zakat* funds is permissible if the following three conditions are satisfied; 1) the ultimate ownership of its return and the capital sum be spent on the recipients, 2) only surplus funds should be invested, and 3) investment activities should be carried out using extra caution and prudent financial planning so as to avoid losses to the pool of *zakat* property. Although it would take much longer to settle the controversy, the innovative attempts by ZF would serve as a test in paving the way for a substantive linkage between *zakat* and Islamic finance.

## 4. Resuscitation of the antique economic system or novel sustainable system?

Finally, this paper analyzes the characteristics of these new trends ("New Horizons 1.0 and 2.0") in Islamic finance, and then considers the historical implications.

Before the emergence of new trends, Islamic finance was functioning as an autonomous financial sector, although it had been contributing towards the development of the economy and society as an intermediary for monetary flows. After the emergence of new trends, Islamic finance has become deeply ingrained in both the economy and society by broadening the range and types of services. For example, Islamic microfinance enables pious but poor people to have easy access to retail financial products while maintaining their beliefs, which leads to an improvement in their standard of living. The concept of Islamic SRI has enabled us to recently recognize the importance of Sharia legitimacy for the contents of business enterprises as Islamic investment destinations, besides the legitimacy of financial services. The popularity of Islamic SRI is one of the important factors in explaining the recent rise of the so-called Islamic businesses, such as *halal* products (food, cosmetics), Islamic clothing for Muslim women, and Islamic tourism. As for *waqf* and *zakat*, Islamic finance provides important ideas for revitalizing these traditional institutions, and contributes to the socio-economic development of the Muslim community.

It can be said that the involvement of Islamic finance in the economy and society in various ways implies that the new trends in Islamic finance are conducive to the organic integration of the Islamic economic system in the modern world. In this system, profits from businesses can be efficiently redistributed to society through Islamic finance; therefore, Islamic finance plays an important role in the system as a medium to embed the economy into society, implying a counter-vision of the current capitalist system (see Figure 3).

Based on the clarification of the characteristics of the new trends in Islamic finance, this paper considers whether this Islamic economic system with organic integration in the modern world can be perceived either as a resuscitation of the antique Islamic economic system in the pre-modern Islamic world, or as the emergence of a novel sustainable system. When we trace back through history, it can be observed that the Islamic world had such an integrated economic system in the pre-modern era. According to Hiroshi Kato's theoretical work on the economic system of the pre-modern Islamic world [Kato, 2002], the open

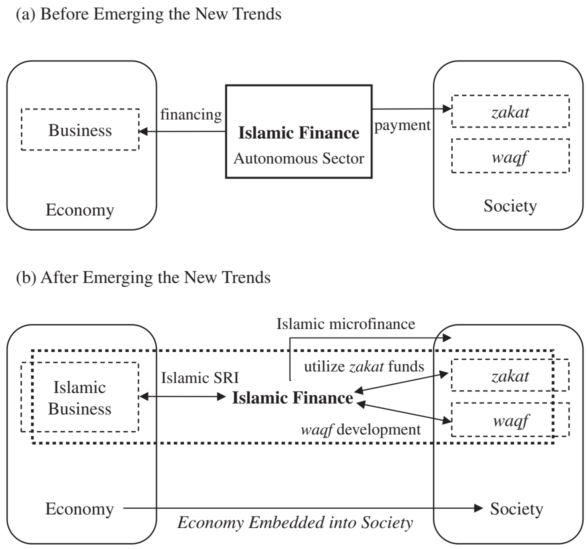


**Figure 3.** Organic integration of the Islamic economic system in the modern world.
*Source*: Author's own.

market policies pursued by the Islamic dynasties and the prevalence of the economic institutions such as *waqf* and *zakat* constituted the highly integrated economic system. For example, large-scale *waqf* properties were usually established as a combination of commercial estates (markets, accommodation etc.) and charitable (hospitals, asylums etc.) or religious (mosques etc.) estates. When revenue was generated through commercial activities in the market, it was promptly distributed amongst charitable and religious purposes. There, a market (*suq* in Arabic) took a part of the medium of the system and integrated the economy with society (see Figure 4). It is easy to understand that the organic integrated model in the modern world can share its nature with the economic system in the pre-modern Islamic world.

Then, we should consider whether the Islamic economic system with organic integration in the modern world is just a resuscitation of the antique system. The novelty of the emerging system is based on modern technology, especially cyber networks. Through this network, we can conduct remote transactions, for example, between Malaysia and the Gulf countries round the clock daily. This characteristic implies that the emerging system forms a transnational network that exists not at the real geographical level but at a meta-geographical level.

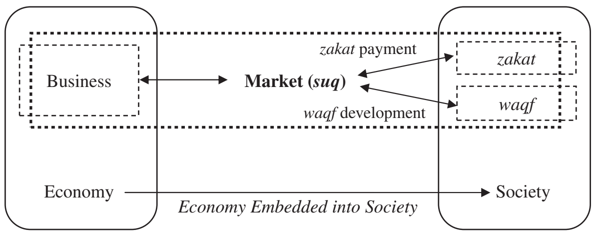


**Figure 4.** Economic system in the pre-modern Islamic world.
*Source*: Author's own based on the theoretical work of [Kato, 2002].

## 5. Conclusion

This paper focused on new trends in Islamic finance after the Sharia compliant criticism in the middle of the first decade of the twenty first century, and classified these into two trends. The first trend, which the paper calls "New Horizon 1.0," pertains to the development of new areas in the practice of Islamic finance, and the paper discussed Islamic microfinance and Islamic SRI as examples. The second trend, which the paper calls "New Horizon 2.0," pertains to the revitalization of the traditional Islamic economic institutions through utilizing the scheme of Islamic finance, and the paper discussed *waqf* and *zakat* as examples. The primary characteristic of these new trends is that Islamic finance is significantly involved with the economy and society in various ways. This implies that the new trends in Islamic finance are conducive to the organic integration of the Islamic economic system in the modern world. When we trace back to the history of the Islamic world, we observe that the nature of the emerging system shares commonality with that of the economic system in the pre-modern Islamic world, in terms of high integration with economy and society. However, this paper highlighted that the emerging system came into existence based on the modern cyber technology. This enabled the system to exist not at the real geographical level but at a meta-geographical level. Therefore, it can be concluded that the system is not just a resuscitation of the antique economic system in the pre-modern Islamic world, but is also a novel system that succeeds the golden heritage of the pre-modern era.

For further discussion, it is worth mentioning that the meta-geographical nature of the emerging system is quite important for considering the future vision of the economic system for humanity. This is because the spirit of the emerging system, which embeds the economy into society, raises sympathy amongst many people in many regions and becomes very easy for these people to introduce or join the system. This implies that not only is there a potential for the system to spread globally, but there is also a great potential to become an alternative choice for the next universal economic system with sustainable development.

In addition, as discussed in the paper, these new trends emerged as a result of the criticism on the current practice (called "Sharia compliant finance") of Islamic finance. Some researchers and bankers argue for the need to standardize regulations and products in Islamic finance in order to reduce controversies. However, when we consider the source of the emergence of new trends, the controversy between Sharia Legitimacy Condition (SLC) and Economic Feasibility Condition (EFC), as reviewed in the paper, becomes very important for further innovative developments in Islamic finance; radically speaking, the controversy guarantees the future of Islamic finance. Therefore, it would be very important to ensure the arena for sound discussions amongst Sharia scholars, researchers, and bankers.

**Notes**

1. For more details, see their books [Ahmad, M., 1947; Uzair, 1978; Siddiqi, 1983(1969)].
2. For the concrete statistics calculated by the author, see [Nagaoka, 2012: 122–123].
3. For example, see Ziauddin Ahmad's argument [Ahmad, Z., 1985: 19–20].
4. For example, see the *fatwa* issued at the 1st Albaraka Symposium held in 1983 (English translation available at [Nagaoka, 2007: 75–76]).
5. For example, see the resolutions issued at the 2nd & 5th meetings of the Sharia Advisory Council at Securities Commissions Malaysia in 1996 & 1997, and the 8th meeting of the Sharia Advisory Council of at Bank Negara Malaysia in 1998.
6. For example, Taqi Usmani's opinion [Usmani, 2001: 113].
7. For example, see the *Fatwa* issued at the 11th meeting of the OIC *Fiqh* Academy (*Majma & al-Fiqh al-Islami al-Duwali*) in 1998.
8. Except China and India. Calculated by the author based on [Mckinsey Global Institute, 2009; TheCityUK, 2011].
9. This part of a case study is a revised version of [Nagaoka, 2012: 127–129].
10. A wide variety of product brands is based on the scheme of *tawarruq*: "*mal*" at the Saudi British Bank, "*Dinar*" at Bank al-Jazira, "*Tawarruq Khayr*" at SAMBA, "*Khayr*" at the Abu Dhabi Islamic Bank, and "*Tashir*" at the Bahrain Islamic Bank.
11. Yaquby talked about *tawarruq munazzam* in an interview with *Reuters*. His comment referenced in this paper is cited from the website of the *Gulf Times* (July 26, 2009, http://www.gulf-times.com/).
12. Data based on the author's independent field survey in March 2013.
13. Data based on [Hamada, 2010: 222].
14. *Gharzul-hasaneh* is Persian literature; *qard hassan* in Arabic.
15. Bank Mehr Iran, known as the first newly-branded Islamic bank in Iran, mainly provides services based on the scheme of *gharzul-hasaneh*.
16. For example, [al-Harran et al., 2008; IRTI, 2008; Obaidullah, 2008; Ali, 2012].
17. Islamic Saving and Credit Cooperative of Cameroon was established in Cameroon in 2008. In 2010, Ghana Islamic Microfinance was established in Ghana, and Al-Barakah Microfinance Bank in Nigeria.
18. The year of abolishment in each country is as follows: Turkey, 1926; Syria, 1949; Egypt, 1952; Tunisia, 1962–63; Libya, 1973; United Arab Emirates, 1980 [Rashid, 2003: 9].
19. The following analysis of Singapore mainly refers [Abdul Karim, 2010] as an information source.
20. Baitulmal fund is the institution that acts as a trustee for the Muslims. MUIS allocates the funds for public and community projects and general welfare. The source of the funds is primarily from the estate of a deceased person (http://www.muis.gov.sg/).
21. The concept of *hukr* grants the tenant of the *waqf* property a priority of lease, the right of permanent lease, or the perpetual right to the usufruct of the *waqf*. The occupant either pays a variable rent during the lease period that changes as the value of the property changes, or a fixed rent [Dallal, 2004: 26–27].
22. The following analysis of the UAE is mainly based on the author's own field research conducted in September, 2011.

## References


Abdul Karim S. 2010. "Contemporary Shariah Compliance Structuring for the Development and Management of *Waqf* Assets in Singapore." *Kyoto Bulletin of Islamic Area Studies* 3(2), pp. 143–164.

Ahmad M. 1947. *Economics of Islam: A Comparative Study*. Lahore: Muhammad Ashraf.

Ahmad Z. 1985. *The Present State of Islamic Finance Movement*. Islamabad: Institute of Policy Studies.

Al-Harran S. ed. 1995. *Leading Issues in Islamic Banking and Finance*. Petaling Jaya: Pelanduk Publications.

Al-Harran S. et al. 2008. *An Islamic Microfinance Enterprise: The Financial Vehicle That Will Change the Face of the Islamic World*. Bloomington: Xlibris Corporation.

Al-Najjar A. 1972. *Bunuk bi-la Fawaid ka-Istiratijiya li-l-Tanmiya al-Iqtisadiya wa-l-Ijtimaiya fi al-Duwal al-Islamiya*. Jidda: Jamia al-Malik Abd al-Aziz. (Arabic).

Ali SN. ed. 2012. *Shari'a-compliant Microfinance*. Abington: Routledge.

Al-Shalhoob S. 2007. "Organized *Tawarruq* in Islamic Law: A Study of Organized *Tawarruq* as Practiced in the Financial Institutions in Saudi Arabia." A paper presented at IIUM International Conference on Islamic Banking & Finance 2007 in Kuala Lumpur, 23rd-25th April.

Askari H. et al. 2009. *New Issues in Islamic Finance and Economics: Progress and Challenges*. Singapore: John Wiley & Sons.

Asutay M. 2007. "A Political Economy Approach to Islamic Economics." *Kyoto Bulletin of Islamic Area Studies* 1(2), pp. 3–18.

Çizakça M. 2011. "*Waqf* in History and its Implications for Modern Islamic Economies." In M. Kahf and S. M. Mahamood eds., *Essential Readings in Contemporary Waqf Issues*. Kuala Lumpur: CERT Publications, pp. 3–42.

Dallal A. 2004. "The Islamic Institution of Waqf: A Historical Overview." In S. P. Heyneman ed., *Islam and Social Policy*. Vanderbilt University Press, pp. 13–43.

El-Gamal M. 2006. *Islamic Finance: Law, Economics and Practice*. New York: Cambridge University Press.

Hamada M. 2010. "Development of Islamic Finance in Indonesia." In M. Hamada and S. Fukuda eds., *Islamic Finance in the Global Economy: From the Middle East to Asia and Europe*. Chiba: Institute of Developing Economies, pp. 205–226. (in Japanese).

IRTI (Islamic Research and Training Institute) 2008. *Islamic Microfinance Development: Challenges and Initiatives*. Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Ismal R. 2013. *Islamic Banking in Indonesia: New Perspectives on Monetary and Financial Issues*. Singapore: John Wiley & Sons.

Kahf M. 2004. "Outlines of a Brief Framework of Tawarruq (Cash Procurement) and Securitization in Shariah and Islamic Banking." A paper written for the Seminar of the AAOIFI in Manama, February, 2004.

Kato H. 2002. *The Islamic World: The God as Trickster*. Tokyo: University of Tokyo Press.

Lahsasna A. 2010. "The Role of Cash Waqf in Financing Micro and Medium Sized Enterprises (MMEs): A New Islamic Financial Approach by Using Cash Waqf Model – Testing the Model on Malaysian MMEs Framework." A paper presented at the Seventh International Conference – *The Tawhidi Epistemology: Zakat and Waqf Economy*.

Mahamood SM. 2006. *Waqf in Malaysia: Legal and Administrative Perspectives*. Kuala Lumpur: University of Malaya Press.

Mckinsey Global Institute 2009. *Global Capital Markets: Emerging a New Era*.

MWL (Muslim World League) 1999. "Al-Qarar al-Khams al-Sadir an al-Dawra al-Khamsa Ashara al-Munaqida am 1419H bi-Shaan Hukm Bay al-Tawarruq." *Majalla al-Majma al-Fiqhi al-Islami* 12 pp. 161–62. (Arabic).

_____. 2004. "Al-Qarar al-thani bi-Shan Mawdu: al-Tawarruq Kama Tajrihi Baad al-Masarif fi al-Waqt al-Hadir." *Majalla al-Majma al-Fiqhi al-Islami* 17, pp. 287–89. (Arabic).

Nagaoka S. 2007. "Beyond the Theoretical Dichotomy in Islamic Finance: Analytical Reflections on *Murabahah* Contracts and Islamic Debt Securities." *Kyoto Bulletin of Islamic Area Studies* 1(2), pp. 72–91.

_____. 2012. "Critical Overview of the History of Islamic Economics: Formation, Transformation, and New Horizons." *Asian and African Area Studies* 11(2), pp. 114–136.

Obaidullah M. 2008. *Introduction to Islamic Microfinance*. New Delhi: IBF Net.

OIC (Organization of Islamic Conference) 2009. *Al-Qararat wa al-Tawsiyat: Al-Dawra al-Tasia Ashara li-Majma al-Fiqh al-Islami al-Duwali*. Jidda: Majma al-Fiqh al-Islami al-Duwali. (Arabic).

Rashid SK. 2003. "Current Waqf Experiences and the Future of Waqf Institution." *Awqaf* 5, pp. 5–25.

SC (Securities Commission Malaysia). 2009. *Introduction to Islamic Capital Market*. Petaling Jaya: LexisNexis Malaysia.

Seibel HD. 2012. "Islamic Microfinance in Indonesia: The Challenge of Institutional Diversity, Regulation and Supervision." In S. Nazim Ali ed., *Shari'a-compliant Microfinance*. Abington: Routledge, pp. 147–169.

Shah Haneef S. and Mahmud M. 2011. *Issues in Contemporary Zakah: A Juristic Analytical Evaluation*. Kuala Lumpur: IIUM Press.

Siddiqi N. 1983(1973). *Banking without Interest*. Leicester: Islamic Foundation (originally published in Urdu, 1969).

_____. 2006. "Islamic Banking and Finance in Theory and Practice: A Survey of State of the Art." *Islamic Economic Studies* 13(2), pp. 1–48.

Suzuki H. 2010. "Financial Policy and Islamic Finance in Iran." In M. Hamada and S. Fukuda eds., *Islamic Finance in the Global Economy: From the Middle East to Asia and Europe*. Chiba: Institute of Developing Economies, pp. 119–139. (Japanese).

TheCityUK 2011. *Islamic Finance* 2011.

Usmani MT. ed. 2001. *Riba (Interest): Given by the Supreme Court of Pakistan 23rd December 1999*. Petaling Jaya: The Other Press.

Uzair M. 1978. *Interest-Free Banking*. Karachi: Royal Book.

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# Impact of *zakat* in alleviating rural poverty: A case study of Masjid Council for Community Advancement (MACCA) in Bangladesh

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**Abstract** - The Masjid Council for Community Advancement (MACCA) provided zakat to the rural poor in order to improve their living standard through accelerating income- generating activities. The prime objective of the study was to assess the impact of zakat on the living standard of the poor in terms of total household income, expenditure and saving. Primary data was collected from the households of Manikganj District of Bangladesh that received zakat under the Hasana program of MACCA. Using a simple random sampling technique 179 households were selected as the sample for this study. The weighted least square (WLS) technique was used for accessing the influence of the zakat fund on the total income, total expenditure, and total savings of the household. The study showed that the amount of zakat received by the beneficiaries did not have any significant influence in improving their income, expenditure and saving.

*Keywords:* MACCA, zakat, poverty, Bangladesh

## 1. Introduction

### *Poverty scenario of Bangladesh*

A substantial section of the population of Bangladesh is not in a position to fulfill their basic needs such as food and shelter due to poverty. About 40% of the country's total population was in poverty and their per capita GDP was low, being estimated at about US$621 (Bangladesh Economic Review 2009; 2010). Among the six divisions, the poverty rate was highest in the Barisal division and lowest in the Dhaka division (Bangladesh Economic Review 2009; 2010). The incidence of poverty is high in the rural population as compared to the urban population in Bangladesh. At the national level, rural and urban poverty were estimated at 43.8% and 28.4%, respectively (Bangladesh Economic Review 2009; 2010). There are innumerable reasons for such high poverty in Bangladesh. Sen (2003) identified several causes of poverty of rural households which were:

1. People living in the remote areas.
2. Unfavorable agricultural environment.
3. Lack of rural infrastructural facilities.
4. Illiteracy.
5. Lack of assets among the households.

Hassan and Khan (2007) observed several characteristics of poverty in Bangladesh such as:

- Rural people are more affected by poverty than urban people.
- Large families suffer more from poverty compared to small families.
- Poor people are generally landless and mostly work as agricultural laborers in the rural areas.
- Poor people lack infrastructural facilities and live in places where the probability of occurring natural hazards are high.
- Poor people utilize a major portion of their family income on food consumption.

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- Poor people have lack of physical and financial assets.
- Poor people have very limited access to public goods and services.

Such a situation is not desirable for any developing country. One of the major aims of the millennium development goals (MDGs) is to eradicate extreme poverty. In order to achieve this goal the government of Bangladesh (GOB) undertook several programs by implementing poverty alleviation projects with the assistance of donor agencies and NGOs. Consistent with the MDGs, the GOB had set a few major strategies in the Poverty Reduction Strategy Paper (PRSP) to fight poverty which were to:

1. Enhance pro-poor growth.
2. Encourage women empowerment.
3. Invest in human development.
4. Ensure social security.

### *Concept of Zakat system in Islam*

Literally, zakat means blessing, purification, increase and goodness. It is so-called as it blesses the wealth from which it is taken and protects it from misfortunes. In the Islamic philosophy, the term zakat is defined as "a pre-determined portion of the wealth taken from the wealthy persons of the Muslim society which is allocated to the poor by the Islamic law". Zakat is considered to be one of the fundamental principles of Islam which every eligible Muslim is bound to obey. Zakat, for the eligible Muslim, is due once a year. There are some salient features of zakat system which are:

- Full ownership: implies that the owner should be fully capable of disposing of the property without being an object of contest by others. As zakat is considered a kind of ownership as regards the receiver, the giver must purely own it. Thus, no zakat is due on property which is not fully possessed.
- Growth of wealth: can be categorized as real growth and assumed growth. Real growth of wealth is that which is caused by its producing offspring, or through gain realized from trade. Assumed growth implies the capacity of property, such as gold, silver and currencies, to increase when exploited in trade. However, no zakat is due on properties that are not liable to real or assumed growth.
- Minimum wealth requirement or nisab: zakat is not applicable for a person whose wealth is below the minimum standard set by Islamic law. Zakat is due upon a person only if he possesses the following amount of wealth: nisab for gold is 3 ounces or 100 grams; for silver it is 21 ounces or 700 grams; for cash, it is an equivalent of the value of the nisab in silver or gold; for merchandise and inventories it is the same situation as for cash.
- Stocks and shares are also considered the same as cash and inventories. However, tools, equipment, and machinery used in business are excluded from zakat deduction.
- Exceeding the basic needs: properties which are owned to meet one's basic requirements such as houses, work tools, machines for industry, means of transport, and furniture are excluded from zakat. The amount of money which is kept to meet the basic requirements is also exempted from zakat.
- The lapse of a full year: a property is not counted for zakat until after the lapse of a full lunar year from the day it reaches the nisab; however, this condition does not apply to fruit and other crops.
- Public wealth, endowments and charitable properties: zakat is not due on public wealth since it is common property. Likewise, zakat in not due on endowments and money dedicated to charitable purposes, such as charitable associations and funds, so long as they do not belong to a specific owner.

### *Masjid Council for Community Advancement (MACCA)*

The Masjid Council for Community Advancement (MACCA) is a faith-based development, humanitarian and campaigning organization in Bangladesh. It has been working in the country for the purpose of achieving the goals of reducing poverty, inequality, extremism, and establishing social justice. MACCA is led by the chairman under whom four directors are appointed to operate all the programs of MACCA. A technical advisory team is also appointed to provide the necessary technical advice and support to the chairman. Registered with the Registrar of Joint Stock Companies of the Government of the People's Republic of Bangladesh under the Societies Act, MACCA started its interventions in 1999. Soon after, MACCA obtained registration from the Directorate of Social Welfare and NGO Affairs Bureau. The Head Office of MACCA is located in Dhaka, Bangladesh and there are two regional offices in the Manikganj and Faridpur districts. Currently, MACCA operates its program in the seventeen districts of Bangladesh. These programs are being operated with the support of GOB and donor agencies like the World Bank and USAID. A wide range of programs have been undertaken by the MCCA, including:

- Development program: mosque-based program; income-generating program; gender equity and women empowerment program; AIDS/HIV prevention program; integrated development education and livelihood (IDEAL) village project.
- Complementary partnership for development: development education program for faith leaders; water and sanitation project; pure drinking water supply project.
- Humanitarian and emergency program: children's development program and free Friday clinic.
- Research, advocacy and campaigning program: support for election commission; promotion of interfaith cooperation; center for research on society and development.

### *Hasana program of MACCA*

The Hasana approach is a zakat-based integrated development program. The concept evolved from the noble virtue of fellow-feeling where each individual must think of his neighbors. The Hasana model supports a group-based participatory approach. A "Hasana group" consists of 20–30 people from the same locality, each representing a hardcore poor family. The prime goal of the Hasana program is to ensure sustainable employment opportunities for the poor and to enhance their capability in pursuing income generating activities (IGAs). The vision of the program is to solve community problems through community leadership and preferably through community resources. Poor and hardcore poor families are the target group of this project. A few criteria must be met to be an eligible member of a Hasana group:

1. People having an income of less than 100 taka per day.
2. Households having persistent food insecurity.
3. Households having no sustainable job opportunities.
4. Households having no arable land excepting the homestead or no arable land.

The Hasana program is being implemented in the three Upazillas (lowest administrative unit) namely Chandirchar, Partilli-Chartilli and Nobogram under the Manikganj district among the 1045 poor households, which comprises 29 Hasana groups. The Hasana program has various development components like health, sanitation, education, income generation, capacity building, and leadership building. Resourceful community people contribute to financial support of the project in the form of zakat. MACCA follows several strategies to implement its programs:

- Establishing a community-based development group known as a Hasana group involving poor and hardcore poor.
- Transferring ownership of capital in the form of zakat among the groups for pursuing IGAs.
- Providing training facilities to the group members through the Hasana program for operating IGAs efficiently.
- Ensuring effective community ownership in capital formation, program implementation, and monitoring.

### *Outline of Problem*

The prime objective of the GOB is to alleviate poverty. Therefore, the government has emphasized rural financing as poverty is higher among the rural population than their urban counterpart. It goes without saying that no significant development is feasible in Bangladesh without the overall economic development of the rural people. Although the GOB made attempts to provide financial support to the rural poor though commercial banking activities it could not achieve the desired outcomes due to poor cliental service and the requirement for collateral.

Commercial banks in the developing countries fail to cater for the credit needs of the poor because of the perceived high risks and high transaction costs associated with small loans and saving deposits (Coleman 2006). As a tool of poverty alleviation, the microcredit system was evolved in Bangladesh, which needed no collateral. One of the major objectives of microcredit program is that the program must reach the poor and the loan must bring net benefits to them and uplift their socio-economic condition. In fact, microcredit programs have failed to eradicate poverty completely among the rural poor in Bangladesh. Hassan and Khan (2007) mentioned that the microfinance program failed to meet the social needs and could not stop social inequalities. Evidence from Bangladesh shows that the microfinance program had a positive role in poverty alleviation but the magnitude of the microcredit impact on the living standard (in terms of income) of the poor households was small (Mahmud 2010; Mahmud et al. 2007). The zakat system as a way of Islamic financing can be used as one of the strong weapons to combat poverty; it has been ignored by Western and Muslim thinkers (Hassan and Khan 2007). Following Islamic philosophy, to obtain zakat is a right of the poor from the rich of the society. This zakat system is based on highly ethical foundations. The main purpose of giving zakat is to attain the mercy of Almighty Allah. Therefore, it can be assumed that the risk of misuse of zakat money is much less than for any other financing system. Every year a huge amount of money is collected as “zakat”, which can be used for poverty alleviation programs. PRSP has increased external debt burdens and dependency on the donor countries while zakat funds can increase the potential of taxation of the government though improvement of productivity, employment and output (Hassan and Khan 2007). Nevertheless, in the PRSP, the GOB ignored the opportunities of utilizing zakat money as a poverty alleviation tool. Based on Islamic philosophy, MACCA has been implementing a poverty alleviation program by providing this zakat money to poor households. The poor have limited capital and a low level of skills to pursue income-generating activities. MACCA provides zakat (as one of the tools of poverty alleviation) along with training facilities to the rural poor in order to improve their living standard in terms of income, consumption, savings, and social awareness. MACCA supports the group-based development program for alleviating poverty. Through the Hasana Program, MACCA provided a huge amount of money as zakat among the poorest of the poor. This financial assistance is provided to the poor without collateral and at a zero interest rate. It can be hypothesized that by investing this zakat money in IGAs, the poor households would be capable of graduating from the vicious circle of poverty. So, the question arises as to whether this zakat money reaches the poor in improving their living standard. This study made a comprehensive effort to assess the zakat activities of MACCA as one of the tools of poverty alleviation. This study placed an emphasis on quantifying the impact of zakat on the living standard of MACCA beneficiaries in terms of household income, expenditure, and savings using an econometric technique.

## 2. Literature review

### *Role of rural finance in poverty alleviation*

Rahman (2003) conducted a survey on the farmers of Bangladesh. The author examined factors determining the use of pesticides and farmers’ awareness of beneficial and harmful effects of pesticides. The author observed that, among the socio-economic variables, land ownership and agricultural credit were positively related with pesticide usage and further stated that increased access to agricultural credit would open up opportunities for diversifying crop production and increasing cropping intensity. The study showed that farmers’ awareness of the harmful effects of pesticides was not very strong. Awareness training for farmers on the harmful effects and proper handling and management of pesticides was suggested.

Zeller et al. (1998) conducted a study in Malawi to analyze the credit programs for the production of crops like tobacco and hybrid maize. They observed that in the context of Malawi, households with small farm sizes and low risk-bearing ability were able to adopt capital-intensive crops, such as hybrid maize and tobacco, if policies improved their access to credit, and input and output markets. According to them, participation in the agricultural credit program substantially raised the cropping share for hybrid maize and tobacco. They observed that membership in the credit programs had sizable effects on crop income. Therefore, they concluded that an expansion of the existing credit programs could have beneficial effects on agricultural production and rural incomes. They also added that participation in the agricultural credit program was lower for households living in areas with higher variations in rainfall.

Ahmed (1984) examined whether lack of adequate finance was the constraint for the growth and extension of small-scale cottage industries (SCIs) in Bangladesh. The author found that inadequacy of credit was a critical constraint for the growth and sustained development of the rural SCIs. The author also indicated that rural entrepreneurs faced problems in accessing formal and informal credit markets due to stringent collateral requirements, complexities of official formalities and high monetary and non-monetary costs.

Rao (2003) conducted a study on microfinance institutions in India and Bangladesh. The author mentioned that microcredit programs can be viewed as an important component of rural development strategies for generating employment, microenterprise development, and in reducing poverty. According to the author, the microcredit program had mainly targeted the rural poor women because they were found to have minimum access to economic resources. The author also reported that the microcredit program had improved the social, economic, legal and political status of the rural poor women.

Pitt (2000) conducted a study on the group-based credit program in Bangladesh. The author examined the effects of the credit program on agricultural contracts and supply of agricultural labor. The author stated that microcredit programs had increased own-cultivation through sharecropping for male members. According to the author, the female credit effect was larger than for their male counterparts in increasing share-cropping. The author observed that the credit program had increased self-employment for both male and female borrowers.

Mahmud et al. (2010) conducted a study on the marginal and landless borrowers of the Agricultural Intensification and Diversification Project (ADIP) in Bangladesh, who took loans for fishery activities. The prime goal of the study was to measure the impact of the microcredit program on the households' total expenditure. The author found that the microcredit program failed to have a significant influence on the households' expenditure. The author also stated that the households' income, borrowers' education, training, distance of the rural market from the borrowers' dwelling place, expenditure on food items, and investment on fishery activities were the key factors in determining households' expenditure.

Hashemi et al. (1996) studied the microcredit program of Grameen Bank and BRAC in Bangladesh. They examined the effect of the microcredit program on women's empowerment. They found that the BRAC and Grameen Bank programs had increased their economic security, purchasing ability, mobility, ability of taking household decisions, contribution to family support, and political/legal awareness.

Mosley and Hulme (1998) conducted a study on the microfinance institutions of developing countries, namely Bangladesh, India, Sri Lanka, Indonesia, Bolivia, Malawai and Kenya. They reported that the income and assets of the borrowers had increased due to microfinance, and found that higher income households had experienced, on average, a higher program impact than the households living below the poverty line.

Selvaraj et al. (1998) measured the effect of agricultural credit on resource allocation decisions and productivity in two regions of the Tamil Nadu state in India. They found that formal credit had positive effects on the adoption of high yielding varieties (HYVs) and labor use.

Mahmud (2006) measured the effect of the microcredit program on living standards in terms of income, expenditure, and compulsory savings for the landless and marginal borrowers of Bangladesh, who took loans for agricultural production activities. The author mentioned that the microcredit program had a positive role in improving their living standard in terms of household income, food consumption, and saving. The author also stated that the magnitude of the impact on living standards (in terms of income, saving, and food expenditure) of the borrowers was small.

Based on the above studies, it can be observed that most of the previous studies focused on the agricultural credit program and microfinance. The studies showed that rural financing had a positive impact on poverty alleviation, but that the agricultural credit and microfinance program failed to alleviate poverty completely for the rural society. However, very few studies were conducted in Bangladesh to assess the zakat system as a tool of poverty alleviation. In this study, the initiative was taken to assess the impact of the zakat system in alleviating rural poverty in terms of household income, consumption, and saving.

### *Empirical evidence of measuring impact of rural financial program*

Several impact studies were conducted by various authors in assessing the impact of rural finance on the living standards of the borrowers in terms of income, consumption, saving, empowerment of women etc. Various econometric methods, such as ordinary least square (OLS), weighted least square (WLS), and simultaneous equation systems such as two stage least square (TSLS) and weighted least square technique (WTSLS) were used by researchers to evaluate this impact. Mosley and Hume (1998) assessed the impact of the microcredit program on household income and assets using the OLS technique. Mahmud et al. (2010) used the WLS technique to assess the impact of fishery credit in Bangladesh on household consumption. Duong and Izumida (2002) conducted a study in Vietnam to evaluate the impact of credit on household production using the WLS technique. Mahmud (2006) used the WTSLS technique to assess the impact of credit on borrowers' income, expenditure and saving. Mosely and Rock (2004) used both the OLS and TSLS techniques to assess the impact on microcredit in the African context and they found that microcredit had a positive role in alleviating poverty and increasing the risk management ability of the households. Perceptions of the rural borrowers' about the rural financial projects were also evaluated using a Logit model. Mahmud et al. (2007) used the Logit model to assess the opinion of the borrowers about their economic well-being. The Logit model was also used by Latif (1994) to assess the opinions of microcredit borrowers on their contraceptive use. In fact, the WLS technique is more appropriate than OLS in solving the heteroscedasticity problem (Mahmud et al. 2010; Mahmud 2010). The two stage least square (TSLS) is an appropriate technique when some of the right-hand side variables are correlated with the error term (Mahmud 2006). In this study, WLS was selected to assess the impact of zakat on the living standard of the beneficiaries (in terms of households' income, expenditure and saving) in order to solve the heteroscedasticity problem, which the OLS technique failed to solve.

## 3. Conceptual framework for alleviation poverty

The beneficiaries under this study were poor. Due to poverty they could not start IGAs despite having adequate skills; they had very limited access to formal financial institutions. The zakat system may provide a unique opportunity for them to pursue IGAs properly as it requires no collateral and interest. The zakat fund would increase investment and the risk-bearing ability of the rural poor. This increased income would ultimately increase their purchasing ability leading to a better quality of life. This system would also accelerate employment-generation opportunities for poor households in the rural areas. The conceptual framework of poverty alleviation under the zakat program is shown in Figure 1.

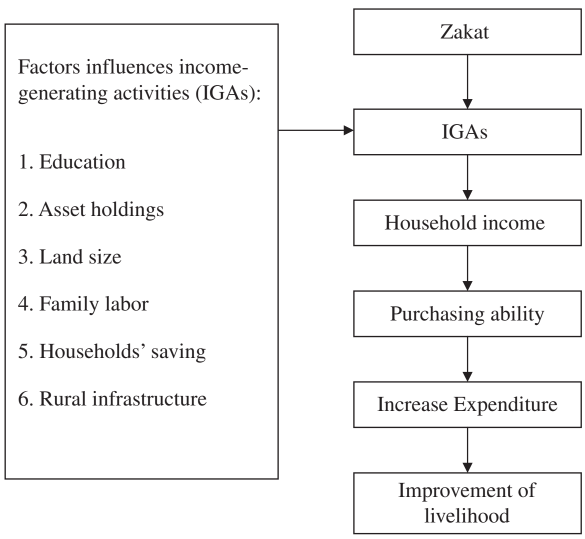


**Figure 1.** Conceptual framework of poverty alleviation under Zakat program.

Besides zakat, there are other factors which are related to the well-being of the beneficiaries. The education level of the beneficiaries would assist them in improving the skills of operating IGAs. The savings activities of the households should also be considered carefully. Household investment activities and decisions of selecting IGAs depend to a great extent on the saving behavior of the households. Factors like household assets would increase the ability of the beneficiaries to invest in IGAs. The household assets of the beneficiary can be considered as crucial in determining their income since the risk management, investment and negotiation capability depend to a large extent on their asset-base. Family size plays a vital role in supplying agricultural labor for the production activities since hired labor is expensive. Lack of rural infrastructural facilities is one of the major obstacles for the rural development of Bangladesh. Initiatives to establish rural infrastructure (such as rural markets, roads, cold-storage, banks) under the zakat program would assist the poor in accelerating their IGAs.

## 4. Methodology

Data was collected from the beneficiaries of MACCA. The lists of households were collected from the local office of MACCA in the Manikganj district. Based on the list, and using simple random sampling, 179 households were selected as the sample for this study. The following criteria were used in selecting the sample:

1. Households engaged in agricultural activities.
2. Households that are permanent residents of the village.
3. Households having less than 100 decimals of land.
4. Households who joined the zakat program in 2009.
5. Recipients' age to be between 18 and 55 years.
6. Households who received zakat for the first time in 2009 and have used it for 12 months.
7. Household maximum monthly income not exceeding 5000 taka.

The survey was conducted in August 2010 using questionnaires with the beneficiaries of the Hasana program. The beneficiaries were asked to provide information on various socioeconomic aspects such as demographic profile; economic activities; household assets; zakat management; training activities; opinion about the zakat program; and any problems with participation in the zakat program. In this study, the weighted least square (WLS) technique was used to assess the impact of zakat on households' income, expenditure and saving.

A. The household income model can be specified as:

$$Y = A_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \mu \quad (1)$$

where, $Y$ = Income of the household in 2009 (taka)
$X_1$ = Number of family members in the household
$X_2$ = Education of the zakat recipients (number of years of schooling)
$X_3$ = Total land size of the household (decimals)
$X_4$ = Total saving of household in 2009 (taka)
$X_5$ = Amount of zakat received by household in 2009
$X_6$ = Number of family members involved in other IGA program in 2009
$X_7$ = Number of training received by zakat recipient in 2009

$A_0$ is the constant for equation one
μ is the error term for the equation one

B. Household total expenditure model can be specified as:

$$C = B_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu \qquad (2)$$

where, C = Household total expenditure in 2009 (taka)
$X_1$ = Amount of zakat received by households in 2009 (taka)
$X_2$ = Households' total income in 2009 (taka)
$X_3$ = Education of the zakat recipients (number of years of schooling)
$X_4$ = Number of family members involvement in other IGA program in 2009
$X_5$ = Total saving of household in 2009 (taka)
$B_0$ is the constant for equation two
μ is the error term for the equation two

C. Households' total saving model can be specified as:

$$S = C_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \mu \qquad (3)$$

where, S = Household total saving in 2009 (taka)
$X_1$ = Total income of household in 2009 (taka)
$X_2$ = Total expenditure of the zakat recipients in 2009 (taka)
$X_3$ = Amount of zakat received by households in 2009 (taka)
$X_4$ = Distance of rural bank from beneficiaries' home (kilometer)
$X_5$ = Education of the zakat recipients (number of years of schooling)
$X_6$ = Distance of rural market from the house of zakat recipient (kilometer)
$X_7$ = Distance of MACCA's branch office from the house of zakat recipient (kilometer)
$X_8$ = Number of training received by the zakat recipient in 2009
$C_0$ is the constant for equation three
μ is the error term for the equation three

## 5. Results and discussion

This study focused on the impact of zakat on the living standard of beneficiaries of MACCA. In this study, three important aspects of living standards (i.e. income, expenditure, and saving) were analyzed. Not only zakat, but also other important factors related to the living standards of the household were considered. Socio-economic variables like income, saving, expenditure, family size, education, family members' involvement in other IGA programs, training, and rural infrastructural facilities were considered. The estimated results of the impact of zakat on the household income, expenditure and saving are presented in Table 2, Table 3 and Table 4, respectively.

### *Factors of household income*

Education is one of the key factors for improving living standard of the rural poor. Proper education assists people in sound planning and proper monitoring of the IGAs. The beneficiaries of this study had a low level of education. Therefore, they had to face big obstacles in decision-making activities and in adopting modern technology, this resulting in lower production and income. MACCA took the initiative to improve their educational status through non-formal educational activities. It can be hypothesized that educated beneficiaries would be more capable in pursuing IGAs and would earn more than a less-educated participant. This study confirms that beneficiaries' education was positively and significantly related to the dependent variable (Table 1).

Saving assists the poor to increase the capability of their investment activities as it increases risk-bearing ability and bargaining power. Beneficiaries under this study were poor and had a small amount of savings. Due to inadequate savings they faced obstacles in investing in the income-generating activities which led them to have lower economic benefits. MACCA took the initiative to motivate beneficiaries through awareness-building programs to save a portion of their income to handle adverse economic situations. It was assumed that beneficiaries' saving ability would be increased by taking part in the zakat program. This study showed that saving was positively and significantly related to the household income (Table 1). This result indicates that the income of the household increases as saving increases.

Agricultural land is scarce in Bangladesh and it is also very expensive for poor households. In the context of rural

**Table 1.** Factors of households' income.

| Variables | Co-efficient | t-value | Level of Significance |
|---|---|---|---|
| Constant | –6344.479 | 0.090838 | 0.9277 |
| Number of family member | 7144.039 | 3.350615 | 0.0010 |
| Number of years of schooling of the zakat-recipient | 4879.351 | 2.085774 | 0.0385 |
| Land size (decimals) | 326.8485 | 2.734717 | 0.0069 |
| Household's saving (taka) | 0.942713 | 10.17471 | 0.0000 |
| Amount of zakat received (taka) | 2.549190 | 0.413384 | 0.6798 |
| Family members in other program (number) | 7208.235 | 1.422772 | 0.1566 |
| Number of training received | 5309.099 | 1.144451 | 0.2540 |
| R-squared: 0.668332 | | | |
| Durbin-Watson: 1.922984 | | | |

*Source*: Survey 2010.

Bangladesh, poor people have very limited or no land of their own. Households under the zakat program had small pieces of land. Possession of assets like agricultural land provides the poor with the opportunity to increase their agricultural productivity and income. Moreover, ownership of agricultural land assists the poor in increasing their bargaining power, risk-bearing ability, and increases employment opportunities. It can be hypothesized that households who were had more agricultural land would be economically well-off compared to households who possess small pieces of land. This study reveals that the land size of the household was positively and significantly related to the household income (Table 1). This implies that, as land size increases, the agricultural production and income would increase yielding higher living standards for the beneficiaries.

Family size is related to household sources of income and working ability. In rural Bangladesh, poverty holds back most of the household involvement in IGAs. Moreover, farming activities as well as non-farm activities in rural areas are poorly mechanized. It is not cost-effective for the poor households to hire labor to perform economic activities. Thus, poor households have to depend on the family supplied labor, which is cheap and easy to utilize. It can be hypothesized that a large household with more working members would be in a more advantageous position than a small family in the case of earnings. This study shows that family size was positively and significantly related to the dependent variable (Table 1). It indicates that household income increases as family size increases.

### *Factors of household total expenditure*

MACCA provided zakat to the poor to improve their living standard in terms of household expenditure. This study showed that zakat money failed to have a significant influence on total household expenditure (see Table 2). However, the three factors of education of the beneficiaries, household saving, and income played an important role in determining household expenditure.

In the rural areas of Bangladesh, people have a low level of income due to poverty and lack of opportunities to involve themselves in the IGAs. Lack of income for a household can be considered as one of the major obstacles of low level of consumption. Therefore, it is important to increase household income to improve living standards through financial, educational and infrastructural development in the rural areas. MACCA made the effort to provide zakat money to the rural poor and created facilities for them to pursue IGA opportunities in order to accelerate household income. It was expected that the increase in income would increase their purchasing capacity and, eventually, the poor would spend more. The results shown in Table 2 reveal that household income had a significant and positive effect on the total expenditure of the household.

Education (years of schooling) is a factor that is related to human knowledge. It is generally believed that an educated person is more skilled in analyzing socio-economic activities; he is more aware of healthcare facilities, and more efficient in overcoming any adverse situation compared to a less educated person. MACCA provided non-formal education to the beneficiaries on various socio-economic aspects related to their living standard, such as healthcare, production and marketing conditions of the rural areas, legal and educational rights, and social responsibilities. It was expected that this provision of educational facilities to the beneficiaries would increase their living standard (in terms of household total expenditure). This study confirmed that education of the zakat recipients was positively and significantly related to the total expenditure of the household (see Table 2).

The rural people in Bangladesh have very limited opportunities to operate multiple IGAs at a time. Due to low income, they cannot cover their consumption expenses properly. Very often, they need to depend on their saving for covering the consumption expenses. In fact, they have a small amount of savings, or no savings, with which to handle risks and to cover consumption expenses. An absence of efficient government social security programs for the rural poor is a major obstacle for their saving activities. In Bangladesh, there exist almost no insurance policies for the rural poor to cover their risk and uncertainty. Moreover, adopting an insurance policy is also very expensive for the rural poor. The beneficiaries of this study were poor. Thus, they had to cut down their unproductive consumption expenses for increasing their saving. The study confirmed that saving was negatively and significantly related to the total expenditure of the household. It indicates that household total expenditure decreases as the saving increases (Table 2).

**Table 2.** Factors of households' total expenditure.

| Variables | Co-efficient | t-value | Level of Significance |
|---|---|---|---|
| Constant | 14734.78 | 0.345220 | 0.7303 |
| Amount of Zakat (taka) | 1.217136 | 0.298018 | 0.7660 |
| Household income (taka) | 0.484659 | 3.696287 | 0.0003 |
| Education (year of schooling) | 4661.989 | 2.215369 | 0.0280 |
| No. of family members in other IGA | 1699.3645 | 0.493455 | 0.6223 |
| Household saving (taka) | –0.579245 | –2.889488 | 0.0044 |
| R-squared: 0.636631 | | | |
| Durbin-Watson: 1.907995 | | | |

*Source*: Survey 2010.

**Table 3.** Factors of households' saving.

| Variables | Co-efficient | t-value | Level of Significance |
|---|---|---|---|
| Constant | –4886.402 | –0.236074 | 0.8137 |
| Total income of household (taka) | 0.040529 | 1.838599 | 0.0677 |
| Total expenditure of household (taka) | –0.096111 | –2.382019 | 0.0183 |
| Amount of zakat received (taka) | 0.954904 | 0.604538 | 0.5463 |
| Distance of rural bank (km) | –2091.318 | –1.868420 | 0.0634 |
| Education (years of schooling) | 1203.636 | 1.446966 | 0.1497 |
| Distance of rural market (km) | –767.5276 | –0.474389 | 0.6358 |
| Distance of MACCA's branch office (km) | –1345.324 | –0.886331 | 0.3767 |
| Number of training received | 387.6822 | 0.110118 | 0.9124 |
| R-square: 0.088757 | | | |
| Durbin-watson: 1.762855 | | | |

*Source*: Survey 2010.

### *Factors of total household saving*

In the context rural Bangladesh, most of the poor households have limited or no savings at all. The low level of household income creates an obstacle to invest properly in the IGAs, yielding lower returns and saving. Saving assists the rural poor in increasing their investment and risk-bearing ability. But, due to lack of income, they cannot save. Thus, MACCA made the effort to enhance IGAs for the rural poor through the zakat program. It was expected that household income would increase due to taking part in the zakat program and this increased amount of income would in turn increase household savings. The study confirmed that the household income was positively and significantly related to the saving. It indicates that household saving would increase as income increases (see Table 3).

Government and NGOs development activities in the rural areas provided more opportunities to spend more on consumption purposes (such as healthcare and educational activities). Rural people have become more aware of their healthcare, children's education, telecommunications, use of electricity and social nobilities. Moreover, the price of goods and services (such as food, land, clothing, and daily amenities) has increased in the rural areas. Thus, rural people have to spend more for their consumption. As they are poor, but there is an increase in consumption, they have to cut down on savings as their current income is inadequate to cover their consumption expenses. This study showed that household consumption was significantly and negatively related with the household savings, and indicates that saving decreases as consumption increases.

A rural bank can play a significant role in the rural economy through enhancing economic transactions among the rural people. The bank provides a loan facility to the rural poor for pursuing their IGAs. It also assists the poor household in enhancing their savings by receiving deposits from the rural clients. Moreover, a bank provides various services to the clients. For instance, banks issue financial certificates in favour of the clients, provide necessary suggestions about future investment activities, and assist in establishing networks between different organizations and the clients. However, in the rural areas of Bangladesh, bank branches are very limited compared with the demand. Usually, rural bank branches are located at the Upazilla level; thus, it is difficult for the rural poor to obtain bank services due to the long distance from their villages. It is important to establish bank branches as close as possible to the villages so that the rural people (especially rural women) have easy access to banks and may avail themselves of banking services promptly. This study showed that the distance of a rural bank from the houses of the beneficiaries under study was negatively and significantly related to the dependent variable. It indicates that household saving would decrease as the distance from the rural bank increases.

## 6. Conclusion

MACCA took the initiative to provide zakat money to the rural poor for alleviating poverty. However, the amount of money provided to them as zakat failed to have a significant influence on household income, expenditure, and saving. The inadequate size of the zakat fund, lack of training facilities for perusing IGAs, lack of proper motoring by MACCA staff, and diversion of money to non-productive activities by the households may be the major causes behind such failure. However, factors like households' income and savings, education of the beneficiaries, land size of the household, and family size were identified as influential factors in terms of their living standard. Policy makers should focus on the following for reducing rural poverty:

- Emphasis should be given to providing educational facilities among the beneficiaries, and the necessary educational inputs, such as books and pencils, must be provided free of cost. The government and MACCA should jointly set up night schools to provide adult education. Motivational and awareness programs must be strengthened in the rural areas to encourage rural people to send their family members (focusing on children and women) to school. Stipend facilities should be extended for meritorious students. It is also important to focus on appointing experienced and qualified teachers.
- Proper steps need to be taken to increase rural employment opportunities. The government and NGOs should work together to establish more

small-scale agro-based industries in rural areas. It is important to establish an adequate number of training centers in the rural areas so that knowledge about modern technology can be disseminated promptly among target the groups.

- Focus should be placed on land reform activities. Necessary laws need to be enacted to prevent land fragmentation. Beneficiaries should be encouraged to follow community-based farming systems. Reserved government lands should be made available to poor households on a long-term lease for them to pursue agricultural activities. Farmers should be encouraged to use more organic fertilizers than chemical fertilizers in order to conserve soil fertility.
- Emphasis should also be placed on accelerating rural saving activities among the beneficiaries, making savings compulsory. The government should take steps to establish more rural banks. Motivational programs need to be launched in the rural areas to create awareness about saving, and various types of saving schemes can be introduced for the poor at very cheap rates.

## References


Ahmed MU. Financing Rural Industries in Bangladesh. The Quarterly Journal of the Bangladesh Institute of Development Studies, 12 (1&2), 1984. 59–80.

Bangladesh Economic Review 2009. Finance Division, Ministry of Finance. Government of the People's Republic of Bangladesh. 2010.

Coleman BE. Microfinance in Northeast Thailand: Who Benefits and How Much? World Development, 34 (9), 2006. 1612–1638.

Duong PB, Izumida Y. Rural Development Finance in Vietnam: A Microeconometric Analysis of Household Surveys. World Development, 30 (2), 2002. 319–335.

Hashemi SM, Schuler SR, Riley AP Rural Credit Programs and Women's Empowerment in Bangladesh. World Development, 24 (4), 1996. 635–653.

Hassan MK, Khan JM. Zakat, External Debt and Poverty Reduction Strategy in Bangladesh. Journal of Economic Cooperation, 28 (4), 2007. 1–38.

Latif MA. Programme Impact on Current Contraception in Bangladesh. Quarterly Journal of the Bangladesh Institute of Development Studies, 22 (1), 1994. 27–61.

Mahmud KT. Does Microcredit Really Matter To Women Borrowers of Bangladesh? A Case of BRAC's Agribusiness Program. Journal of Finance and Economics, 7 (2), 2010. 111–121.

Mahmud KT, Mohamed ZA, Ismail MM, Shamsudin MN, Hilton D. Perception and Attitude of Microcredit Borrowers Towards Effectiveness of Agricultural Diversification and Intensification Project in Bangladesh. Asia-Pacific Journal of Rural Development, 17 (2), 2007. 65–87.

Mahmud KT, Mohammed ZA, Simbasivan M, Khan SI. Opinion of Fishermen Towards Their Well-being Under Agricultural Diversification and Intensification Project (ADIP) in Bangladesh. International Journal of Economics and Management (IJEM), 4 (1), 2010. 45–60.

Mahmud KT. (2006). Effectiveness of micro-credit for Poverty Alleviation Under Agricultural Intensification Projects in Bangladesh, Ph.D Thesis, University Putra Malaysia (UPM), Selangor, Malaysia.

Mosley P, Hulme D. Microenterprise Finance: Is There a Conflict Between Growth and Poverty Alleviation? World Development, 26 (5), 1998. 783–790.

Mosley P, Rock J. Microfinance, Labour Markets and Poverty in Africa: A Study of Six Institutions. Journal of International Development, 16 (3), 2004. 467–500.

Pitt MM. The Effect of Non-agricultural Self-employment Credit on Contractual Relations and Employment in Agriculture: The Case of Microcredit Programmes in Bangladesh. The Quarterly Journal of the Bangladesh Institute of Development Studies, 26 (2&3), 2000. 15–48.

Rahman S. Farm-level Pesticide Use in Bangladesh: Determinants and Awareness. Agriculture, Ecosystems and Environment, 95, 2003. 241–252.

Rao CRS. Management Information System for Microfinance Institutions. Asia-Pacific Journal of Rural Development, 13(2), 2003. 79–86.

Sen B. Drivers of Escape and Descent: Changing Household Fortunes in Rural Bangladesh. World Development, 31(3), 2003. 513–534.

Selvaraj KN, Chandran K, Sundaravaradarajan KR. Access to Credit and the Effects of Credit on Resource Allocation Decisions and Productivity in Indian Agriculture. Asia-Pacific Journal of Rural Development, 8(2), 1998. 1–46.

Zeller M, Diagne A, Mataya C. Market Access by Smallholder Farmers in Malawi: Implications for Technology Adoption, Agricultural Productivity and Crop Income. Agricultural Economics, 19, 1998. 219–229.

# Efficiency of *zakat* institutions and its determinants

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**Abstract** - Zakat is one of the five basic pillars in Islam. It is an obligation of Muslims to give a specific amount of their wealth (with certain conditions and requirements) to beneficiaries called al-mustahiqqin with the main objective being achievement of socio-economic justice. Zakat institutions are trusted bodies that manage zakat in Muslim countries. In Malaysia, such zakat institutions are State Islamic Religious Councils (SIRCs). The institutions are expected to play a key role in promoting the socio-economic objectives of zakat in Malaysia. Thus, it is of prime importance that these institutions are being managed effectively and efficiently. The purpose of this paper is to analyze the efficiency of zakat institutions in Malaysia. This study uses the data envelopment analysis (DEA) method to estimate zakat efficiency and the tobit model to determine the efficiency of zakat institutions in Malaysia. We use three different types of DEA model which are technical efficiency (TE), pure technical efficiency (PTE), and scale efficiency (SE) model. The data consist of a panel of fourteen State Islamic Religious Councils (SIRCs) in Malaysia during the period of 2003 to 2007. Further, tobit analysis is utilized in the second stage to determine factors that influence the efficiency of zakat institutions in Malaysia. During the study period, our results suggest that pure technical inefficiency rather than scale inefficiency has resulted in the zakat institutions inefficiency. This could be due to inability of the institutions in using the technology available to collect more zakat collection and distribute it to the recipients. Examination of the return to scale revealed that more than half of the zakat institutions in Malaysia were scale-inefficient (operating at DRS or IRS). The empirical findings suggest that the zakat payment system, computerized zakat system, board size, audit committee, and decentralization significantly affect the efficiency of zakat institutions in Malaysia.

*Keywords:* efficiency, data envelopment analysis (DEA), zakat institutions, Malaysia

## 1. Introduction

One of the performance measurement systems in the public sector is efficiency. Efficiency deals with both inputs and outputs and measures how productively inputs are turned into outputs. Besides efficiency, there are two other "E"s that should be measured in a public sector organization: economy and effectiveness. Economy represents the relationship between resources expended or budgeted for an activity and what is received for them. Effectiveness focuses mainly on the outputs and refers to goods and services produced as a direct result of management activities. The additional measure of performance is outcomes, which refers to the consequences of the output produced (Abdul Rahman 2007, referring to Schacter 1999). In this study, the efficiency of zakat institutions will be evaluated as one of the performance measurement systems.

In Malaysia, such zakat institutions are State Islamic Religious Councils (SIRCs). The institutions are expected to play a key role in promoting the socio-economic objectives of zakat in Malaysia. Thus, it is of prime importance that these institutions are being managed effectively and efficiently. Being a public service organization which is accountable to stakeholders and the Muslim public at large, these zakat institutions have been subjected to intense public scrutiny and criticism. Cursory examination would indicate many

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parties questioning the efficiency and effectiveness of these institutions in managing zakat affairs of their respective states. Given this ongoing public concern, it is important to examine the efficiency of these zakat institutions. This paper can be considered as the first systematic attempt to examine the efficiency of zakat institutions in Malaysia.

## 2. Literature review

In Malaysia, all aspects pertaining to the administration of zakat are under the jurisdiction of the states through the SIRCs. There are a total of fourteen SIRCs, one for each of the thirteen states and one for the federal territory. Due to the demand for more efficient and effective collection and distribution of zakat funds in Malaysia, some of the Religious Councils have corporatized an institution that is responsible for the matter of collection (and distribution) of part of zakat in those particular states.

Eight Religious Councils have so far been corporatized, starting with Pusat Pungutan Zakat (PPZ), Wilayah Persekutuan in 1991, followed by Pusat Zakat Selangor, Pahang and Pulau Pinang in 1995, and lastly Pusat Pungutan Zakat Negeri Sembilan and Melaka in 2000 (Ahmad et al. 2006). These were followed by Tabung Baitulmal Sarawak in 2001, and the latest is Pusat Zakat Sabah that was been corporatized in 2007. However, to date, only Selangor, Pulau Pinang, Sarawak, and Sabah are fully corporatized (for both collection and distribution affairs).

The rise of New Public Management and de-centralization has shown a transfer of some public services to the private sector and has been seen to be more effective and has contributed to a decline in the traditional ethos of the public sector (Brereton and Temple 1999). The decentralizations of the Islamic religious councils showed a transfer of authority or decentralization of the chairman of the councils from Sultan to the state government (Menteri Besar or Chief Minister), and further delegation to those other than the Chief Minister. To date, the religious councils of Perak, Kelantan, Perlis and Pahang are still chaired by the Sultan, while Terengganu, Melaka and Negeri Sembilan have decentralized the authority of the religious councils to the Chief Minister. The remaining religious councils were further decentralized to persons other than the Sultan and the Chief Minister.

Most studies conducted on zakat in Malaysia concentrate on various areas including theoretical (Mujitahir 2003; Tarimin 1995), legal and compliance (Idris et al. 2003; Ahmad 2004), accounting (Abdul Rahman 2003; Ismail and Sanusi 2004), and Muslim awareness and payment behaviour (Nor et al. 2004; Ahmad et al. 2005; Idris and Ayob 2002). However, there are very few studies that have examined the performance of zakat institutions. Some studies focused on the performance of zakat collection and distribution (Noor et al. 2005) and some other studies measure the impact of privatisation on the performance of zakat institutions (Nor Ghani et al. 2001; Ahmad et al. 2005). It can be seen that there is no study which has comprehensively examined the efficiency of Malaysian zakat institutions.

In terms of efficiency, economic efficiency is defined in economic theory as a term describing how well a system is performing in generating the maximum desired output for given inputs with the available technology. Efficiency is improved if more output is generated without changing inputs. An economic system is more efficient if it can provide more goods and services for society without using more resources. Studies on the efficiency of financial institutions have also been extensively undertaken especially in the banking sector. Sufian (2006), Hassan (2006), Tahir, Bakar and Haron (2009), Sufian and Habibullah (2010), Maamor and Ismail (2010) are among the recent studies undertaken on financial institutions.

In terms of the efficiency of public sector organization, there is still a lack of studies undertaken on the efficiency of public sector organization in Malaysia. Husain, Abdullah and Kuman (2000) and Ibrahim and Md. Salleh (2006) are among researchers who have explored the efficiency of the public sector in Malaysia. Husain, Abdullah and Kuman (2000) studied the efficiency of the Road Transport Department (RTD) using data envelopment analysis (DEA) and found out that of 46 service units, only 11 service units scored above 50% as an efficiency score. Ibrahim and Md. Salleh (2006), for instance, in their studies of local government provision of public goods and services, found that the overall result was that most of the local governments in Malaysia are cost-inefficient, and that municipality councils are more inefficient than the district councils. Despite limitations, this study attempts to explore the efficiency of zakat institutions in Malaysia, and to identify the factors affecting efficiency.

## 3. Methodology

### *Data envelopment analysis*

The term “data envelopment analysis” (DEA) was first introduced by Charnes et al. (1978) (“CCR” model), to measure the efficiency of each decision making units (DMU) that is obtained as a maximum of a ratio of weighted outputs to weighted inputs. This denotes that the more the outputs produced from given inputs, the more efficient is the production. The weights for the ratio are determined by a restriction that the similar ratios for every DMU have to be less than or equal to unity. This definition of an efficiency measure allows multiple outputs and inputs without requiring pre-assigned weights. Multiple inputs and outputs are reduced to a single “virtual” input and single “virtual” output by optimal weights. The efficiency measure is then a function of multipliers of the “virtual” input-output combination.

The CCR model presupposes that there is no significant relationship between the scale of operations and efficiency by assuming constant returns to scale (CRS) and it delivers the overall technical efficiency (OTE). The CRS assumption is only justifiable when all DMUs are operating at an optimal scale. However, firms or DMUs, in practice, might face either economies or diseconomies of scale. Thus, if one makes the CRS assumption when not all DMUs are operating at the optimal scale, the computed measures of technical efficiency will be contaminated with scale efficiencies.

Banker et al. (1984) extended the CCR model by relaxing the CRS assumption. The resulting “BCC” model was used to assess the efficiency of DMUs characterized by variable returns to scale (VRS). The VRS assumption provides the measurement of pure technical efficiency (PTE), which is the measurement of technical efficiency devoid of the scale efficiency (SE) effects. If there appears to be a difference between the TE and PTE scores of a particular DMU, then it indicates the existence of scale inefficiency.

The input oriented DEA model with VRS technologies can be represented by the following linear programming problem:

$$\begin{aligned}&\min \varphi, \lambda, \varphi\\&\text{subject to } -\varphi yi, + Y\lambda, \geq 0\\&xi - X\lambda \geq 0\\&N1'\, \lambda = 1\\&\text{and } \lambda \geq 0 \qquad (1)\end{aligned}$$

where λ is an N x 1 intensity vector of constants and φ is a scalar ($1 \geq \varphi \leq \alpha$). N1 is an N x 1 vector of ones. For N number of firms, yi and xi are the M x N and K x N output and input vectors, respectively. Y comprises the data for all the N firms.

Given a fixed level of inputs for the ith firm, the proportional increase in outputs to be achieved by the firm is indicated by $\varphi - 1$. Note that without the convexity constraint $N1'\, \lambda = 1$, equation (1) becomes a DEA model with CRS technology. The convexity constraint implies that an inefficient firm is benchmarked against firms of a similar size and therefore the projected point of that firm on the DEA frontier will be a convex combination of observed firms. In other words, each firm would produce on or to the right of the convex production possibility frontier. If TE scores for a particular firm with or without the convexity constraint imposed are the same, then the firm is operating under CRS. If these scores are different, the firm operates under VRS technology. However, in such a case, it would be necessary to identify whether the firm or the DMU operates with IRS or DRS. To do this, an assumption of non-increasing returns to scale (NIRS) is imposed in (1) and the convexity constraint $N1'\, \lambda = 1$ is substituted with $N1'\, \lambda \leq 1$. This is given as follows:

$$\begin{aligned}&\min \varphi, \lambda, \varphi\\&\text{subject to } -yi, - Y\lambda, \geq 0,\\&\varphi xi - X\lambda \geq 0,\\&N1'\, \lambda \leq 1\\&\lambda \geq 0 \qquad (2)\end{aligned}$$

Solution of equation (2) reveals the nature of scale efficiencies. IRS exists if the TE score obtained with NIRS technology differs from the TE estimates with VRS technology. If both of these efficiency scores are equal, then the corresponding firm operates with DRS. Because the number of zakat institutions is small, the scope to undertake this study using standard econometric methods is somewhat limited. Amongst the strengths of the DEA is that DEA is less data demanding and works well with small sample size (Canhoto and Dermine 2003).

It is the small sample size, among other reasons, that leads us to DEA as the tool of choice for evaluating the efficiency of zakat institutions in Malaysia. Furthermore, DEA does not require a pre-conceived structure or specific functional form to be imposed on the data in identifying and determining the efficient frontier, error, and inefficiency structures of the DMUs (Bauer et al. 1998).

DEA can be used to derive measures of scale efficiency by using the variable returns to scale (VRS), or the BCC model, alongside the constant returns to scale (CRS), or the CCR model. Coelli et al. (1998) noted that the BCC model has been used most commonly since the beginning of the 1990s. A DEA model can be constructed either to minimize inputs or to maximize outputs. An input orientation aims at reducing the input amounts as much as possible while keeping at least the present output levels, while an output orientation aims at maximizing output levels without increasing use of inputs (Cooper et al. 2000).

The standard approach to measuring scale effects using DEA is to run models on both a CRS and VRS basis. Scale efficiency is then found by dividing the efficiency score from the CRS model by the efficiency score from the VRS model. Because the data points are enveloped more tightly under the VRS model, the VRS efficiency scores will be higher and the scale efficiency measures will therefore be in the range 0 to 1. A useful feature of the VRS model as compared to the CRS model is that it reports whether a decision-making unit (DMUs) is operating at increasing, constant, or decreasing returns to scale. Constant returns to scale will apply when CRS and VRS efficiency frontiers are tangential with each other; in other words, when the slope of the efficiency frontier is equal to the ratio of inputs to outputs (Cooper et al. 2000). Increasing returns to scale must apply below that level, as the slope of the efficient frontier, which reflects the marginal rate of transformation of inputs to outputs, will be greater than the average rate of conversion. Likewise, decreasing returns to scale must apply above the zone in which constant returns to scale apply. DMUs not on the efficient frontier must first be projected onto the efficient frontier before their returns to scale status can be assessed.

### *Tobit analysis*

To test the determinants of efficiency of zakat institutions in Malaysia, three models of efficiency (TE, PTE and SE) will be tested against the determinants of zakat efficiency. Since the DEA technique produces efficiency scores which are bounded by 0 and 1, hence, it is appropriate to use a limited dependent variable approach, such as the Tobit model to perform the multivariate analysis. The possible determinants of the efficiency of zakat institutions are investigated using a random effects[1] Tobit model. The definition of each variable is provided in Table 5.

The model is written as:

$$\begin{aligned}TE_{it} = \beta_0 + \beta_1\, NOB_{it} + \beta_2\, NOS_{it} + \beta_3\, ZPS_{it} + \beta_4\, WEB_{it} + \beta_5\, CZS_{it}\\ + \beta_6\, BS_{it} + \beta_7\, MPY_{it} + \beta\, \beta_8\, AC_{it} + \beta_9\, DEC_{it} + \beta_{10}\, CORP_{it} + \mu_{it}\end{aligned}$$

$$\begin{aligned}PTE_{it} = \beta_0 + \beta_1\, NOB_{it} + \beta_2\, NOS_{it} + \beta_3\, ZPS_{it} + \beta_4\, WEB_{it} + \beta_5\, CZS_{it}\\ + \beta_6\, BS_{it} + \beta_7\, MPY_{it} + \beta\beta_8\, AC_{it} + \beta_9\, DEC_{it} + \beta_{10}\, CORP_{it} + \mu_{it}\end{aligned}$$

$$\begin{aligned}SE_{it} = \beta_0 + \beta_1\, NOB_{it} + \beta_2\, NOS_{it} + \beta_3\, ZPS_{it} + \beta_4\, WEB_{it} + \beta_5\, CZS_{it}\\ + \beta_6\, BS_{it} + \beta_7\, MPY_{it} + \beta\beta_8\, AC_{it} + \beta_9\, DEC_{it} + \beta_{10}\, CORP_{it} + \mu_{it}\end{aligned}$$

where:

| | |
|---|---|
| TE, PTE, SE | : Technical efficiency, pure technical efficiency and scale efficiency computed from the DEA model |
| NOB | : Number of branches |
| NOS | : Number of staff |
| ZPS | : Zakat payment system |
| WEB | : Website |
| CZS | : Computerized zakat system |
| BS | : Board size |
| MPY | : Meetings per year |
| AC | : Audit committee |
| DEC | : Decentralization |
| CORP | : Corporatization |

### *Data and inputs-outputs definition*

For the purpose of this study, the efficiency of fourteen DMUs will be examined during the period of 2003–2007. The production approach[2] is chosen in defining the inputs and outputs used in the study whereby zakat institutions are assumed to produce more zakat funds (collecting zakat, and "persuade" more people to pay zakat and distribute it) using dakwah and other promotion methods. Since this study is the first attempt at measuring the efficiency of zakat institutions, the choices of inputs and outputs for this study are serendipitous and based on the availability of data for analysis. The data used in the analysis differ in terms of units of measurement (some are in terms of Ringgit Malaysia such as total expenditure, total collection and total distribution, while the others are in terms of real number). Avkiran (1999) acknowledges the edge of the DEA by stating that the technique allows researchers to choose any kind of inputs and outputs of managerial interest, regardless of the different measurement units and there is no need for standardization.

Table 1 displays the descriptive statistics of the inputs and outputs employed in this study.

The choice of inputs and outputs in this study is essentially determined by data availability. Three outputs and two inputs are considered for this study to investigate the efficiency of 14 SIRCs in Malaysia for the period of 2003 to 2007. The outputs are total collection of zakat, total distribution of zakat, and total number of zakat payers, while the inputs are number of staff, and total expenditure. Data was collected from the multiple years' annual report of PPZ Kuala Lumpur[3], particularly for the data regarding zakat collection, distribution, and zakat payers. As for the data regarding number of staff and total expenditure, these were collected from the office of the SIRCs and Zakat Center in Malaysia. As can be seen from Table 1, of the 14 SIRCs, there is a wide range on average between the minimum and the maximum amount of inputs used and outputs produced by zakat institutions in Malaysia. This situation is due to differences in the area of states in Malaysia. For instance, Perlis as the smallest state in Malaysia should be using less input than a large state like Pahang. The state of Selangor is found to have the highest figure for most variables used since this state is the largest concentration of Muslim population in Malaysia with 16.75% of the Muslim population in 2007 (Department of Statistics Malaysia 2010). On the other hand, the state of Perlis is found to have the lowest value of outputs and inputs, simply due to the fact that it is the smallest state in Malaysia, with the smallest Muslim population in the country at only 1.21% of the total Muslim population in 2007 (Department of Statistics Malaysia 2010).

## 4. Empirical results

In this section, the results of technical efficiency (TE), and its decomposition into pure technical efficiency (PTE) and scale efficiency (SE) components are presented. The efficiency is examined first by employing the DEA method for each year under investigation. To substantiate the results under the DEA approach, a random-effect Tobit model is employed to relate the efficiency scores with its determinants.

### *Efficiency of Zakat institutions in Malaysia*

Table 2 displays the mean technical, pure technical, and scale efficiency score of zakat institutions in Malaysia for the years 2003, 2004, 2005, 2006, 2007, and all years.

Based on Table 2, the TE scores of zakat institutions are found to be the highest in 2004 (0.828), while in 2007, the TE score of zakat institutions is the lowest (0.779). Similarly the PTE score is also found to be the highest in 2004 (0.882), but 2005 is the year with the lowest PTE score (0.834). However, based on the results, the efficiency score of zakat institutions in Malaysia does not change much over the years studied. Hence, more attention should be paid to the differences between efficiency scores of the different zakat institutions, as the results between the minimum and

**Table 1.** Descriptive statistics of inputs and outputs of the SIRCs, 2003–2007.

| | Mean | Median | Maximum | Minimum | Std. Dev. |
|---|---|---|---|---|---|
| Input | | | | | |
| No. of staff | 127 | 100 | 461 | 22 | 91 |
| Total Expenditure | 37,742,331 | 25,727,861 | 214,767,671 | 1,957,135 | 42,735,550 |
| Output | | | | | |
| Total collection | 42,079,560 | 27,771,981 | 202,193,541 | 5,102,537 | 42,224,646 |
| Total distribution | 32,111,273 | 20,392,516 | 174,520,057 | 3,036,304 | 34,232,324 |
| No. of zakat payers | 304,079 | 62,408 | 2,100,562 | 1,482 | 505,887 |

**Table 2.** Summary statistics of efficiency scores (TE, PTE and SE).

| Years/Types of Efficiency | Mean | Min | Max | SD |
|---|---|---|---|---|
| 2003 | | | | |
| TE | 0.810 | 0.325 | 1.000 | 0.223 |
| PTE | 0.845 | 0.462 | 1.000 | 0.205 |
| SE | 0.950 | 0.704 | 1.000 | 0.084 |
| 2004 | | | | |
| TE | 0.828 | 0.363 | 1.000 | 0.199 |
| PTE | 0.882 | 0.518 | 1.000 | 0.178 |
| SE | 0.933 | 0.680 | 1.000 | 0.089 |
| 2005 | | | | |
| TE | 0.812 | 0.337 | 1.000 | 0.227 |
| PTE | 0.834 | 0.389 | 1.000 | 0.229 |
| SE | 0.959 | 0.752 | 1.000 | 0.075 |
| 2006 | | | | |
| TE | 0.802 | 0.336 | 1.000 | 0.210 |
| PTE | 0.857 | 0.464 | 1.000 | 0.193 |
| SE | 0.928 | 0.724 | 1.000 | 0.079 |
| 2007 | | | | |
| TE | 0.779 | 0.331 | 1.000 | 0.224 |
| PTE | 0.874 | 0.515 | 1.000 | 0.182 |
| SE | 0.880 | 0.643 | 1.000 | 0.127 |
| All years | | | | |
| TE | 0.806 | 0.325 | 1.000 | 0.211 |
| PTE | 0.861 | 0.389 | 1.000 | 0.192 |
| SE | 0.929 | 0.643 | 1.000 | 0.094 |

the maximum score of these zakat institutions are bigger than the differences between the years. Another interesting results that should be of concern is the higher results of SE compared to PTE, which suggests that the efficiency of zakat institutions in Malaysia may be due to the scale or size of the institutions, rather than to technical aspects. The results show that pure technical inefficiency dominates scale inefficiency of Malaysian zakat institutions. In other words, it shows that zakat institutions in Malaysia rely more on size of operation in gaining efficiency.

We now turn our discussion to the developments on returns to scale of zakat institutions in Malaysia (see Table 3).

As shown Table 3, over the five year period the zakat institutions were experiencing a U-shaped trend in terms of inefficient zakat institutions, from 67.2% in 2003 and 64.3% in 2004, to 42.9% in 2005, before increasing to 64.3% in 2006 and 2007. It is apparent that the number of zakat institutions experiencing economies of scale (IRS) decreased substantially from 2 (14.3%) in 2003 to none (0%) in 2006 and in 2007, after increasing to 4 (28.6%) in 2005. In contrast, zakat institutions that are experiencing diseconomies of scale (DRS) dominate the inefficient zakat institutions in all years except for 2005. For instance, in 2003, there were 6 (42.85%) zakat institutions experiencing diseconomies of scale and this number rose to 8 (57.1%) in 2004 and 9 (64.3%) in 2006 and 2007, having declined to 2 (14.3%) in 2005. The share of scale efficient zakat institutions (operating at CRS) on the other hand, is quite stable, this having increased from 6 (42.85%) in 2003 to 8 (57.1%) in 2005, before it declined to 5 (35.7%) in 2007. Hence, there are many improvements that could be made by zakat institutions to improve overall efficiency if scale inefficiency resulting from the scale inefficient institutions could be tackled.

### *The determinants of Zakat efficiency*

The regression results focusing on the relationship between zakat efficiency and the explanatory variables are presented in Table 4. In this section, the determinants of efficiency of zakat institutions are tested against the TE, PTE and SE of zakat institutions in Malaysia.

Table 4 shows the determinants of TE, PTE and SE of zakat institutions in Malaysia. Based on TE category, all variables have a positive relationship with TE except NOS, CZS, MPY, AC, and PRIV. However, only number of staff (NOS), zakat payment system (ZPS), computerized zakat system (CZS), board size (BS), and decentralization (DEC) are found to significantly affect the TE of zakat institutions. In terms of PTE category, all variables positively affect PTE of zakat institutions except NOS, CZS, and CORP and only ZPS, CZS, BS, and AC are found to be significant in determining PTE of zakat institutions. By contrast, all variables are found to have a positive relationship with SE except NOS, CZS, MPY, AC, and PRIV, but only NOS, ZPS, WEB, AC, and DEC are significant in determining the SE of zakat institutions in Malaysia.

Branch networks may facilitate the geographical constraint of some of the larger states in Malaysia. As anticipated, it appears that the coefficient of NOB is positive. Although the results are not statistically significant at any conventional

**Table 3.** Returns to scale in zakat institutions in Malaysia.

| | 2003 | | 2004 | | 2005 | | 2006 | | 2007 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. of ZIs | % Share | No. of ZIs | % Share | No. of ZIs | % Share | No. of ZIs | % Share | No. of ZIs | % Share |
| CRS | 6 | 42.9 | 5 | 35.7 | 8 | 57.1 | 5 | 35.7 | 5 | 35.7 |
| DRS | 6 | 42.9 | 8 | 57.1 | 2 | 14.3 | 9 | 64.3 | 9 | 64.3 |
| IRS | 2 | 14.2 | 1 | 7.2 | 4 | 28.6 | 0 | 0 | 0 | 0 |
| Total | 14 | 100 | 14 | 100 | 14 | 100 | 14 | 100 | 14 | 100 |

**Table 4.** Determinants of TE, PTE and SE.

| **Dependent variables** | **TE** | | **PTE** | | **SE** | |
|---|---|---|---|---|---|---|
| | Coefficient | P>\|t\| | Coefficient | P>\|t\| | Coefficient | P>\|t\| |
| Constant | 0.4832 | 0.031 | 0.3622 | 0.164 | 0.8383 | 0.000 |
| NOB | 0.0089 | 0.230 | 0.0120 | 0.133 | 0.0041 | 0.187 |
| NOS | –0.0013 | 0.012** | –0.0003 | 0.672 | –0.0008 | 0.000*** |
| ZPS | 0.0668 | 0.009*** | 0.1287 | 0.001*** | 0.0168 | 0.095* |
| WEB | 0.1183 | 0.197 | 0.0518 | 0.610 | 0.0670 | 0.079* |
| CZS | –0.3104 | 0.007*** | –0.4791 | 0.001*** | –0.0523 | 0.248 |
| BS | 0.0188 | 0.092* | 0.0202 | 0.094* | 0.0058 | 0.217 |
| MPY | –0.0074 | 0.737 | 0.0189 | 0.467 | –0.0108 | 0.255 |
| AC | –0.0606 | 0.522 | 0.2528 | 0.041* | –0.1138 | 0.006*** |
| DEC | 0.3708 | 0.001*** | 0.1243 | 0.025* | 0.2279 | 0.000*** |
| CORP | –0.1846 | 0.050 | –0.1397 | 0.200 | –0.0626 | 0.116 |
| sigma | 0.2314 | | 0.2247 | | 0.0947 | |

NOB: Number of branches available; NOS: Number of staff; ZPS: Total zakat payment system offered; WEB: Dummy of operational website; CZS: Dummy of computerized zakat system; BS: Board size; MPY: Meetings per year; AC: Audit committee; DEC: Decentralization; CORP: Corporatization.
***, ** and * represent significance at 0.01%, 0.05% and 0.10%, respectively.

levels, the results suggest extension of the branch networks to collect and distribute zakat funds as, although this may increase the costs, the increase in outputs (zakat collection and distribution) gathered dominates the increase in inputs used.

Selangor, Perak and Kedah, for instance, are the leading institutions in providing a higher number of branches in the respective states. This is probably due to the wide area of these states, which also have amongst the highest densities of Muslims. Hence, the extension of branches into a local community may ease the collection of zakat as the local area of zakat management will have become narrower, and the branch may also meet the needs of citizens.

A negative and significant coefficient of NOS suggests that a higher number of staff may not lead to a consequent increase in the efficiency of zakat institutions in Malaysia. Comparing these results with others reported in the literature, several possible reasons may explain the results. A large number of people in an organization tend to diminish efficiency as it may result in delays (Keen 1991) and increase complexity (Ginn and Barlog 1994). A large number of people involved in a the processes of an organization may affect the process efficiency (see Arveson 1999), whereby the bureaucratic processes which add no value to an organization nor to the customer tend to add inefficiencies (Zaheer et al. 2008). Such results indicate that, in order to improve its efficiency, zakat institutions do not necessarily need to hire more staff, resulting in an unnecessary number of staff. However, the institutions should pay more attention to the quality and qualifications of staff.

Under the variable of technology, three proxies of technology were used to determine the efficiency of zakat institutions in Malaysia. The proxies are total zakat payment used by the institutions, existence of an operational website, and existence of a computerized zakat system. In theory, the use of technology may benefit the applicant in terms of work efficiency, ease of use, and many more factors. However, in this study, the existence of an operational website and computerized zakat collection system are found to be insignificant in terms of affecting the efficiency of zakat institutions in Malaysia (although the results regarding the existence of a website are consistent in positively improving the efficiency of zakat institutions).

Perhaps the most important finding is the positive and significant coefficient of modes of zakat payment used, which suggests that the more zakat payment systems offered by zakat institutions, the more efficient the institutions. An improvement in technology, especially in collecting zakat funds has been used widely by higher technology applicants, especially in urban states like Selangor and Kuala Lumpur. For instance, Selangor is the state offering the highest number of zakat payment systems and makes it easy for payers to pay zakat online. A total of 11 zakat payment systems were offered in Selangor, including internet banking, short messages services (SMS), ATM machines, kiosk machines, credit card, phone banking, and an e-debit system. Furthermore, people in Kuala Lumpur and Selangor can also be considered to be the most technology-literate in Malaysia. Hence, zakat collection and distribution in Selangor is among the most efficient in Malaysia.

The board of directors has a number of important responsibilities including hiring and overseeing the management team, setting major policies and objectives, and participating in significant decisions within their organization. Thus, the board plays a key role in setting the policies under which management operates, and board decisions have a significant influence on an organization's performance (Hsu and Petchsakulwong 2010). Based on the results of the Tobit regression model, the variable BS is found to be positively associated with the efficiency of zakat institutions in Malaysia. Although the results are found to be insignificant, this could be due to subjectivity, consistent with Abor et al. (2008), Huang et al. (2008) and Hsu and Petchsakulwong (2010); it indicates that a more knowledgeable background and more varied opinions (provided by a larger board) will, to a certain extent, lead to increased efficiency of an organization. A larger number of knowledgeable zakat directors within the board with a diversity of perspectives, backgrounds, expertise and experience are important in making important decisions to improve the efficiency and further the attainment of the objectives and goals of the institutions. Perhaps it may be more beneficial to evaluate the variable of professionals on the board in order to complement the results. The inclusion of professionals on the board may be more beneficial than the size of the board, as they will have particular experience and knowledge that can improve the efficiency of the institutions. However, due to the unavailability of data, this variable has to be removed from the analysis.

The effectiveness of a board also depends on its diligence. However, since board diligence is not directly observable, board meeting frequency is often used as a proxy for board diligence (Hsu and Petchsakulwong 2010). Studies in corporate sectors show that a higher frequency of board meetings may positively affect the efficiency of an organization (Vafeas 1999; Evans et al. 2002) as it help the firm to improve operating performance. In contrast, it may negatively affect the efficiency of an organization (Rebeiz and Salameh 2006; Salim et al. 2010).

In this study, the variable of meetings per year (MPY) was found to be negatively associated with the efficiency of zakat institutions in Malaysia. Consistent with Rebeiz and Salameh (2006) and Salim et al. (2010), the frequency of board meetings is found to be not significant in improving the efficiency of zakat institutions. A large number of meetings per year may also suggest that the board is not properly using meetings to develop policies that may contribute to the efficiency of the organization. Hence, it is suggested that the frequency of board meetings is less important than the quality, which implies that, in order to improve the efficiency of zakat institutions, the decisions and actions taken in and after the meetings may be more important than the frequency of meetings.

From the traditional functional perspective, the aim of auditing is to increase the efficiency or financial or administrative accountability of an organization based on the written rules and regulations of that organization (Boerhannoeddin et al. 2004). An audit committee is defined as a group of individuals responsible for reviewing and monitoring all internal and external audit functions of an organization. An audit committee is established to oversee the financial reporting process including (but not limited to) supervising internal auditors, monitoring internal controls and ensuring adequate compliance with the standards. Since the committee reports to the board of directors, they have to be independent.

Nonetheless, while other studies have explored dimensions of the audit committee such as size, audit committee diligence, and financial expertise on the audit committee (see Hsu and Petchsakulwong 2010), this study investigated the effect of the existence of an audit committee in the management of zakat institutions in Malaysia. Surprisingly, the existence of an audit committee (AC) is found to be negatively associated with the efficiency of zakat institutions in Malaysia. It may suggest that the existence of an audit committee may not consequently improve the efficiency of zakat institutions. However, this result is probably attributable to the limited number of audit committee in existence in zakat institutions in Malaysia during the study period. An audit committee is still a relatively new feature in zakat institutions. During the study period, there were only five zakat institutions in Malaysia (as at 2007) which had established an audit committee in their organization.

Under corporatization, zakat institutions have implemented innovations and new approaches, such as setting up a special unit on research and development, public relations, promotions, and internal audit, use of computers and information technology in zakat affairs, and the involvement of young people and professionals not only of a religious background but also those with modern and professional education (Makhtar and Ahmad 2010). Besides this, other innovations by corporatized institutions include transforming facilities and other methods of zakat payment involving the phone banking system, using short message services (SMS), internet banking, auto teller machine (ATM), credit card, debit card, as well as more aggressive promotion and publicity through advertisements, article writing, exhibitions, pamphlets, documentaries in electronic and print media, and much more (Makhtar and Ahmad 2010). In terms of zakat distribution, the corporatized zakat institutions have innovated in creating a variety of zakat distribution projects as well as providing immediate assistance to the recipients (Makhtar and Ahmad 2010).

With innovation and transformation implemented, corporatized zakat institutions are assumed to be more efficient than the conventional ones. Surprisingly, however, the results show that corporatization does not lead to improvements in the efficiency of zakat institutions in Malaysia. This result is probably due to the limited number of corporatized institutions: there are only three fully corporatized zakat institutions and another four are partially corporatized. Further analysis (see Table 6) showed that fully corporatized zakat institutions are positively associated with efficiency of zakat institutions in Malaysia, while the partially corporatized negatively affect zakat efficiency. This provides evidence that the partially corporatized zakat institutions dominate the effect of corporatization towards the efficiency of zakat institutions in Malaysia, due to its larger number of these than fully corporatized ones. On the other hand, it may be suggested that, in order to improve efficiency, zakat institutions should be fully corporatized as it involves the same pattern of working experience and may lead to input savings with a single institution managing both zakat collection and distribution matters.

In terms of organizational structure of SIRCs in Malaysia, this has undergone change since the occurrence of decentralization in 1980s. Decentralization is the process by which decision-making responsibilities are transferred from a higher level of government to the lower level (Winkler 2005). Decentralization of zakat institutions showed a transfer of authority to the chairman of the institutions from the traditional structure of Sultan/Raja/Yang Dipertua Negeri to others, that is, to the state government, or further down. This system may benefit the zakat institutions in terms of attainability of the goals and objectives of the organization as the decentralized authority is held at the lower level of management by those who are responsive to the local stakeholders of zakat affairs in the particular states.

Consistent results appear in terms of the effect of decentralization (DEC) on the efficiency of zakat institutions in Malaysia. The positive and significant results of DEC shown in Table 4 suggest that, consistent with Azfar et al. (2001) and Barankay and Lockwood (2007), decentralization improves the efficiency of an organization as it increases accountability, reducing the level of bureaucracy as well as limiting the leakage of funds and other resources. There exists the need to have an authority who responds to local demand as well as adequate mechanisms for accountability. They are likely to be aware of local preferences which, in turn, will be likely to adjust the local demands accordingly. With respect to zakat institutions in Malaysia, this may be decentralization to the lower level of chairman who might have been the person who is responsive to the local stakeholders of zakat affairs in their states as they are those at the same level with the stakeholders of the institutions. For instance, the states of Penang and Sarawak, which are among the most efficient zakat institutions, are also among the decentralized zakat institutions, having been which decentralized and chaired by the lower level of chairman (rather than by the Sultan/Raja and the Chief Minister). By contrast, Kelantan and Perak, which still maintain the old organizational structure whereby the Sultan (or the acting Sultan) chairs the religious council, are found to be among the least efficient states in this study.

Further analysis (see Table 7) revealed that two stage decentralization of authority of the chairman of zakat institutions to someone other than the Sultan and the Chief Minister tends to improve the efficiency of zakat institutions. The results could be due to the fact that decentralization further down the organisational hierarchy leads to higher efficiency. The results of this study imply that, in order to improve the efficiency of zakat institutions in Malaysia, the chairman of the institutions should be among the lower level of hierarchy of the management with the right experience and qualifications to chair and lead the councils. They should also be more transparent and accountable in managing the institutions. Furthermore, it also indicates that chairmanship by a non-political person and those who have the ability and qualifications may also help to improve the efficiency of the institutions.

## 5. Conclusion

This paper investigates the efficiency of zakat institutions in Malaysia during the period of 2003–2007. The preferred non-parametric data envelopment analysis (DEA) methodology has allowed us to distinguish between the three different types of efficiency, that is, technical, pure technical, and scale efficiency. The results suggest that zakat institutions have exhibited a mean technical efficiency of 80.6%. The results also suggest that pure technical inefficiency dominates the scale inefficiency effects in determining the technical efficiency of zakat institutions in Malaysia. This implies that more attention should be paid to a more efficient use of inputs in order to improve efficiency. In terms of the returns to scale, the results suggest that most zakat institutions were operating at non-CRS. Hence, there are many improvements that could be undertaken by zakat institutions to improve overall efficiency, if scale inefficiency resulting from the scale inefficient institutions could be tackled.

The results of the determinants of zakat institutions in Malaysia with three dependent variables (TE, PTE and SE) were tested against ten independent variables. Those variables are number of branches available (NOB); number of staff (NOS); total zakat payment system offered (ZPS); dummy of operational website (WEB); dummy of computerized zakat system (CZS); board size (BS); meetings per year (MPY); Audit committee (AC); Decentralization (DEC); and Corporatization (CORP). Based on the Tobit regression results in the TE category, of the ten variables, five variables were found to significantly affect the TE of zakat institutions in Malaysia, namely NOS, ZPS, CZS, BS, and DEC. However, only DEC has a positive correlation with the efficiency score, while the other four have negative correlations.

Meanwhile, in the PTE category, all five variables have a significant impact on zakat efficiency. The variables ZPS, BS, AC, and DEC have positive impacts while the variable CZS has a negative impact on PTE. Furthermore, for the SE category, five variables were found to significantly affect zakat efficiency. These variables are NOS, ZPS, WEB, AC, and DEC. However, only ZPS, WEB, and DEC have positive impacts on zakat efficiency while the variables NOS and AC are negatively correlated with the zakat efficiency score. From the findings, it can be summarized that only ZPS and DEC are consistently significant in affecting zakat efficiency in Malaysia during the study period. Further studies are required to examine the issues that will provide guidance for policy makers aiming to improve the efficiency of zakat institutions in Malaysia.

**Notes**

1. A random effects model assumed the unobservable effects are uncorrelated with the observed explanatory variables, whereas a fixed effects model assumes that they are correlated. In the context of a Tobit model, the statistical package Stata only provides the random effects option. This is because the fixed effects cannot be conditioned from the likelihood, and unconditioned fixed effects estimates are biased.
2. There are mainly two approaches in defining inputs and outputs especially in the banking sector, ie. the production approach and intermediation approach. Under the production approach, an institution is defined as a producer. The intermediation approach on the other hand, assumes that a DMU acts as an intermediary.
3. PPZ Kuala Lumpur has taken its own initiative in combining data of zakat of all zakat institutions in Malaysia.

## References


Abdul Rahman AR. Zakat on Business Wealth in Malaysia: Corporate Tax Rebate, Accountability, and Governance. Jurnal IKIM, 11(1), 2003. 37–50.

Abdul Rahman AR. Pre-Requisites for Effective Integration of Zakah into Mainstream Islamic Financial System in Malaysia. Islamic Economic Studies, 14(1&2), 2007.

Abor PA, Abekah-Nkrumah G, Abor J. An examination of hospital governance in Ghana. Leadership in Health Services, 21(1), 2008. 47–60.

Ahmad S, Wahid H. Penerimaan dan Tanggapan Masyarakat terhadap Sumber Harta Zakat Harta yang Diikhtilaf. Islamiyyat, 27(1), 2005. 45–65.

Ahmad S, Wahid H, Mohamad A. Penswastaan Institusi Zakat dan Kesannya Terhadap Pembayaran Secara Formal di Malaysia, in Abu Sufian et.al (ed,) Pascasidang Seminar Ekonomi & Kewangan Islam. Kuala Lumpur: Univision Press Sdn Bhd, 2005. 251–264.

Ahmad S, Wahid H, Mohamad A. Penswastaan Institusi Zakat dan Kesannya Terhadap Pembayaran Secara Formal di Malaysia. International Journal of Management Studies, 13(2), 2006. 175–196.

Arveson P. Designing metrics for Government agency performance. Balanced Scorecard Institute. Retrieved July 13, 2010 from http://www. balancedscorecard. org/metrics/triage.html. 1999.

Avkiran NK. An Application Reference for Data Envelopment Analysis in Branch Banking: Helping the Novice Researcher. International Journal of Bank Marketing, 17(5), 1999. 206–220.

AzfarO, Kahkonen S, Meagher P. Conditions for Effective Decentralized Governance: A Synthesis of Research Findings. A working paper of IRIS Center, University of Maryland. March 1, 2001.

Bakar NBA, Rahman ARA. A Comparative Study of Zakah and Modern Taxation. J.KAU: Islamic Economics, 20(1), 2007. 25–40.

Banker RD et al. “Some models for estimating technical and scale inefficiencies in data envelopment analysis.” Management Science, 30(9), 1984. 1078–1092.

Barankay I, Lockwood B. Decentralization and the productive efficiency of government: Evidence from Swiss cantons. Journal of Public Economics, 91(5–6), 2007. 1197–1218.

Bauer PW, Berger AN, Ferrier GD, Humphrey DB. Consistency Conditions for Regulatory Analysis of Financial Institutions: A Comparison of Frontier Efficiency Methods. Journal of Economics and Business, 50(2), 1998. 85–114.

Boerhannoeddin A, Arshad R, Rasip OM. Pengantar Pentadbiran Kewangan dalam Sektor Awam, Singapore: Thomson Learning, 2004.

Brereton M, Temple M. The New Public Service Ethos: An Ethical Environment for Governance. Public Administration, 77(3), 1999. 455–474.

Canhoto A, Dermine J. A Note on Banking Efficiency in Portugal: New vs. Old Banks. Journal of Banking and Finance, 27911), 2087–2098. 2003.

Charnes A, Cooper WW, Rhodes E. Measuring efficiency of decision making units. European Journal of Operational Research 2, 1978. 429–444.

Coelli T, Prasada Rao D, Battese GE. An Introduction to Efficiency and Productivity Analysis, Kluwer Academic Publishers, Norwall, MA. 1998.

Cooper WW, Seiford LM, Tone K. Data Envelopment Analysis. Boston: Kluwer Academic Publishers. 2000.

Ginn D, Barlog R. Reducing complexity and working with bottlenecks improves an oil refinery’s engineering performance. National Productivity Review, 13(1), 1994. 63–77.

Hassan MK. The X-Efficiency in Islamic Banks. Islamic Economic Studies, 13(2), 2006. 49–78.

Hsu W-Y, Petchsakulwong P. The Impact of Corporate Governance on the Efficiency Performance of the Thai Non-Life Insurance Industry. The Geneva Papers, 35, 2010. S28-S49.

Huang LY, Lai GC, Wen MM. The effects of corporate governance and auditor independence on the efficiency performance of the U.S. life insurance industry. Paper presented at the Asia-Pacific Risk and Insurance Association, 12th Annual Conference, Sydney, Australia. 2008.

Husain N, Abdullah M, Kuman S. Evaluating public sector efficiency with data envelopment analysis (DEA): a case study in Road Transport Department, Selangor, Malaysia. Total Quality Management, 11(4&5&6), 2000.

Ibrahim F, Salleh MFM. Stochastic Frontier estimation: an Application to Local Government in Malaysia. Malaysian Journal of Economic Studies, 43(1&2), 2006.

Idris KM, Ayob AM. Peranan Sikap dalam Gelagat Kepatuhan Zakat Pendapatan Gaji. ANALISIS, 9(1&2), 2002. 171–191.

Idris KM, Ali EIE, Ali J. The Role of Intrinsic Motivational Factors on Compliance Behaviour of Zakat on Employment Income. Jurnal Pembangunan Sosial, Jilid 6&7, 2003. 95–122.

Ismail AG, Sanusi NA. Metodologi Pengiraan Zakat dan Nilai Syarikat. (Zakat Calculation Methodology and Firm Value). in Hailani Muji Tahir and Abd. Ghafar Ismail (eds.) Zakat: Aspects of Sharia, Economic and Law (in Bahasa Malaysia). Bangi: Penerbit Universiti Kebangsaan Malaysia. 2006.

Keen PGW. Redesigning the organisation through information technology. Strategy and Leadership, 19(3), 1991. 4–9.

Maamor S, Ismail AG. The Ar-Rahnu Efficiency and its Determinants. Journal of Islamic Economics, Banking and Finance, 6(1), 2010. 105–126.

Makhtar AS, Ahmad S. Transformasi Pengurusan Zakat di Malaysia. Paper presented at The 4th ISDEV

International Islamic Development Conference (IDMAC 2010) organized by Centre for Islamic Development Management Studies (ISDEV), University Science Malaysia. 2010.

Mujitahir H. Kedudukan Illah, Nisab Kadar dan Haul dalam Menjana Sumber Zakat Korporat. In the proceeding of Seminar Halatuju Zakat Korporat Di Alaf Baru. Kumpulan Kajian Zakat, Universiti Kebangsaan Malaysia. 2004.

Nor Ghani Md Nor, Mariani Majid, Jaafar Ahmad dan Nahid Ismail. Can privatization improve performance? Evidence from zakat collection institutions. Paper presented at Bengkel Ekonomi Islam. Fakulti Ekonomi, Universiti Kebangsaan Malaysia. 2001.

Nor MAM, Wahid H, Nor NGM. Kesedaran Membayar Zakat Pendapatan di Kalangan Kakitangan Profesional Universiti Kebangsaan Malaysia. Islamiyyat, 26(2), 2004. 59–67.

Rebeiz KS, Salameh Z. Relationship between governance structure and financial performance in construction. Journal of Management in Engineering, 22(1), 2006. 20–26.

Salim R, Hoque MZ, Suyonto. The Role of Governance, ICT and Bad Loans in Australian bank Efficiency: An Empirical Study. Asia Pacific Journal of Economics & Business, 14(1), 2010. 18–73.

Shacter M. Means..Ends..Indicators: Performance Measurement in the Public Sector. Policy Brief No. 3: Institute on Governance, Ottawa. Retrieved from http://www.schacterconsulting.com/docs/means_ends.pdf, 12 November 2011. 1999.

Sufian F, Habibullah MS. Developments in the efficiency of the Thailand banking sector: a DEA approach. International Journal of Development Issues, 9(3), 2010. 226–245.

Sufian F. The efficiency of Islamic banking industry: A non-parametric analysis with non-discretionary input variable. Islamic Economic Studies, 14(1&2), Aug.2006 & Jan.2007, 53–87.

Tahir IM, Bakar NA, Haron S. Estimating Technical and Scale Efficiency of Malaysian Commercial Banks: A-Non-Parametric Approach. International Review of Business Research Papers, 5(1), 2009. 113–123.

Vafeas N. Board meeting frequency and firm performance. Journal of Financial Economics, 53(1), 1999. 113–142.

Winkler DR. Understanding Decentralization. Working paper of Educational Quality Improvement Program Policy (EQUIP2), April 2005.

Zaheer A, Rehman KU, Saif MI. Development and Testing of a Business Process Efficiency Scale. European Journal of Social Sciences, 7(2), 2008. 179–188.

# Efficiency and effectiveness of *waqf* institutions in Malaysia: Toward financial sustainability

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**Abstract** - Financial health is crucial to the continuous existence and operation of any organisation. It is even more essential in the case of waqf. Accordingly, determining the financial strength and vulnerability of waqf institutions is particularly significant and congruent to waqf's perpetual existence. Using content and ratio analysis, the 2008 annual reports of state waqf institutions were examined to determine their transparency and performance accountability. Four essential financial health ratios were computed: the equity balance ratio, the revenue concentration index, the administrative costs ratio and the operating margin ratio. The findings indicate that the institutions were, on average, satisfactorily efficient and effective in administering and managing waqf properties. Although it is the first humble attempt, this study provides an insight into the efficiency and effectiveness of the Malaysian institutional mutawallis in carrying out their tasks, a guide for policy makers on the formulation of policies for the revitalisation of waqf, and it contributes to the financial sustainability literature as a reference for researchers and students.

*Keywords:* waqf institutions, efficiency, effectiveness, financial health model, Malaysia

## 1. Introduction

Waqf, a perpetual voluntary charitable act (Sadeq 2002), is one amongst the various mechanisms in the Islamic economic system set aimed at promoting equitable and just distribution of wealth. This form of charity assures the donor a continuous reward in the afterlife for as long as the useful years of the underlying asset remain. The contributions of waqf in the political and socio-economic growth and development of Muslim countries and communities over the years were particularly pertinent, so much so that waqf has been labelled the most visible evidence of charity in Islam (Singer 2008). More importantly, waqf assets were instrumental in providing social and economic safety valves through their role in promoting religion, education, shelter, health, food security, and rural-urban transformation. In the tenth century, waqf replaced zakat as the vehicle for financing social economic development in Islamic societies (Singer 2008).

Despite its overwhelming role in supporting social, cultural, economic and religious functions (Mohd Akhyar, Maliah and Nor Suad 2007; Abul and Abdus Shahid 2010), previous studies reveal that the history of waqf has been tempestuous (Cizaka 1998; Bremer 2004; Osman 2010). Vast waqf institutions and properties were – and still are – at the mercy of mis-management, corruption, abuse, misuse, and total neglect (Arrif 1991; Hoexter 1998; Bremer 2004; Abul and Abdus Shahid 2010). Given this, it is interesting to examine whether or not the same holds true for waqf institutions in Malaysia. More specifically, our study attempts to investigate performance by determining the efficiency and effectiveness of such institutions. The study contributes to the existing literature in several important respects. First, the efficiency and effectiveness performance framework developed here, as the first of its kind, may help determine the financial health of other waqf institutions, this being crucial to the continuous existence and operation of these organisations. More importantly, given that a waqf's perpetual existence lies in its financial strength, determining its performance is vital. Second, prior work examining the performance of religious organisations has rarely focused on the institution of waqf.

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Third, the growing scholarly interest in the management (or mis-management) of waqf is an issue that should be addressed through empirical work. Finally, the results of our study may provide a platform for future studies on waqf.

## 2. Literature review

Financial health is crucial to the continued existence and operation of any organisation. It is even more essential in the case of waqf because productive endowed assets are left idle due to insufficient revenue to sustain operational costs (Chowdhury, Ghazali and Ibrahim 2011). Prior studies on waqf focusing on the management aspects of such organisations concentrated on contemporary managerial, administrative and governance issues, highlighting poor structure, mis-management, corruption, abuse, neglect and other administrative lapses warranting recommendations for revival of waqf (Zainuddin 1998; Abdul Rahim, Mohammad and Ismail 1999; Siti Mashitoh 2006a). Specific to accounting, previous research on waqf examined record-keeping and documentation, the need for the development of waqf accounting standards, and accountability and transparency issues, as well as the performance of these institutions. The focus here is on accounting and accountability.

Abdul Rahim, Mohammad and Ismail (1999) explored the accounting and administrative practices in State Islamic Religious Councils (SIRCs). Among other things, their study found evidence of poor documentation and record keeping, absence of a sound accounting system, and seemingly chronic accountability lapses. As a result, the authors called for improvement in the management of waqf and the establishment of proper accounting procedures. For the betterment of waqf management, Marsoof (2004) also urged advancement in accounting standards and procedures; this recommendation was made following his discovery of poor management of waqf assets during research on waqf administration in Sri Lanka. Extending the preliminary study of Abdul Rahim, Mohammad and Ismail (1999), Rokyah (2005) investigated the status of financial reports and the relationship between financial procedures and waqf accounting. Through this study she determined the extent of waqf disclosure in SIRCs. In her findings, Rokyah noted the existence of overdue and out-of-date financial reports in most of the SIRCs and very few of them were found to have a satisfactory level of disclosure. In affirmation of the recommendation of Abdul Abdul Rahim, Mohammad and Ismail (1999), Rokyah advocated the need for proper reporting standards and guidelines.

Hisham (2006) conducted a case study of the Federal Territory SIRC to examine its waqf accounting practices in greater depth. The results of this exploratory and descriptive study revealed some degree of improvement in keeping records in this particular SIRC. Nonetheless, he lamented the lack of dedicated financial statements for waqf. Accounting for waqf was embedded in the accounts of the SIRC. To compound it all, Hisham's findings also reveal that there was no segregation of the various types of waqaf. Hisham suggested that waqf accounting practices should be based on the Statement of Recommended Practices (SORP 2005) for charities in the UK. Concerned with the same accounting and managerial issues of waqf, a replica of this study was undertaken a year later by Ihsan (2007), in order to scrutinise the accounting practices of two Indonesian waqf institutions. A lack of uniform accounting practices between these two institutions was discovered. As a consequence of this, there were accountability and transparency lapses in the management and accounting of waqf. This led Ihsan and Adnan (2009) to propose the kind of information that should be provided by the mutawallis to various stakeholders.

In response to the earlier calls for the proper accounting of waqf, Adnan (2005) took on the challenge to develop waqf accounting standards. He suggested two alternative accounting and reporting frameworks for waqf accounting on the basis that waqf can operate as a social organisation (non-profit) as well as a commercial organisation. Adnan asserts that it is appropriate to apply accounting for non-profit organisations to the former, whereas accounting for commercial organisations is more applicable to the latter. Similarly focusing on accounting standards, Ihsan, Ayedh and Ibrahim (2006) undertook a comparative study between waqf and charities in the UK. Their findings suggested that some aspects of Charity Commission proposals – such as internal financial controls, transparency and reporting, management of funds, and code of good governance – should be adopted for waqf institutions. Similarly, Mohd Akhyar, Maliah and Nor Suad (2007) discussed the development of a conceptual framework and accounting standards for waqf institutions based on a review of some related accounting standards for charity organisations, integrated with Islamic values. Given the uniqueness of waqf institutions, these authors proposed some particular accounting concepts (definition, recognition, measurement, presentation, and disclosure) that align with AAOIFI's statements of Financial Accounting, SORP 2005.

Most recently, Yaacob and Nahar (2011) undertook a study to empirically investigate the accounting, reporting and management practices of a Malaysian cash waqf management institution over a six year period, from 2000 to 2005. Using archival documentation review and analysis, they found that the particular waqf institution had discharged its accountability satisfactorily. Also, on the basis of the cash waqf's return on investment having increased by more than 100% from 2003 onwards, the researchers concluded that this is an indication of good management; they did, however, contend that there remained room for improvement.

Pirasteh (2011) investigated the economic and operational efficiency of governmentally- and privately-administered waqf in Iran. These features were measured on the basis of two ratios:

1. The ratio of disbursement to proceeds (termed "the objective achieved index").
2. The ratio of the balance remaining for a year to total earnings, (termed "the expected income achieved index").

The former ratio measures achievement in terms of the extent to which the institution is fulfilling its objectives, while the latter measures the degree to which the institution is able to maximise generation and collection of waqf income, while minimising uncollectable earnings.

The findings revealed that privately-managed waqf performed better than governmentally-managed waqf. However, both failed to meet donors' specified objectives. Sulaiman, Adnan and Nor Suad (2009) documented the development of the International Islamic University Malaysia's waqf Fund (IIUMWF) from its inception in 1999 until 2008, as well as its accounting practices. Issues concerning disclosure and performance of the IIUMWF were also examined. Specifically, the authors measured the efficiency of IIUMWF for the years 2003, 2004 and 2005 by focusing on three ratios:

1. Programme expenses to total expenses.
2. Investment income to average investment.
3. Total fundraising expenses to total funds raised.

Evidently, there has been a great deal of research interest taken in waqf. However, there has been no single empirical study examining the efficiency and effectiveness of waqf institutions in Malaysia. The study by Sulaiman, Adnan and Nor Suad (2009) focused only on one private waqf institution. More importantly, the study examined just the efficiency of waqf. Accordingly, this present study builds on the former in looking at both the efficiency and effectiveness of waqf institutions. Ultimately, efficiency and effectiveness are interrelated. There can be no efficiency without effectiveness since it is imperative for the organisation to excel in doing the right thing instead of doing well in the wrong direction (Mihaiu, Opreana and Critescu 2010). More importantly, according to Ireland (1999) and Abraham (2003), efficiency and effectiveness are concerned primarily with how the organisation can sustain its operations in delivering its mission. It therefore follows that financial efficiency and effectiveness depend upon an organisation's financial condition and vulnerabilities (Keating et al. 2005). Given that the foundation of efficiency and effectiveness lies in the financial sustainability or vulnerability of an organisation, we have used Tuckman and Chang's (1991) framework to determine the financial sustainability of waqf institutions in Malaysia. Additionally, while Sulaiman, Adnan and Nor Suad (2009) focused on a particular private waqf, our study will examine the performance of SIRC waqf institutions in Malaysia. Most importantly, measuring the performance of waqf institutions may be regarded in some ways as examining the extent to which these institutions discharge their accountability.

## 3. Accountability of Waqf institutions

Simply put, accountability is the provision of an account of the actions for which individuals or organisations are held responsible under the basic assumption that required expectations and values have been determined and expressed through rules, procedures and standards (Rabrenovic 2009). Waqf institutions, as institutional trustees, are accountable for the management of waqf properties based on pre-established expectations as expressed through the waqf deed by the waqif (donor or funder). The position of the waqf deed makes it a very important foundation to begin with for holding the institutions accountable.

Other compelling reasons make accountability a necessary ingredient for the governance of waqf institution. First, apart from the stipulations in the waqf deed, the institutions operate without any formal checks and balances by the founder (in most cases, the founder will be deceased). This fiduciary relationship, coupled with the beneficiaries' trust on waqf trustees, warrant that accountability be discharged satisfactorily to ensure the continuity of the waqf arrangement (Laughlin 1996). Secondly, given the fact that waqf properties are for public benefit (Ihsan and Shahul 2011), the public and other stakeholders deserve to be kept informed as to how resources are being managed to yield greater benefit. Accordingly, accountability becomes the foundation for measuring, assessing and reporting trustees' performance (Cutt and Murray 2000). Finally, waqf is a religious voluntary act motivated by one's desire for recurrent reward hereafter. Despite this motivation, waqf institutions rely to a great extent on public confidence and trust for the continuous flow of support to sustain waqf activities. This necessitates waqf discharging its accountability adequately (Sinclair, Hooper and Ayoub 2010), subsequently boosting the trust and confidence of donors and the public.

Researchers, donors, the public and other stakeholders are increasingly demanding in terms of being kept informed of what is actually happening to resources committed to charitable organisations, including waqf institutions (Iwaarden et al. 2008). For instance, funders and donors demand that charitable organisations be held accountable for integrity, efficiency and impact of the funded programmes, while beneficiaries put pressure on the organisations to live up to expectations about the championing of socially-determined development programmes, rather than imposing their own priorities (Basri and Abdul Khalid 2011). These demands present a challenge to the trustees to adopt and implement best practices in waqf. The trustees must therefore respond to this call by creating a reliable structure of accountability mechanisms that would enable waqf stakeholders to evaluate whether the entrusted tasks are being carried out in accordance with the pre-established waqf deed (Rabrenovic 2009). Osman (2010) argues that for waqf, holistic accountability is most pertinent. This form of accountability balances between upward (donors, funders, regulators, etc.) and downward (beneficiaries, community, etc.) accountability. It leads to the engagement and participation of beneficiaries and other constituents in running the waqf (Osman 2010). The bottom line is that waqf accountability should not be discriminatory; it should encompass all related stakeholders (Adnan, Maliah and Nor Suad 2007; Ihsan and Adnan 2009). More importantly, holistic accountability encompasses the concept of self-accountability. This self-accountability is the result of the manifestation of primary accountability to Allah. As humans we are primarily accountable to Allah for all entrusted resources and secondarily accountable to fellow humans by virtue of our contractual relationships (Sulaiman, Adnan and Nor Suad 2009).

Stewart (1984) classified areas of accountability into probity and legality, process, performance, programme and policy. The focus of this study is on performance accountability of the commercial activities of waqf institutions. As indicated elsewhere, waqf institutions are accountable for their financial performance as to the resources entrusted to them by donors (Ihsan and Adnan

2009). Thus, performance is the result of instantaneous pursuit of effectiveness, efficiency and the economic use of entrusted resources (Mihaiu, Opreana and Critescu 2010) for the maximisation of sustainable output to intended beneficiaries (objectives). Accordingly, the demonstration of accountability could be achieved through effectiveness and efficiency dimensions (see, for example, Better Business Bureau [BBB] 2001; Sulaiman, Adnan and Nor Suad 2009; Wahab and Abdul Rahman 2011). This is supported by Connolly and Hyndman (2003) who proposed that the performance of non-profit organisations should be judged in terms of efficiency and effectiveness.

While efficiency is the conversion of inputs into outputs, effectiveness is the relationship between output and objectives. Inputs are the organisation's resources that are used for the attainment of a desired output. Outputs are the result of transformed inputs. The objectives are the goals of the organisation necessary for the realisation of its mission. Efficiency takes into consideration the attainment of results in relation to the resources used (Mihaiu, Opreana and Critescu 2010). An organisation is said to be efficient if it obtains maximum output with a given level of resource. It could also be the use of minimum resources at a certain level of output. From both perspectives, the efficiency of a waqf institution is viewed as how well it employs endowment assets in the course of its day-to-day activities to generate more revenue to satisfy intended beneficiaries. On the other hand, the degree to which an organisation realises its goals determines its effectiveness (Lane 1995). Effectiveness ensures that measureable objectives are in place with a clear process to evaluate the success of implemented program(s) in fulfilling the goals of an organisation, and also identifies ways to address deficiencies. There are two paramount types of effectiveness: administrative and programme effectiveness (Poister 2003). Whereas administrative or managerial effectiveness is concerned with doing the right thing towards achieving predefined objectives, programme effectiveness deals with the degree to which spending on programmes are congruent with organisational goals. All in all, effectiveness is all about doing the right things while efficiency is doing things right.

In the context of waqf, donated waqf assets come with specific objectives specified by the donor. The achievement of such objectives due to programmes undertaken or as a result of its administrative activities is the effectiveness of the institutions. Both efficiency and effectiveness are very important to waqf management. They ensure that the trustees (mutawallis) are indeed judiciously using resources efficiently in discharging their responsibilities according to the waqf deed (doing the right thing).

## 4. Overview of Waqf management in Malaysia

In Malaysia, waqf is under the auspices of State Rulers (Sultan). The SIRCs assume managerial and trusteeship mandates through delegated authority from their respective Rulers. This is further legitimised through various enactments. To date, almost all the 14 States have enactments/ordinances dictating that the SIRCs are the sole trustee of waqf assets. To discharge their responsibility, each SIRC has established a dedicated waqf unit/division or an independent agency to carry out waqf-related activities within its jurisdiction. These institutions are hereafter referred to as SIRC Waqf Institutions (SWIs).

In addition, the waqf arm of the Department of Awqaf, Zakat and Haj (JAWHAR) provides financial and non-financial assistance (guidelines, funding and training) to the SWIs. The department was commissioned in October 2004 as one of the departments under the Prime Minister's Department. Its objectives are to enhance the quality of service delivery, reinforce waqf, zakat and haj for socio-economic development, and to ensure good governance as well as the effective planning, coordination and implementation of government policies and development programs for Awqaf, Zakat and Haj (Sohaimi and Syarqawi 2008). Because of its limitations as a government body to directly carry out waqf commercial activities, JAWHAR established the National Endowment Foundation (Yayasan Waqaf Malaysia (YWM)) to focus exclusively on this commercial aspect of waqf (Sohaimi and Syarqawi 2008). Today, YWM functions not only as the main national endowment foundation but also the coordinator of the activities of the SWIs. However, it must be noted that JAWHAR and its YWM have no enforcement power over the SWIs. The relationship between the SIRCs and JAWHAR with regards to waqf management and control is represented in Figure 1.

As seen in Figure 1, the State Ruler's delegated authority is exercised by the SIRC to manage and administer waqf properties. This led to the establishment by SIRCs of waqf units within their administrative structures. On the other hand, the right hand side of the diagram depicts the role played by JAWHAR through YWM. JAWHAR's role is based on the government's economic development commitment expressed in the Malaysia Plan (MP). The plan details Malaysia's economic development plan over a five year period. The role and establishment of YWM were conceived in the Ninth Malaysian Plan (9th MP) as stated in paragraph 16.62 (p 348):

> "Wakaf, baitulmal and zakat resources will be appropriately mobilized towards enhancing the development of Bumiputera and other Muslims.

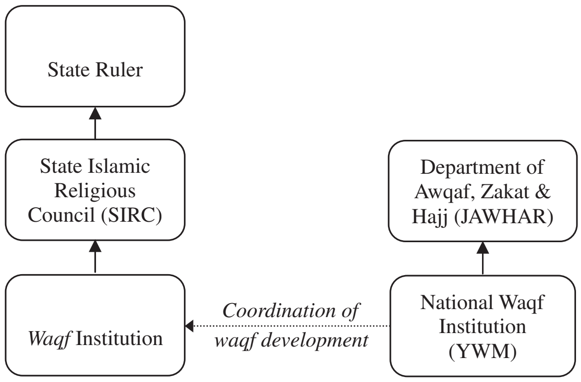


**Figure 1.** Waqf management structure.

> During the planning period, emphasis will be given to develop wakaf land within the commercial urban areas in the Johor Bahru, Klang Valley and Pulau Pinang. The development programme will involve integrated redevelopment of housing settlements with infrastructure and economic facilities, including business and industrial premises on wakaf land. The Jabatan Wakaf, Zakat and Haji [JAWHAR] will coordinate the establishment of a new entity [YWM] with the participation of State Religious Islamic Councils to implement programmes to develop wakaf and baitulmal land into viable economic investments and thus, contribute to the development of the BCIC [Bumiputera Commercial and Industrial Community]."

Through the development of waqf assets, the Bumiputera development agenda is one way of increasing the participation and ownership of bumis (plural Bumiputera) in the corporate sector. This is undertaken to minimise wealth disparity between the bumis and non-bumis. This is clearly indicated in the 9th MP as follows:

> "Wakaf land and properties under the state religious Islamic authorities will be developed to tap their productive potential as well as to spawn new entrepreneurs." [paragraph 1.44, p 36].

Development of commercial assets, such as hotel and business premises, on wakaf land will be expanded to increase Bumiputera ownership of non-financial assets. A strategic plan will be drawn up to ensure that the income generated from the development of wakaf land will enable state religious authorities to be more self-reliant in developing new wakaf land [pp 64–65].

It is obvious from the extracts above that the motive of supporting the SIRCs is to allow government to tap the vast asset potential of waqf in the country for its poverty alleviation programme. The government, however, reiterated its commitment to devising a strategy for the SIRCs to be self-dependent in developing new waqf land. Sohaimi and Syarqawi (2008) pointed out that waqfs land is leased to the government by the SIRCs for development activities. For these development activities, the government allocated RM250 million in its 9th MP (2006–2010). To continue the execution of ten development projects under the 9th MP, through JAWHAR, the government allocated RM72.76 million in its first rolling plan under the 10th MP (2011–2015) for the period 2011/2012. Until 31 December 2011, a total of seven projects were completed, whilst three projects were expected to be completed in 2012 based on its second rolling plan, with a total allocation of RM36.87 million. In its 2010 budget statement, the government allocated RM20 million for the development of awqaf lands within the premises of state mosques.

In summary, the management of waqf is carried out by the SIRCs, which have been empowered by their respective state enactments to be the sole trustees and custodians of all waqf properties. Due to the lack of financial and managerial expertise of SWIs, the government has taken the initiative to develop the large vast of waqf land to drive economic growth and development through poverty alleviation.

## 5. Data collection and findings

To enable the assessment of accountability of the trustees, clear and transparent reporting is required (Ihsan and Shahul 2011). It is only through good reporting of accounting information that the efficiency and effectiveness performance accountability elements can be evaluated by the user. In effect, evaluating the extent of financial performance accountability depends largely on the disclosure of financial information. Ideally, this information should be disclosed in the annual reports of the waqf institutions. However, as will be explained, the annual reports of the SIRCs contain minimal information of use in assessing the performance of such institutions. Nonetheless, we have proceeded with the little information we received.

Using information from the audited financial reports of the SWIs and adopting Tuckman and Chang's (1991) model on non-profit financial sustainability, we determined the financial vulnerability of SWIs in Malaysia. As stated, the efficiency and effectiveness of an organisation depends on the financial condition and vulnerabilities of the institution (Keating et al. 2005). Thus, the assumption made here is that the financial sustainability of an organisation does reflect on the efficiency and effectiveness of that organisation.

The audited financial report is regarded as an important source of financial data since it is the paramount document used to disseminate information about the financial standing and other issues relating to the organisation (Froelich, Knoepfle and Pollak 2000). Furthermore, the fact that it has been audited means that the report has been verified beyond the numbers provided by the organisation, and the auditor has examined additional documentation before arriving at conclusions (Froelich et al. 2000). Thus, the annual reports of the waqf institutions used in this study were considered reliable and credible sources of data. Additionally, interviews were conducted with selected individuals in order to gain a richer understanding about the commercial operations of the institutions, and to seek further clarification about the disclosure items for validation purposes (McNamara 1999).

### *The sample*

The initial intention was to examine all 14 SWIs. However, this proved not to be possible. The annual report of the SWIs of Negri Sembilan and Sarawak could not be obtained. Although the most recent accounting period is 2011, we focused on annual reports of 2008 as we possessed the greatest number of annual reports for this year, and were able to obtain the audited reports for the 11 SWIs. In terms of disclosure of audited financial statements, only Pulau Penang and Terengganu have separate waqf income statements and balance sheets. The other States have only one or other of the statements separated, or else both are combined with other institutions, such as zakat and baitulmal. For example, the SWIs of Johor and Pahang have a separate waqf balance sheet, while Kelantan has a separate waqf income statement. In the case of combined statements, where possible we attempted to extract and reconstruct the waqf statements from the accompanying notes to the consolidated accounts. Taking all these

**Table 1.** Financial vulnerability and sustainability ratios.

| Measure | Ratio |
|---|---|
| Equity balances | Ratio of equity to revenue |
| Revenue concentration | Square of the percentage share that each revenue source represents of the total revenue |
| Administrative costs | Ratio of administrative costs as a percentage of total costs |
| Operating margin | Net income (or loss) divided by total revenue |

Source: Tuckman and Chang (1991)

difficulties into account, we ended up with seven SWIs, comprising those of Selangor, Johor, Kelantan, Melaka, Pahang, Pulau Pinang, and Terengganu. This smaller than intended sample size is clearly a limitation of our study.

### *Findings*

The financial sustainability and vulnerability of the waqf institutions was investigated using the financial health model developed by Tuckman and Chang (1991), which involves the four ratios listed in Table 1.

According to the model, a SWI may be financially vulnerable when the results of all of its four ratios are low. The results of the above computed ratios are presented in Table 2.

### *Equity balances*

Generally, an organisation is financially sustainable when the ratio of equity to revenue is high. The drawback here is that Tuckman and Chang (1991) did not suggest any standard benchmark for this ratio. Equity, as used in this study, included net assets or the accumulated waqf funds of the SWIs. The equities for the SWIs of Johor, Kelantan, Melaka and Penang were less than ten times their respective revenues, this indicating their vulnerability when compared to SWIs of Selangor (13.26), Terengganu (12.93) and Pahang (49.80). With its equity at more than 49 times its revenue, the SWI of Pahang appears to be the most financially sustainable. The gap between this SWI and the others is so wide that no other institution comes close to it. On another note, one of the basic pillars of waqf requires that the equity to remain intact. As such, its assets are restricted to a certain extent. Consequently, such assets cannot be used to cover deficits since this would lead to a reduction in waqf assets. It is only the accumulated surpluses that can be used as a temporary measure to sustain operations or to replace lost revenues. The income statements of the SWIs, with the exception of Pahang, indicate that surpluses were transferred to accumulated funds, or the waqf fund. As for SWI Pahang, surpluses were transferred to a "general assistance fund". Thus, one may deduce that surpluses were accumulated annually as buffers to cushion operational financial distress. Accordingly, the equity balance ratios may be regarded as falling within the sustainability region – an indication that these SWIs are financially sustainable (or at least not financially vulnerable).

### *Revenue concentration*

The revenue concentration index is the square of the percentage share that each revenue source represents of the total revenue. An index close to zero for each source of revenue indicates that a waqf institution had equal revenues from diverse sources and this means that the organisation is significantly healthy. According to Tuckman and Chang (1991), a non-profit organisation is less vulnerable to revenue downturns if its revenue sources are diverse because an economic downturn may be more likely

**Table 2.** Results of financial vulnerability and sustainability ratios.

| | | SWIs | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Variables** | ***Code*** | **Selangor** | **Johor** | **Kelantan** | **Melaka** | **Pahang** | **Penang** | **Terengganu** |
| Administrative expenses | A | 376,296 | NA | NA | 433,369 | NA | 546,503 | 108,772 |
| Total expenses | B | 476,904 | 2,476,374 | 3,098 | 670,556 | 89,801 | 1,024,512 | 251,516 |
| Total revenue | C | 608,143 | 3,819,965 | 115,515 | 981,948 | 28,212 | 1,705,163 | 442,758 |
| Surplus/(Deficit) | D | 131,239 | 1,343,591 | 112,417 | 311,392 | (61,589) | 680,651 | 333,763 |
| Equity (Funds) | E | 8,060,959 | 16,995,938 | 764,543 | 5,297,017 | 1,405,003 | 5,958,941 | 5,725,949 |
| Ratios | | | | | | | | |
| Equity balance | E/C | 13.26 | 4.45 | 6.62 | 5.39 | 49.80 | 3.49 | 12.93 |
| Administrative costs | A/B | 78.90% | NA | NA | 64.63% | NA | 53.34% | 43.25% |
| Revenue concentration | | 0.35 | NA | 0.67 | 0.52 | 0.91 | 0.75 | 0.38 |
| Operating margin | C/D | 21.58% | 35.17% | 97.32% | 31.71% | (218.31%) | 39.92% | 75.38% |

NA = not available; all monetary values are expressed in Malaysian Ringgits.

**Table 3.** Revenue concentration index.

| Sources | Selangor | Johor | Kelantan | Melaka | Pahang | Penang | Terengganu |
|---|---|---|---|---|---|---|---|
| Rental | 0.09 | NA | | 0.16 | NA | NA | |
| Waqf land | | | 0.01 | | | 0.73 | 0.31 |
| Waqf house | | | 0.01 | | | | |
| Waqf store | | | 0.65 | | | | |
| Investment | | NA | NA | NA | NA | NA | 0.01 |
| Shares | | | | | | 0.00 | |
| Mudarabah | 0.07 | | | | 0.90 | | |
| Fixed deposits | | | | | | 0.02 | |
| Current accounts | 0.00 | NA | NA | 0.00 | 0.00 | 0.00 | 0.01 |
| Fees | | NA | NA | NA | NA | 0.00 | NA |
| Agriculture | | NA | NA | NA | NA | 0.00 | NA |
| Sales | | NA | NA | NA | NA | NA | 0.00 |
| Others | 0.18 | NA | NA | 0.36 | NA | 0.00 | 0.05 |
| Concentration | 0.35 | NA | 0.67 | 0.52 | 0.91 | 0.75 | 0.38 |

NA = not available or not applicable.

to affect one revenue source and not all others. However, an index close to 1 for any revenue source indicates that an SWI is severely at risk, as this is an indication that it is dependent on one single source of revenue (see Table 3).

SWI Selangor appears to have an index close to zero for each of its revenue sources. Similarly, SWI Terengganu appears to be financially healthy as its sources of revenue are diverse, although it relies on rental from waqf land more than on other sources of revenue. Although SWI Penang had diverse sources, the distribution of these was uneven. Like SWI Terengganu, it is heavily dependent on rental from waqf land. Further, as the index for this particular source of income is rather high at 0.73, any economic downturn that affects rental properties will put SWI Penang in a vulnerable position financially. The same can be said for SWI Kelantan. With an index of 0.65 for the rental of waqf store, it would be in a precarious position financially if, for some reason, the store was not able to be leased. The least diversified institution was SWI Pahang which, significantly, derived its entire revenue from mudarabah investments. Its index of 0.91 is an indication that in 2008 it was highly vulnerable and severely at risk.

Overall, it can be observed that, although the SWIs had a diversity of revenue sources, the distribution of these was uneven. As indicated earlier, for a waqf institution to be financially sustainable, the index must have a balanced distribution of income from multiple sources. This would enable the institution to absorb financial shocks and so carry out their waqf activities (Yan, Denison and Butler 2009).

### *Administrative costs*

The administrative cost ratio is the ratio of administrative costs as a percentage of total costs. This ratio determines the ability of an organisation to control expenditure and the probable impact of such control on service delivery. An SWI with high administrative costs is assumed to have a greater opportunity to reduce the administrative costs of its programmes without a reduction in the number of programmes undertaken. Accordingly, and in line with this argument, SWIs with low administrative cost ratios would be more vulnerable and can be categorised as SWIs that are “at-risk”. This is because a further reduction in administrative costs for such SWIs may affect the quality of services provided. Administrative costs here includes managerial and general costs, such as governance, management, record-keeping, office supplies and services, office repairs and maintenance, professional services and honorarium, office-related depreciation, doubtful debts, and other related administrative activities.

As can be seen from Table 4, SWI Selangor had the highest and SWI Terengganu the lowest ratio, which implies that the former had the highest capacity and diverse opportunities to contain expenditure without affecting its

**Table 4.** Administrative costs ratio.

| Variables | Code | Selangor | Johor | Kelantan | Melaka | Pahang | Penang | Terengganu |
|---|---|---|---|---|---|---|---|---|
| Admin. costs | A | 376,296 | NA | NA | 433,369 | NA | 546,503 | 108,772 |
| Total expenses | B | 476,904 | 2,476,374 | 3,098 | 670,556 | 89,801 | 1,024,512 | 251,516 |
| Ratio | A/B | 78.90% | NA | NA | 64.63% | NA | 53.34% | 43.25% |

NA = not available; all monetary values are expressed in Malaysian Ringgits.

**Table 5.** Operating margin ratio.

| Variables | Code | Selangor | Johor | Kelantan | Melaka | Pahang | Penang | Terengganu |
|---|---|---|---|---|---|---|---|---|
| Surplus/(Deficit) | C | 131,239 | 1,343,591 | 112,417 | 311,392 | (61,589) | 680,651 | 333,763 |
| Total revenue | D | 608,143 | 3,819,965 | 115,515 | 981,948 | 28,212 | 1,705,163 | 442,758 |
| Ratio | C/D | 21.58% | 35.17% | 97.32% | 31.71% | (218.31%) | 39.92% | 75.38% |

All monetary values are expressed in Malaysian Ringgits.

programme and service delivery, while the latter is in the "at-risk" category. The percentage for SWI Pahang was just a little above 50%, indicating that it still has a buffer against a reduction in service delivery. On the extreme end, the SWI of Terengganu had a ratio below 50%. This means that this SWI is left with very few opportunities to reduce expenditure since this may affect its services. However, in the case of SWI Terengganu, the lower administrative costs might be due to the institution's administrative costs being covered partly by its State treasury. However, it was not possible to discern such information from the relevant annual report. Further, given that Tuckman and Chang (1991) did not specify what constitutes a high or a low administrative cost, a possible benchmark that could be applied is that provided by Charity Facts. According to this, a ratio of less than 10% may mean that investment in the administrative structure is insufficient. However, Sorensen and Kyle (2007) suggested that the programme expenses to total expenses ratio should be at least 65% (Better Business Bureau's Wise Giving Alliance Standard 8). Taking both studies into account, one may conclude that SWIs should have a ratio of at least 50%. As shown in Table 4, the SWIs of Selangor, Melaka, Penang and Terengganu have ratios higher than 10%, the highest being 78.90% and the lowest being 43.25%. This means that most of the SWIs in the study have expended an adequate amount of resources on administrative costs, with the notable exception of SWI Terengganu.

The administrative ratio must be interpreted with care. Although a higher administrative costs ratio may allow the waqf institutions to cut costs without affecting programme delivery, the higher ratios may equally signal the fact that too many resources were being committed to administrative expenses, with consequently fewer funds available for programme services. In such a case, the high administrative cost ratio may not necessarily mean that the SWI is financially sustainable. Perhaps scrutiny of each administrative cost would provide the answer to this question. However, given the limited disclosure of information by SWIs, this will rarely be possible. It was observed that there was no income statement in the audited financial statements of SWI of Johor. Total revenues and expenses were obtained from the statement of changes in equity for the year 2008. Consequently, details of the relevant income and expenses were unavailable. The income statement for SWI Kelantan disclosed "group waqaf fund expenses" (RM3,098) as the only expenditure item without any details. Given that its main waqf activity (according to the statement) is rental, one may assume that this expense item refers to rental expense. Additionally, the audited income statement of SWI Pahang disclosed only "waqaf aid/assistance" as its total expenses without any further information. The assumption made here is that this expense represents the amount disbursed from its investment activities.

Generally, in Malaysia, it is possible for some SWI institutions to have minimal or no administrative expenses because these and other waqf expenses are covered either by the State treasury or the government. This was confirmed during a phone interview with the research and products division manager of Yayasan Waqaf Malaysia, and during a face-to-face interview with the waqf research and investment manager of SWI Selangor. The low administrative expenses are also due to the fact that most SWIs have only very recently dedicated qualified staff specifically to handle the affairs of waqf (Rokyah 2005).

### *Operating margins*

This ratio is calculated using net income (or loss) divided by total revenue. The higher the ratio, the greater the opportunity for the SWI to draw on the surplus should there be a decline in revenues in subsequent periods. Accordingly, a SWI will be financially stable if it has a high operating margin. As shown in Table 5, SWI Kelantan had the highest at 97.32%. This was followed by Terengganu at 75.38%. The SWIs of Penang, Johor, Melaka and Selangor all had operating margins below 50%. However, given the positive ratios, the results indicate that these SWIs are financially sustainable.

The negative operating margin of Pahang puts this SWI severely at risk as there is no way that it can build equity. Consequently, this may signal a financial sustainability crisis.

## 6. Conclusion

The study examined the financial accountability of SWIs in Malaysia through determining the financial sustainability. More importantly, given that the efficiency and the effectiveness of an organisation are concerned primarily with how the organisation can sustain its operations in delivering its mission, our study may also be regarded as one which examines the efficiency and effectiveness of SWIs. The financial health model developed by Tuckman and Chang (1991) is used to determine the financial vulnerability of SWIs. In this regard, the four components of financial sustainability and vulnerability measures – equity balances, administrative costs, revenue concentration, and operating margin – were computed.

Overall, the results indicate that two of the institutions (SWIs of Selangor and Terengganu) were financially

**Table 6.** Summary of results for financial vulnerability and sustainability ratios.

| Ratios | Selangor | Johor | Kelantan | Melaka | Pahang | Penang | Terengganu |
|---|---|---|---|---|---|---|---|
| Equity balance | 13.26 | 4.45 | 6.62 | 5.39 | 49.80 | 3.49 | 12.93 |
| Admin. Costs | 78.90% | NA | NA | 64.63% | NA | 53.34% | 43.25% |
| Revenue concentration | 0.35 | NA | 0.67 | 0.52 | 0.91 | 0.75 | 0.38 |
| Operating margin | 21.58% | 35.17% | 97.32% | 31.71% | –218.31% | 39.92% | 75.38% |

NA = not available.

sustainable in all the four components in that they have an adequate level of equity balances and reasonably high administrative costs, the desired revenue concentration (close to zero), and positive operating margins (see Table 6 below).

The SWI of Penang was financially sustainable in three components: equity balance, administrative cost and operating margin. The SWIs of Johor, Kelantan, and of Melaka were financially sustainable in equity balance and operating margin, but financially vulnerable in relation to revenue concentration. The SWI of Pahang was financially vulnerable due to its substantial deficit (negative operating margin) and revenue concentration (closer to one); it was, however, financially sustainable in terms of equity balance and administrative cost. On the basis of the results obtained in the study using the financial sustainability framework of Tuckman and Chang (1991), one may conclude that only Selangor and Terengganu appear to be efficient and effective. The financial health of the remaining SWIs in the study is less than satisfactory.

However, the results of the study should be interpreted in light of several limitations. The first is that the data used are not the most recent. Therefore, the findings may not hold true currently. Second, our study focused only on Malaysia and the results may not be transferable to waqfs in other countries, or to privately managed waqf institutions. Accordingly, future research should address these points. However, the results of the study raised pertinent issues that policy makers should address to ensure the systematic revival of waqaf institutions in Malaysia. Consistent with previous studies, we established that there was inadequate disclosure and poor accounting practices for waqf transactions, equity, liabilities and assets. Most SWIs did not have up-to-date audited financial statements. It was concerning that even though the accounts were audited, unqualified and certified by chartered accountants, nevertheless there was improper classification and treatment of classes of accounts. Furthermore, these were accounts that had been certified by the Office of the Auditor General.

On the basis of the findings of this study, four recommendations are made. The first pertains to revenue diversification. It is important that waqf institutions do not rely solely on one particular source of income. This could be avoided by looking for other viable investment opportunities. Handling divestments would require capacity building or employing qualified investment specialists to competently manage investment risks. Further close attention on revamping idle waqf resources could enhance the sustainability of waqfs. In Malaysia, the 9th Malaysia Plan (pp 64 and 65) specifically provides for this. It states:

> "a strategic plan will be drawn up to ensure that the income generated from the development of wakaf land will enable state religious authorities to be more self-reliant in developing new wakaf land".

Self-reliance means that each SWI should ensure that it depends on multiple sources of revenue equally in order to sustain developmental and operational activities. Second, there is a need for improved accounting practices among the waqf institutions to ensure adequate disclosure of waqf assets, liabilities, equity, revenue and expenditure. According to Ihsan and Shahul (2011), accounting is a basic requirement for true accountability to be discharged through standardized, clear and transparent reporting. In line with this, there is an urgent need for the standardization of waqf accounting to minimise diversity across the SWIs. In Malaysia, a guideline formulated by JAWHAR is indeed commendable. However, close examination of the accounts showed that no SWI has actually adopted the framework; given that JAWHAR has no real power over SWIs, this may be unsurprising.

Despite these limitations, it is hoped that the results from this study may help other Muslim countries manage waqf. More importantly, the findings here have provided an insight as to how well institutional mutawallis are carrying out their tasks – an indispensable ingredient for revitalization of waqf. Finally, we would like to emphasize the point that performance accountability is particularly significant since a donor to a waqf must be kept informed of the purpose for which the funds have been used, and whether the funds have been distributed to the appropriate beneficiaries (Sulaiman, Adnan and Nor Suad 2009). However, having placed their trust in the SIRCs, donors of waqf assets do not generally establish mechanisms to ensure the successful management of their assets. Similarly, users of waqf assets and/or recipients of the resultant economic benefit arising from the employment of waqf assets either have little or nothing to say about how well the institutions are managing the assets in order to reap maximum benefit. By default, donors (dead or alive) and the recipients (otherwise the public) become absentees and detached from the trusted waqf institutions. This situation leads to lapses in accountability. In this regard, assessing the performance of waqf institutions will indicate the extent to which such institutions have discharged their accountability.

## References

Abdul Rahim AR, Mohammad DB, Ismail Y. "Current practices and administration of waqf in Malaysia: a preliminary study." Awqaf Report-Malaysia, 1999.

Abraham A. "Financial Sustainability and Accountability: A Model for Non-Profit Organisations." In: AFAANZ 2003, Conference Proceedings, Brisbane 6–8 July 2003. Australia: AFAANZ, 2003.

Abul H, Abdus Shahid M. "Management and Development of the Awqaf Assets." Paper presented at the Seventh Tawhidi Epistemology: Zakat and Waqf Economy International Conference, Bangi, 2010.

Adnan MA. Akuntansi dan auditing kelembagaan wakaf [Accounting and auditing for waqf institutions]. Akuntansi syariah, arah, prospek dan tantangannya, 2005. 143–152.

Adnan MA, Maliah S, Nor Suad PMMN. "Some Thoughts about Accounting Conceptual Framework and Standards for Awqaf Institutions." Indonesian Management & Accounting Research, 6 (1), 2007. 43–56.

Ariff M. "Resource Mobilization Through the Islamic Voluntary Sector in Southeast Asia." In: Ariff, M. ed. 1991. The Islamic Voluntary Sector in Southeast Asia. Singapore: Institute of Southeast Asian Studies. 1991.

Basri H, Abdul Khalid SN. "Strengthening Accountability of Charitable Organisations: A Literature Review." Academic Public Administration Studies Archive-APAS, 2011. 312.

BBB (Better Business Bureau), "Standard for Charity Accountability". Available at: www.bbb.org/us/Standards-Charity [Accessed 20 November 2012]. 2003.

Bremer J. "Islamic philanthropy: Reviving traditional forms for building social justice." In: CSID (Center for the Study of Islam and Democracy), 5th Annual Conference: Defining and Establishing Justice in Muslim Societies. Washington, DC 28–29, May 2004. Available at: <https://www.csidonline.org/documents/pdf/5th_Annual_Conference-Bremer_paper.pdf> [Accessed 24 December 2012]. 2004.

Chowdhury MSR, Ghazali MF, Ibrahim MF. "Economics of cash waqf management in Malaysia: a proposed cash waqf model for practitioners and future researchers." African Journal of Business Management, 5(30), 2011. 12155–12163.

Cizakca M. "Awqaf in history and its implication from modern Islamic economies." Islamic Economic Studies, 6(1), 1998. 43–69.

Connolly C, Hyndman N. "Performance reporting by UK charities: approaches, difficulties and current practice." Edinburgh: The Institute of Chartered Accountants of Scotland. 2003.

Cutt J, Murray V. Accountability and Effectiveness Evaluation in Non-Profit Organisations. New York: Routledge. 2000.

Froelich KA, Knoepfle TW, Pollak TH. "Financial measures in non-profit organisation research: comparing IRS 990 return and audited financial statement data." Non-Profit and Voluntary Sector Quarterly, 29(2), 2000. 232–254.

Hisham Y. "Waqf accounting in Malaysian state Islamic religious institutions: the case of federal territory SIRC." Master's thesis. International Islamic University Malaysia. 2006.

Hoexter M. "Waqf studies in the twentieth century: the state of the art." Journal of the Economic and Social History of the Orient, 41(4), 1998. 474–495.

Ihsan H, Ayedh AM, Ibrahim, SHM. Towards the betterment management and transparency of waqf institutions: lessons from the charity commission, Al Risalah, 6, 2006. 27–46.

Ihsan H, Adnan MA. "Waqf accounting and the construction of accountability." In: MC (IIUM Management Centre), AIKOL (Ahmad Ibrahim Kulliyyah of Laws) and IIMU (International Institute for Muslim Unity), International Conference on Waqf Laws and Management: Reality and Propects. Kuala Lumpur 20–22 October 2009. International Islamic University Malaysia. 2009.

Ihsan H. "An exploratory study of waqf accounting and management in indonesian waqf institutions: the cases of Dompet Dhuafa and UII waqf foundations." Master's thesis. International Islamic University Malaysia. 2007.

Ihsan H, Shahul HMI. "Waqf accounting and management in Indonesian waqf institutions: the cases of two waqf foundations." Humanomics, 27(4), 2011. 252–269.

Ireland SS. Quality and non-profit organisations. Quality Progress, 32(3), 1999. 96–99.

Iwaarden J, Wiele T, Williams R, Moxham, C. "Charities: How Important is Performance to Donors?" International Journal of Quality & Reliability Management, 26(1), 2009. 5–22.

Keating EK, Fischer M, Gordon TP, Greenlee JS. "Assessing Financial Vulnerability in the Non-Profit Sector." Hauser Center for Non-Profit Organisations. Available at: http://ssrn.com/abstract=647662 [Accessed on December, 2012]. 2005.

Lane JE. Public sector: concepts, models and approaches. London: SAGE. 1995.

Laughlin R. "Principals and higher principals: accounting for accountability in the caring professions." In: R. Munro and J. Mouritsen, eds. 1996. Accountability: power, ethos and the technologies of managing. London: International Thomson Business Press. 1996.

Marsoof S. "Awqaf Experience in Sri Lanka." Awqaf, 6, 2004. 1–32.

McNamara C. General Guidelines for Conducting Interviews. Free Management Library. Available at: <http://www.mapnp.org/library/evaluatn/interview.htm> [Accessed January 2013]. 1999.

Mihaiu DM, Opreana A, Cristescu MP. "efficiency, effectiveness and performance of the public sector." Romanian Journal of Economic Forecasting, 4, 2010. 132–147.

Mohd Akhyar A, Maliah S, Putri Nor SMMN. "Some thoughts about accounting conceptual framework and standards for awqaf institutions." Indonesian Management & Accounting Research, 6(1), 2007. 43–60.

Osman AZ. "Accountability in waqf management: learning from praxis of non-governmental organisation (NGO)." In: Sixth Asia Pacific Interdisciplinary Research in Accounting Conference, 12–13 July 2010. University of Sydney. 2010.

Pirasteh H. "Efficiency criteria in the public and private waqf management: the iranian experience." In: Essentail Readings in Contemporary Waqf Issues. Kuala Lumpur: CERT. 2011.

Poister TH. Measuring performance in public and non-profit organisations. San Francisco. JosseyBass. 2003.

Rabrenovic A. Financial accountability as a condition for EU membership. Belgrade: Institute of Comparative Law. 2009.

Rokyah S. "Determinants of Financial Reporting Practices on Waqf by Malaysian State Islamic Religious Council in Malaysia." Masters. International Islamic University, Malaysia. 2005.

Sadeq MA. "Waqf, perpetual charity and poverty alleviation." International Journal of Social Economics. 29(1/2), 2002. 135–151.

Sinclair R, Hooper K, Ayoub S. "Perspectives of Accountability in Charities." In: 6th Asia Pacific Interdisciplinary Research in Accounting Conference, Sydney July 2010. Australia. 2010.

Singer A. Charity in Islamic Societies. New York: Cambridge. 2008.

Siti Mashitoh M. "Waqf in Malaysia: legal and administrative perspectives." Kuala Lumpur: University of Malaya Press. 2006a.

Sohaimi MS, Syarqawi, M. "Waqf development in Malaysia: issues and challenges." Jurnal Pengurusan JAWHAR, 2(1), 2008. 13–35.

Sorensen SM, Kyle Dl. "Valuable volunteers." Strategic Finance. February, 2007. 39–45.

Stewart JD. "The role of information in public ccountability." Great Britain, Heritage Publishers. 1984.

Sulaiman M, Adnan MA, Nor Suad PMMN. "Trust me! A case study of the International Islamic University Malaysia's waqf fund." Review of Islamic Economics, 13(1), 2009. 69–88.

Tuckman H, Chang C. "A methodology for measuring the financial vulnerability of charitable non-profit organisations. Non-Profit and Voluntary Sector Quarterly, 20(4), 1991. 445–460.

Wahab AN, Abdul Rahim AR. "A framework to analyze the efficiency and governance of zakat institutions. Journal of Islamic Accounting and Business Research, 2(1), 2011. 43–62.

Yaacob H, Nahar HS. "Accountability in the sacred context: the case of management, accounting and reporting of a Malaysian cash awqaf institution." Journal of Islamic accounting and business research, 2(2), 2011. 87–113.

Yan W, Denison DV, Butler JS. "Revenue structure and non-profit borrowing." Public Finance Review, 37(1), 2009. 47–67.

Zainuddin Z. "The management of funds of zakat, sadaqat and awqaf and their contributions toward Muslim educational purposes in Malaysia." Master's thesis. International Islamic University Malaysia. 1998.

# The role of Islamic micro-finance institutions in economic development in Indonesia: A comparative analytical empirical study on pre- and post-financing states

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**Abstract** - Different institutions are engaged in the development efforts in Indonesia by appealing to different sectors of socio-economic life. Among such institutions, BMT (Baitul Maal wa Tamweel) and BPRS (Shariah People Credit Bank) are the main players of the shariah micro-finance institution in Indonesia.

However, these two institutions are different in nature: whereas BMT is a shariah cooperative with only limited support, regulation and monitoring, BPRS is a bank which receives sufficient support, regulation and monitoring from the Central Bank. It should be noted that these institutions overwhelmingly prevail in the urban and rural parts of Indonesia.

This study aims to explore and analyse the roles of BMT and BPRS in East Java's economic development within Indonesia, through reference to their micro-dynamics. Based on an informed understanding of the findings established in the empirical part of the study, strategies on how BMT and BPRS may improve their roles are also proposed.

For this study, primary data were collected from 348 completed questionnaires distributed to the clients of 21 BMT and BPRS branches in twelve towns/cities in East Java. The aim was to explore clients' perceptions of the impact on their socio-economic lives of receiving financing from the relevant institutions.

The findings are rather mixed: while the average annual value of sales, net income, business expenditure, household expenditure, and employment increased significantly following receipt of loans, clients' perceptions of the impact, however, ranges mainly from 'no impact' to 'some positive impacts'. Importantly, the findings also suggest that the financing has helped with a moderate decrease in poverty, there being a reduction in percentage of poor BPRS respondents under the national poverty line from 35.5% before financing to 23.1% after financing.

In order to improve their roles, it is suggested that BMT and BPRS should provide more social services to their clients; promote their financing products to a wider community; better train their customers to improve understanding of Islamic terms used in financing products; and be innovative in their financial product development in order to meet the particular needs of their clients. With such a proactive strategy, it is expected that a more positive impact could be achieved.

*Keywords:* Islamic micro-finance, BMT, BPRS, economic development

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## 1. Introduction

Islamic micro-finance has been developed to respond to the demands of less fortunate sectors of society and provides an opportunity to fulfil the aspirations of Islamic economics (social justice). It represents a good opportunity for the public in the lower strata of society to gain a valuable and alternative source of capital rather than relying on general commercial banks. It is expected that such a development will provide significant positive motivation for economic development through reducing poverty and unemployment among the younger generation as a result of enhancement of economic capacity and social capital, provided that it is accompanied by an entrepreneurial spirit with moral and Islamic values.

As a developing country, Indonesia has the world's fourth largest population of 241 million people in 2011 (Asian Development Bank 2012). Possessing a large population but without the corresponding wealth, Indonesia is facing an on-going socio-economic challenge, mainly in the form of poverty and unemployment. Statistics Indonesia measures poverty based on people's ability to meet their basic needs. Hence, people are considered 'poor' if they are economically unable to fulfil food and non-food basic needs, measured by consumption/expenditure per capita per month (Biro Pusat Statistik 2012b). In March 2012, the poverty line applied was defined as IDR 267,408 (equal to around US$ 30) which, particularly in East Java, is IDR 245,305 (Biro Pusat Statistik 2012b). According to the statistics, the number of people living in poverty in March 2012 was 29.13 million, corresponding to 11.99% of the population. This was a decrease compared to the previous data from March 2011, when the figure was 30.02 million (12.49%) (Biro Pusat Statistik 2012b). While this decreasing trend might be regarded with some scepticism, these data are nevertheless similar to those of the Asian Development Bank (ADB), which reported that 18.1% of the population has been living on less than $ 1.25 (purchasing power parity) a day and 12.5% of population were living below the national poverty line in 2011. Such measures become meaningful in comparison to other relevant variables; for example, the annual population growth in 2011 was 1.6%, GDP growth was 6.5%, the literacy rate according to 2008 data was 92.2% (which is considered very high, and 53.7% of the population was living in urban areas (in 2010). The ADB report also reveals that GDP growth has shown an increasing trend over the last three years, from 4.6% in 2009 to 6.2% in 2010 and 6.5% in 2011 (Asian Development Bank 2012). Overall, although the prevalence of a high level of poverty is a reality, it should be noted that considerable achievements were made during 1970 and 1980, when the poverty level was reduced from 60% to 20% (World Bank 2001).

According to the February 2012 dataset, the level of unemployment was 6.32% (7.61 million people) (Biro Pusat Statistik 2012a). As regards human development in Indonesia, the UNDP ranked Indonesia 124th in terms of HDI in 2011 which, unfortunately, is lower than the rank in 2010, which was 108th. However, despite the adverse trend in the HDI ranking, it should be noted that the value increased from 0.600 in 2010 to 0.617 in 2011 (UNDP 2010; UNDP 2011). This indicates that other countries in the world have developed higher HDI values than has Indonesia. Moreover, the UNDP report in 2009 ranked Indonesia 111th in the HPI (Human Poverty Index); this ranking was no longer provided in HDR 2010 and 2011 (UNDP 2009).

In responding to economic challenges, including poverty and human development, it should be noted that Indonesia does have a large number of microenterprises (MEs), which form a strong pillar of the national economy as they account for more than 98% of total enterprises (see Table 1).

In 2008, statistics showed that microenterprises (MEs) accounted for 98% of the total number of enterprises – which is considered very high – contributing around 32% of the total GDP, and absorbing the highest number of employees (89.3% of the total labour force); however, their export value was the lowest (Table 1).

However, despite the significant role of MEs in micro-development and their impact on the macro-economy and other such important contributions, there are still barriers to accessing finance, which can hinder the growth of BMT and BPRS on the periphery. Hence, a study focusing on the role that BMT and BPRS can play in developing MEs and in alleviating poverty in Indonesia could enable a better understanding of development dynamics in Indonesia, and of the importance of faith (Islamic) constructed around such institutions in this process. It should be noted that these two types of institutions are chosen as the subjects of this research because they are popular among the Muslim population; thus, it is essential to examine the role of BMT and BPRS in providing services to MEs in order to determine their impact on economic development. This study also considers the effectiveness of BMT and BPRS through exploring the impact their financing. Moreover, it aims to identify the potential role of BMT and BPRS in alleviating poverty in Indonesia.

**Table 1.** Profile of Small Medium Enterprises (SMEs) in Indonesia.

| Criteria | Number | | GDP | Labour | | Export |
|---|---|---|---|---|---|---|
| Micro | 50,697,659 | 98.9% | 1,505,308 | 83,647,771 | 89.3% | 20,247 |
| Small | 520,221 | 1.1% | 473,267 | 3,992,371 | 4.26% | 44,148 |
| Medium | 39,657 | 0.08% | 630,784 | 3,256,188 | 3.34% | 119,363 |
| Large | 4,372 | 0.01% | 2,087,121 | 2,776,214 | 2.96% | 727,169 |
| | 51,261,909 | | 4,696,480 | | | 910,927 |

Source: Biro Pusat Statistik (2008).

## 2. Research questions

This paper aims to explore the economic development role of BMT and BPRS in East Java, as the second largest province in Indonesia, in order to propose strategies for improvement of this role. The research questions of this study are:

1. What are the roles of BMT and BPRS in economic development, particularly in improving microenterprises which involve improvement of sales, business expenditures, net income, household expenditure, assets, economic activities and employment?
2. What are the roles of BMT and BPRS in the alleviation of poverty?
3. Which institution has the better performance in economic development and poverty alleviation?

## 3. Literature review

### *BMT and BPRS: The main Islamic micro-finance institutions in Indonesia*

BMT is a micro-financial institution operated under the Shariah principles, which aims to provide micro-financing to micro- and small enterprises; there are many such enterprises in Indonesia but they have difficulty in accessing finance. As institutions under the Ministry of Cooperatives and SMEs, some of them come under the label of KJKS (Koperasi Jasa Keuangan Shariah/Shariah Financial Cooperative) rather than BMT. The initiative for establishing BMT is usually provided by educated persons or local community leaders, who are concerned with the development of local communities through providing financial access to the poor and to micro- and small enterprises (Ascarya et al. 2007). As such, they are likely to be similar to self-help groups with minimal support from the government.

On the other hand, the establishment of BPRS was supported by Act No 7/1992 on Banking as revised by Act No 10/1998. It is defined as a bank conducting banking/business activities based on Shariah principles (Banking Act No. 10/1998 1998). Article One of this Act defines a Shariah principle as an agreement based on Shariah law between a bank and other parties in funding and/or financing business activities or other activities in accordance with Shariah, such as those financial instruments based on the profit-loss sharing (PLS) principle (mudharabah), those based on equity financing capital through musharakah based on the selling principle (murabaha), or financing capital goods on the basis of a pure lease option (ijarah), or with option of removal of ownership of the leased items from the bank by another party (ijara wa istisna). It should be noted that this micro-banking operates in specific local areas (district/kecamatan) providing micro-financing, savings and other related financial products to local communities under Bank Indonesia's supervision and regulation, as identified in Act No 10/1998, Article 29.

As 'a community-based financial institution' which helps SMEs through training and social development programmes, the character of BMT is unique compared to that of BPRS; BMT is not just a financial institution – it is also a social enterprise for two reasons (Sakai and Marijan 2008):

1. BMT started as a cooperative; thus, it has a cooperative nature with the advantage of providing a more flexible and faster financing approval process than banks.
2. BMT offers entrepreneurial skills and the promotion of Islamic values in a practical way.

**Table 2.** Development of BMT and BPRS.

| Micro-finance Institutions | 2000 | 2005 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|
| BPRS | 78 | 92 | 150 | 155 | 155 |
| Branch Offices | | | 286 | 364 | 389 |
| BMT | 2,938 | 3,101 | 5,200 | 5,500 | N/A |

Sources: Bank Indonesia (2012), Seibel (2008), Pinbuk (2005), Sakti (2011)

The survey by Bank Indonesia (2011) also confirms that BMT is a community-based institution. Out of a total of 386 BMT respondents in the three provinces of Java (West, Central and East Java), 62.72% of the BMT were established by community-initiated projects based on community organisations, Islamic boarding schools, mosques or professional associations; a further 12.11% were established by cooperatives, 12% by individual persons, and others by Islamic Banks (Sakti 2011). This indicates a high awareness in society of the development and empowerment of microenterprises through the development of Islamic micro-finance institutions.

Considering the development of BMT and BPRS, it can be seen from Table 2 that the number of BMTs is much higher than the branches of BPRS. However, it should be noted that the size of BPRS in terms of value of assets, total number of borrowers, scope of operation, etc is generally higher than for BMT.

### *Role of IsMFIs in economic development*

Provision of financial access to poor people will enable them to increase their income and economic well-being, develop assets and reduce weaknesses; lack of access to financial support seems to be the main reason for the inability of the poor to become involved in development (Obaidullah 2008b).

The performance of Islamic micro-finance has been quite promising. Obaidullah (2008a) argues that the performance of RDS (Rural Development Scheme) of IBBL was better in terms of growth (12.5%), drop-out rate (5%), and operational efficiency compared to three conventional leaders in micro-finance, namely Grameen Bank, ASA (Association for Social Advancement), and BRAC (Bangladesh Rural Advancement Committee). Charging a lower rate of return (10% with 2.5% rebate for on-time payments) than other micro-finance (16–22.5% interest) offers an advantage to the poor (Obaidullah 2008a). This type of micro-finance also provides an active spiritual development programme with the purpose of improving members' awareness of social rights and responsibilities in order to forge better relationships with others (Obaidullah 2008a); such a programme has not been provided by conventional micro-finance.

The impacts of Islamic micro-finance can be discussed on both an economic and social basis, this paper focusing only on the former. In general, it is expected that provision of financial access to poor people will enable them to increase their income and improve their economic well-being, develop assets, reduce weaknesses, and become involved in development (Obaidullah 2008b). The latest economic impact presented by an empirical study of IBBL's (Islamic Bank Bangladesh Limited) impact on rural poverty finds that loans had a considerable effect in improving household earnings, output of harvest and cattle, disbursement and employment (Rahman and Ahmad 2010). In particular, based on a field survey of 1,024 respondents, Rahman (2010) finds that the family income increased by more than 33%, health expenditure increased by 50%, family employment increased from 1.91 to 2.1 working members, and all types of assets also increased. Moreover, the impressive economic impact can be seen in Ahmed's study of three IsMFIs in Bangladesh, as he finds an increasing amount of time spent on productive activities by beneficiaries and other family members, increased output from economic activity, particularly in improving the amount of goods/services, innovation of new products, and increasing assets and other properties (Ahmed 2002). These economic aspects might imply that Islamic micro-finance has an advantage to offer, although it still has weaknesses to overcome.

By way of empirical evidence, a recent study by Khandker et al. (2013) revealed that improved access to financing, particularly through MFIs, could contribute to the development of MEs and reduce poverty in Bangladesh. Based on a large amount of national data, the empirical findings confirm that households with additional income from MEs have much better living conditions than households without MEs, since MEs "… could raise income additionally by 6%, consumption by 5% and reduce moderate poverty by 2% and extreme poverty by 4% per year" (Khandker et al. 2013). In addition, the most recent study on the economic impact of MEs in Thailand suggests that IsMFIs has contributed positively to increase customers' welfare (Naipom 2013). In particular relation to the economic impact of micro-financing, Naipom (2013) argues that gender, annual household income, age, total land size, membership length and occupation are contributory impact factors.

### *Roles of Baitul Maal wa Tamweel (BMT) and BPRS in economic development*

Islamic micro-finance plays a significant role in promoting microenterprises. A study of the Islamic Banking industry in Indonesia found that it has both a positive effect – based on financial measures, sales improvement, and accumulation of working capital – and an ability to improve the tough synergy with a national programme for development of small enterprises and microenterprises (Antonio 2004). In addition, it is capable of filling the gap between the poverty alleviation approach and commercially-based methods of micro-finance (Antonio 2004).

However, Siebel presents a different view, noting that Islamic micro-finance in Indonesia has low assets compared to conventional banking, due to the lack of regulatory and supervisory aspects in Islamic values (Seibel 2005). The two options he proposes are:

1. To focus completely on Islamic commercial banks and the "establishment of branch networks with Islamic micro-finance products"; and
2. "[T]o reassess the challenges and realistic opportunities for Islamic rural banks and cooperatives" (Seibe, 2005).

Although true for this specific area of research, this finding could not be generalised to all areas of Indonesia. As Obaidullah (2008a) maintains, the BMT in Indonesia represents a success story in the linkage programme between a group of microenterprises, BMT and Islamic banks. Given its ability to cooperate with the poor in the surrounding area, BMT seems to be the most suitable institution to serve the poor (Ascarya and Sanrego 2007).

Some studies indicate a good performance by and prospects for BMT. Based on a survey of three BMTs under the Peramu Foundation, Bogor, Indonesia, Widyaningrum (2002) found that they make a positive contribution in improving customers' assets, turnover, net income, return on assets (ROA), and productivity. In addition, a study analysing the sustainability of BMT in developing microenterprises using data envelopment analyses established that the efficiency level of BMT is relatively low; BMT operates below the optimal scale and have managerial problems (Chokro and Ismail 2008). Ismail and Chondro (2008) conclude that "[a]lthough the profitability efficiency of BMT is relatively low, since generally BMT have made a profit and social benefit, Islamic financing can be predicted to be sustainable – able to provide viable Islamic financing".

Considering the contribution to BMT customers, Sakai (2008) argues that BMTs have developed financing services, despite the limited start-up capital, and are able to provide financial resources to microenterprises as an alternative to money lenders. New economic prospects are brighter for the poor community as BMT facilitates their business (Sakai 2008). Sakai also conducted a study over three consecutive years (2006, 2007, 2008) on how BMT services enhance microenterprises among women in Central Java; the study revealed that BMT contributes to improve women's economic independence by providing them with access to financial services (Sakai 2010). Further, he also points out that despite the lack of government support BMT have developed well with the support of Muslim economic activists. Hence, as indicated by empirical evidence, BMT have the potential to develop provided they can overcome the observed operational problems and undergo "financial and legal reform". In this complex situation, some BMT are well developed but some of them have faced failure and even bankruptcy.

A study by Adnan et al. (2003) found that with regard to the future of BMT, the respondents consider that BMT have 'high potential' (50%) and 'potential' (50%). Concerning the social services provided to customers, the responses show that 87% of 47 BMT provide such services (Adnan et al. 2003). This should be considered an additional benefit to the social capital created by BMT. Therefore, Adnan et al. (2003) concluded that BMT are institutions with the potential to provide financial services to the poor and offer a positive contribution to the national economy, which is evidenced by their resilience in surviving during the economic crisis in 1997. However, BMT still need support and assistance, particularly on legal issues.

With particular regard to the impact of BMT on the poor, the research findings of Ajija and Adnan (2011) concerning the poor customers of BMT MMU in East Java show that BMT have a significant impact on improving household income by around 50%, from IDR 1,097,700 before financing to IDR 1,669,100 after financing. This resulted in poverty reduction, as measured by three indices including head count index (HC), which showed that the number of people below the poverty line fell from 0.52 to 0.30; poverty gap (PG) which measured the extent of poverty, and fell from 0.24 to 0.11; and the Sen Index, which calculated the harshness of poverty, this falling from 0.187 to 0.079 (Ajija and Adnan 2011).

Another research survey of 100 members of the biggest Islamic cooperative in Central Java, Kospin Jasa Syariah (Koperasi Simpan Pinjam/Credit Union Shariah Services) also reveals the effectiveness of the financing procedure and its impact on micro- and small enterprises in improving income levels (Beik and Purnamasari 2011). In this research, the effectiveness of financing is measured based on the following steps: application; fund disbursement; repayment; and the effect of financing. The customers reported high scores which indicate the straightforward procedure and rapid disbursement of funds, and, although the repayment period is reported to be too short (less than 1.5 years), the impact is considered positive and effective (Beik and Purnamasari 2011). Moreover, the results also show that the amount of proposed financing is affected positively (76%) by the cost of financing and borrowers' education levels (Beik and Purnamasari 2011). Further analysis of the impact of financing shows that the daily income level after financing is positively affected (81%) by daily business profit, monthly consumption and proposed financing application (Beik and Purnamasari 2011). The findings are likely to provide better information if the variable used in the model is the amount of approved financing, rather than the proposed financing, since there is a possibility that the proposed funds will not be the same as the approved financing. Besides, analysis shows that another impact of BMT financing is its ability to significantly improve borrowers' average sales by IDR 1,427,769, and average monthly income by IDR 472,328 (Amalia 2008).

Similar to the above positive findings, Hamada (2010) argues that the impact can be varied, based on secondary data from 1,104 BPRs (people's credit banks/village banks) in Indonesia; he found that bank loans received by those BPRS contribute to expanding the provision of credit to clients, and that this contribution is even larger when the loans are gathered through linkage programmes (Hamada 2010). However, another study on micro-finance in Indonesia based on a survey of 100 participants reveals that there is no immediate impact on poverty alleviation through the provision of microcredit because, apart from sales of non-farm enterprises for the non-poor and schooling expenditures, the effect on household outcome is not significant (Takahashi 2010). In addition, although the policy of requiring collateral in order to provide loans has been eased, it benefits the non-poor rather than the poor, which means that the outreach may be questionable.

## 4. Research methodology

This study adopts an exploratory, descriptive, survey and case study-oriented research design in relation to BMT and BPRS in East Java, Indonesia. The method of data collection involves quantitative data collection based on purposive sampling through questionnaires distributed to MEs that borrow from BMT and BPRS. The purpose of the questionnaires is to find out how respondents perceive the impact of financing on their businesses. Therefore, the criteria for selecting respondents were that they:

- Received financing from BMT/BPRS.
- Had a business, whether as main source of income or non-main source of income.
- Used the funds for productive purposes to improve their microenterprise.

The quantitative data obtained from 348 completed questionnaires are analysed with the use of statistical tests including:

1. Descriptive analysis to test the changes of poor respondents from before to after financing, applied separately for BMT and BPRS respondents.
2. Wilcoxon Signed Rank Test to test whether there is a change from before to after financing in the value of annual sales, net income, business expenditure, household expenditure and number of workers; this test was applied to total respondents, and specific subgroups of BMT respondents and BPRS respondents in order to obtain a more detailed insight on the impact on each institution.
3. Mann-Whitney U-Test to explore statistically significant differences among subgroups in type of micro-financing sources and the impact on assets, on economic activities, on monthly business expenditures, and on monthly household expenditures.

## 5. Research findings and analysis

### *Impact on sales*

The impact on sales was analysed based on the Wilcoxon Signed Rank Test to investigate whether there was a change in the value of annual sales following financing (Table 3). The test was applied to total respondents, and specific subgroups of BMT and BPRS respondents, in order to obtain a detailed insight into the impact on each institution. The annual sales of total respondents were found to be significantly higher after financing (median = IDR 120,000,000) than the annual sales before financing (median = IDR 84,000,000), at significance level of $p = .000$, which is lower than the confidence level of $p = 0.05$. The annual sales of BMT respondents were also significantly higher

**Table 3.** Wilcoxon signed rank test: Impact on annual sales.

| Variable | | N | Median Rank | Z | Asymp. Sig. (*p*) | Effect size |
|---|---|---|---|---|---|---|
| Total respondents | Before financing | 348 | 84,000,000 | | | |
| | After financing | 348 | 120,000,000 | –10.841 | 0.000 | –0.031 |
| | Increase | | 36,000,000 | | | |
| BMT respondents | Before financing | 179 | 72,000,000 | | | |
| | After financing | 179 | 108,000,000 | –8.097 | 0.000 | –0.045 |
| | Increase | | 36,000,000 | | | |
| BPRS respondents | Before financing | 169 | 108,000,000 | | | |
| | After financing | 169 | 132,000,000 | –7.432 | 0.000 | –0.044 |
| | Increase | | 24,000,000 | | | |

after financing (median = IDR 108,000,000) than annual sales before financing (median = IDR 72,000,000), at a significance level of p = 0.000. The BPRS respondents also had improved annual sales after financing (median = IDR 132,000,000) compared to before financing (median = IDR 108,000,000), at the significance value of p = 0.000. Based on the improvement of median rank, the BMT respondents performed better than the BPRS respondents, the improvements being IDR 36,000,000 and IDR 24,000,000 respectively.

### *Impact on net income*

Impact on net income was analysed based on Wilcoxon Signed Rank Test to investigate whether there was a change in the value of annual net income following financing (Table 4). The results show that annual net income of total respondents was significantly higher after financing (median = IDR 27,000,000) than annual net income before financing (median = IDR 18,000,000), at a significance level of p = 0.000, which is lower than the confidence level of p = 0.05. The annual net income of BMT respondents was also significantly higher after financing (median = IDR 18,000,000) than before financing (median = IDR 15,700,000) at a significance level of p = 0.000. Similarly, the annual net income of BPRS respondents was also significantly higher after financing (median = IDR 36,000,000) than before financing (median = IDR 24,000,000) at a significance level of p = 0.000. The improvement of annual net income for BPRS respondents (IDR 12,000,000) was around three times higher than for the BMT respondents (IDR 3,300,000).

### *Impact on businesses expenditures*

The impact on business expenditures was analysed based on two tests:

1. The Wilcoxon Signed Rank Test was used to investigate whether there was a difference in the value of annual business expenditure from before financing to after financing (Table 5).
2. The Mann-Whitney U-test was employed to explore statistically significant differences among subgroups in type of micro-financing sources, and impact on monthly business expenditure after financing (Table 6).

The results of the Wilcoxon Signed Rank Test showed that annual business expenditure was significantly higher after financing (median = IDR 84,000,000) than the annual business expenditure before financing (median = IDR 60,000,000), at a significance level of p = 0.000, which is lower than the confidence level of p = 0.05. Similarly, the annual business expenditure of BMT respondents was significantly higher after financing (median = IDR 72,000,000) than the annual business expenditure before financing (median = IDR 48,000,000), at a significance level of p = 0.000. The annual business expenditure of BPRS respondents was significantly higher after financing (median = IDR 97,000,000) than the annual business expenditure before financing (median = IDR

**Table 4.** Wilcoxon signed rank test: Impact on annual net income.

| Variable | | N | Median Rank | Z | Asymp. Sig. (*p*) | Effect size |
|---|---|---|---|---|---|---|
| Total respondents | Before financing | 347 | 18,000,000 | –10.661 | .000 | –0.031 |
| | After financing | 348 | 27,000,000 | | | |
| | Increase | | 9,000,000 | | | |
| BMT respondents | Before financing | 178 | 14,700,000 | –8.042 | .000 | –0.045 |
| | After financing | 179 | 18,000,000 | | | |
| | Increase | | 3,300,000 | | | |
| BPRS respondents | Before financing | 169 | 24,000,000 | –7.235 | .000 | –0.044 |
| | After financing | 169 | 36,000,000 | | | |
| | Increase | | 12,000,000 | | | |

**Table 5.** Wilcoxon signed rank test: Impact on annual business expenditure.

| Variable | | N | Median Rank | Z | Asymp. Sig. (*p*) | Effect size |
|---|---|---|---|---|---|---|
| Total Respondents | Before financing<br>After financing<br>Increase | 347<br>347 | 60,000,000<br>84,000,000<br>24,000,000 | −11.328 | .000 | −0.608 |
| BMT Respondents | Before financing<br>After financing<br>Increase | 179<br>179 | 48,000,000<br>72,000,000<br>24,000,000 | −8.315 | .000 | −0.621 |
| BPRS Respondents | Before financing<br>After financing<br>Increase | 168<br>168 | 72,000,000<br>97,800,000<br>25,800,000 | −7.865 | .000 | −0.607 |

**Table 6.** Mann-Whitney U-test: Impact on monthly business expenditure after financing.

| Variable | Subgroup | N | Mean Rank | Z | Asymp. Sig. (*p*) | Effect size |
|---|---|---|---|---|---|---|
| Tools/minor equipment | Type of financing sources<br>BMT<br>BPRS<br>Total | <br>179<br>169<br>348 | <br>170.28<br>178.97 | −.976 | .329 | −0.052 |
| Stocks (eg. shop stock, raw materials) | Type of financing sources<br>BMT<br>BPRS<br>Total | <br>178<br>169<br>347 | <br>156.97<br>191.94 | −3.577 | .000 | −0.192 |
| Rent (per year) | Type of financing sources<br>BMT<br>BPRS<br>Total | <br>178<br>169<br>347 | <br>173.75<br>174.26 | −.101 | .920 | −0.005 |
| Utilities | Type of financing sources<br>BMT<br>BPRS<br>Total | <br>178<br>169<br>347 | <br>162.57<br>186.04 | −2.658 | .008 | −0.143 |
| Transport | Type of financing sources<br>BMT<br>BPRS<br>Total | <br>178<br>169<br>347 | <br>166.25<br>182.16 | −1.954 | .051 | −0.105 |
| Wages | Type of financing sources<br>BMT<br>BPRS<br>Total | <br>178<br>169<br>347 | <br>169.64<br>178.59 | −1.301 | .193 | −0.070 |
| Financing repayment | Type of financing sources<br>BMT<br>BPRS<br>Total | <br>178<br>169<br>347 | <br>187.75<br>159.52 | −3.358 | .001 | −0.180 |

72,000,000), at a significance level of $p = 0.000$. In this case, the respondents from both institutions showed a similar level of improvement, although the BPRS respondents performed slightly better (IDR 25,800,000) than the BMT respondents (IDR 24,000,000).

The descriptive analysis (unreported) revealed that a large majority of the respondents reported 'no impact' on monthly business expenditure. The ranking of the 'no effect' responses are as follows: rent (91.9%), wages (83.9%), transport (74.9%), loan repayment (72.6%), utilities (67.1%), tools/minor equipment (66.7%), stock (37.2%). The ranking of 'positive impacts' is as follows: stock (60.6%), tools/minor equipment (33%), utilities (32.3%), and loan repayment (25.7%).

Based on the critical confidence level of $p = 0.05$, the findings suggest statistically significant differences among

**Table 7.** Wilcoxon signed rank test: Impact on annual household expenditure.

| Variable | | N | Median Rank | Z | Asymp. Sig. (*p*) | Effect size |
|---|---|---|---|---|---|---|
| Total respondents | Before financing | 347 | 12,000,000 | | | |
| | After financing | 348 | 16,800,000 | −9.520 | .000 | −0.511 |
| | Increase | | 4,800,000 | | | |
| BMT respondents | Before financing | 178 | 12,000,000 | | | |
| | After financing | 179 | 14,400,000 | −6.197 | .000 | −0.464 |
| | Increase | | 2,200,000 | | | |
| BPRS respondents | Before financing | 169 | 12,000,000 | | | |
| | After financing | 169 | 18,000,000 | −7.308 | .000 | −0.562 |
| | Increase | | 6,000,000 | | | |

subgroups of the two types of financing institutions and the following monthly business expenses: stock ($p = 0.000$), utilities ($p = 0.008$), transport, and financing repayment ($p = 0.001$). However, there were no significant differences among subgroups of the two types of financing institution in terms of the variables of tools/minor equipment, rent, and wages. The subgroups with higher mean ranks indicate least impact on business expenditure. Overall, the subgroup reported to have least effect were BPRS respondents, except in financing repayment.

### *Impact on household expenditure*

The impact on household expenditures was similarly analyzed based on two tests:

1. The Wilcoxon Signed Rank Test was used to investigate whether there is a change in the value of annual household expenditure following financing (Table 7).
2. The Mann-Whitney U-test was employed to explore statistically significant differences between subgroups in

**Table 8.** Mann-Whitney U-test: Impact on monthly household expenditure after financing.

| Variable | Subgroup | N | Mean Rank | Z | Asymp. Sig. (*p*) | Effect size |
|---|---|---|---|---|---|---|
| Food | Type of financing sources | | | | | |
| | BMT | 177 | 171.23 | −.527 | .598 | −0.028 |
| | BPRS | 169 | 175.88 | | | |
| | Total | 346 | | | | |
| Health/ Medical | Type of financing sources | | | | | |
| | BMT | 178 | 169.30 | −1.375 | .169 | −0.074 |
| | BPRS | 169 | 178.95 | | | |
| | Total | 347 | | | | |
| Education | Type of financing sources | | | | | |
| | BMT | 177 | 169.67 | −.796 | .426 | −0.043 |
| | BPRS | 168 | 176.51 | | | |
| | Total | 345 | | | | |
| Clothing | Type of financing sources | | | | | |
| | BMT | 178 | 169.58 | −1.152 | .249 | −0.062 |
| | BPRS | 169 | 178.66 | | | |
| | Total | 347 | | | | |
| Transport | Type of financing sources | | | | | |
| | BMT | 178 | 166.51 | −2.007 | .045 | −0.108 |
| | BPRS | 169 | 181.89 | | | |
| | Total | 347 | | | | |
| Household utensils | Type of financing sources | | | | | |
| | BMT | 179 | 168.78 | −1.375 | .169 | −0.074 |
| | BPRS | 169 | 180.56 | | | |
| | Total | 348 | | | | |
| Furniture/ electronics purchases (per year) | Type of financing sources | | | | | |
| | BMT | 178 | 164.22 | −2.527 | .011 | −0.136 |
| | BPRS | 169 | 184.30 | | | |
| | Total | 347 | | | | |

type of micro-financing sources and impact on monthly household expenditure after financing (Table 8).

The results of the Wilcoxon Signed Rank Test show annual household expenditure of total respondents was significantly higher after financing (median = IDR 16,800,000) than annual household expenditure before financing (median = IDR 12,000,000), at a significance level of $p = 0.000$, which is lower than the confidence level of $p = 0.05$. Similarly, the annual household expenditure of BMT respondents was significantly higher after financing (median = IDR 14,400,000) than annual household expenditure before financing (median = IDR 12,000,000), at a significance level of $p = 0.000$. The annual household expenditure of BPRS respondents was also significantly higher after financing (median = IDR 18,000,000) than annual household expenditure before financing (median = IDR 12,000,000), at a significance level of $p = 0.000$. By comparison, the improvement shown by the BPRS respondents (IDR 6,000,000) was more than double that of the BMT respondents (IDR 2,200,000).

The descriptive analysis (unreported) shows that the majority of the respondents reported 'no effect' on monthly household expenditures, according to the following ranking: health (83%), transport (78.7%), clothing (76.9%), furniture (76.4%), household utensils (70.4%), education (69.9%), and food (67.3%). However, several respondents reported a positive impact on household expenditure, the ranking being as follows: food (29.7%), household utensils (29.3%), education (28.7%), furniture (23.4%), clothing (22.2%), transport (20.7%), and health (16.5%).

Table 8 shows the statistically significant difference among subgroups of type of financing institution in transport expenditures ($p = 0.045$) and furniture/electrical purchase per year ($p = 0.011$). No statistically significant differences were found in household expenditures of food ($p = 0.598$), health/medical ($p = 0.169$), education ($p = 0.426$), clothing ($p = 0.249$), and household utensils ($p = 0.169$). The higher mean ranks indicate the least effect; in general, BPRS respondents had the least effect.

**Table 9.** Mann-Whitney U-test: Impact on assets after financing.

| Variable | Subgroup | N | Mean Rank | Z | Asymp. Sig. (*p*) | Effect size |
|---|---|---|---|---|---|---|
| Land/ agriculture | Type of financing sources | | | | | |
| | BMT | 177 | 167.54 | −1.843 | .065 | −0.099 |
| | BPRS | 169 | 179.74 | | | |
| | Total | 346 | | | | |
| Building | Type of financing sources | | | | | |
| | BMT | 176 | 163.15 | −2.493 | .013 | −0.134 |
| | BPRS | 169 | 183.25 | | | |
| | Total | 345 | | | | |
| Private cars/ Motorcycles | Type of financing sources | | | | | |
| | BMT | 178 | 157.91 | −3.904 | .000 | −0.210 |
| | BPRS | 169 | 190.95 | | | |
| | Total | 347 | | | | |
| Cattle | Type of financing sources | | | | | |
| | BMT | 178 | 167.22 | −2.542 | .011 | −0.137 |
| | BPRS | 168 | 180.15 | | | |
| | Total | 346 | | | | |
| Productive assets | Type of financing sources | | | | | |
| | BMT | 177 | 141.84 | −6.360 | .000 | −0.343 |
| | BPRS | 167 | 204.99 | | | |
| | Total | 344 | | | | |
| Electric goods | Type of financing sources | | | | | |
| | BMT | 177 | 159.26 | −3.281 | .001 | −0.177 |
| | BPRS | 168 | 187.48 | | | |
| | Total | 345 | | | | |
| Jewellery (gold) | Type of financing sources | | | | | |
| | BMT | 177 | 163.85 | −2.895 | .004 | −0.156 |
| | BPRS | 167 | 181.66 | | | |
| | Total | 344 | | | | |
| Savings | Type of financing sources | | | | | |
| | BMT | 177 | 176.63 | −.989 | .323 | −0.053 |
| | BPRS | 167 | 168.12 | | | |
| | Total | 344 | | | | |

### *Impact on assets*

Based on the findings of the descriptive analysis (unreported), a large majority of the respondents reported 'no effect' on impact on assets after financing, the rankings being as follows: cattle (91.9%), gold jewellery (87.5%), land/agricultural (85.3%), building (75.4%), private cars/motorcycle (71.8%), savings (69.8%), electronic goods (69.6%). However, a positive impact was also reported by respondents with the following rankings: productive assets (59.9%), electric goods (29.8%), savings (28.8%), private cars/motorcycles (27.1%), building (24.4%), land (13.8%), gold jeweller (11.7%), and cattle (7.8%). Based on the Mann-Whitney U-Test and a confidence level of p = 0.05, statistically significant differences were found in almost all variables: building (p = 0.013), 'private car/motorcycles (p = 0.000), cattle (p = 0.011), productive assets (p = 0.000), electronic goods (p = 0.001), jewellery (p = 0.004); but not for land and building' (p = 0.065) and savings (p = 0.323) (Table 9). Overall, the subgroups with higher mean ranks, which indicate least effect, were BPRS respondents.

### *Impact on economic activities*

As found in the descriptive analysis (not presented), the rank of activities with highest positive impacts reported by the respondents were volume of goods/services (72.7%), quality of goods/services (49.4%), diversification into new goods/services (37.1%), premises (21.6%), production technology (11.9%), and bookkeeping (9.5%). The purpose of the Mann-Whitney U-Test is to explore significant differences between subgroups of type of micro-financing source and the impact on particular aspects on economic activities. The findings show statistically significant differences in volume of goods/services (p = 0.007), quality of goods/services (p = 0.000), production technology (p = 0.023) and premises (p = 0.000) (Table 10). However, no significant differences were found in diversification into new goods/services (p = 0.319) and bookkeeping (p = 0.500). In this section, the higher mean ranks imply a higher impact, which are generally held by BPRS respondents (see Table 10).

### *Impact on employment*

To investigate further the impact on employment, the Wilcoxon Signed Rank Test was employed in order to establish whether there is a change in the number of male workers, female workers and total workers following financing (Table 11). The results of the Wilcoxon Signed Rank Test show that there were significantly more male workers after financing (mean = 1.66) than before financing (mean = 1.25), at the significance level of p = 0.000, which is lower than the confidence level of p = 0.05. The number of female workers was also higher after financing (mean = 1.37) than before financing (mean = 1.22), at a significance level of p = 0.000. In total, the number of workers after loan financing (mean = 3.03) was higher than before financing (mean = 2.46).

Further analysis of the comparison between BMT and BPRS shows that the improvement in total number of workers for

**Table 10.** Mann-Whitney U-test: Impact on economic activities after financing.

| Variable | Subgroup | N | Mean Rank | Z | Asymp. Sig. (*p*) | Effect size |
|---|---|---|---|---|---|---|
| Volume of goods/services sold | Type of financing sources | | | | | |
| | BMT | 179 | 160.98 | –2.698 | .007 | –0.145 |
| | BPRS | 169 | 188.82 | | | |
| | Total | 348 | | | | |
| Quality of goods/services | Type of financing sources | | | | | |
| | BMT | 179 | 147.58 | –5.576 | .000 | –0.299 |
| | BPRS | 169 | 203.02 | | | |
| | Total | 348 | | | | |
| Diversification into new goods/services | Type of financing sources | | | | | |
| | BMT | 177 | 168.98 | –.996 | .319 | –0.054 |
| | BPRS | 169 | 178.23 | | | |
| | Total | 346 | | | | |
| Production technology | Type of financing sources | | | | | |
| | BMT | 178 | 167.15 | –2.281 | .023 | –0.122 |
| | BPRS | 169 | 181.21 | | | |
| | Total | 347 | | | | |
| Bookkeeping | Type of financing sources | | | | | |
| | BMT | 178 | 171.66 | –.674 | .500 | –0.036 |
| | BPRS | 168 | 175.45 | | | |
| | Total | 346 | | | | |
| Premises | Type of financing sources | | | | | |
| | BMT | 179 | 159.88 | –3.886 | .000 | –0.208 |
| | BPRS | 169 | 189.99 | | | |
| | Total | 348 | | | | |

**Table 11.** Wilcoxon signed rank test: Impact on number of workers.

| Variable | | | N | Mean Rank[a] | Z | Asymp. Sig. ($p$) | Effect size |
|---|---|---|---|---|---|---|---|
| Total respondents | Male workers | Before financing | 348 | 1.25 | | | |
| | | After financing | 348 | 1.66 | –5.568 | .000 | –0.016 |
| | | Increase | | 0.41 | | | |
| | Female workers | Before financing | 348 | 1.22 | | | |
| | | After financing | 348 | 1.37 | –4.666 | .000 | –0.013 |
| | | Increase | | 0.15 | | | |
| | Total workers | Before financing | 348 | 2.46 | | | |
| | | After financing | 348 | 3.03 | –6.258 | .000 | –0.018 |
| | | Increase | | 0.57 | | | |
| BMT respondents | Male workers | Before financing | 179 | 1.00 | | | |
| | | After financing | 179 | 1.36 | –4.457 | .000 | –0.025 |
| | | Increase | | 0.36 | | | |
| | Female workers | Before financing | 179 | 1.09 | | | |
| | | After financing | 179 | 1.28 | –4.146 | .000 | –0.023 |
| | | Increase | | 0.19 | | | |
| | Total workers | Before financing | 179 | 2.09 | | | |
| | | After financing | 179 | 2.64 | –5.599 | .000 | –0.031 |
| | | Increase | | 0.55 | | | |
| BPRS respondents | Male workers | Before financing | 169 | 1.51 | | | |
| | | After financing | 169 | 1.98 | –3.476 | .001 | –0.021 |
| | | Increase | | 0.47 | | | |
| | Female workers | Before financing | 169 | 1.34 | | | |
| | | After financing | 169 | 1.46 | –2.478 | .013 | –0.015 |
| | | Increase | | 0.12 | | | |
| | Total workers | Before financing | 169 | 2.85 | | | |
| | | After financing | 169 | 3.44 | –3.365 | .001 | –0.020 |
| | | Increase | | 0.59 | | | |

[a]Mean rank used instead of median rank in order to show the improvement in more detail.

the BPRS customer was slightly higher (mean = 0.59) than for BMT respondents (mean = 0.55). However, the BMT respondents seem to have had more improvement in terms of the number of female workers (mean = 0.019) compared with BPRS respondents (mean = 0.012).

### *The role of BMT and BPRS in poverty alleviation*

The role in poverty alleviation is measured based on the Head Count Index, which measures the number of respondents living below the international and national poverty line, divided by the total respondents of each institution. The international poverty line was US$ 2/person/day, for which the average exchange rate data from Bank Indonesia for mid-August to mid-November was US$ 1 = IDR 8.794; therefore, US$ 2/person/day was equivalent to IDR 17,589/day/person, or IDR 527,660/month/person. In March 2012, Statistics Indonesia set up East Java's poverty line at IDR 245,035/person/month (Biro Pusat Statistik 2012b). Based on these two standards, a comparative analysis before and after financing for each type of institution was conducted, as presented in Table 12 and Table 13. As the national poverty line is set up based on individual household expenditure, the computed process is conducted by multiplying for each respondent the total number of family members at the poverty line as baseline judgment, whether the respondent is living below or above the poverty line.

As can be seen in Tables 12 and 13, the number of poor respondents of both BMT and BPRS decreased after financing, but by differing percentages. Before financing, the percentage of BMT respondents living under the international poverty line was 85.4%, this reducing by only 1% to 84.4% after financing. Under the Statistics Indonesia poverty line, 44.4% of the respondents were living under the poverty line before financing, this reducing to 36.3% after financing (8% reduction). It should be noted that the minimum household expenditure improved after financing compared with before financing.

Table 13 shows that the percentage of BPRS respondents under the international poverty line was 82.2% before financing, and reduced to 72.2% after financing; this 10% reduction was greater than that for the BMT respondents. In addition, based on the Indonesian' poverty line, there was 35.5% of respondents under the poverty line before financing, which reduced to 23.1% after financing (12.4% reduction).

## 6. Discussion

### *Impact on sales*

With regards to the impact on sales, the findings show a significant improvement of annual sales (almost 50% higher) following financing (Table 3). This indicates a positive role of BMT and BPRS financing in improving sales.

**Table 12.** Number of BMT respondents with household expenditure under the poverty line.

| | | Frequency | Percent | Mean | Standard Deviation |
|---|---|---|---|---|---|
| International Poverty Line of US$ 2/day = IDR 17,589/day/person (IDR 527,660/month/person) | | | | | |
| Monthly Household Expenditure (before loan) | Below poverty line | 152 | 85.4 | | |
| | Above poverty line | 28 | 14.6 | | |
| | Total | 178 | 100 | –872,832.24 | 1,071,870.56 |
| | Minimum | –4,148,940 | | | |
| | Maximum | 3,361,700 | | | |
| Monthly Household Expenditure (after loan) | Below poverty line | 151 | 84.4 | | |
| | Above poverty line | 28 | 15.6 | | |
| | Total | 179 | 100 | –748,741.78 | 1,075,823 |
| | Minimum | –3,848,940 | | | |
| | Maximum | 3,361,700 | | | |
| Indonesia National (East Java) Poverty Line of IDR 245,035 /month/person | | | | | |
| Monthly Household Expenditure (before financing) | Below poverty line | 79 | 44.4 | | |
| | Above poverty line | 99 | 55.6 | | |
| | Total | 178 | 100 | 284,660.02 | 900,133.36 |
| | Minimum | –1,605,315 | | | |
| | Maximum | 4,774,852 | | | |
| Monthly Household Expenditure (after financing) | Below poverty line | 65 | 36.3 | | |
| | Above poverty line | 114 | 63.7 | | |
| | Total | 179 | | 408,599.69 | 906,311.51 |
| | Minimum | –1,305,315 | | | |
| | Maximum | 4,774,825 | | | |

**Table 13.** Number of BPRS respondents with household expenditure under the poverty line.

| | | Frequency | Percent | Mean | Standard Deviation |
|---|---|---|---|---|---|
| International Poverty Line of USD 2/day = IDR 17,589/day/person (IDR 527,660/month/person) | | | | | |
| Monthly Household Expenditure (before loan) | Below poverty line | 139 | 82.2 | | |
| | Above poverty line | 30 | 17.8 | | |
| | Total | 169 | | –706,024.61 | 1,359,468.12 |
| | Minimum | –3,248,940 | | | |
| | Maximum | 8,417,020 | | | |
| Monthly Household Expenditure (after loan) | Below poverty line | 122 | 72.2 | | |
| | Above poverty line | 47 | 27.8 | | |
| | Total | 169 | 100 | –308,598.57 | 1,447,689.64 |
| | Minimum | –2,565,960 | | | |
| | Maximum | 8,417,020 | | | |
| Indonesia National Poverty Line of IDR 245,035 /month/person | | | | | |
| Monthly Household Expenditure (before financing) | Below poverty line | 60 | 35.5 | | |
| | Above poverty line | 109 | 64.5 | | |
| | Total | 169 | | 424,475.38 | 1,240,046.73 |
| | Minimum | –1,170,210 | | | |
| | Maximum | 9,264,895 | | | |
| Monthly Household Expenditure (after financing) | Below poverty line | 39 | 23.1 | | |
| | Above poverty line | 130 | 76.9 | | |
| | Total | 169 | | 821,901.42 | 1,423,075.77 |
| | Minimum | –870,210 | | | |
| | Maximum | 9,264,895 | | | |

Compared to the BPRS respondents, the BMT respondents had a 50% improvement in sales performance. On this basis, it is likely that the BMT respondents will be able to manage the fund more productively. This sales improvement is high compared with findings from earlier research of BMT in six cities in Java (Tangerang, Depok, Jakarta Selatan, Jakarta Barat, Jakarta Timur, Wonosobo and Yogyakarta), for which the average sales improvement was reported to be IDR 1,417,769; this was a 21.36% increase after the customers built a partnership with BMT (Amalia 2008). However, compared to a study by Widyaningrum (2000) which found improvement on sales of around 60%, the finding here could be considered low, and this could be due to the larger number of respondents from a larger numbers of institutions applied in this study.

### *Impact on net income*

As for the impact on net income, the results show that the annual net income of total respondents was significantly higher after financing (50%) than the annual net income before financing (Table 4). The improvement in annual net income for BPRS respondents was around three times higher than for the BMT respondents. This could indicate that BPRS respondents with more mature and larger businesses could operate these more efficiently compared with the BMT respondents. A further regression analysis would identify the specific variables that particularly affect the capability to attain higher net income.

In comparison to previous findings, research comparing the income before and after financing shows an improvement in average monthly income of IDR 472,328 (19.58%) (Amalia 2008). Further, a study by Ajija and Adnan (2011) shows that BMT MMU East Java make a positive contribution, having a significant impact in improving household income by around 50% following financing, from IDR 1,097,700 before financing to IDR 1,669,100 after financing. This finding is similar to that from previous research on BMT MMU, and much higher than for Islamic Micro-finance Institutions (IsMFIs) in other provinces in Java. A study on three BMT under Yayasan Peramu Bogor, West Java, Indonesia found that around 70% of the respondents reported a net improvement in income after financing; however, a decline in net income occurring for businesses of 27–60% of the respondents (measured separately for businesses of different ages) has also been presented (Widyaningrum 2002). These findings provide evidence that BMT and BPRS are likely to have positive role in real income improvement.

The results from this study support previous findings. Amongst other studies, an analysis using a different approach based on a model of path analysis with three variables presented by Beik and Purnamasari (2011) suggests that the daily income level after financing is positively affected (81%) by daily business profit, monthly consumption and proposed financing application. In addition, Rahman (2010) revealed that the average improvement of customers' income reached 33% after joining RDS IBBL, particularly for clients who run small businesses, as compared to other types of business. Using binary logistic regression analysis as a means of determining which variables have an effect on economic impact, Naipom (2013) found that the strong predictors of economic impact in Thailand are gender, occupation and age: those who are male, a government officer, and an older respondent are likely to benefit from Islamic micro-financing.

### *Impact on business expenditure*

With regards to impact on business expenditure, the annual business expenditure was significantly higher after financing than before financing, which might indicate that the funds have been used productively (Table 5). BMT and BPRS respondents were found to have a similar level of improvement in performance, although BPRS respondents' business expenditures were slightly higher than those of BMT respondents. This might due to the different size of businesses among the respondents; BPRS respondents generally have larger business expenses and greater business costs.

Although a large majority of the respondents reported 'no impact' on specific monthly expenditures (descriptive analysis, unreported), the findings also suggest statistically significant differences among groups of financing institutions type and the following monthly business expenses: stock, utilities, transport, and financing repayment (Table 6). These expenses are the ones most likely to be related to business and directly attached to daily expenses. Generally, the BPRS respondents reported them to have least impact, except for financing repayment. In other words, the BMT respondents are likely to benefit more from the financing and to have more respect in response to an improvement.

However, there are no significant differences among groups of type of financing institution for the variables of tools and minor equipment, rent, and wages (Table 6). This indicates that BMT and BPRS respondents do not differ in terms of spending the funds on these businesses expenditures. A possible reason is that both BMT and BPRS respondents are likely to operate a business in the same premises after financing; hence, there is no additional cost for rent. Wages, in particular, also remain the same for the respondents of both institutions. This is in contrast with the finding on improvement of 'number of workers', which shows a positive impact. This would imply that improvement in number of workers has no effect on wages, which is not to be expected.

Comparing these findings, it should be noted that there is a different finding according to the test applied. This raises a question: why, in terms of quantitative perception (value of money), is the business expenditure of BPRS respondents higher while, in contrast, in the qualitative range of perception on expenditure, BPRS is lower? A possible reason might be the high expectation of BPRS respondents; although their expenditures may be higher, it seems that they are insufficiently high to be considered a positive impact.

### *Impact on household expenditure*

The research findings indicate that the annual household expenditure of total respondents was significantly higher after financing than before (Table 7), and the improvement reported by BPRS respondents was twice that of the BMT respondents. This might indicate that the BPRS respondents achieve a greater improvement in terms of household and personal life. However, it could also imply that the BMT respondents are more efficient in managing the fund and consume less than the BPRS respondents.

A further test identified statistically significant differences among groups of type of financing institution in transport expenditures, and furniture and electrical purchase per year (Table 8). No statistically significant differences are found in household expenditures on: food, health and medical, education, clothing, and household utensils. Overall, the BPRS respondents are more affected than the BMT respondents, which might indicate that they spend more money on transport expenditures; it could imply that they buy better modes of transport, probably a new motorcycle or a new car, and expend more on furniture/ electrical goods.

Again, the same question arises of why in terms of value the BPRS respondents reported a higher impact, but the perception they report is lower. A possible explanation for this may arise from a different way of thinking for the respondents of these two types of Islamic financial institutions: the BPRS respondents are likely to come from a higher economic level than the BMT respondents, and so may have a higher level of expectation which will affect the way they respond to the qualitative perception question.

With respect to previous research, the results of this study are similar to the findings from a survey in RDS IBBL, which show that household expenditures increase, within which food expenditure shows the largest improvement, followed by house repair and maintenance, and expenditure on medication (51%) (Rahman and Ahmad 2010).

### *Impact on assets*

With regard to the impact on assets, the findings suggest a large majority of the respondents reported 'no effect' on assets (descriptive analysis, unreported). However, significant differences are found in almost all variables in assets and types of financing institutions, including building, private car/motorcycles, cattle, productive assets, electronic goods, jewellery; but not for land/building and savings (see MWU Test, Table 9). Overall, the group for which there was the least improvement in assets is the BPRS respondents. This might imply that BPRS respondents have higher level of expectation with respect to improvement in their assets, possibly due to their higher level of economic status. The significance attached to the variables listed may be due to the character of these assets, which have less value than land/building. Saving is also not significant, probably because savings are more easily measured since they have an obvious value base, and so any improvement can readily be recognised.

A significant increase in assets was also found in previous research; almost 80% of the respondents of three BMT in West Java, Indonesia were found to have improvement in assets after financing (Widyaningrum 2002). A study by Ahmed (2002) also found that the respondents of an IsMFI in Bangladesh attained a 68% improvement in assets, while the other two IsMFIs had a 15% and a 24% improvement (Ahmed 2002). Further, the premises showed an improvement that was greater than the assets; for the respondents of one IsMFI premises improved by 88%, while the premises improved for the other two IsMFI by 17% and 28% (Ahmed 2002). In addition, another survey in Bangladesh (2010) indicates that all types of assets, for instance, house, land, furniture, radio, television, cycle and cart, increased following joining RDS IBBL (Rahman and Ahmad 2010).

### *Impact on economic activities*

The greatest impacts on economic activities were found to be improvements in volume of goods/services (by 75% of the respondents), quality of goods/services (by half of the respondents), and diversification into new goods/services; production technology and bookkeeping, however, seemed unaffected (descriptive analysis, unreported). The observed high impact could be considered as a positive indicator that the funds are used directly for business development in terms of volume, quality and new products. Improvement on volume of goods/services transpires to be the activity experiencing the highest impact, and this could be due to a simple and direct approach in using the funds.

This finding supports previous findings, as the improvement in volume of goods/services was also revealed in Bangladesh, the respondents of an IsMFI achieving more than a 50% improvement in volume of goods/services after receiving funds, while two other IsMFIs improved by around 10% (Ahmed 2002). In particular, diversification into new goods/ services seems to be less affected (37%) than the improvement in volume and quality of goods/services, this also being similar to the findings from previous research (Ahmed 2002).

It should be noted that although technology and bookkeeping are likely to be disregarded in this study, the majority of the respondents (60%) are in retail businesses (descriptive analysis, unreported), for which there is likely to be less of a requirement for improvement in technology. Unfortunately, a lack of awareness about maintaining proper bookkeeping seems widespread, and is a common trend among MEs. Hence, it is suggested that the BMT and BPRS should provide more training on how to maintain proper bookkeeping; such training could be conducted in cooperation with universities under the higher education community service (development) programmes.

The findings also show that for the BPRS respondents there is a significantly higher impact on volume of goods/ services, quality of goods/services, production technology, and premises than for the BMT respondents (Table 10). The possible reasons for this finding are that the BPRS respondents have used the funds more productively, and that the funds received are likely to be almost double those received by the BMT respondents (descriptive analysis, unreported).

However, no significant differences are found in diversification into new goods/ services and bookkeeping. This might imply that diversification is not likely to be a priority for either the BMT or BPRS respondents, as they are focusing more on the improvement of volume and quality of the existing products. In terms of bookkeeping, again, a lack of awareness of the importance of proper bookkeeping occurs for both BMT and BPRS respondents.

Overall, it should be noted that the perception of economic activities is higher among the BPRS respondents, which might indicate that this group benefited more from the micro-financing in improving their businesses due to the higher funding received, and they may also have a greater ability to manage business more efficiently.

### *Impact on employment*

The findings generally show that the total number of both male workers and female workers is significantly higher following financing, which might indicate a real positive impact on employment (Table 11). Overall, the improvement in total numbers of workers as reported by the BPRS respondents was slightly higher than for the BMT respondents. This might indicate that BPRS respondents have opened more job opportunities for new workers than did the BMT respondents; the possible reasons for this may include the larger scope and size of the BPRS respondents' businesses compared with those of the BMT respondents', and the larger amount of financing received (descriptive analysis, unreported). However, the BMT respondents reported a greater improvement in number of female workers than the BPRS respondents, which might indicate that BMT focus more on the empowerment of women.

Similarly, the positive impact on employment has also been pointed out by Ahmed (2002), who showed that the time spent engaged in business (by both respondents and other family members) increased significantly following funding by IsMFI. In addition, Rahman (2010) points out that, after joining RDS IBBL, the average number of family members involved in the business improved from 1.96 to 2.1.

With regard to the impact on poverty alleviation, the data analysis reveals a reduction in the number of respondents living under the poverty line. However, when based on the international poverty line, the percentage reduction is less than when the national poverty line is applied; the international poverty line is almost double the national poverty line. Hence, although the micro-financing contributes to an improvement in household expenditure, this improvement did not extend above the international poverty line. Overall, BPRS seemed to have a better performance in terms of reducing the number of respondents who lived below the poverty line.

### *Comparative impact analysis for BMT and BPRS*

Table 14 shows a comparative analysis of the economic impact and poverty alleviation of BMT and BPRS. It should be noted that the findings for each impact differ. For improving sales and assets BMT performed better,

**Table 14.** Comparative impact analysis for BMT and BPRS.

| No | Subject interest | BMT | BPRS | Remark |
|---|---|---|---|---|
| 1 | Sales | Before: IDR 72 million<br>After: IDR 108 million | Before: IDR 108 million<br>After: IDR 132 million | BMT respondents improvement 50% higher than BPRS |
| 2 | Business expenditures | Before: IDR 48 million<br>After: IDR 72 million<br>BMT respondents are likely to report higher impact on monthly business expenditures | Before: IDR 72 million<br>After: IDR 97 million<br>BPRS respondents reported lower impact on monthly household expenditures | BPRS respondents have slightly higher improvement than BMT<br>Majority reported 'no effect' on monthly business expenditures; however, there is small positive effect and the BMT respondents have higher impact than BPRS |
| 3 | Net income | Before: IDR 14.7 million<br>After: IDR 18 million | Before: IDR 24 million<br>After: IDR 36 million | Net income of BPRS respondents is three times higher that of BMT respondents |
| 4 | Household expenditure | Before: IDR 12 million<br>After: IDR 14.4 million<br><br>BMT respondents are less affected | Before: IDR 12 million<br>After: IDR 18 million<br><br>BPRS respondents are more affected | Household expenditures of BPRS respondents improvement more than double that of BMT respondents<br>Significant differences are only on transport expenditures and furniture and electrical purchase |
| 5 | Assets | BMT respondents reported higher impact on all variables of assets | BPRS respondents reported lower impact on assets | A large majority reported 'no effect' on assets; however, there is a small positive impact, in which the BMT respondents reported higher impact |
| 6 | Economic Activities | BMT respondents reported lower impact on economic activities | BPRS respondents reported higher impact on economic activities | The highest impact on economic activities related to goods/services sold, including improvement of volume, quality and diversification. In general, BPRS respondents reported higher impact on economic activities |
| 7 | Employment | Number of employees:<br>Before: 2.09<br>After: 2.64 | Number of employees:<br>Before: 2.85<br>After: 3.44 | The total number of workers improved significantly; BPRS respondents reported slightly higher impact on employment |
| 8 | Poverty alleviation | Reduction in poverty after financing based on poverty lines:<br>International: 1%<br>Indonesian: 8% | Reduced poverty after financing based on poverty lines:<br>International: 10%<br>Indonesian: 35.5% | BPRS seems to have better achievement in poverty reduction |

Note: Values shown are annual amounts.

whereas BPRS did so for developing impacts on business expenditures, net income, household expenditures, economic activities, employment and poverty reduction. Overall it can be concluded that BPRS performed better than BMT in economic development and poverty alleviation; this might be due to the larger organisational size, wider scope of operation, bigger assets, more effective management and more supportive regulation of BPRS.

## 7. Conclusions and Recommendations

The main findings show the both BMT and BPRS in East Java Indonesia play a positive role in economic development for all variables of the economic impacts, and for none is there a negative impact. In particular, the Wilcoxon Signed Rank Test suggests a positive result, the improvement after financing occurring in the annual value of sales, net income, businesses expenditures, households' expenditures, and employment. Although the results varied case by case, generally the BPRS respondents were likely to report a higher impact after financing. Despite the positive result on the above tests, the perception of the impact was dominated by a 'no effect' response, although there were significant numbers of positives impact reported. The findings also suggest a positive role in poverty alleviation since BMT and BPRS could decrease the number of poor respondents living under the international and national poverty line. Overall, it should be noted that BPRS has a better performance in developing MEs compared to BMT, which might indicate that BMT needs to improve their services and to manage their operations more efficiently.

In conclusion, BMT and BPRS have the potential to develop enterprises, particularly micro- and small enterprises. However, the following recommendations are proposed:

- Services to respondents, both financial and social, should be improved as this will further increase the development of respondents' businesses; this might include technical, book keeping and management training.
- Promotion of financing products should be to a wider community; providing education to customers through delivering religious speeches during routine groups meetings (monthly).
- Further training of customers will improve understanding of the Islamic terms used in financing products.
- Greater innovation in financial product development is desirable in order to meet the particular needs of clients.

It is expected that if such a proactive strategy is adopted, a more positive impact can be achieved.

## References

Adnan Muhammad Akhyar et al. "Study of Factors Influencing Performance of The Best Baitul Maal Wat Tamwils (BMT) in Indonesia." IQTISAD Journal of Islamic Economics, 4(1), 2003. 13–35.

Ahmed Habib. "Financing Microenterprises: An Analytical Study of Islamic Micro-Finance Institutions." Islamic Economic Studies, 9(2), 2002. 27–64.

Ajija Sochrul Rohmatul, Adnan Muhammad Akhyar. "The Effectiveness of BAitul Maal wat Tamwil in Reducing Poverty: The Case of Indonesian Islamic Micro-finance Institution." Paper presented at 2nd International Conference on Inclusive Islamic Financial Sector Development: Enhancing Islamic Financial Services for Microenterprises. 2011.

Amalia Euis. "Potensi dan Persoalan LKMS/BMT Bagi Penguatas UKM dalam Kerangka Keadilan Distributif Ekonomi Islam." (Studi LKMS/BMT di 6 Kota Pulau Jawa). Paper presented at IAEI Conference, Surabaya. 2008.

Antonio, Muhammad Shafii. "Islamic Banking in Indonesia, A Study of Riba and the Development of the Islamic Banking Industry and its role in the Advancement of Small and Micro Financing." The University of Melbourne, Melbourne, Australia. 2004.

Ascarya Sanrego, Yulizar D. "Redefine Micro, Small, And Medium Enterprises Classification And The Potency Of Baitul Maal Wa Tamwiel As Intermediary Insitutions In Indonesia." Paper presented at the First International Conference on Inclusive Islamic Financial Sector Development, Brunei Darussalam. 2007.

Ascarya et al. "The Profile and Role of Baitul Maal wa Tamwiel as an Alternative Source of Financing for MSMEs." Jakarta: Center for Central Banking Education and Studies. 2007.

Asian Development Bank. Asian Development Bank and Indonesia: Fact Sheet. Manila: Asian Development Bank. 2012.

Banking Act No 10/1998. 1998.

Beik Irfan Syauqi, Purnamasari Indah. "Empirical Role of Islamic Cooperatives in Financing Micro and Small Scale Enterpreneurs in Indonesia: Case Study of KOSPON Jasa Syariah Pekalongan." Paper presented at the Islamic Finance Conference, Qatar. 2011.

Biro Pusat Statistik. Laporan Bulanan Data Sosial Ekonomi October 2012. Jakarta: Statistics Indonesia. 2012a.

Biro Pusat Statistik. Statistical Yearbook of Indonesia 2012. Jakarta: Statistics Indonesia. 2012b.

Chokro Widiyanto Mislam, Ismail, Abdul Ghafar. "Sustainability of BMT Financing for Developing Micro-Enterprises." Munich Personal RePEc Archive. 2008.

Hamada Miki. (2010). "Commercialization of Micro-finance in Indonesia: The Shortage of Funds and The Linkage Program." The Developing Economics (IDE JETRO) Chiba Japan, 48 (1). 2010.

Khandker Shahidur R. et al. "Does Access to Finance Matter in Microenterprise Growth? Evidence from Bangladesh." Public Research Working Paper. 2013.

Naipom Tawat. "Assessing the Performance and Scope of Islamic Micro-finance in Thailand: Developments and Prospects." Durham University, Durham, UK. 2013.

Obaidullah Muhammed. "Role of Micro-finance in Poverty Alleviation." Jeddah: IRTI, Islamic Development Bank. 2008a.

Obaidullah Muhammed. "Introduction to Islamic Micro-finance." New Delhi: International Institute of Islamic Business and Finance. 2008b.

Rahman M Mizanur, Ahmad Fariduddin. "Impact of micro-finance of IBBL on the rural poor's livelihood in Bangladesh: an empirical study." International Journal of Islamic and Middle Eastern Finance and Management, 3(2), 2010. 168–190.

Sakai Minako. "Community Development through Islamic Micro-finance: Serving the Financial Needs of the Poor in Viable Way." In G. Fealy & S. White (Eds.), Expressing Islam: Religious Life and Politics in Indonesia. Singapore: ISEAS Publishing. (2008).

Sakai Minako. "Growing together in partnership: Women's views of the business practices of an Islamic Savings and Credit Cooperative (Baitul Maal wat Tamwil) in Central Java, Indonesia." Women Studies International Forum, 33, 2010. 412–421.

Sakai Minako, Marijan Kacung. "Harnessing Islamic Micro-finance." Paper presented at the Australian Indonesian Governance Research Partnership Research Policy Forum. 2008.

Sakti Ali. "Pemetaan Kondisi dan Potensi BMT: Kemitraan Dalam Rangka Memperluas Pasar dan Jangkauan Pelayanan Bank Syariah kepada Usaha Mikro." Unpublished paper. Bank Indonesia. 2011.

Seibel Hans Dieter. "Islam Micro-finance in Indonesia." University of Cologne, Development Research Center. 2005.

Takahashi Kazishi, Higashikata Takayugi, Tsukada Kazunari. "The Short-Term Poverty Impact Of Small-Scale, Collateral-Free Microcredit In Indonesia: A Matching Estimator Approach." The Developing Economics (IDE JETRO) Chiba Japan, 48(1), 2010. 128–155.

UNDP Human Development Report 2009. From http://hdr.undp.org/en/reports/global/hdr2009.

UNDP Human Development Report. "The Real Wealth of Nations, Pathway to Human Development." New York: United Nation Development Programme. 2010.

UNDP Human Development Report. "Sustainability and Equity: A Better Future for All." New York: United Nation Development Programme. 2011.

Widyaningrum Nurul. "Model Pembiayaan BMT dan Dampaknya Bagi Pengusaha Kecil, Studi Kasus BMT Dampingan Yayasan Peramu Bogor." Bandung: Yayasan Akatiga. 2002.

World Bank. World Development Report 2000/2001: "Attacking Poverty." New York: World Bank. 2001.

# A market-based financing model for Islamic housing microfinance market

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**Abstract** - For many years, microfinance (MF) was considered an appropriate tool to accomplish social and financial goals simultaneously. Over time, microfinance has become more commercialized, transforming into a financially efficient industry, allowing customers to have access to more sophisticated banking products (e.g. small housing loans). Despite interest from the commercial sector, the industry has yet to find a workable market-based solution to fund microfinance.

Microfinance in the member states of the Organization of Islamic Cooperation (OIC) faces two challenges:

1. Constraints in the area of risk and management capabilities as well as funding.
2. Limited access by consumers to financial services.

Growing populations and rising urbanization have impeded the access of low income groups to housing finance. Housing cost in relation to incomes and the lack of formal titles have forced people to live in informal settlements.

The objective of this paper is therefore to describe and assess the introduction of an innovative and practical market-based and Shariah-compliant mechanism aimed at housing microfinance with access to finance at lower cost. The market-based solution entails structuring sukuk through securitization of micro-portfolios. Due to the high risk of the underlying portfolio, conventional mechanisms of credit enhancements would fail. The paper proposes a unique way to overcome the credit enhancement problem through the use of Islam's redistributive instruments such as waqf, qard-al-hassan, etc. The result is a viable option to develop a market-based financing solution to address core problems of financial inclusion and the non-bankable segment of the society.

## 1. Introduction

Low income groups in OIC countries struggle to access financing at affordable cost to meet their housing needs.

Increasing urbanization and growing populations are important drivers of demand for housing in the Organization of Islamic Corporation (OIC) countries.[1] According to UN-Habitat, the estimated shortfall of housing, at present amounting to about 8.2M houses a year, is predicted to increase at an average rate of 2.83% annually. In particular, low income groups are exposed to this housing backlog because they are often forced to find shelter at the fringes of the cities, or in an informal settlement with suboptimal construction standards and no access to clean water. Besides weak and dysfunctional legal and regulatory conditions, a major challenge for countries is to provide and allocate sufficient financial resources, estimated at US$ 15.5 billion a year, to meet the costs of providing the majority of their citizens with decent housing conditions.[2]

Low income groups typically access financial services from relatives, friends or informal lenders (e.g. loan sharks), or a microfinance institution (MFI).[3] MFIs have benefitted from the concept among investors, policy makers and academics that granting loans at fair conditions is an acceptable approach to alleviate the financial constraints of the poor.[4] The industry has expanded over recent years, extending loans to more than 200M clients. Concurrently, the offer of Shariah-compliant microfinance products has also increased, albeit at a much slower rate.

Coupled with the expansion, over time the industry has become more commercialized, allowing customers to have access to a wider range of different products, especially small

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housing loans. However, the growth in access to finance has uncovered a number of weaknesses in the management of MFIs, leading to deterioration in their portfolio quality:

- In the wake of the fast expansion of microfinance, many MFIs have extended finance to riskier borrowers without having adequate risk management capacities. Another challenge for the industry has been product diversification beyond the traditional lending schemes to small entrepreneurs. Many MFIs have not adjusted their lending standards to incorporate different loan products.
- Microfinance was often introduced as a development tool in a largely non-competitive setting; however, with increasing commercialization and competition, the instruments used to overcome moral hazard and adverse selection have become less effective. This has weakened incentives to repay on the part of borrowers, increasing the probability of multiple borrowings and strategic default by borrowers.

As a result, the industry experienced its first setback in 2008: asset growth slowed markedly, profitability declined and portfolio risk rose. The microfinance crisis in Andhra Pradesh (India) was a prominent example of the industry's difficulties. The future development of the industry will therefore depend on the implementation of sound lending and risk management standards, as well offering products which put client needs back in focus. It also requires a culture of social responsibility among MFI owners, managers and staff. Another important aspect is the access to stable funding sources to allow a balanced expansion. The US subprime mortgage crisis of 2007 that revealed the risks of slicing and dicing of underlying portfolios brought the development of market-based funding solutions to a complete standstill. Markets are only slowly recovering. For example, securitization volumes in 2012 amounted to about EUR 200 billion, a fraction of the more than EUR 800 billion in 2008.[5] Before the financial crisis, leading investment houses began to take a serious look at the microfinance market with a view to entering into this market. Several efforts were made to provide financing from financial markets as the market appeared to offer viable investment opportunities. However, the complexities of the microfinance sector and the financial crisis halted the introduction of a market-based solution to financing this sector.

The objective of this paper is to describe and assess the introduction of a market-based and Shariah-compliant mechanism aimed at combining Islamic finance principles in (housing) microfinance with access to finance at lower cost. In OIC countries, low income groups often do not have access to formal financial services. It also appears that there is preference for Shariah-compliant products.[6] Housing microfinance (HMF) intersects housing finance and microfinance and incorporates elements of both.[7] As a result, HMF products combine on the one hand traditional microfinance elements (e.g. creditworthiness assessment methodologies); and on the other hand, they include features common in housing finance. Typically, HMF loans have longer tenors and loan amounts are larger.[8] HMF loans can be also included in securitization transactions of a microfinance portfolio.

A particular focus will be given to funding mechanisms to support the expansion of such products. Market-based solutions entail the structuring of sukuks through securitization of micro-portfolios. Due to the high risk of the underlying portfolio, conventional mechanisms of credit enhancements would fail. In addition, they are not aligned with Shariah-rules. Therefore, the paper proposes waqf and qard-al-hasan – two of Islam's redistributive instruments – to serve as credit enhancements, which facilitate the use of securitization as a funding vehicle for HMF portfolios.

## 2. Challenges of Islamic microfinance in OIC countries

The aggregate population of the 57 OIC countries amounts to about 1.6 billion. Nearly half the population (about 733M people) lives below the poverty line of US$ 2 per day.[9] As poverty is widespread, access to financial services is rather limited. According to estimates of CGAP, there are only 1.28M Islamic microfinance clients, representing about 0.1% of the total population of the OIC countries. Additionally, most of the clients are concentrated in three countries: Indonesia (181,508 clients), Sudan (426,694 clients) and Bangladesh (445,153 clients). The remaining number (226,645 clients) is distributed among 16 OIC countries. It seems that no Islamic microfinance products are offered in the other OIC countries.[10]

The number of those customers with a microfinance loan is even smaller. The total portfolio of Islamic microfinance loans amounts to US$ 628 m for 817,000 customers. This results in an average loan amount of US$ 768. The majority of loans are granted in form of murabaha and qard hassan loan contracts. The percentage of these loans, which are used for housing purposes, is not known. Anecdotal experience from conventional MFI lenders suggests that about that about 30 to 40% of MF loans (or a fraction of the amount borrowed) is used for housing purposes. For many microfinance clients, the home is often the place of production. Therefore, it is evident that customers also invest in the home to facilitate the production process.

Concurrently, the number of financial service providers which offer Islamic microfinance products is quite small. The number is estimated at 255, the majority of which are concentrated in East Asia and Pacific (64% of all providers), and the Middle East and North Africa, including Sudan (28%). The slow growth of Islamic microfinance is attributed to a number of reasons, including the fact that Islamic MF programs are provided by small institutions (NGOs, village or rural banks) with limited outreach, and also that there is limited access to funding at reasonable cost.[11]

As information on demand for microfinance products is incomplete and contradictory, it is difficult to provide estimates of the demand for these products (including demand for small housing loans or housing microfinance loans). As stated, increasing urbanization, growing populations and a relatively young population which is emerging are driving the demand for housing. For example, more than 60% of the population of roughly 300 million in the Arab world is under the age of 25. One of their biggest concerns is the access to affordable housing.[12]

In conclusion, it appears justified to assume that borrowers of Islamic MFIs use a certain percentage of their borrowings for housing purposes. HML product offerings are likely to be well absorbed by the market given the needs of low income groups to improve their housing situation.

## 3. Building the model

### *Securitization of (Housing) microfinance assets*

Microfinance finance institutions have successfully tapped capital markets to raise funding by issuing domestic or international bonds, or else through equity funds. In India, MFIs regularly raise funds by securitizing their loan portfolios.[13] In contrast, there is hardly any capital market activity by Islamic MFI providers. This absence is due to the small size of the industry, lack of awareness of MFI providers and lack of a conducive legal and economic environment. Another important factor is the absence of an institutional credit guarantee system in OIC countries which could provide credit enhancement to securitization transactions.[14]

Securitization involves the collection of homogeneous assets with a known stream of cash flows into a pool, or portfolios, which are independent from the creditworthiness of the financier. This pool or portfolio of assets is used to issue securities, which can be marketed to different classes of investors. The securities are structured in such a way that all payoffs in terms of risks and returns are "passed through" to the investors or the holders of the securities. As a result, this is similar to a direct ownership by the investor in the underlying assets; he or she shares the returns from the assets, and is exposed to all associated risks. The securities are traded on organized exchanges. This description of a conventional securitization is also applicable to securitization within an Islamic financial system.[15]

The main structural difference between the Islamic securitization process and that applying to conventional securitization is, however, the way in which returns and risks are shared with the investors: in the conventional system, the buyer and holder of the security is exposed to a number of risks which are passed on to him or her (including credit risk, market risk, interest rate risk,) but he or she enjoys some protection given by the underlying assets which "back" the security ("asset-backed security"). This structure does not transfer any rights or control or ownership over these assets to the investor. The function of the asset backing is a credit enhancement; in the case of a default, the assets will be seized and the proceeds from foreclosure will be used to repay the investors.

In contrast, the Islamic finance structure suggests the establishment of a link between the security payoffs and the underlying assets. This "asset-linked" structure leads to an ownership interest by the investor (i.e. Islamic bank) in the underlying asset. It also leads to uncertainties in the security's cash flows to the investor, which will depend on the performance of the underlying asset. The repayment of the principal will not necessarily be guaranteed. Additionally, the holder of the security establishes an ownership claim against underlying assets (whereas in a conventional securitization structure, the holder of a security establishes a claim against a pool of assets).[16]

Figure 1 depicts a simplified model of securitization as used in an ijarah-based sukuk. The core legal entity in the securitization is a special purpose mudarabah (SPM) or special purpose vehicle (SPV) which is bankruptcy remote and has Shariah-compliant assets on the asset side against liabilities of sukuk or marketable securities. Although fund mobilization, pooling of assets, setting-up of SPMs or SPVs, placement, and servicing are all structured in a similar way to conventional securitization, credit enhancement (which gives the certificates an investment grade rating) is complex to replicate. As a key notion of Islamic finance is risk-sharing and passing-through of assets' payoffs to investors, providing financial guarantee style credit enhancement is difficult. This is particularly critical in the case where the underlying assets are exposed to high risk as would be the case for microfinance portfolios.

Table 1 shows the main differences between the conventional and Shariah-compliant securitized assets. The comparison is with a conceptual view of Shariah-compliant securitization and may be different from the actual securitized product practised in the market. In a conventional asset backed or mortgage-backed security,

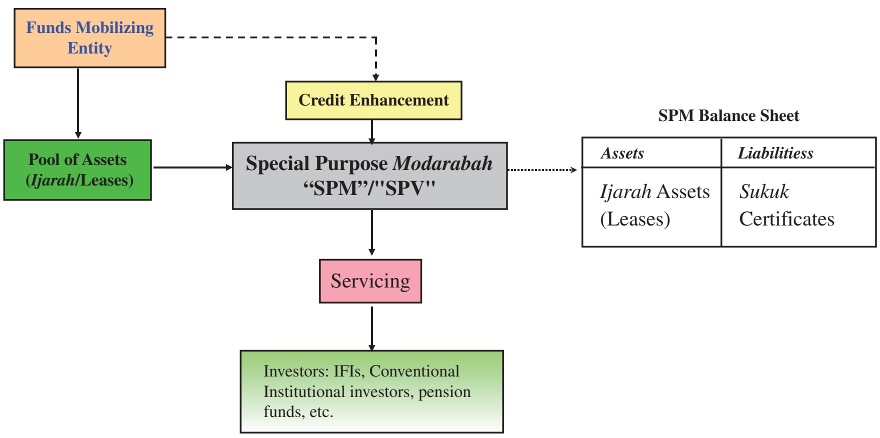


**Figure 1.** Anatomy of a Shariah-compliant securitization.
*Source*: Iqbal and Mirakhor (2011).

**Table 1.** Comparison between conventional and Islamic securitized securities.[17]

| | Conventional asset-backed security | Shariah-compliant, asset-linked security |
|---|---|---|
| Type of security | Fixed income (debt based) | Hybrid structure depending on contract and underlying asset |
| Intended risk allocation | Risk transfer | Risk sharing |
| Ownership | No ownership in underlying assets | Security owner has ownership interest in underlying asset |
| Linkage with asset value | No direct link to market value of underlying asset | Final or other payoffs may be linked to market value of underlying asset |
| Principal protection | Principal is protected irrespective of the value of underlying real estate | Principal is linked to market value of underlying asset |
| Pricing valriable | Based on expected yields, current interest rates, creditworthiness of asset owner and issuer or guarantor | Based on expected yields, current levels of return, market value of underlying asset, expected value of underlying asset at maturity |
| Recourse | No recourse of security holder in case of distress | Recourse to underlying asset in case of distress |
| Principal agent problem | May exist | Moral hazard should be minimized |

Source: Iqbal.[18]

the typical pricing model uses variables such as the probability of prepayment or refinancing, which depends on the expected interest rate levels in the future, the loan-to-debt ratio, the credit score of the borrower, and other considerations. Since the principal of the security is guaranteed through credit-enhancing mechanisms, the security is priced in the same way as a coupon-bearing debt security with an early prepayment option.

In the case of an Islamic security, however, the price will depend on variables determining the expected periodic cash flows in the future, but in addition it will have to take into consideration the expectation of future market values, or the residual values of the underlying assets. In the absence of any guarantee of the principal, the redemption value of the security will depend on the expected market value of the asset at the time of maturity of the security. Another factor which influences the pricing of an Islamic security is the underlying risk-sharing agreement. In an asset-linked security, the price of the security will also incorporate the riskiness of the underlying assets and the investor will be sharing the risk through fluctuations in the price of the security. Investors will be exposed to the risks associated with the portfolio of assets and will share the losses. This will put greater emphasis on the need for prudent selection of the underlying assets and close monitoring of the assets' performance, and should motivate securitization specialists to structure good-quality securities that offer valuable and secure investment opportunities.

Principal-agent problems are treated in a different way: in a conventional securitization, securitization can create considerable agency costs if agents (borrowers, originators, issuers, arrangers, investors, servicers, credit rating agencies, and third-party guarantors) are tempted to pursue their own economic interests. For example, uncertainty about the future value of the securitized assets could lead to moral hazard by originators if default risk is completely passed on to the investors. The advantage of the originator with regard to information about the quality of borrowers and the historical performance of individual asset exposures could also give rise to adverse selection when security selection favors the originator rather than the investor.

In a Shariah-compliant securitization, moral hazard should be minimized by the Shariah-compliant contract structures. For example, the musharakah arrangement with pre-determined profit-loss sharing ratios aims to regulate incentive structures.[19] Additionally, the Shariah requirements to maintain high moral values and ethics by the stakeholder would discourage practices such as "predatory lending" or "walking away."

Shariah-compliant securitization is not without its challenges. An Islamic lender that wishes to securitize its mortgage loan portfolio (we assume that the underlying contractual arrangements are Shariah-compliant) faces a number of challenges in structuring a Shariah-compliant security:

- Ownership and linkage with the assets. Typically, a conventional mortgage backed security (MBS) issue comprises many small mortgage loans which are collateralized against individual properties. These serve to back the security. It could be difficult to establish an equal distribution of ownership rights among investors. This question could become critical in the case of an increasing number of foreclosures. To ensure an equal distribution, the issuer may be required to establish an investor registry to establish a link between the underlying assets and the investors.
- Linkage with the asset value. As already mentioned above, the valuation of the security depends to a great extent on the quality of the underlying assets as expressed by the loan-to-value ratios (LTV), the terms of the loans, and other factors. As the market value of the underlying assets also has a considerable impact on the value of the security, there may be considerable fluctuations in the security value, depending on the location and quality of the properties. These could be a deterrent for investors.

- Pricing the sukuk (Islamic bond) – a Shariah-compliant MBS, however, must determine additional ratios which may add a great deal of insecurity to the fair price of the security. For example, the determination of the market value and the expected value of the underlying assets at maturity may lead to stark differences depending on the scenario selected for the valuation (rising house prices or declining house prices). It is likely that the issuer may overstate the expected value.
- Credit enhancement is a challenge. Direct guarantees of performance may face constraints as they impose restrictions on risk-sharing and may not be acceptable if such blanket guarantees are given by an entity that may not have a direct stake in the underlying pool of assets.
- Duration mismatches.[20] Depending on the structure of the security, any duration mismatches within the security may be passed directly onto the investor as the issue has to remove pre-paid parts from the underlying assets. Duration mismatches could be reduced in a pass-through structure.

### *Credit enhancements to securitize housing microfinance portfolios*

Credit enhancements bridge the gap between the stand-alone quality of the portfolio of assets transferred by the originator, and the target rating of the instrument based on the needs of various investors. Credit enhancement is comparable to equity in a business; it determines the extent of leverage in transactions, the layer of protection against expected and unexpected losses. There are three types of credit enhancements.[21] Not all of them are necessarily Shariah-compliant:

### 1. Originator provided.

The originator assumes part of the credit risk:

- *Excess spread or profit*. It represents the excess of the inherent rate of return in the securitized portfolio over the expenses of the transaction; senior servicing fees; and the rate of return offered to investors. Excess spread retention is considered the most common credit enhancement.
- *Cash collateral*. It refers to the special purpose vehicle (SPV) retaining a cash balance, which is subordinated to the interests of the investors. The cash reserve can be created either up front, by retention of a part of the funding of the transaction by the SPV, or by the originator making a subordinated loan to the SPV.
- *Over-collateralization*. It refers to the originator transferring a higher value of receivables, but being paid for a lesser value and leaving the balance as a security interest with the SPV.

### 2. Structural credit enhancements.

These arise from the structure of the liabilities, and refer to the redistribution of risks among the investors, so that one section of the investors provides credit enhancements to the other. The most common form is the stratification of securities into senior, mezzanine, and junior or subordinated securities. The senior securities are protected by the subordinated securities. They are considered the safest and, consequently, have to be content with a very low rate of return. The subordinated securities are those paid after settling the claims of the senior and the mezzanine security holders. Cash flows are organized in a waterfall structure. The definition of the individual tranches and their rights is contained in the waterfall clause of securitization contract. In terms of ratings, the stratification of liabilities is done to provide a triple A rating for the most senior class. Consequently, the other tranches receive a lower rating. The junior class, which is retained by the originator, is typically not rated.

### 3. Third party credit enhancements

Third parties assume specific risks of a securitization transaction. The most common form of third party credit enhancements are:

- *Pool insurance*. It provides cover for the assets in the pool. It is frequently used with the securitization of housing loans. Policies often cover the risk of foreclosure of the underlying housing loan. There are two forms of pool insurance: primary insurance covering a particular loans; and portfolio insurance covering a pool of housing loans.[22]
- *Letters of credit*. The originator arranges for a letter of credit from a third party, usually from an acceptable bank. It can be considered a more advanced form of credit guarantee where the insurer may cover such risks as interest rate variations.
- *Credit derivatives*. They are one of the most common forms of third party credit enhancement and involve the transfer of credit risk to a counterpart by way of a credit default swap transaction. Typically, derivatives are not in compliance with Islamic finance principles.

### *Enabling Securitization of Islamic Housing Microfinance Portfolios with Shariah-Compliant Credit Enhancement Instruments*

Conventional and Islamic MF have very similar features and objectives (see Table 2). They differ mainly in terms of the mode of financing (for example, risk sharing elements as well as prohibition of interest (riba) and certain transactions), and the emphasis on ethical and religious principles. Therefore, it appears feasible to arrange a securitization of MF portfolios using the same structures and methodologies as a conventional securitization.

However, the securitization agent may not use the same credit enhancements as many of them are not considered Shariah-compliant. Given the associated risks with the securitization of housing microfinance portfolios, a credit enhancement is necessary to attract lower risk premiums to be paid to investors, and to allow for the offering of products which are affordable to households. For a Shariah-compliant HMF securitization structure, two forms of credit enhancements can be used:

1. Qard Hassan (= beautiful loan)

Qard hassan (QH) is a loan granted to the needy and is mentioned in the Quran as “beautiful” (al-hassan). It is a voluntary loan devoid of any expectation on the creditor’s part of monetary return, but the loan is granted to please

**Table 2.** Comparison between Islamic and conventional microfinance.

| Items | Islamic Microfinance | Conventional Microfinance |
|---|---|---|
| Liabilities (sources of funds) | External funds, Islamic charitable sources | External funds (e.g. deposits) |
| Assets (deployment of funds) | Islamic financial instrument | Interest based |
| Target group | Family (or individual) | Individuals or groups |
| Disbursement | Goods and/or cash | Cash |
| Repayment incentive | Monetary and religious | Monetary |
| Dealing with default | Group/center pressure and/or spouse guarantee, and Islamic Ethic | Group/center pressure may be used (in case of group lending schemes) |
| Social development program | Can be included and may have a religious component (social and ethical behavior | Can be included |

Source: Ahmed (2002).[23]

Allah with the expectation of His Blessing. Additionally, while the debtor is obliged to return the principal, the creditor, of his or her own free will, does not press the debtor for an exact timing of its return. In the case where, despite the debtor's best efforts, the debtor's circumstances make it difficult to repay the loan, then the creditor would forgive the loan. In the case of qard hassan, God promises multiple returns on such a "beautiful loan." Qard hassan is called "beautiful" (hassan) probably because in all the verses of the Quran, in which this loan is mentioned, it is stipulated that it is made directly to Allah, and not to the recipient (see, for example, Quran Verse 17, Chapter 64).

Typically, MFIs attract QH funds in form of deposits which can be structured as savings, current and time deposits. As stated, the depositor does not receive any return on her/his deposits. In some cases, she/he may pay a fee to the MFI for the administration of the QH deposits. The depositor is entitled to claim these back from the MFI. QH funds have successfully supported micro- as well as SME lending in several OIC countries. They are a regular source of funds for many MFIs in South-East Asia.[24] In Iran, there are established dedicated financial intermediaries or banks specializing in the intermediation of QH funds.

Waqf (= endowment)

A waqf is a trust or endowment in which the contributor endows a property in perpetuity for specific purposes. No property rights can be exercised over the corpus (privately owned property). Only the usufruct or return will be applied towards the objectives of the waqf (typically charitable).

Extensive research by Cizakca (1998) has documented the historical significance of this Islamic instrument.[25] Although awqaf (plural of waqf) has been known in civilized human societies prior to Islam, it was Islam which put this institution to versatile uses especially for the benefit of poor segments of the society. Consequently, awqaf flourished in several Muslim communities, especially during the Ottoman civilization, and provided important social services especially in the form of mosques, schools, hospitals, potable water sources, and support for the poor. Very early in the history of Muslim societies, a practice emerged whereby a person could contribute up to one third of his/her wealth at the time of his/her death. An important characteristic of waqf relates to its objective, that is, the idea of birr (doing charity out of goodness).[26] The concept of waqf functions as follows: a founder who has accumulated private wealth decides to endow his personal property for a specific, often pious, purpose. The amount of the original capital (or corpus), the purpose for which it is endowed, and all the other conditions of management are clearly registered in a deed of endowment submitted to the authorities. In this way, the privately accumulated wealth of a pious Muslim becomes God's property. The founder stipulates strictly how the annual revenue of the waqf should be spent. This revenue (usufruct) may be allocated completely for a social welfare purpose, such as health, education, or civil services to poor (waqf khayri), or to a group of specified beneficiaries. Typically, awqaf institutions (AIs) provide such services at no cost without being a burden on the government. On the macroeconomic front, AIs can be seen as serving the ultimate goal of reducing government spending, which contributes to reducing the budget deficit, inflation and government borrowing (other things being equal).[27]

The cash waqf is a special type of endowment and it differs from the ordinary real estate waqf in that its original capital, asl al-mal or corpus, consists purely or partially, of cash. A key feature of cash waqf is that it generates income which in turn supplies the capital necessary to provide social services or poverty alleviation services. The concept of cash waqf opens the door to an innovative use of such capital. The management of the waqf is entrusted to trustees, whose functions may be fulfilled by the founder him or herself during his or her lifetime. Thus, there are four major components of any waqf: the founder; the beneficiaries; the trustees; and the endowed capital, or corpus, itself.

Figure 2 depicts a simplified structure of a cash waqf. The waqf manager or nazir collects the contributions from the waqif or contributors and makes investments (e.g. housing, SMEs, etc.). The returns from the investments (after deduction of all costs) will be allocated by the nazir to charitable programs (e.g. improvement of health services, infrastructure for poor people or others). As in the original waqf design, it is important that the value of the contributions made by the waqif will remain constant to fulfill the criterion of perpetuity.[28]

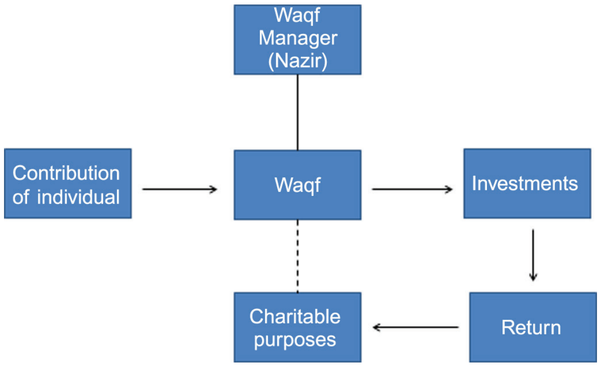


**Figure 2.** Simplified structure of a cash Waqf.

## 4. Putting the model together

### *General prerequisites for securitization*

Islamic securitization has specific requirements with regard to following Shariah rules and general requirements, which are the same as for conventional securitization. The most important are:[29]

- Conducive legal and tax framework. Securitization must be supported by basic security laws, clear and reasonable off-balance sheet valuation guidelines for securitized assets and the guarantee of the bankruptcy remoteness of the SPV or SPM among others. As necessary, it also includes a specific securitization law.
- Significant asset volumes. Lenders should have sufficiently large pools of loan portfolios for securitization to achieve economies of scale to justify the advantage of securitization over alternative funding sources. Ideally, these loan portfolios correspond to certain standards to facilitate the assessment of the credit quality of the underlying portfolio backing the bond issued by the SPV/SPM.
- Lender preparedness. The originator's organization (MFI) must be prepared for securitization, especially departments in charge of underwriting, servicing, information management and treasury.
- Investor demand. Various factors influence investor demand for securitized assets. These include the performance of the loan pools, liquidity in the market, the availability of a benchmark or yield curve. Typically, investors compare the return on an asset backed security issue with that of government bonds as the quasi risk-free alternative investment, and expect an attractive risk-adjusted return to compensate for the higher risk.

### *Structuring a securitization using Waqf and QH deposits as credit enhancement*

As the nature of QH and waqf funds differ, both fund types can be applied at different levels of an asset backed security. By structuring the ABS issue as a waterfall, waqf and QH deposits could be integrated into the issuance in such a way that they provide credit enhancement to the senior notes. Being better protected against default, the senior notes would have a lower interest rate, which is expected to lead to a lower interest charged to the borrower (= individual household having a HMF loan), thereby increasing affordability.

To comply with the perpetuity principle, the waqf funds should be invested at a level where the probability of default could be higher than of a senior note but still lower than that of junior note (which is typically held by the originator). As the QH investors do not necessarily expect the return of her/his deposits, these can be used at the junior tranche level. Figure 3 depicts a simplified structure of the waterfall of the ABS issue as well as the structure of the SPV balance sheet. Referring to the conventional credit enhancement structure, the following elements can be observed:

- Originator provided: overcollateralization of the SPV receivables.
- Structural credit enhancement: waterfall structure with mezzanine and junior securities.
- Third party protection: waqf and QH funds. The use of a waqf fund as mezzanine tranche which will give a first level of defense against any default risk of the underlying HMF portfolio. The third and the last tranche could be financed by QH funds which also serve as quasi-equity. This tranche will absorb credit risk and loss of principal in case of defaults. It serves as the final buffer against any credit risk and provides a cushion against losses to waqf investments.

The balance sheet of the SPV/SPM reveals that there are two layers of protection: on the asset side through the over-collateralization; and on the liability side through the QH deposits and waqf funds.

- On the asset side: the share of over-collateralization amounts, for example 10% (e.g. the outstanding principal value of the loan is US$ 110 which will be transferred to the SPV but the SPV will raise funding for US$ 100. The balance of the assets will be retained as collateral).
- On the liability side: the QH funds assume the role of the originator holding the "unrated piece". From the Islamic finance perspective, the QH funds enable the lending to low income groups by offering the QH deposits by Islamic financial intermediaries. In this way, Islamic financial intermediaries become channels to organize and distribute QH financing to deserving projects.
- Proposed percentages for the liability side: 10% for the QH funds and 5–10% for waqf funds. The remaining funds can be sold to investors preferring senior notes. Although the proposed percentages for the credit enhancements are quite high, this extra credit enhancement is considered necessary to attract market-based financing as investors are likely to perceive such a security to be quite risky given the nature of the underlying loan portfolio.
- Additional credit enhancement could be built into the structure by using the return from the waqf certificates. In this case, the returns will not be deployed for charitable purposes and will be withheld by the waqf manager.

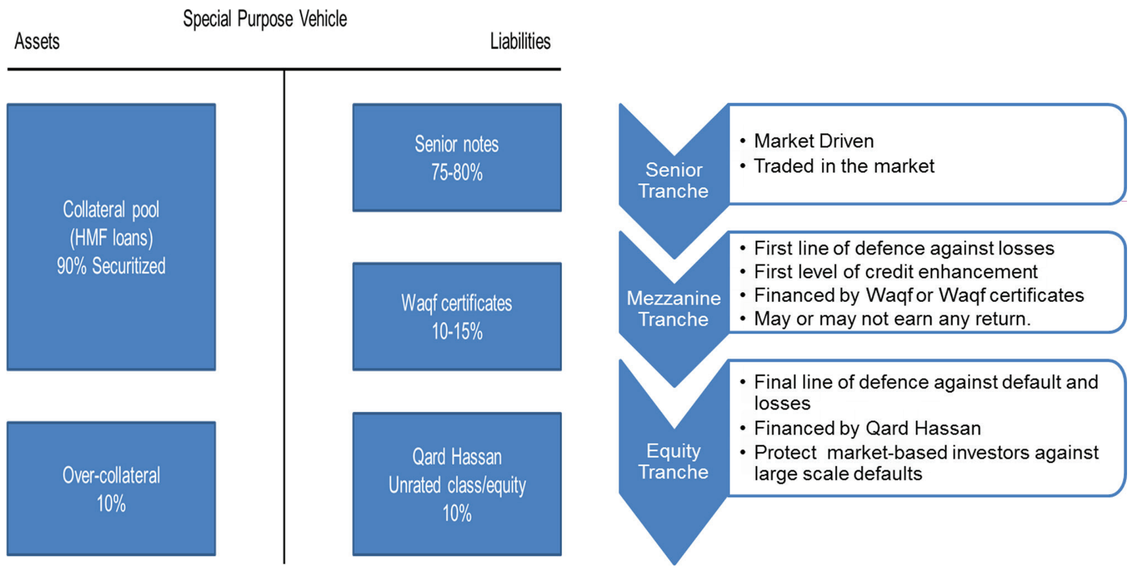


**Figure 3.** Simplified structure of the use of Waqf and QH funds as credit enhancement and simplified structure of the SPV balance sheet.

- Alternatively, returns from the waqf certificates could be used for administration of SPV/SPM to lower the overall transaction cost of the securitization.

## 5. Feasibility of the proposed model

To assess the feasibility of the proposed structure, certain criteria will be applied. As the member states of the OIC are in very different stages of development, the analysis provides a perspective from the MF industry and refers to individual OIC countries in selected cases only. Table 3 provides a simplified overview.

Criteria:

1. Enabling environment. This comprises not only a conducive regulatory framework for securitization, but also conditions which allow the Islamic microfinance industry to flourish.
2. Market preparedness. This criterion assesses the preparedness of investors to invest in the securities offered as well as investors to provide funding for the establishment of waqf funds as well as a sufficient number of QH investors.

**Table 3.** Simplified feasibility analysis of proposed Waqf/QH securitization model.

| | Criterion | Overall status | OIC country which is considered a comparatively high performer for this criterion |
|---|---|---|---|
| 1. Enabling environment | Capital market infrastructure | Most OIC countries do not have necessary infrastructure to allow for the securitization of loan portfolios | Malaysia, Turkey, Indonesia |
| | Financial sector development | Underdeveloped financial sector with a small MFI industry | Malaysia, Turkey |
| 2. Market preparedness | Size of MFI industry | Very small size | |
| | Originator and investor preparedness | Potentially limited | |
| | Availability of waqf and QH funds | Most countries have established waqfs and banks collect QH deposits | Indonesia, Pakistan, Iran, Saudi Arabia |
| 3. Shariah-compliant standards and HMF products | Prevalence of shariah-compliant standards and regulation | Especially in GCC countries, Pakistan, Iran and Indonesia. Some countries lack legal framework for waqf | |

3. Shariah-compliant standards and HMF products. Questions of relevance concern whether there is a demand for Shariah-compliant HMF products, or whether there are already well-established standards, which are known to the investor community.

Although Table 3 indicates a weak capital market infrastructure, the set up from a purely technical standpoint appears feasible, especially in those markets which have some capital market activities (e.g. Saudi Arabia or Indonesia). Some countries, such as Indonesia, have also implemented conventional housing finance securitization models,[30] which could help stimulate the appetite among investors to buy Islamic HMF-backed securities. These issuances are likely to benefit from the assigned reputation of MF-portfolios as having good credit quality, as MFIs are considered to be good at servicing their loan portfolios.[31]

The implementation of such a model is likely to face several obstacles which range from a very small industry (US$ 600M) concentrated in countries with a weak enabling environment (e.g. Sudan), to a weak and inadequate infrastructure for the establishment of a continuous flow of securitization transactions, allowing for liquidity, transparency and visibility.

In addition, the number of charitable investors is probably also limited. Although some countries have considerable QH deposit volumes (e.g. Iran), a viable model requires a continuous flow of QH deposits into the SPV as the value of the QH deposits is likely to erode over time due to the relative high and volatile inflation rates in many OIC countries.

One point which requires further clarification is how it can be ensured that the selling MFI will have “skin in the game”: a mechanism must be established which requires the selling MFI to take back any defaulting loan which it has sold previously to the SPV/SPM. The MFI is also likely to remain the servicer of the HMF loans sold. Thus, the proposed model supports the funding side, but does not provide capital relief.

Another point deals with the management of the SPV/SPM. The waqf fund manager could be in charge of it; however, this may lead to a potential conflict of interest. Depending on which type of institution is in charge of the overall securitization process, increased transaction costs can arise.

In conclusion, the development of a feasible approach requires substantial improvement of the enabling environment and the market infrastructure in most OIC countries. In addition, a stronger development of the Islamic MF industry is warranted to raise the profile and the attractiveness of further investment flows into the industry.

## 6. Conclusions: A potential model

Figure 4 summarizes the proposed structures of securitization using waqf and QH funds as credit enhancements. The green dashed lines and boxes illustrate an approach for developing a sustainable model combining waqf and QH funds.

Initially, a MFI sells its HMF portfolio to an SPV/SPM which issues senior notes and waqf certificates to investors. The

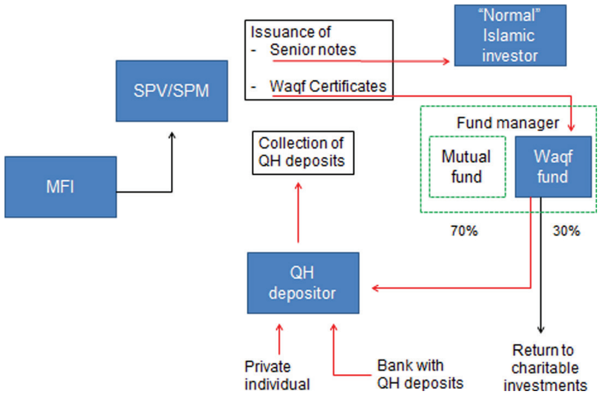


**Figure 4.** Simplified summary of a securitization structure using Waqf and QH funds as credit enhancement and proposed structure for a feasible model.

SPV also receives QH funds to offer additional protection to investors against default of the underlying portfolio. By providing waqf and QH funds to the transaction, the contributors fulfill the social and religious goals as required by Islam for these instruments.

A potential approach to developing a viable and sustainable model could be through the establishment of a waqf mutual fund model. Such models have been already established in Indonesia:[32]

- The contributor divides his or her contribution into a mutual fund and waqf fund. A potential breakdown could be to invest 30% of her/his contribution into the waqf fund and 70% into the mutual fund. Whereas the mutual fund aims to achieve a market based return, the waqf fund will operate under the same principles as outlined here.
- The waqf manager manages both the mutual fund and the waqf fund.

Such a model would target the socially responsible investor who aims to make some return on his or her investment but is ready to share part of the returns and funds for a good purpose. In this way, the investment model would be in a position to broaden its appeal beyond the classical charitable investor. In addition, it allows the waqf fund manager to build up a more liquid and sustainable investment vehicle over time. In addition, the returns from the waqf fund could be used to increase the volume of available QH funds to be used for the junior tranche in the securitization transaction. In this way, the returns can compensate for the eroding value of the QH funds, or serve as replenishment for those QH funds which have not been returned to the QH depositors as loans of the underlying HMF portfolio have defaulted.

In conclusion, this proposed structure is a way of integrating Islamic social instruments to support access to affordable housing for low income groups. As the markets for housing microfinance loans are quite small, the fund manager may also consider direct investments into MFIs and developing the securitization model over time once higher volumes are available. The returns from the waqf funds can be used in several ways:

1. To support the volume of available QH funds.
2. To offer constructive support to low income households.
3. To offer advisory services to the MFI to improve risk management and corporate governance capacities, as well as to help build standardized HML portfolios and facilitate their securitization at a later stage.

In this way, the fund manager supports expansion of the Islamic MF industry in a responsible manner. Simultaneously, it allows for the combination of innovations in finance with the goal of financial inclusion in compliance with Shariah principles. A marketable instrument would be introduced to provide funding for much-needed housing finance in OIC countries, where it is to be offered to low income groups. With the introduction of securitization of housing microfinance loans, financial institutions would be able to pool their assets and issue marketable securities. In this way, they will share the risks with the market, as well as free up the capital for further mobilization of housing finance.

### Abbreviations

| | |
|---|---|
| AI | Awqaf institution |
| CGAP | Consultative Group to Assist the Poor |
| GCC | Gulf Cooperation Countries |
| HMF | Housing microfinance |
| IFI | International financial institution |
| IFSB | Islamic Financial Services Board |
| LTV | Loan to value ratio |
| MF | Microfinance |
| MFI | Microfinance institution |
| NGO | Non-governmental organization |
| OIC | Organization of Islamic Corporation |
| QH | Qard hassan |
| SMF | Sarana Multigriya Finansial |
| SPV | Special purpose vehicle |
| SPM | Special urpose mudarabah |

**Notes**

1. List of OIC countries can be found at www.oic-oci.org.
2. N. S. Shirazi, M. Zulkhibri, S. S. Ali (2012). Challenges of Affordable Housing Finance in IDB Member Countries using Islamic Modes. *Islamic Research and Training Centre*, page 3.
3. The term microfinance institution is used in a broader sense, comprising besides the typical MFIs, NGO, co-operatives or other non-bank financial institutions which specialize in lending to low income groups.
4. C. Luetzenkirchen, C. Weistroffer (2012). Microfinance in evolution. *DB Research*, Current Issues, page 2.
5. R. Atkins (2013). ECB's Draghi in drive to drive to revive slicing and dicing. *Financial Times*, Thursday May 9, 2013, p. 21.
6. N. Karim, Michael Tarazi, X. Reille (2008). Islamic Microfinance: An Emerging Market Niche. *CGAP Focus Note,* No. 49, p. 5.
7. F. Daphnis, Bruce Ferguson (2004). Housing Microfinance: A Guide to Practice. *Kumarian Press Inc.,* p. XV.
8. For a summary of the differences between microfinance loans and housing microfinance loans, see S. R. Merrill (2009). Microfinance for Housing: Assisting the "Bottom Billion" and the "Missing Middle". Urban Institute Center on International Development and Governance, IDG Working Paper No. 2009–05, p. 2.
9. Data from A. Mohensi-Cheraghlou (2013). Islamic Finance and Financial Inclusion: A Few Must-know Facts. GFDR Seminar, World Bank, p. 1.
10. M. El-Zoghbi, M. Tarazi (2013). Trends in Sharia-Compliant Financial Inclusion. CGAP Focus Note, No. 84, p. 7.
11. B. K. Grewal (2011). Constraints on Growth in Islamic Finance. IFSB 4th Public Lecture on Financial Policy and Stability, p. 13. IFSB (2013). Islamic Financial Services Industry Stability Report, p. 142.
12. J Drummond (2011). Youths fear housing shortage. *Financial Times* April 1, 2011.
13. Accion (2006). Who will buy our Paper: Microfinance Cracking the Capital Markets. Number 18, p.1; CRISIL (2012). CRISIL – rated MFI securitization transaction expected to continue demonstrating robust performance.
14. M. Obaidullah, T. Khan (2008). Islamic Microfinance Development – Challenges and Initiatives. *Islamic Research and Training Institute*, Policy Dialogue Paper No. 2, p. 34.
15. H. Askari, Z. Iqbal, N. Krichne, A. Mirakhor (2012). Risk Sharing in Finance – The Islamic Finance Alternative. *John Wiley & Sons (Asia) Pte. Ltd*. p. 125 sqq.
16. Y. Zöngür, "Comparison between Islamic and Conventional Securitization: A Survey", Review of Islamic Economics, Vol. 13, No. 2, 2010, pp. 81–118, p. 90.
17. The table highlights the differences from a theoretical perspective. At present, sukuk issues resemble in most cases conventional securitization structures.
18. Z. Iqbal (2011). Economics of Sukuk. Washington DC, p. 18 – 19.
19. A. Jobst (2009). Islamic Securitization after the Subprime Crisis. *Journal of Structured Finance*, Vol. 14, No. 4, pp. 41–57
20. Duration is common measure of interest rate sensitivities.
21. V. Kothari (2006). Securitization. The Financial Instrument of the Future. *John Wiley & Sons (Asia) Pte. Ltd*, pages 211 sqq.
22. In addition, there are monoline insurance companies which are not engaged in traditional insurance functions but merely provide insurance against defaults in financial transactions. They are most common in the US.
23. H. Ahmed (2002). Financing Micro Enterprises: An Analytical Study of Islamic Microfinance Institutions. Journal of Islamic Economic Studies No. 9(2).

24. M. Obaidullah, K. Tariqullah (2008). Islamic Microfinance Development – Challenges and Initiatives. Islamic Development Bank, Policy Dialogue Paper No. 2, p. 19.
25. M. Çizakça (1998). Awqaf In History And Its Implications For Modern Islamic Economies, Islamic Economic Studies, Vol. 6, No. 1, November 1998.
26. H. Ahmed (2007) Waqf-Based Microfinance: Realizing the Social Role Of Islamic Finance, Islamic Research and Training Institution (IRTI), Proceedings of International Seminar on "Integrating Awqaf in the Islamic Financial Sector" Singapore, March 6–7, 2007.
27. M. Çizakça (1998). Awqaf in History and its Implications For Modern Islamic Economies, Islamic Economic Studies, Vol. 6, No. 1, November 1998.
28. M. Khademolhoseini (2008). Cash-*Waqf* – a new financial instrument for financial issues: an analysis of structure and Islamic justification of its commercialization. Imam Sadiq University, p. 3.
29. F. Roy (2011). Primary Mortgage Market Development in Emerging Markets – Is the Central and Eastern Europe Experience Replicable in Sub-Saharan Africa, in D. Koehn, J.D. v. Pischke (editors), Housing Finance in Emerging Markets. Springer Verlag Berlin Heidelberg, p. 171.
30. Sarana Multigriya Finansial (SMF), 2011. Development of Housing Finance in Indonesia. International Seminar for Asian Housing Finance Market, Seoul, June 22.
31. R. Cull, A. Demirguc-Kunt, J. Morduch (2008). Microfinance meets the Market. World Bank Policy Research Paper No. 4630.
32. M. Khademolhoseini (2008). Cash-*Waqf* – a new financial instrument for financial issues: an analysis of structure and Islamic justification of its commercialization. Imam Sadiq University, p. 11.

## References


Accion. "Who will Buy our Paper: Microfinance Cracking the Capital Markets." Number 18. 2006.

Ahmed H. "Financing Micro Enterprises: An Analytical Study of Islamic Microfinance Institutions." Journal of Islamic Economic Studies No. 9(2), 2002.

Ahmed H. "Waqf-Based Microfinance: Realizing The Social Role Of Islamic Finance." Islamic Research and Training Institution (IRTI), Procceding of International Seminar: "Integrating Awqaf in the Islamic Financial Sector" Singapore, March 6–7, 2007.

Askari H, Iqbal Z, Krichne N, Mirakhor A. Risk Sharing in Finance – The Islamic Finance Alternative. John Wiley & Sons (Asia) Pty. Ltd. 2012.

Atkins R. ECB's Draghi in drive to drive to revive slicing and dicing. Financial Times, Thursday May 9, 2013.

Çizakça M. "Awqaf In History And Its Implications For Modern Islamic Economies." Islamic Economic Studies, 6(1), 1998.

CRISIL CRISIL– rated MFI securitization transaction expected to continue demonstrating robust performance. 2012.

Cull R, Demirguc-Kunt A, Morduch J. Microfinance meets the Market. World Bank Policy Research Paper No. 4630, 2008.

Daphnis F, Ferguson B. Housing Microfinance: A Guide to Practice. Kumarian Press Inc., p. XV. 2004.

Drummond J. Youths fear housing shortage. Financial Times April 1, 2011.

El-Gari MA. "The Qard Hassan Bank", paper presented at the International Seminar on Nonbank Financial Institutions: Islamic Alternatives, March 1–3, 2004, Kuala Lumpur, jointly organized by Islamic Research and Training Institute, Islamic Development Bank and Islamic Banking and Finance Institute Malaysia. 2004.

El-Zoghbi M, Tarazi, M. Trends in Sharia-Compliant Financial Inclusion. CGAP Focus Note No. 84. 2013.

Grewal BK "Constraints on Growth in Islamic Finance." IFSB 4th Public Lecture on Financial Policy and Stability. 2011.

IFSB Islamic Financial Services Industry Stability Report, 2013.

Iqbal Z. Economics of Sukuk. Washington DC. 2011.

Jobst A. "Islamic Securitization After the Subprime Crisis." Journal of Structured Finance, 14(4). 2009.

Karim N, Tarazi Michael, Reille X. Islamic Microfinance: An Emerging Market Niche. CGAP Focus Note, No. 49. 2008.

Khademolhoseini M. Cash-Waqf – a new financial instrument for financial issues: an analysis of structure and Islamic justification of its commercialization. Imam Sadiq University. 2008.

Kothari V. Securitization. The Financial Instrument of the Future. John Wiley & Sons (Asia). 2006.

Luetzenkirchen C, Weistroffer C. "Microfinance in evolution." DB Research, Current Issues. 2012.

Merrill, S. R. "Microfinance for Housing: Assisting the 'Bottom Billion' and the 'Missing Middle'. Urban Institute Center on International Development and Governance, IDG Working Paper No. 2009–05. 2009.

Mohensi-Cheraghlou A. "Islamic Finance and Financial Inclusion: A Few Must-Know Facts." GFDR Seminar, World Bank. 2013.

Obaidullah M, Khan T. Islamic Microfinance Development – Challenges and Initiatives. Islamic Research and Training Institute, Policy Dialogue Paper No. 2, 2008.

Roy, F. "Primary Mortgage Market Development in Emerging Markets – Is the Central and Eastern Europe Experience Replicable in Sub-Saharan Africa." In D. Koehn, J.D. v. Pischke (Eds), Housing Finance in Emerging Markets. Springer Verlag, Berlin, Heidelberg. 2011.

Sarana Multigriya Finansial (SMF). Development of Housing Finance in Indonesia. International Seminar for Asian Housing Finance Market, Seoul, June 22. 2011.

Shirazi NS, Zulkhibri M, Ali SS. Challenges of Affordable Housing Finance in IDB Member Countries using Islamic Modes. Islamic Research and Training Centre. 2012.

# Crowdfunding in Islamic finance and microfinance: A case study of Egypt


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**Abstract** - The changing political scene in North Africa is resulting in a much greater interest in Islamic finance and what it has to offer. The modern practice of Islamic finance started in Egypt with the Mit Ghamr experiment of 1963. This project had a strong focus on development and provided micro-savings and micro-loans before microfinance was conceptualized as such in the 1970s. Nowadays, Egypt has the potential to develop a new homegrown model focused on development that could avoid cosmetic "Islamic" finance. Profit and loss sharing formulas can make both Islamic finance and Islamic microfinance real alternatives to both conventional finance and microfinance, and ones that can address new niches of population and promote entrepreneurship and SMEs. It is estimated that by 2020, the North African region needs to create 75 million jobs. In this context, the promotion of entrepreneurship and micro-entrepreneurship might be the only effective vehicle for economic development. Crowdfunding is the collective effort of individuals who network and pool their money to support a wide variety of activities, including startup company funding. Two internet-based platforms, Shekra and Yomken, have recently been established in Egypt as the first Islamic finance and Islamic microfinance crowdfunding platforms of the region, respectively. These examples, inspired by the Mit Ghamr project, show interesting innovations within both industries. Interestingly, while being Shariah-compliant, neither of them uses the label "Islamic", showing a distinctive ideological trend that emphasizes quality service, partnership, risk-sharing, and social impact. The latter are ingredients that allow both Islamic finance and Islamic microfinance to think beyond the boxes of their conventional counterparts.



*Keywords:* crowdfunding, Islamic microfinance, Islamic finance, development, Egypt, Mit Ghamr


## 1. Introduction

In the context of Egypt since the 2011 revolution, this paper explores the relationship between the two fast-growing industries of Islamic finance and crowdfunding, through a case study of the Shariah-compliant crowdfunding platforms, Shekra and Yomken. These examples provide the possibility of a fruitful common ground between the Islamic finance and crowdfunding industries. Both Islamic finance institutions and crowdfunding platforms have increased in number and availability worldwide in recent years. While the growth of the former reflects the increasing demand by certain segments of the world's 1.3 billion Muslims for Shariah-compliant products,[1] the growth of the latter shows its viability for attracting much-needed investment for businesses and entrepreneurs.

In order to approach this subject, interviews were used with key players in the Islamic finance/microfinance field, including organizations, and crowdfunding platforms. I also used private and public economic reports, conference material, books, and articles relevant to the field. The paper is focused on the events between January 2011 and May 2013.

## 2. Islamic finance in Egypt

Egypt accounts for about 9% of the Arab world's GDP and its banking system is one of the largest in the region. However, nowadays, Shariah-compliant assets represent only 5% of Egypt's total bank assets.[2] The example of Mit Ghamr's Savings Association[3] – the first Islamic bank in the world and largely unheard of by the majority of Egyptians – resonates in the distance and connects with current developments in unexpected ways. It operated between 1963 and 1967 and practiced Islamic microfinance before either Islamic finance or conventional microfinance had gained their current


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definitions. The project, directed by Ahmad El-Najjar,[4] was inspired by the example of German savings banks, and its main purpose was to educate people in the importance of savings. Underlying such purpose, El-Najjar concerns included questions of social justice, poverty alleviation, economic development, and equal access to credit.[5]

The bank operated through different kinds of savings and loan arrangements. The purpose of the loans was "to increase local production in commerce, trade, industry, and agriculture, and one of the firmest loan polices [was] that savings collected from the local area should be invested in that area and not outside."[6] They carried no interest or service charges and the borrower was always assisted by the bank to improve his business operations. Loans required no actual collateral and depended on reputation and mutual trust. Through equity participation, the bank, as a joint owner, held a title deed to the enterprises and shared the profits with the entrepreneur in proportion to the capital invested.

Regarding the "Islamic" labeling of the bank, the word was used informally with the general public and clients, but was not officially employed. Both microfinance and Islam were a matter of adaptation, Mit Ghamr was gathering savings focussing on local rural areas which had small industries and strong religious convictions; therefore, in this context, it became Islamic microfinance. In the words of El-Najjar himself, "it was indispensable to find a way that suits the existing climate and matches with our Arab traditions and our spiritual heritage."[7]

Mit Ghamr was a unique institution that did not directly compete with established commercial banks, as it addressed a niche that was overlooked at the time: micro-financing, allowing small and low-income clients to save and borrow money. It is important to note that this experiment did not establish any relationship with Islamic movements and parties, nor with the Muslim religious scholars. In addition, it did not have a Shariah board or a committee of religious experts to supervise the Shariah-compliance of their contracts, procedures, and policies.[8]

In 1979, over a decade later, Faysal Islamic Bank was established, becoming the first Egyptian Islamic bank to be registered with the Central Bank. Since then, and up to the 2011 revolution, Islamic banking in Egypt has gone through three phases: impressive growth until the mid-80 s, deep crisis up to the 90 s due to the bad policies and diminishing reputation of some un-regulated Islamic Investment Funds and, finally, a relative recovery followed by stagnation.[9] Throughout these phases, Islamic finance has never thrived. While this underdevelopment can be explained by the challenges the industry faces, mainly the limited development of retail banking in general, the lack of knowledge of Islamic banking, and the absence of government support,[10] the gap between promise and performance in the area of economic development has negatively affected the image of Islamic banks among Egyptians. Actually, most of the Islamic finance products are perceived to be just mimicking conventional products and many analysts "consider Islamic banks in Egypt to be no different from conventional banks."[11] Several Islamic banks exist in Egypt, but to this day separate regulation does not exist.

Since the 2011 revolution, and following governmental promises on the promotion of Islamic economics, we may wonder whether the time for Islamic finance in Egypt is finally about to come. Regardless of what seemed like years of stagnation, the idea of a successful Islamic finance industry in the most populated country of the Middle East never disappeared. Interestingly, the Egyptian Islamic Finance Association's (EIFA) first steps were taken in 2010, showing an already existing interest in the industry.

EIFA's[12] purpose is to promote Islamic finance as a fundamental industry that could contribute to the economic development of Egypt. Inspired by the Mit Ghamr project, as well as by the examples of Malaysia and the Gulf, it wishes to develop a home-grown new model focused on development that should avoid cosmetic "Islamic" finance. EIFA criticizes current Egyptian Islamic banks, and imagines a future version of banking characterized by ethical, moral and just values. Islamic finance needs to go where conventional finance failed through the re-definition of banking as a partnership. In this context, risk control, proper monitoring, and community ties are of utmost importance. Interestingly, EIFA sees an opportunity both in the critical economic situation and the current under-development of the industry in Egypt, as it will give Islamic finance the chance to focus on social and community responsibility.

Islamic finance, in essence, is constructed to have a real impact on an economy through job creation and entrepreneurial development, but its practice in recent years has been increasingly criticized for not doing enough to contribute to a "real economy".[13] However, current banks' ability to increase their profit-and-loss sharing (PLS) portfolio is hindered by an inadequate legal framework, risk management measures, and additional administrative and monitoring costs. In this context, the bigger role might lie on the intermediate non-financial institutions and non-profit organizations who can provide more equity-based financing alternatives and non interest-based loans through the development of new financial instruments based on the PLS mechanism. Among such instruments, Marzban and Asutay[14] identify crowdfunding as an increasingly attractive alternative that can help find the equilibrium between social development, capacity-building, and profitability.

## 3. Crowdfunding

Crowdfunding is a type of crowdsourcing, which can be defined as a type of participative online activity in which an individual, institution, non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, through a flexible open call, the voluntary undertaking of a task which always entails mutual benefit. The crowd participates by bringing work, money, knowledge and/or experience.[15] Crowdfunding is the application of this concept to the collection of funds through small to medium-sized contributions from a crowd in order to finance a particular project or venture, offering small businesses and entrepreneurs a chance at success.

Crowdfunding shares some characteristics with traditional resource-pooling and social-networking phenomena,[16] but has a novel and defining characteristic: it involves consumers who act as investors, providing monetary support to others' proposals and expecting some payoffs, either monetary or non-monetary.[17] Thus, instead of by traditional investors, crowdfunding campaigns are funded by the general public. Each campaign is set for a goal amount of money and a fixed number of days. Typically, most successful projects receive about 25–40% of their revenue from their first, second, and third degree connections, which can include friends, family, or acquaintances. Once a project has gained some traction, unrelated consumers or investors start to support campaigns they believe in.[18]

Successful service businesses that organize crowdfunding and act as intermediaries are increasing worldwide,[19] as banks have augmented interest rates or pulled back from lending to consumers and small businesses. Interestingly, lending supplied by a crowd has lower interest rates than those offered at large retail banks or by credit cards. For lenders, the platforms are viewed as investment opportunities, yielding them more than bank deposit accounts.[20] In 2012, crowdfunding platforms raised a total of $2.7 billion, compared with $1.5 billion in 2011. Although crowdfunding is growing everywhere, North America and Western Europe raised much more capital than platforms in other regions.[21]

Massolution[22] defines four categories of crowdfunding platforms (CFPs):

1. Equity-based.
2. Lending-based.
3. Donation-based
4. Reward-based.

In equity-based crowdfunding, funders receive compensation in the form of fundraiser's equity-based or revenue, or profit-share arrangements. In lending-based crowdfunding, by contrast, funders receive fixed periodic income and expect repayment of the original principal investment. In donation-based crowdfunding, funders donate to causes that they want to support, with no expected compensation. Finally, in reward-based crowdfunding, the funders' primary objective for funding is to gain a non-financial reward. Thus, equity-based and lending-based crowdfunding involves participation for financial return, while donation-based and reward-based crowdfunding are used for campaigns that appeal to funders' personal beliefs and passions. Most crowdfunding platforms generate revenue by charging a percentage commission on funds paid out to fundraisers. This commission is typically calculated from the total funds raised, and/or based on achieving a "fully-funded" goal. In addition, crowdfunding platforms can adopt two funding options – "all or nothing" or "keep it all". In the former, pledged money is only collected if the fundraising goal is met, otherwise the money is returned. In the latter, the funds are collected whether the project goal is met or not.

## 4. Shariah-compliant crowdfunding: the cases of Shekra and Yomken

Shekra and Yomken are Shariah-compliant crowdfunding platforms established in Egypt at the end of 2012.[23]

The data analyzed includes both primary data, gathered through interviews, as well as secondary data taken from company websites and press reports. Detailed semi-structured interviews with key informants in the two crowdfunding platforms constituted a significant portion of the data collection effort. I performed in-depth interviews with Shekra's co-founders, Shehab Marzban[24] and Walid Hegazy;[25] also with a member of EIFA; and with Yomken's founder and CEO, Tamer Taha.[26] Any necessary clarification was achieved through e-mail.

### *Shekra*

*What is Shekra?*

Shekra is a crowdfunding platform that links a closed network of investors with potential startups and companies. Shekra is the first example of Shariah-compliant equity-based crowdfunding. It was founded as a company in Egypt in November 2012, and is currently in the process of screening the first startups. It has been self-funded by its founders.

*Context and Purpose*

Shekra's main purpose is to fill the funding gap for those startups or already established companies which are too big for microfinance and too small for financial institutions and banks. It does so by connecting entrepreneurs with a wide spectrum of investors. There is a strong emphasis on both social responsibility and Shariah-compliance and a special focus on upgrading the success rate of startups in the MENA region to match global standards.

The idea of Shekra was born from the combination of two fields: Islamic finance and startups. Since the revolution, the entrepreneurial ecosystem has been very weak and access to funding very difficult. Therefore, the connection of entrepreneurs and investors can be beneficial for both, and have a positive impact on the social and economic development of the region.

*How Does it Work?*

Shekra targets the segment of projects that need funding from between $50,000 and $300,000, seeking to connect creative people with investors willing to invest in them. For this purpose, Shekra runs its activities through both the Investors Network and the Startups Reach Program. The former is a closed investors' network, crucial to ensure their seriousness and reliability, whereby investors join based on recommendations from existing members and agree to maintain confidentiality. Knowing that startups may be a high-risk investment, Shekra enables its network members to distribute their capital among multiple startups, resulting in a diversified portfolio that minimizes the overall risk exposure.

The Startups Reach Program is focused on reaching out to young entrepreneurs through advertisements in social media, universities, startup and SMEs events. Potential startups are assessed based on an internal screening process. If the startups pass the screening phase they sign an Entrepreneur Agreement with Shekra; if they lack essential skills or requirements, they can be supported to become Shekra-eligible.

As soon as the startup becomes ready for the crowd, it will be posted on the Shekra Portal and promoted through their social media network services. A short summary and the current funding status will be public, but access to details of the startup and its underlying concepts and ideas will only be available to investors within the Shekra Network. Funding is considered successfully completed when the target fund of a company is fully attained within the specified timeline, generally 60 days. Shekra will undertake the legal process required to document the transfer of the shares to the investors upon the completion of the funding process. In addition, the entrepreneurs and investors will meet once and sign a shareholder agreement, which will govern their silent partnership and define rights and obligations. Reports, progress, and monitoring will be on-line and payments mostly off-line. A minimum fee is charged to the startups for Shekra's services, which include business plan support, due diligence, and monitoring.

*Islamic Component*

Shekra is not labeled as "Islamic" but it defines itself as "Shariah-compliant". The "Islamic" label is not considered to be important and the website lacks references to "Shariah" or "Islam." Shekra wants to focus on the core values of an Islamic product through quality in order to develop a business model that is based on ethical principles and social responsibility.

From a sector perspective, projects are required to obey Islamic principles and startups and companies are not allowed to raise additional capital in an interest-based or non-Shariah-compliant manner. From a legal perspective, investors take an equity stake in the project and gain returns based on the PLS principle, which ensures a fair distribution between shareholders and entrepreneurs. Therefore, Shekra provides specific Shariah screening and legal formalities. In addition, once an idea attracts capital, Shekra acts as a partner and takes an equity stake in the projects, which ensures its long-term commitment, given the fact that the success of the projects is coupled with their own success.

Shekra's seven founders have backgrounds in academia, venture capital, information technology, commercial law, aviation, sustainable development, green entrepreneurship, innovation, capacity building, investment, and banking.

*Challenges and Future Prospects*

Shekra's future prospects are bright. So far, it has received about 150 projects, from which three were be selected for the first round. This large number of application shows a great interest on the part of both startups and companies. Actually, the platform was limited initially to technology, but demand in other areas, such as services, industry, and agriculture, was so great that this limitation was dropped.[27] Shekra, while currently focused on Egypt and the GCC, hopes to expand throughout Africa and members of the OIC, for both startups and companies from all fields, and investors of all sizes.

Most research identifies raising capital as the main problem of startups. To date, equity-based funding for MENA startups and SMEs has essentially been provided by venture capital firms and large angel investors. However, there is a funding gap for entrepreneurs trying to raise seed or early-stage capital under $1–2 million. Therefore, equity-based crowdfunding can be considered as an alternative financing method, filling the observed gap through reaching out to a much larger base of small investors.[28] While many are still skeptical about investing in startups, in general, Shekra "hopes to build trust in the idea by leading with trustworthy investors."[29]

In introducing crowdfunding in the region, Marzban and Asutay[30] consider that investors' risk needs to be reduced as much as possible and entrepreneurs should be equipped, not only with capital, but also with the skills needed to increase their chances for success. Consequently, the conventional crowdfunding process needs to be re-structured to meet not only Shariah requirements, but also the circumstances and special requirements of entrepreneurs and investors in Muslim countries.

Regarding challenges, together with online payment and internet penetration, the huge demand and the overwhelming number of startups looking for funding received, a key challenge is to overcome the legal issues of crowdfunding. "Shekra wants to be able to raise capital from the public and have contributions as small as $10, which is currently not legally possible."[31] In addition, the typical legally enforceable shareholder structure used by venture capital firms which involve granting preferential rights for certain investors is deemed non-Shariah-compliant. Therefore, the shareholder structure and investor protection requirements had to be modified to adhere to Shariah principles.[32] For the foreseeable future, "Shekra will keep its investor network closed to ensure that it's compliant with securities laws, and to show proof of concept."[33]

### *Yomken*

*What is Yomken?*

Yomken is a product-based crowdfunding platform that opened in Egypt in October 2012. It is the first example of product-based crowdfunding and it defines itself as Shariah-friendly. It is a company under Egyptian commercial law and the supervision of the Ministry of Trade and Industry, but even though this law does not provide for non-profit, Yomken considers itself a non-profit company. Yomken is self-funded by its members and started as a result of a grant from the World Bank's Youth Innovation Fund for their website. It also won the Social Impact Forum 2012 competition organized by the Saudi-Spanish Center for Islamic Economics and Finance (Scief) and was one of the finalists of the ArabNet Startup Demo competition.

*Context and Purpose*

Yomken's founder, Tamer Taha, inspired by the idea of crowdfunding, wanted to develop a crowdfunding model suitable for Egypt and the Arab world. Wishing to have a social impact and promote solidarity in the context of Egypt after the Revolution, Yomken combines three different business models: crowdfunding, open innovation, and Islamic finance. As new products are generally not financed by banks because their market demand is unknown, Yomken removes this risk by offering the new product through its platform on the pre-commercialization phase.

Yomken wishes to fill a gap within the market: high-tech products represent less than 5% of Egypt's exports, but receive the majority of the attention and funding opportunities, while low and medium-tech businesses that represent 60% of

Egypt's economy are largely being ignored.[34] In addition, with an estimate 60% informal economy, the technical support of small innovations and people working on low value-added industries is fundamental. Thus, Yomken mainly targets low-tech enterprises in Egypt's informal manufacturing industry, and its focus areas include handicrafts, artisanal goods, and site materials for workshops. The platform was founded in close contact with residents of one of Cairo's poorest neighbourhoods, Nasr City, whose craftsmen's and workshop owners' products have long faced competition from Chinese exporters. Yomken gives them the chance to expand their businesses, hire more people, and create better products.[35]

*How does it Work?*
Yomken targets innovation as the way to increase the productivity of the Egyptian economy and promote development. For that purpose, it provides entrepreneurs with both technical assistance and/or finance. Therefore, Yomken follows a two-fold process. First, it links people who want technical solutions with people who have them, such as university students, researchers, specialists, or even companies, in order to make new products or improve the existing ones. Yomken partners with NGOs involved with entrepreneurs, micro- and SMEs, in order to locate small businesses facing technical challenges which require creativity and expertise, and link them with the wisdom of the crowd. Problem-solvers are rewarded depending upon the case: they get a share of the benefits, a lump sum benefit, or an award from Yomken. On the site, users can post "challenges" and ideas for new innovations for free. The website creates a competitive environment amongst contributors in order to come up with the best solution.

Secondly, once the prototype is developed, a target number of buyers is set up according to its production costs, and the product is offered through Yomken's web-page on a crowdfunding basis. If the target number of buyers is reached, the funds are raised for the prototype, and it is produced and delivered to them, showing that the market needs the product. In the event that the target funding amount is not collected, contributors retrieve their initial funding amount. In this way, Yomken removes the risk of innovations and assists new product ideas to become a reality. To ensure that a product is delivered, Yomken finances the challenge temporarily until the crowdfunding phase is completed, "placing faith in these businesses before users do".[36] This is a risk that the company is willing to take, as solutions might not reach the funding goal.

The originality of product-based crowdfunding lies in the fact that, in return, the investor does not receive interest but the product itself, which promotes the creation of new products and furthers innovation. Investors who pay for a product they wish to have can track the production process, and see how their money is spent through weekly updates on the progress of the projects. Transparency is a very important part of the project, and a direct link between the customer and the workshop owner is established from the beginning.

*Islamic Component*
Yomken defines itself not as "Shariah-compliant" but as "Shariah-friendly", as its founder considers that in order to call themselves "Shariah-compliant" they would need a Shariah board. The Islamic content of the project, however, is not advertised, as its relevance depends on the audience. The product is defined as "halal" and receives a new name, istebda, similar to istisna, but involving buying a new product, that is, "buy an innovation".

Yomken considers itself a halal enterprise compliant with the tenets of Islamic finance because of its transparency and social content. Tamer completed his graduation project[37] on Shariah-based microfinance; no-one else in his team, however, has expertise in the field.

*Challenges and Future Prospects*
To date, Yomken has offered four challenges and seven products, obtained two solutions for two challenges, and has reached the selling goal of one product. Successful products will continue to be offered indirectly through an on-line catalogue on Yomken's web-page, but they will no longer be bounded to exclusivity. Yomken is currently looking for investors and partners in order to expand the model and become the region's leading micro-enterprise focused crowdfunding platform. In this respect, it recently partnered with Silatech, an initiative that promotes large-scale job creation among youth in the Arab world, which "will increase its presence on the regional level and secure additional funding for entrepreneurs".[38]

Over the next two years, Yomken's objective is to list more than 300 projects on its site.[39] It currently targets Egyptian entrepreneurs but in the future wants to expand its activities to the MENA region for products and projects, preserving the concept of "Arab Handicrafts,"[40] while searching for clients everywhere.

Regarding challenges, low internet penetration rates and low familiarity with e-payment methods are one of the biggest problems in Egypt. In addition, regulation is a challenge. Yomken, as a company, is under the umbrella of non-financial institutions and cannot offer financial services.

## 5. Shariah-Compliant Crowdfunding: Towards a Definition

Islamic Finance, ideally, is an alternative way of financing based on ethical and socially responsible standards, which ensures fair distribution of benefits and obligations between all the parties in any financial transaction. Crowdfunding possesses these characteristics and provides the ground for new developments in the field, as it can use Islamic finance as an ethical and socially responsible tool to promote financing and development, representing "an exciting opportunity to promote innovation across various sectors of the MENA economies, especially technology, agriculture, health services, and education."[41] Islamic finance and crowdfunding both conceptualize costumers as investors and can potentially provide investment opportunities with higher returns. Interestingly, as most crowdfunding platforms charge a percentage commission on funds paid out to fundraisers, they are already applying a PLS formula. In addition, they both place a strong emphasis on transparency, mutual involvement, and trust.

In light of the examples of Shekra and Yomken, I will advance a preliminary definition of Shariah-compliant crowdfunding. There seems to be three basic features distinguishing conventional and Islamic crowdfunding, which relate to the projects/products, risks, and interest. Shariah-compliant crowdfunding invests in halal socially responsible projects/products, shares the risks of the investment, and is characterized by the absence of an interest rate. In the case of Shekra, the company takes equity stakes in the project, while in Yomken, the model of product-based crowdfunding eliminates the issue of interest altogether.

Regarding the certification of the Shariah-compliance of these platforms, the most widely used approach to ensuring the Islamicity of Islamic banking at the private sector level is that of the Religious Supervisory Boards. Islamic banks employ scholars of Islamic law in a consultancy and advisory capacity to examine the Shariah-compliance of their contracts, dealings and transactions.[42] According to El-Gamal, this Islamicity certification is actually the most obvious distinguishing feature of Islamic finance.[43] However, these boards have been criticized by several scholars on the basis that their approach to Islamic banking problems is based on taqlid, or imitation, rather than ijtihad, or interpretation. Furthermore, such an approach to modern banking and finance transactions does not seem to be justified, as the Shariah did not restrict the development of commercial institutions explicitly or implicitly. On the contrary, it leaves it to Muslims to develop such institutions as the circumstances dictate, as long as they do not violate Islamic law.[44]

Actually, once the Islamic financial products become standardized, the role of these boards is reduced substantially. “Moreover, widespread understanding of those modes of finance reduces barriers to entry in Islamic finance.”[45] Furthermore, if certain specific Shariah principles were systematized, they could provide the Islamic banker with the flexibility to develop new products and to judge their Islamicity without having to refer to the legist.[46] In this context, the development of Shariah-compliant crowdfunding without Shariah boards presents an intriguing case that can push for the systematization of principles and open the gate to the development of innovative products. In addition, in the case of Islamic microfinance, Shariah boards might be not viable, as the size of the projects would make their existence too costly and ineffective.

Regarding types of Shariah-compliant crowdfunding, Shekra is an example of equity-based crowdfunding, and Yomken, of product-based crowdfunding, which could be considered a type of reward-based crowdfunding. The other two types, lending-based and donation-based crowdfunding, are yet to be developed. However, offline initiatives similar to crowdfunding have already happened in the region, such as the 57357 Children’s Cancer Hospital in Cairo, which was financed in large part by personal donations as small as LE1.[47] Given the zakat (the obligation every Muslim has to donate a small portion of his or her earning to the less fortunate), the development of Shariah-compliant donation-based crowdfunding in the Muslim world would be extremely interesting. Lending-based crowdfunding would need to be adapted in order to be Shariah-compliant, as it charges interest.

Shekra, with regards to its crowdfunding model, introduces some novelties. First of all, it has a closed trusted investors’ network, similar to a network of angel investors, which challenges the idea of the “crowd”. In relation to this, most of the information of the projects will be accessible only to investors, while the typical crowdfunding is directed to show-casing in a very transparent way the projects on the website. Usually the people in the closest circle of the entrepreneur are the first to invest in the project, but with this model, first investments will come from other sources. Finally, they finance long-term projects, while the typical crowdfunding projects are short-term.

According to Siddiqui, “Shekra differs from conventional crowdfunding by considering the specific cultural, educational and social characteristics of entrepreneurs and investors in OIC countries.”[48] We may wonder, at this point, whether any of these novelties relates to the Islamic side of Shekra. The idea of a local trusted network of investors that know and recommend each other can be associated with the emphasis Mit Ghamr placed on mutual trust and local investments, and the importance of these concepts in the ideal definition of an Islamic economy. However, the closed network, the accessibility of the information, the different origin of the first investments, and the long-term projects, can also be considered an adaptation to the Egyptian legal system, and not the specificities of Shariah-compliant crowdfunding. Additionally, the concept of association, or jamiya, as a form of credit is a popular institution in Egyptian society. It usually operates on an annual basis and its members turn over a given sum each month to the administrator, who pays out the pooled contributions each month in an agreed-upon sequence to the members. The jamiya consists of a circle of friends or colleges who have enough confidence in each other’s solvency and reliability to accept each other as a member.[49] Therefore, the closed investor network can also be seen as a cultural adaptation to the Egyptian context.

Yomken focuses on microfinance, but in the absence of microfinance legislation,[50] it was founded as a company. The product-based crowdfunding model resulted from the adaptation of crowdfunding to fit into Egyptian law. Even though Yomken does not define itself as Shariah-compliant, nothing in its operations, aside from the absence of a Shariah board, can be seen as conflicting with Shariah. Yomken shares the risk of the products, which are halal, and charges no interest. Furthermore, it has a strong focus on social responsibility and development. For these reasons, I believe Yomken should be considered a Shariah-compliant crowdfunding platform. With regards to its product-based model, we can conclude that, while being Shariah-friendly, product-based crowdfunding is not Islamic per se, and could be viewed as a type of reward-based crowdfunding.

Shekra and Yomken face similar challenges, mainly the lack of a regulatory structure for crowdfunding, online payment, and low internet penetration. In addition, and more importantly, the region lacks a developed startup financing ecosystem and Islamic finance is not very well known.[51] We will have to wait to see whether Shariah-compliant crowdfunding can positively impact both. Shekra and Yomken operate their sites in Arabic and English in order to appeal to the international community, mainly the Muslim community and the Arab diaspora across the world.

It is worth reiterating that neither Yomken nor Shekra use the label "Islamic". Neither considers the word relevant to the quality or the Shariah-compliance of their services. Given the recurring criticisms of the absence of social impact of Islamic banks, Shekra and Yomken want to focus on the core values of an Islamic product through quality, and therefore their social purpose might be viewed as more "Islamic" than their banking counterparts. For these platforms, Islamic finance is not a target, but an ethical and socially responsible tool to promote financing and development.

Can something be "Islamic" without an Islamic reference and discourse? Is a "true Islamic" product defined by its quality, by its name, or both? These questions include essential issues relating to authority and legitimacy. Who defines what is "Islamic", "halal", or "Shariah-compliant"? Currently, the principles of Islamic banking are largely unknown to the majority of Muslims. Provided that education in this respect improves, the future might see more actors questioning and assessing the "Islamicity" of their finances. Thus, Shariah-compliant crowdfunding opens up new debates within the industry and challenges current definitions of "Islamic", empowering a much larger customer base to access Shariah-compliant finance.

## 6. Conclusion

This paper has shown how new Islamic finance ideas have grown in Egypt since January 2011 and that, for the most part, they are not related to the Islamist government nor to the already established Islamic finance industry. Shekra and Yomken are the first of their kind: equity-based and product-based Shariah-compliant crowdfunding platforms, dedicated to filling the funding gap within the Islamic finance and microfinance markets, respectively. The importance of these initiatives should be stressed: they mean not only the further development of Islamic finance, but also its connection to entrepreneurship, job creation, and ultimately, economic development. Furthermore, their success might lead to the diversification of Islamic finance providers and products that could serve those currently excluded from the financial system. However, while the future of the new developments is promising, the road ahead is challenging, as political and economic instability will undoubtedly affect performance.

The Egyptian example might inspire crowdfunding platforms and Islamic banks elsewhere. Islamic banking assets have had an average annual growth of 19% over the past four years; Islamic finance is thus is growing 50% faster than the overall finance sector,[52] while the global crowdfunding markets have accelerated from an annual growth of 64% in 2011 to an 81% growth in 2012.[53] In light of these impressive growth statistics, it may be stated that the development of Islamic crowdfunding can be beneficial for both the Islamic finance and crowdfunding industries, and provide a fruitful ground for new developments.

**Notes**

1. Said M. Elfakhani, Imad J. Zbib, and Zafar U. Ahmed, "Marketing of Islamic Financial Products," in *Handbook of Islamic Banking*, ed. M. Kabir Hassan and Mervyn K. Lewis (Cheltenham: Edward Elgar, 2007), 116.
2. Rodney Wilson, *Islamic Banking and Finance in North Africa. Past Development and Future Potential* (African Development Bank, 2011), 23.
3. Most of the information has been obtained through interviews conducted with Ahmad El-Najjar's son: Khaled El-Najjar, and Ahmed Koura, original associate and manager at one of Mit Ghamr branches: Khaled El-Najjar, Son of Ahmed El-Najjar, Personal Interview by Author, December 19, 2012; Ahmad Koura, Branch Manager at Mit Ghamr, Personal Interview by Author, December 29, 2012.
4. He studied Economics in Cairo University and pursued his PhD in Germany.
5. Walid S. Hegazy, "Contemporary Islamic Finance: From Socioeconomic Idealism to Pure Legalism," *Chicago Journal of International Law* 7, no. 2 (2007): 585.
6. R. K. Ready, "Interest-free Banks and Social Change: A Study of the Town of Mit Ghamr, the Village of Dondait and the Mit Ghamr Savings Bank Project (Interest-free Local Banks)," Unpublished, 1967, 9.
7. Ibid., 8.
8. Monzer Kahf, "Islamic Banks: The Rise of a New Power Alliance of Wealth and Shari'a Scholarship," in *The Politics of Islamic Finance*, ed. Clement M. Henry and Rodney Wilson (Edinburgh: Edinburgh University Press, 2004), 20.
9. Samer Soliman, "The Rise and Decline of the Islamic Banking Model in Egypt," in *The Politics of Islamic Finance* (Edinburgh: Edinburgh University Press, 2004), 274–8.
10. Wilson, *Islamic Banking and Finance in North Africa. Past Development and Future Potential*, 20.
11. Soliman, "The Rise and Decline of the Islamic Banking Model in Egypt," 266.
12. Information extracted form interviews with Shehab Marzban, Walid Hegazy, and Muhammad Beltagi, co-founders and board members of EIFA: Albeltagi, Mohamed. Personal interview by author, December 19, 2012; Hegazy, Walid. Personal interview by author, September 18, 2012; Marzban, Shehab. Personal interview by author, December 30, 2012.
13. Shehab Marzban and Mehmet Asutay, "Standing Out With the Crowd," *The Banker*, November 2012, 28.
14. Ibid.
15. Enrique Estellés-Arolas and Fernando González-Ladrón-De-Guevara, "Towards an Integrated Crowdsourcing Definition," *J. Inf. Sci*. 38, no. 2 (Abril 2012): 9–10.
16. Andrea Ordanini et al., "Crowd-funding: Transforming Customers into Investors through Innovative Service

Platforms," *Journal of Service Management* 22, no. 4 (August 9, 2011): 448.

17. Ibid., 457.
18. Tanya Prive, "What Is Crowdfunding And How Does It Benefit The Economy," *Forbes*, November 27, 2012, http://www.forbes.com/sites/tanyaprive/2012/11/27/what-is-crowdfunding-and-how-does-it-benefit-the-economy/.
19. Ordanini et al., "Crowd-funding," 445.
20. Helen Avery, "Crowdfunding: John Mack Backs Non-bank with Board Role," *Euromoney*, December 4, 2012, http://www.euromoney.com/Article/3010184/Crowdfunding-John-Mack-backs-non-bank-with-board-role.html.
21. Massolution, *2013 CF The Crowdfunding Industry Report,* April 2013, http://www.crowdsourcing.org/editorial/2013cf-the-crowdfunding-industry-report/25107?utm_source=website&utm_medium=text&utm_content=LP+bottom&utm_campaign=2013CF+Launch.
22. Massolution, *Crowdfunding Industry Report: Market Trends, Composition and Crowdfunding Platforms*, May 2012, http://www.crowdsourcing.org/document/crowdfunding-industry-report-abridged-version-market-trends-composition-and-crowdfunding-platforms/14277.
23. Expanding our geographical focus, we can also find other examples of *Sharī'a*-complaint crowdfunding such as HalalFunder, a crowdfunding platform for *halal* projects created by Habibur Rehman in London in October 2012.
24. Marzban, Shehab. Personal interview by author, December 30, 2012.
25. Hegazy, Walid. Personal interview by author, September 18, 2012.
26. Taha, Tamer. Personal interview by author, November 25, 2012 & January 13, 2013.
27. Astrid Frefel, "Islamische Finanzen in Ägypten auf dem Vormarsch: Scharia-konform," *Neue Zürcher Zeitung*, December 27, 2012, sec. Wirtschaftsnachrichten, http://www.nzz.ch/aktuell/wirtschaft/wirtschaftsnachrichten/islamische-finanzen-in-aegypten-auf-dem-vormarsch-1.17909594.
28. Marzban and Asutay, "Standing Out With the Crowd," 29.
29. Ahmed Gabr, "New Investment Platform Shekra Supports Startups in Egypt," *Wamda*, February 17, 2013, http://www.wamda.com/2013/02/new-investment-platform-shekra-supports-startups-in-egypt.
30. Marzban and Asutay, "Standing Out With the Crowd," 29.
31. Rushdi Siddiqui, "Islamic Venture Capital: Crowdfunding. Interview with Shehab Marzban.," *Khaleej Times*, October 2, 2013, sec. Business, http://www.khaleejtimes.com/biz/inside.asp?section=opinionanalysis&xfile=%2Fdata%2Fopinionanalysis%2F2013%2Ffebruary%2Fopinionanalysis_february6.xml.
32. Marzban and Asutay, "Standing Out With the Crowd," 29.
33. Anton Root, "Shekra Blends Crowdfunding with Islamic Finance," *www.crowdsourcing.org*, March 22, 2013, http://www.crowdsourcing.org/editorial/shekra-blends-crowdfunding-with-islamic-finance/24733.
34. Shaimaa El Nazer, "Crowdfunding Platform Yomken Makes Launching Products Easy in Egypt," *Wamda*, October 29, 2012, http://www.wamda.com/2012/10/crowdfunding-platform-yomken-makes-launching-products-easy-in-egypt.
35. Anton Root, "Egypt's 'Yomken' Brings Open Innovation, Crowdfunding Under One Roof," *www.crowdsourcing.org*, December 11, 2012, http://www.crowdsourcing.org/editorial/egypts-yomken-brings-open-innovation-crowdfunding-under-one-roof/21380.
36. El Nazer, "Crowdfunding Platform Yomken Makes Launching Products Easy in Egypt."
37. Tamer Taha, "La Micro-finance Islamique… Un Modèle Efficace Pour l'Égypte" (BA thesis, Université du Caire, 2009).
38. Neil Parmar, "Today $249 for Clay Pots, Tomorrow the Region," April 28, 2013, http://www.thenational.ae/thenationalconversation/industry-insights/finance/today-249-for-clay-pots-tomorrow-the-region.
39. Ibid.
40. El Nazer, "Crowdfunding Platform Yomken Makes Launching Products Easy in Egypt."
41. Marzban and Asutay, "Standing Out With the Crowd," 29.
42. Abdullah Saeed, *Islamic Banking and Interest. A Study of the Prohibition of Riba and Its Contemporary Interpretation*, vol. v. 2, Studies in Islamic Law and Society (Leiden: Brill, 1999), 108.
43. Mahmoud A. El-Gamal, *Islamic Finance: Law, Economics, and Practice* (Cambridge [UK]; New York: Cambridge University Press, 2006), 7.
44. Saeed, *Islamic Banking and Interest*, v. 2:128–41.
45. El-Gamal, *Islamic Finance*, 11.
46. Saeed, *Islamic Banking and Interest*, v. 2:128–41.
47. Root, "Egypt's 'Yomken' Brings Open Innovation, Crowdfunding Under One Roof."
48. Siddiqui, "Islamic Venture Capital: Crowdfunding. Interview with Shehab Marzban."
49. Ann Elizabeth Mayer, "Islamic Banking and Credit Policies in the Sadat Era: The Social Origins of Islamic Banking in Egypt," *Arab Law Quarterly* 1, no. 1 (November 1985): 34.
50. Islamic micro-finance, except from the distant example of Mit Ghamr, is a newcomer to Egypt. The law for conventional micro-finance is scattered: banks, NGOs, and companies are under different laws and supervisors.
51. Root, "Shekra Blends Crowdfunding with Islamic Finance."

52. Ernst & Young, Growing Beyond: DNA of Successful Transformation, World Islamic Banking Competitiveness Report 2012–2013 (The World Islamic Banking Conference, December 2012), 4.
53. Massolution, *2013 CF The Crowdfunding Industry Report*.

## References


Avery Helen. “Crowdfunding: John Mack Backs Non-bank with Board Role.” Euromoney, December 4, 2012. Available at: http://www.euromoney.com/Article/3010184/Crowdfunding-John-Mack-backs-non-bank-with-board-role.html.

“Best of the Bunch: Ideathon & Startup Demo Finalists for Riyadh Revealed.” ArabNet, October 11, 2012. Available at: http://arabnet.me/ideathon-startup-demo-finalists-riyadh-revealed/.

Borsatti Luciana. “Anna Lindh Forum: Arab Uprisings, Poverty and Unemployment the New Challenges.” ANSAmed, May 4, 2013. Available at: http://www.ansamed.info/ansamed/en/news/sections/politics/2013/04/05/Arab-uprisings-poverty-unemployment-new-challenges_8507588.html.

“Challenges – Yomken.” Available at: http://yomken.com/challenges/. Accessed May 3, 2013.

El Nazer Shaimaa. “Crowdfunding Platform Yomken Makes Launching Products Easy in Egypt.” Wamda, October 29, 2012. Available at: http://www.wamda.com/2012/10/crowdfunding-platform-yomken-makes-launching-products-easy-in-egypt.

El-Gamal, Mahmoud A. Islamic Finance: Law, Economics, and Practice. Cambridge: Cambridge University Press, 2006.

Elfakhani Said M, Imad J. Zbib, Zafar U. Ahmed. “Marketing of Islamic Financial Products.” In Handbook of Islamic Banking, edited by M. Kabir Hassan and Mervyn K. Lewis, 116–127. Cheltenham: Edward Elgar, 2007.

Ernst & Young. Growing Beyond: DNA of Successful Transformation. World Islamic Banking Competitiveness Report 2012–2013. The World Islamic Banking Conference, December 2012.

Estellés-Arolas, Enrique, Fernando González-Ladrón-De-Guevara. “Towards an Integrated Crowdsourcing Definition.” J. Inf. Sci. 38, no. 2 (Abril 2012): 189–200.

Frefel Astrid. “Islamische Finanzen in Ägypten auf dem Vormarsch: Scharia-konform.” Neue Zürcher Zeitung, December 27, 2012, sec. Wirtschaftsnachrichten. Available at: http://www.nzz.ch/aktuell/wirtschaft/wirtschaftsnachrichten/islamische-finanzen-in-aegypten-auf-dem-vormarsch–1.17909594.

Kahf Monzer. “Islamic Banks: The Rise of a New Power Alliance of Wealth and Shari’a Scholarship.” In The Politics of Islamic Finance, edited by Clement M. Henry and Rodney Wilson, 17–36. Edinburgh: Edinburgh University Press, 2004.

Gabr Ahmed. “New Investment Platform Shekra Supports Startups in Egypt.” Wamda, February 17, 2013. Available at: http://www.wamda.com/2013/02/new-investment-platform-shekra-supports-startups-in-egypt.

Galloux Michel. Finance Islamique et Pouvoir Politique: Le Cas de l’Egypte Moderne. 1re éd. Islamiques, 1264–1987. Paris: Presses Universitaires de France, 1997.

Hegazy Walid S. “Contemporary Islamic Finance: From Socioeconomic Idealism to Pure Legalism.” Chicago Journal of International Law 7, no. 2 (2007): 581–603.

Henry, Clement M, Rodney Wilson, eds. The Politics of Islamic Finance. Edinburgh: Edinburgh University Press, 2004.

“Home – Yomken.” Accessed May 3, 2013. Available at: http://yomken.com/?lang = en.

“How It Works – Shekra.” Accessed May 3, 2013. http://www.shekra.com/en/how-it-works.php.

International Development – Social Fund For Development: Micro And Small Enterprises Support Project In The Arab Republic Of Egypt. African Development Bank, August 2006. Available at: https://www.devex.com/en/projects/social-fund-for-development-micro-and-small-enterprises-support-project-in-the-arab-republic-of-egypt/secure.

“Investors – Shekra.” Accessed May 3, 2013. http://www.shekra.com/en/investors.php.

Lotfy, Ahmed. “Islamic Crowd Funding Portal Launched in Egypt.” Reuters. November 12, 2012. Available at: http://www.reuters.com/article/2012/11/12/islamic-finance-egypt-idUSL5E8MC7FN20121112.

MacFarlane Isla. “Shari’ah-compliant Crowd Funding Launched in Egypt.” CPI Financial, November 14, 2012. Available at: http://www.cpifinancial.net/news/post/16827/shariah-compliant-crowd-funding-launched-in-egypt.

Marzban Shehab, Mehmet Asutay. “Standing Out with the Crowd.” The Banker, November 2012.

Massolution. 2013 CF Crowdfunding Industry Report, April 2013. Available at: http://www.crowdsourcing.org/editorial/2013cf-the-crowdfunding-industry-report/25107?utm_source=website&utm_medium=text&utm_content=LP+bottom&utm_campaign=2013CF+Launch.

Massolution. 2012 CF Crowdfunding Industry Report: Market Trends, Composition and Crowdfunding Platforms, May 2012. Available at: http://www.crowdsourcing.org/document/crowdfunding-industry-report-abridged-version-market-trends-composition-and-crowdfunding-platforms/14277.

Mayer, Ann Elizabeth. “Islamic Banking and Credit Policies in the Sadat Era: The Social Origins of Islamic Banking in Egypt.” Arab Law Quarterly 1, no. 1 (November 1985): 32.

Niblock Tim, Rodney Wilson (Eds.) The Political Economy of the Middle East: International Economic Relations. Vol. III. VI vols. Edward Elgar, 1999.

Ordanini Andrea, Lucia Miceli, Marta Pizzetti, A. Parasuraman. “Crowd-funding: Transforming Customers into Investors through Innovative Service Platforms." Journal of Service Management 22, no. 4 (August 9, 2011): 443–470.

Parmar Neil. "Today $249 for Clay Pots – Tomorrow the Region," April 28, 2013. Available at: http://www.thenational.ae/thenationalconversation/industry-insights/finance/today-249-for-clay-pots-tomorrow-the-region.

Pearce Douglas. Financial Inclusion in the Middle East and North Africa: Analysis and Roadmap Recommendations. World Bank, March 2011. Available at: http://www.microfinancegateway.org/p/site/m//template.rc/1.9.49668.

Prive Tanya. "What Is Crowdfunding And How Does It Benefit The Economy." Forbes, November 27, 2012. Available at: http://www.forbes.com/sites/tanyaprive/2012/11/27/what-is-crowdfunding-and-how-does-it-benefit-the-economy/.

"Products – Yomken." Accessed May 3, 2013. Available at: http://yomken.com/products/.

Ready RK. "Interest-free Banks and Social Change: A Study of the Town of Mit Ghamr, the Village of Dondait and Teh Mit Ghamr Savings Bank Project (Interest-free Local Banks)." Unpublished, 1967.

Regional Economic Outlook. Middle East and Central Asia. World Economic and Financial Surveys. International Monetary Fund, October 10, 2010.

Rehman Habibur. "Crowdfunding and the Muslim World." www.crowdsourcing.org, December 26, 2012. Available at: http://www.crowdsourcing.org/editorial/crowdfunding-and-the-muslim-world/22818.

Root Anton. "Egypt's 'Yomken' Brings Open Innovation, Crowdfunding Under One Roof." www.crowdsourcing.org, December 11, 2012. Available at: http://www.crowdsourcing.org/editorial/egypts-yomken-brings-open-innovation-crowdfunding-under-one-roof/21380.

Root Anton. "Shekra Blends Crowdfunding with Islamic Finance." www.crowdsourcing.org, March 22, 2013. Available at: http://www.crowdsourcing.org/editorial/shekra-blends-crowdfunding-with-islamic-finance/24733.

"Rushdi Siddiqui Joins Shekra." Shekra, February 20, 2013. Available at: http://www.shekra.com/en/newsarticle.php.

Saeed Abdullah. Islamic Banking and Interest. A Study of the Prohibition of Riba and Its Contemporary Interpretation. Vol. v. 2. Studies in Islamic Law and Society. Leiden: Brill, 1999.

Wilson, Rodney. Islamic Banking and Finance in North Africa. Past Development and Future Potential. African Development Bank, 2011.

Sahay Ratna, Alan MacArthur. "Challenges for Egypt in the Post Crisis World." Egyptian Center for Economic Studies, IMF Middle East and Central Asia Department, January 23, 2011.

"Shekra – Home." Accessed May 3, 2013. Available at: http://www.shekra.com/en/index.php.

Siddiqui Rushdi. "Islamic Venture Capital: Crowd Funding. Interview with Shehab Marzban." Khaleej Times, October 2, 2013, sec. Business. Available at: http://www.khaleejtimes.com/biz/inside.asp?section=opinionanalysis&xfile=%2Fdata%2Fopinionanalysis%2F2013%2Ffebruary%2Fopinionanalysis_february6.xml.

Soliman Samer. "The Rise and Decline of the Islamic Banking Model in Egypt." In The Politics of Islamic Finance, 265–285. Edinburgh: Edinburgh University Press, 2004.

"Startups – Shekra." Accessed May 3, 2013. Available at: http://www.shekra.com/en/startups.php.

"Submit – Yomken." Accessed May 3, 2013. Available at: http://yomken.com/submit/.

Taha Tamer. "La Microfinance Islamique... Un Modèle Efficace Pour l'Égypte." BA thesis, Université du Caire, 2009.

"Team – Shekra." Accessed May 3, 2013. Available at: http://www.shekra.com/en/team.php.

"The Shape of Things to Come?" FTSE Global Markets, November 26, 2012. Available at: http://www.ftseglobalmarkets.com/issues/issue-66-november-2012/the-shape-of-things-to-come.html.

The Silatech Index: Voices of Young Arabs. Gallup, April 2011. Available at: http://sas-origin.onstreammedia.com/origin/gallupinc/media/poll/pdf/Silatech.Report.2011.Apr.pdf.

Wilson Rodney. Islamic Banking and Finance in North Africa. Past Development and Future Potential. African Development Bank, 2011.

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