# Analysis Of Islamic Bonds Based On Sinlammim Kaffah

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#### Abstract

Financial system around the world in last decade is experiencing the fundamental changing. This conditions are conducted to get better solution in face of economic problem. The solution for global crisis by developing financial system which is more holistic such as Islamic Bonds based on Islamic Financial Concept. Islam had been begun with concept of the God created universe for human life. The meaning of Islam can be interpreted as a system. And Islam prefers to have the system which is more comprehensive. And the holistic in Islam means Kaffah. And to explain a save way for human life consists of 2 things for balance. To do that, there is methodology of Sinlammim Kaffah. Where Sinlammim is derived from Islam, and Kaffah means comprehensive or holistic.

This research represents the result of new finding in Kaffah Thinking and Sinlammim Method based on Islamic Financial Concept. These approaches came from new theory Sinlammim Kaffah method by case study of Islamic Bonds comparison between Indonesia and Malaysia to show that Indonesia will be the biggest Islamic Bonds market in 5 years later.

Sources used and how to read, the main source of this research are statistical data, macroeconomic, monetary, and conventional capital markets also Islamic financial data in Indonesia and Malaysia since 2002 until 2006. The data was read by the method of System Dynamics (Non-linear Systems Thinking) together with Sinlammim Kaffah concept which is a methodology of thinking in a comprehensive system of dynamic multidisciplinary. For computing, this study takes advantage of many techniques in Stock Flow Diagram using Powersim modeling software.

This research shows that: 1) The increasing of Indonesia Islamic Bonds value is effected by SBSN issues, as a high increasing in conventional bonds after Government Debt Securities (SUN) issues. 2) Indonesia Islamic Bonds index is higher than Malaysia Islamic Bonds, this will attract more investments in Indonesia Islamic Bonds. 3) The Indonesia Islamic Bonds development until year 2015 will be effected by macro economy, so it need sensitivity scenario for SBI and market share to anticipate any changing. 4) Indonesia Islamic Bonds value will reach Rp 2.726.019 Billions in year 2015 above Malaysia Islamic Bonds value Rp 1.944.952 Billions through tax and SBSN intervention policy.

Comprehensive conclusion resulted on development of Islamic Bonds through Sinlammim Kaffah based on System Dynamics is the value of Islamic Bonds between Indonesia and Malaysia. The value of Indonesia Islamic Bonds in year 2015 would be more higher than value of Malaysia Islamic Bonds.

Keywords: Islamic Bonds, Sinlammim, Kaffah

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#### 1. Introduction

In year 2008, world economy is experiencing fundamental change to uncertain economy. This happened to all countries then following into financial crisis. The reason of financial crisis occurred in the world, because current economic system failed to predict the sign of crisis that is knocking over the world. Then, conventional economic and financial science looks for economic model in new paradigm on new approach and more comprehensive<sup>2</sup>.

This matter is conducted to get better solution in face of economics problem. One of the solutions is developing financial system based on interest rate free or without usury which is recognized in Islamic economic concept as mudharabah.

Islam also has financial system and will be the solution for this situation where economic system is not working properly. This related with the meaning of the word 'Islam'. Islam means safe or consist of solution for all problems.

Islam can give contribution to make new paradigm and to solve current world problem by comprehensive approach that recognized in Islam as Kaffah<sup>2</sup>. In other word, Islam has also comprehensive approach<sup>3</sup>. One of the Islamic finance instruments are Islamic Bonds or Sukuk.

#### A. Sharia Bonds

According to Fatwa DSN No. 32/DSN-MUI/IX/2002, Islamic bonds is a longterm securities based on sharia principles which issued by the issuer to holders of Islamic bonds. The issuer has to pay revenue o profit loss sharing / fee / margin to holders of Islamic bonds and pay back principal fund at maturity.

Some aqad can be used in the issuance of Islamic bonds such as: mudaraba, musaraka, murabaha, salam, istisna, and ijara. Type of mudarib (issuer) must not be contrary based on sharia standard with respect to the substance Fatwa DSN No. 20/DSN-MUI/IV/2001 about Investment Guidelines for the Implementation of Islamic Mutual Funds. Revenue sharing from mudarib to investors must be cleared from usury.<sup>4</sup>

Definition of Sharia Bonds contained in Fatwa DSN No 32/DSN-MUI/IX/2002 about general term of Sharia Bonds:

- 1) Sharia bonds are long-term securities based on sharia principles which is issued by the Issuer to holders of Islamic bonds that require profit loss sharing/margins/fees and principal of bond funds to be paid back at maturity.
- 2) Bonds can't be in debt structures but more on to investment structures without interest payment.
- 3) Bonds must be based on Sharia compliance.
- 4) Sharia Bonds are long-term securities based on sharia principles and issued bycompany or government with payment of profit loss sharing/fee/margin and its principal due to maturity.
- 5) The amount of income to the results calculated by multiplying the ratio of the Shariah Bonds holders shared revenue generated, the amount stated in the consolidated financial statements which is published prior to payment date of revenue sharing. The payment of revenue sharing for Sharia Bonds holders will made proportionality according to portion of its value compare with pool of fund in Sharia Bonds.

In Islamic securities, there are some term for instance Sharia Bonds, Islamic Bonds, and Sukuk. Concept of Sukuk has been already known in the emerging trade patterns of the late Middle age.

<sup>2</sup> Roikhan Mochamad Aziz. (2006), Sinlammim Kode Tuhan. (Jakarta: Esa Alam), pp.142.

<sup>3 (</sup>QS. Al-Bagarah [2]: ayat 208)

<sup>4</sup> DSN, Himpunan Fatwa, Edisi Revisi (Jakarta: Gaung Persada, 2006), h. 197.

The word of Sukuk came from its plural Sakk. And word of Sukuk can be derived to word Sakaik. And word Sakaik can be derived with word Sakk. A Sakk or Cheque referred to payment obligation transferred between trustworthy parties on behalf of the counterparties to a long distance trade transaction. This term can be formed in gistorical documents known as Genaizah documents<sup>5</sup>. To establish Islamic concept more dynamics and more Kaffah in the filed of securitization, this historical evidence provides a flexible set of concepts.

The term Sukuk defined as letters or certificates that have guarantees. The certificate is not certificate of letter to disburse the money, but to have ownership. There is also the definition of Sukuk by Accounting and Auditing Organization for Islamic Financial Institution (AAOIFI), which is the official institutions of the Islamic financial system that issued the fatwa on accounting and auditing systems in the Islamic financial sector. According to the AAOIFI, Sukuk are certificates in equal value on part or all ownership of tangible assets to get yield in the ownership of assets in certain projects or special investment activity. The certificate is valid until receiving revenue and principle funds based on purpose of Sharia Bonds.

In accordance with AAOIFI standards, aqad for Sharia Bonds can be determined such as murabaha, salam, istisna, mudaraba, musaraka, iijara and the other aqad combination.

There is another term of Islamic securities in Government Of Indonesia known as State Islamic Securities (Surat Berharga Syariah Negara/SBSN). SBSN or State Sukuk is securities based on Sharia Principles as certificates for assets in rupiah or foreign currencies.

As per definition term of Sharia Bonds consist of debt meaning, this reason can be seen in some facts such as:

- 1) Decree of Minister Of Finance stated that definition of bonds is the securities of debt instruments.
- 2) Government Bonds Act (Undang-Undang Surat Utang Negara/UU SUN) stated that the form of securities is debt.
- 3) In global financial definition Bonds mean long term debt..

In the implementation of capital market trading in Indonesia, the two things for these instruments are SBSN which is issued by the government and Sharia Bonds that were already known by market players in a series of emissions as Islamic instrument by corporate. Then the world's financial system began to introduce another term for the name of the Sukuk

## **B.** Law And Principle

Given the opinion of scholars about forbidden usury and also explicitly mentioned in Quran<sup>6</sup>. There are explanation about interest rates and usury can't be allowed are listed in the Indonesia Islamic Scholar Board (Majelis Ulama Indonesia/MUI) fatwa.

- 1. Interest (fa'idah) is imposed in addition to lending money transactions (al-qardh) which is calculated from the principal loan without considering the use of its principal, and calculated with certainty in advance, and are generally based on the percentage.
- 2. Usury is the additional (ziyadah) without compensation because of late in payment as agreed in prior, this known as Riba Nasi'ah.

Regarding to some academics and financial practitioners have argued that interest rates is forbidden because of additional in principal funds, and also it consist of time value of money and certainty. The concept of interest rates is one of the main guidelines in economics until now. The concept of this interest rates can be proved that it has disadvantage empirically by incorporating dynamic factors of time and uncertainty.

<sup>5</sup> Nathif Adam, and Thomas Abdul Kader. Islamic Bonds: Your Guide To Issuing Structuring And Investing Sukuk. 2003. Euromoney Books. London. Pp 44.

<sup>6</sup> Fatwa MUI No.1 Year 2004 about interest / fa'idah) . http://www.mui.or.id/mui\_in/fatwa.php?id=130,

Then National Sharia Board (Dewan Syariah Nasional/DSN) issued fatwa on Islamic bonds. In order to be able to accommodate the needs of society based on Sharia Compliances.. Source about Sharia Bonds in the Quran and the Hadith and rules of jurisprudence can be found below:

It means: "O ye who believe, fulfill with agad-agad". (Surah 5:1)

It means: "And fulfill the promise; real promise must be questioned". (Qur'an 17:34).

c. QS. Al-baqarah [12] paragraf 275

It means: "The people who eat (take) usury can not stand but as stands the devil possessed people because (pressure) psychosis. Their situation so that, is because they say (think), actual trading is like usury. The people who have to ban him from his Lord, and continue to stop (from taking usury), then for him what he had taken first (to judge); and business (up) to God. People who repeat (taking usury), then it is the inhabitants of the Fire they will abide therein ". (Qur'an 2:275)

d. Hadith of the Prophet, al-Tirmidhi history of Amr ibn Awf al-Muzani, the Prophet. said.

It means: "The agreement may be among the Muslims is prohibited unless an agreement is lawful or unlawful which justifies that, and the Muslims are bound by those terms unless the terms which forbid the lawful or unlawful justifies." (Narrated by at-Tirmidhi) <sup>7.</sup>

e. Hadith of the Prophet, history of Ibn Maja, al-Daruquthni, and others, from Abu Said al-Khudri, the Prophet. Said :

<sup>7</sup> Muhammad Ibn Ismâ'l al-Kahlâanî, Subul al-Salâm (Bandung: Pustaka Dahlan, t.t.), Jilid III, h. 59

It means: "No harm (harm) self or others". (Narrated by Ibn Majah) 8.

f. General Rules

It means: "Basically all forms of muamalah be done unless there mengharamkannya proposition."

# C. Types Of Islamic Bonds<sup>9</sup>.

To meet the needs of investors and issuers a wide range of the Islamic economists have developed various kinds of contract (agreement) that can be used. In accordance with the fatwa of Bond Syariah DSN, then the contract that can be used in the issuance of Islamic bonds, among others: mudaraba (muqaradah) / qiradh, musharaka, murabaha, salam, istisna, and ijara<sup>10</sup>.

1) Aqad Mudaraba or Muqaradah (Financing Trust, Investment Trust) Mudaraba is the business cooperation agreement between two parties with the first party providing the capital, while others become managers. Business profits are divided according to the ratio mudaraba the agreed beginning, whereas if the losses borne by capital owners during the loss was not due to negligence by the management. If the losses resulting from fraud or negligence of the manager, the manager will be responsible for the losses. Shariah Bonds Mudaraba mudaraba made under contract with the capital provided by one party and managed by other parties, the percentage of profits has been agreed previously. Please note that Islamic bonds have in common with Mudaraba financing bonds in the conventional system. Revenue bonds from income projects financed by the stock of debt letter. 

11.

Conversely, if the facility does not generate enough income, investment voucher holders may not receive benefits or money anyway at all. National Fatwa Council of Sharia Islamic Bond Mudharabah mentioned that Bond is Bond Mudharabah Islamic Sharia-based contract with respect to the substance mudaraba Sharia Council National Fatwa MUI No. Mudharabah 7/DSNMUI/IV/2000 about financing. Shariah Bonds Mudharabah gives the owner the right to receive appropriate capital at maturity, and also benefits previously agreed upon at the time of the agreement. Shariah Bonds Mudharabah so has an important role in the financing of a development process as it relates to benefits that can be obtained from a project. Financing through mudaraba more efficient in allocating resources than the system of financing with interest, which does not represent the benefits that can be gained from a project.

<sup>8</sup> Ibn Mâjah, Sunan Ibnu Mâjah, Abdul al-Baaqi, Muhammad Fuad, ed. (Jakarta: Darul Fiqr, t.t.) Jilid II, h. 784.

<sup>9 `</sup>Abd al-Wahhâb Khallâf, `Ilm Usûl al-Fiqh (Jakarta: Majlis Ala Indonesia Liddawah Islamiyah, 1972), h. 91. <sup>10</sup>DSN, Himpunan Fatwa, h. 197

<sup>11</sup> Muhammad al-Bashir Muhammad al-Amine, "The Islamic Bonds Market: Possibilities and Challenges", Article in International Journal of Islamic Financial Services, Vol. 3 No. 1, 2001, publised by Islamic Financial services Board, Kuala Lumpur, h. 7..

## 2) Agad Ijara (Operational Lease).

Ijara is a contract based on the parties who buy and lease equipment needed clients with specific rents. Old borrowings and the costs approved in advance and ownership of assets is the owner of the lease. Therefore, the relationship between the parties concerned are not the same as the debtor-creditor relationship because the relationship based on buyer-seller of an asset. Syariah Ijarah Bonds, on the other hand, are securities of the same bill for each publication, represents the physical assets remain tied to an Ijara contract as defined by the shari'a. Basic features of the Syariah Ijarah Bond is that it represents the leased assets, with no evidence linking investment holders (bondholders) with a generic organization, company or institution.

Fatwa DSN No. 41/DSN-MUI/III/2004 of Syariah Ijarah Bond stated that the Syariah Ijarah bonds are bonds based on the Sharia which Aqad Aqad ijara use rights transfer (benefit) of an item within a certain time with rent payments (ujrah), without being followed by the transfer of ownership good itself. Coupled with attention to the substance of the MUI Fatwa No. DSN. Ijara 09/DSN-MUI/IV/2000 about financing.

# 3) Aqad Musharaka (Partnership, Project Financing Participation)

Securities Musharaka Musharaka contract is based on a nearly resembles Mudharabah Securities. The main difference is the mediator will be a couple of the group becomes the owner of the Musharaka bond holders in a combined company, which in mudaraba, source of capital comes only from one side. Please note that almost all the criteria contained in the bonds can also be applied mudaraba for Musharaka bonds.

In a Fatwa DSN No. 08/DSN-MUI/IV/2000 of Musharaka financing mentioned that Musharaka financing is financing based on the contract of cooperation between two or more parties to a particular business. That each party to contribute funds to the provision that the benefits and risks will be borne jointly in accordance with the agreement.

### 4) Agad Salam (In-Front Payment Sale)

Salam is the sale of a commodity, which has determined the quality and quantity to be given to the buyer at the appointed time in the future at current prices. Investors will buy Salam if an expectation of price for commodity in the future will be higher than now. But if investors want to change prior to maturity, the holder can sell the certificate. Fatwa DSN No. 05/DSN-MUI/IV/2000 about buying and selling Salam mentioned that the sale and purchase of goods by way of booking and payment in advance with the price of certain conditions is called Salam.

#### 5) Agad Istisna (Purchase by order or manufacture)

Istisna is a contract to sell manufactured goods and the seller provides material goods, descriptions and specific pricing. Suitability of institutions istisna for financial intermediaries is the permission for the contractor in istisna to enter into a contract in parallel with istisna subcontractors. Financial institution may takes over the construction of a facility in a certain price, then the construction will be done by company that specializes in that field.

In a Fatwa DSN No. 06/DSN-MUI/IV/2000 about buying and selling istisna mentioned that the sale and purchase of the aqad istisna sale in the form of reservations. Reservations in the creation of certain goods with certain criteria and conditions agreed between the buyer (buyer, mustashni) and sellers (manufacturers, Shani).

# 6) Aqad Murabaha (Deferred Payment Sale)

Murabaha is the sale of goods in normal price with an additional benefits. In bai 'almurabaha, the seller must notify the purchase price of the product and determine the level of profits in addition $^{12}$ .

Fatwa DSN No. 04/DSN-MUI/IV/2000 about murabaha mentioned that the buyer needed to buy goods on behalf of the third party, and this purchase must be legitimate and free of usury. Then third party to sell such goods to the customer (buyer) with a selling price after additional profit. Third party must honestly tell the cost of goods to customers following an agreed fee. Then customers pay the price of goods which has been agreed that at a certain time period.

<sup>12</sup> Muhammad al-Amine, "The Islamic Bonds Market", p. 2.

#### D. State Islamic Securities

Government of Indonesia since 2004 has prepared a bill for enactment State Islamic Securities (Surat Berharga Syariah Negara/SBSN) to be a legal umbrella to issue government Islamic instruments. The process of making this SBSN Act had a long process. Almost 4 years this law is discussed by the government such as Debt Management Organization (DMO) which is now transformed into structural formation in Department Of Finance as the Directorate General of Debt Management (Direktorat Jenderal Pengelolaan Utang / JPU) and has Islamic directorate known as Directorate Of Sharia Financing Policy (Direktorat Kebijakan Pembiayaan Syariah / KPS). The discussion about SB SN took a long time because there are crucial issues that can not be solved in a short discussion, such as:

- 1) Indonesian law adopted the Civil Law and not Common Law which did not recognize the transfer of rights over government assets as underlying asset.
- 2) Legal provisions on the establishment of intermediary companies known as Special Purpose Vehicle (SPV) which is not Open Company (PT) and also not a State-Owned Enterprises (SOEs).
- 3) In line with above two things, there are still some problems that a stumbling block for the immediate promulgation of SBSN Act, such as double taxation. But the two things mentioned above SPV and underlying asset are the main problem that makes the SBSN Act experienced a long process of discussion. Then in first semester of 2008 the Act was finally completed SBSN. Parliament approved through the Commission XI to passed SBSN Act in a plenary session.

In the Act there are several explanations, for instances<sup>13</sup>:

- a. SB SN are securities issued based on Islamic principles, as certificate for the inclusion of Asset SBSN, both in rupiah and foreign currencies, which should be paid or guaranteed payment.
- b. Publisher of SBSN is a legal entity established under the provisions of this Act to carry out activities due to SB SN.
- c. SBSN assets are the State Property which have good economic value of tangible or intangible assets within the framework of the publication used as a basis of SBSN.
- d. State-owned goods are all goods purchased or obtained at the expense of the state budget or other gains derived from legitimate, as stipulated in State Treasury Act Law No. 1 Year 2004.

Securities managed by the government or some kind of state, in which there SB SN as one of the few securities issued by the government. The structure of securities issued by the government, SBSN including the State Securities components that can be emitted in the country and abroad. For emissions in the country, according to State Securities (Surat Berharga Negara/SBN) plan will be published in the form of certificates ijara retail sukuk, Islamic Treasury Bills, and projet financing (Musharaka or istisna). As for emissions plan SBSN abroad will be published in foreign currencies United State Dollar (USD) and the European Euro (EUR) 14

#### E. Taxes

In this study will be included as an element of tax factors associated with the development of Islamic bonds<sup>15</sup>. There are various definitions of tax, one of which is defined according to Rochmat Sumitro tax, that tax is a contribution to the treasury of the people under the Law (which can be enforced) with no reciprocal service received (cons achievement) can be shown directly and used to pay expenses common.

For bond tax rules based on the decision Perpem No. 6 of 2002 concerning income tax on interest and discount bonds are traded and / or reported at the stock exchange trading, and managed its implementation by the Republic of Indonesia Ministry of Finance Decree No. 121/KMK.03/2002 and established on April 1, 2002

<sup>&</sup>lt;sup>13</sup>Direktorat Kebijakan Pembiayaan Syariah, RUU SBSN (Jakarta: Direktorat Jenderal Pengelolaan Utang, Depkeu, 2007).

<sup>&</sup>lt;sup>14</sup>Republika, Rabu 9 April 2008, h. 5. Komisi XI Keuangan Perbankan DPR menyetujui RUU SBSN Senin malam, 7 April 2008, usai pandangan fraksi. Dari 10 fraksi di Komisi XI, 9 setuju, 1 fraksi yang menolak RUU SBSN adalah Fraksi Partai Damai Sejahtera (PDS). Pernyataan FPDS mendapat tentangan fraksi lain FPAN, FPPP, FPKB, dan FPG. "Perbedaan pendapat dihargai tapi suara mayoritas menyetujui,"kata Ketua Komisi XI DPR Awal Kusumah.

<sup>15</sup> Rochmat, Sumitro, Dasar-Dasar Hukum Pajak dan Pajak Pendapatan (Bandung: Eresco, 1991), h. 1.

Implementation of this rule is effective from May 1, 2002 is expected to increase the effectiveness of the imposition of income tax (PPh.) the bond's interest income. Bond interest tax will indirectly create and market bond investors do orderly administration of doing transactions.

Change one of the most important principles in the tax rules is the abolition of this bond transaction tax for 0.03% of transaction value. Occurs also increase income tax rates from 15% to 20% final on interest income (coupon) and the discount bonds are traded and or reported to the exchange. With regard to Islamic bonds, the government in this case is the Directorate General of State Treasury Ministry of Finance of Indonesia will lower the tax rate, or sukuk, Islamic bonds lower taxes than conventional bonds.

The imposition of the tax rates sukuk is less competitive now to issue Islamic bonds for the amount of tax exceeds the Conventional Bonds. When this dissertation was written, the provision of taxation more competitive sukuk will be included in a taxation bill currently being discussed the House Special Committee. Elimination of double taxation on Islamic bond transactions needed to encourage the development of corporate sukuk.

To overcome the double taxation on Islamic Bond transaction will require double tax holiday gradually include the use of the term other transactions outside the trading terms as murabaha or with any other contract terms (mudaraba, istisna, salam, musaraka and ijara).

## 2. Philosophy and Methodology

# A. Philosophy

# 1) Ontology

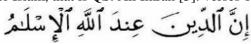
Philosophy of Islamic economics based on 3 (three) entities known as trilogy or trisulo which independent but integrate in a system, and there are God, human being, and religion. The principle of Islamic Economics on philosophy determined that human being has been created by God for worship<sup>7</sup>. Dimension of this Islamic economics differentiate from other economic system for instance socialism and capitalism. Philosophy of Islamic Economics relevant paradigm with logical, aesthetic, and ethical values which based on Islam to be benefited among economic behavior of human being.

In Islam, economic values came from The Quran and The Hadits in the form of universal principles. While other economic system only focused at causality and positive in an economic activity, Islam preferred to have ethics and values which is implied in economic activity. These values always constitute in every single Islamic economics environment.

The big picture of this new paradigm of economics is integration between economics and Islam based on Kaffah Thinking, which can be labeled as a Kaffah Economics. The appearance of this Kaffah economics concept represents the starting point in economics refer to whole life system.

The ontology of Kaffah concept is Islam. This conjunction will bridge all existing life system in human being, environment, and universe. All creations by God could be pointed as the form of Islam.

The word of Islam has word root from 3 (three) initial letters there are alphabet 's' or sin in Arabic ( $\omega$ ), alphabet 'l' or lam ( $\omega$ ), and alphabet 'm' or mim in Arabic ( $\rho$ ). There is sentence in The Quran, as a ultimate source the meaning of ontology for Islam, that is QS. Ali Imran [3]: verses 19.



'Really, the system beside Allah is Islam

#### 2) Epistemology

The new concept can be made as a Scientific Method if it has fundamental of knowledge according to basic science. One of requisite in philosophy study is epistemology. Epistemology is philosophy branch which study exhaustively the whole process to obtain science. Epistemology intrinsically study about knowledge philosophy which is related to origin of science, how to get knowledge, and validity of thinking.

Islam can be meant as a system with holistic approach, comprehensive view, and Kaffah perspective. Then Islam as a system becomes the root of concept to integrate in economic concept which is called Kaffah.

Kaffah Economics emerges in epistemology based on the argument that all concept of basic life is Islam which is

considered as a system. This epistemology can be found in a sentence of Quran Surah Al-Baqarah [2]: verses 208,:

To religious people enter all of you into Islam by Kâffah.

# 3) Axiology

Studying about epistemology is not enough, without describing its axiology. In consequence of Islamic epistemology, there has to involve a picture of axiology. Analysis in Islamic economics for axiology explains about economic in values and benefit of the knowledge. Human being will not conduct something without involving factor of advantages and disadvantages.

Function of epistemology in Kaffah Economics made axiology in the form of equilibrium for human real life. Begin with ontology as Islam for the fundamental of life including economics, then epistemology as Kaffah for economic system, and then axiology in the form of economic application such as good and bad for balance.

In this axiology relation has 2 matter representing good and bad. The existence of Islam can be done by Kaffah concept. The balancing between 2 (two) opposite things such as well and ugly can be read in QS. Saba [34]: verses 28 which expressed 2 matter that is "carrier of good news and giver of commemoration"

We have not sent thee but as a (Messenger) to all mankind, giving then glad tidings, and warning them.

## **B.** Methodology

## 1) Sinlammim Kaffah

Kaffah thinking based on above 3 (three) science philosophy framework. First, ontology made Islam as basic thinking. Second, epistemology of Kaffah represented value of science. Third, axiology performed the balance in regard to good and bad.

Picture Methodology of Sinlammim in Human Hand



Source: Property Of Owner, DR.IR.H.Roikhan, Mochamad Aziz.MM, 2006.

From three framework can be built new paradigm that is Scientific Method of Sinlammim. This methodology can be referred to Quran with words 'Silmi Kâffah', with interpretation the word' silmi' is derived from letters of sin lam mim

Scientific method of Sinlammim represents one of the solution to break the stagnation of life in order to solve some elementary problems. Sinlammim is important to become counter balance in overcome basic question of science. This new paradigm in line with growth of human last civilization which already need to look for a middle course of problems in existing economy by having new way theory related to spiritual. From time to time human being wishes

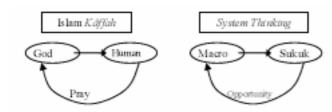
better civilization and can answer the basic question of life. One of the example how the methodology in Sinlammim is very simple can be seen on human hand.

Method of Sinlammim can be developed in life for instance economics. First element is God, second element is economics, and third elements is religious services.

# 2) Kaffah Thinking

Positive Causal Loop in Kaffah can be drawn in the sentence of "giving them glad tidings" and Negative Causal Loop can be interpreted as "warning them". So that, for this context, System Thinking can be replaced with Kaffah Thinking.

Diagram Comparison Between Kaffah and System



Source: Property Of Owner, DR.IR.H.Roikhan, Mochamad Aziz. MM.

For Sinlammim method, as comparator of System Dynamics method, this method also has basic pattern and built by three entities such as 1. God, 2. Human, and 3. Pray. These religious entities can be changed in every particular entity with other illustration for instance:

- 1. Mother replace God
- 2. Children replace Human
- 3. Father replace Pray.

System Dynamics has particular form to be known as feedback. So, System Dynamics and its feedback show this method is a two ways relation. If System Dynamics has two ways relation, so has Sinlammim.

# 3) Digital Root

The hegemony of capitalism on science and technology to make a tool in computer such as Powersim that represent one of many tools based on high standard.

Numbers 6 1+0 1+5 2+1 2+8 4+5 5+5 3+6 Amount 45 55 5 5 + 6 6 8 9

Table Digital Root Of Sinlammim

Source: Property Of Owner, DR. IR. H. Roikhan Mochamad Aziz. MM., 2006

On the other hand, Islam comes with simple argument and supported by basic technology which can transform the thinking theory of Kaffah into Sinlammim method to have digital root as a tool. In this very easy calculation, the numbers will be count one by one until unlimited amounts on certain repeats numbers on the top of absolute value.

Begin with less number until indefinite numbers, there are 1,2,3,4,5,6,7,8,9,10,11,12,13,.....etc., so called count numbers. Then these numbers will be summed one by one to get accumulation result to be transformed into digital root.

Repeat numbers in digital root table can be grouped in three parts. In this three parts, the repeat numbers has many possible patterns. And one of possible patterns are 319, 913, 616. This pattern can be grouped by: group one as 319, group two as 913, and group three as 616. The study of Sinlammim method showed that amount of numbers  $(1,2,3,4,5,6,7,8,9,10,12,13, ... \Box)$  are representing number which showing evidence the great of Allah (Roikhan Mochamad Aziz. Sinlammim: The God Code. Esa Alam , Jakarta 2006) <sup>16</sup>. According to QS. Luqman [31]: 27.

And if all trees on earth were pens and the ocean (were ink) with seven oceans behind it to add to its (supply). Yet would not the Words of Allah be exhausted (In the writing) for Allah is exalted in power, full of wisdom.

Then indefinite number which use all oceans and all forests will back to the highness of Allah. On the other hand, System Dynamics method can fill some weaknesses of orthodox economic theory. During 200 years this conventional theory has been embraced by almost world economists. Collaboration within Sinlammim method and System Dynamics method can be proved as one of concept to solve the problem that is still not answered by conventional economic theories for instance discount rates method and linier thinking method.

#### 2). System Dynamics

## a. System Thinking

An available approach to study real world is system approach. This system approach, the complex world will be studied in the small unit that represent almost all parts from the complex world.

In the system terminology, there is model to draw the real world by taking some representatives data into one simple form. After elements and process parts, then following process can be identified, characterized and the reassembly in a unity of structure to have target and product itself<sup>17</sup>.

The definition of system is the part of real world from various elements at particular time and place. This system model include component and process which interact one another base on concept of goal design.

System thinking or kaffah thinking represents approach method that related with other parts in one system, not independent unit, because all elements has connection chain as a part in one whole system.

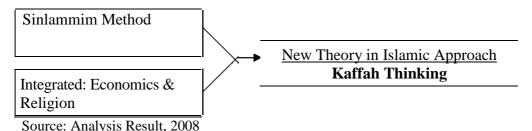
System thinking approach based on environmental elements that related to some objects as a one unity, representing system in some parts, can't be dissociated, and influencing each other. System thinking has new paradigm such as comprehensive solution (by think global, and act local).

System thinking or comprehensive approach is independent relation among elements (between object and environment) on dynamic circumstances, non linier, and far from equilibrium with asymmetric information. The meaning of comprehensive is to explain system by means totally, there are connections and can't be separately.

Diagram: Kaffah Approach In Islam

<sup>16</sup> Original title: Roikhan Mochamad Aziz. Sinlammim Kode Tuhan. Esa Alam, Jakarta 2006.

<sup>17</sup> Khalid Saeed, (1994), Development Planning And Policy Design: A System Dynamics Approach (Cambridge: Avebury,), pp.24.



In Islam, the concept of system and comprehensive is recognized by word Kaffah.

#### b. Transformation Of Thinking

During 200 years, since revolution industry in year 1800. The world hasbeen dominated by linier thinking concept, extrapolation at 2 points, denying metaphysics element, eliminating x factor, separating between science and spiritual. This secular concept had been inserted in Adam Smith Theory and Malthus Theory. This theory was representing the approach of economics by linearity the world<sup>18</sup>. For conventional generation, this theory can be adopted in economic system to increase the growth of economy and to support the development performance for the whole world.

But in complex world in current situation with world crisis recently, the theory of black box can't become solution to the future of the world.

For example, food for human being, nowadays food is not for human being only. Some food such as CPO has already been consumed by man and also by machine. By this complexity problem, the world need new concept to resolve the complex problem like this. And the world already has waited for third concept, or the end of the day concept, as new paradigm which match with current generation.

Forrester from Massachusetts Institute of Technology (MIT) has filled the empty concept by System Dynamics that representing method of System Thinking <sup>19</sup>.

Islam scholars are filling the blank of new paradigm with mudharaba concept, and Sinlammim concept, and also other concept.

# c. System Dynamics

The basic differentiation in System Dynamics can be seen on function of operator and designer. As illustration of operator function is a pilot. Pilot of an airplane can only use all materials in plane system. Pilot only think about how to do the best practice for the part of the system.

And who think about the system of the plane? This is the differentiation System Dynamics: designer is the person to responsible the system of airplane. Designer can create the safety plane and user friendly plane to fly even for younger pilot.

Approach in System Dynamics has a deep philosophy to push economic scholar making new model to picture the system of particular economics system. It means in the system thinking, economists always create something new to develop and generate the best model of the economic system.

Concept of System Thinking such as System Dynamics method represents more comprehensive approach which is different with en existing methodologies that have been used by researcher and academician for 200 years.

In general there are six steps to analyze problem in System Dynamics perspective, those are identifying and definition of problem, conceptualization of system, analysis formulation, simulation and analysis validation, policy analysis and sensitivity, and also implementation analysis. Software as a tool to be used in this research is Powersim version 2.5d, then upgraded to better version that is Powersim 2005. In general existing symbol of Powersim software is not different with other software base on System Dynamics method as seen in the standard symbols that used Powersim to create formula in Stock Flow Diagram (SFD) consist of four forms: constant, auxiliary, level and rate.

<sup>18</sup> Paul Ormerod. The Death of Economics. (London: John Wiley & Sons, 1994), p. 13.

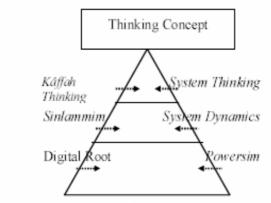
<sup>19</sup> Forrester, Jay W. "System Thinking and Dynamic Modelling Conference: Learning Through System Dynamics as Preparation for the 21<sup>st</sup> Century". Concord: MIT Press, 1994.

## 3) Sinlammim Kaffah And System Dynamics

# a. Sinlammim Method And System Dynamics

System Dynamics method becomes new concept to improve an existing theory. And Sinlammim method is new paradigm to have new theory based on al-Quran and Hadis.

Diagram Thinking Concept Between Kaffah And System



Source: Property Of Owner, DR.IR.H.Roikhan, Mochamad Aziz.MM

## b. Sinlammim Method vs Dynamics Method

In the form of pyramid that divided by 3 parts, there are 3 levels of thinking approach to picture assimilation from Islamic concept into system thinking.

On the top pyramid shows theory of System Thinking, in the middle of pyramid represents System Dynamics method, and on the ground there is Powersim as a tool.

For the same pyramid, on the top level there is Islamic theory that called Kaffah Thinking. In the middle represents Sinlammim method, and on the ground shows digital root as a tool.

# 3. Sukuk Analysis

A. Indonesia

## 1) Macro Economy Indicator in Indonesia

Macro economy has given contribution to grow marketable securities, for instance stability level for economic growth, inflation control, strong IDR, and increasing index. Recent years, government has tried to solve the long economy crisis by giving stable situation in fiscal and monetary system. Stability economy can be seen in increasing economy indicator to have better situation.

Table Macro Economy Indicator of Indonesia

No	Indicator	2002	2003	2004	2005	2006
1	Development GDP (%)	4.38	4.88	5.13	5.62	4.97
2	Inflation (%)	10.03	5.06	6.4	17.11	10,29
3	Interest Rates (% annually)					
	a. SBI 1 month	12.9	8.1	7.4	12.75	11.75
	b. Deposit 1 month	12.8	7.7	6.4	11.98	11.1
4	Reserves (USD Miliar)	32.0	36.3	35.93	34.72	39.77
5	IDX Index	424.9	742.5	1,002	1,162	1,582
6	ForexIDR(Rp/US1)	9,311	8,600	8,939	9.000	9.000

Source: Statistic Center Bureau (BPS), 2007

#### 2) Sukuk in Indonesia

IDX in 2002-2006 has 17 sukuk emissions, and the regulatory, BapepamLK, has approved 20 sukuk until November 2007.

- a) Mudharaba Sukuk Indosat Year2002 value 175 Billions IDR
- b) Mudharaba Sukuk Subordinasi Bank Muamalat Year 2003 value 200 Billions IDR
- c) Mudharaba Sukuk Bank Bukopin Year 2003 value 45 Billions IDR
- d) Mudharaba Sukuk Bank Syariah Mandiri Year 2003 value 200 Billions IDR
- e) Mudharaba Sukuk Berlian Laju Tanker Year 2003 value 60 Billions IDR
- f) Mudharaba Sukuk Ciliandra Perkasa Year 2003 value 60 Billions IDR
- g) Mudharaba Sukuk PTPN VII Year2004 value 75 Billions IDR
- h) Mudharaba Sukuk I Matahari Putra Prima Year2004 value 150 Billions IDR
- i) Ijara Sukuk Sona Topas Tourism Industry Year2004 value 55 Billions IDR
- j) Ijara Sukuk Citra Sari Makmur I Year2004 value 100 Billions IDR
- k) Ijara Sukuk Indorent I Year2004 value 100 Billions IDR
- 1) Ijara Sukuk Berlina I Year2004 emisi oleh PT Berlina Tbk value 85 Billions IDR
- m) Ijara Sukuk I Humpuss Intermoda Transportasi Year 2004 value 125 Billions IDR
- n) Ijara Sukuk Apexindo Pratama Duta I Year 2005 value 240 Billions IDR
- o) Ijara Sukuk Indosat Year2005 value 285Billions IDR.
- p) Ijara Sukuk I Ricky Putra Globalindo year 2005 value 125 Billions IDR. q) Ijara Sukuk PLN I year 2006 value 200 Billions IDR

## B. Malaysia

## 1) Macro Economy Indicator in Malaysia

Although located in same geographical South East Asia, both countries Indonesia and Malaysia have passed monetary crisis in year 1997. But not Malaysia has stability economy stronger than Indonesia. This matter can be read from national economy data that Gross Development Product (GDP) according to constant price of year 1987 experiencing of a good growth level for year 2006 about 5,7%. Beside that, Malaysian Government also control inflation for more than 5 years (2002-2006) then inflation rate not exceed more than 3%. Other economy macro that influence marketable securities are Malaysia Index and Malaysia Ringgit.

## 2) Sukuk in Malaysia

Bursa Malaysia has big penetration for sukuk among other countries in Asia Region. While Indonesia has big market for sukuk, cause this country had many conventional debts and has many underlying assets to support sukuk issues.

Islamic Capital Market (ICM) has given some types of aqad in sukuk, such as qardhul hasan mudharaba, bai' bitsaman ajil, murabaha, musyaraka, bai' istisna, and ijara.

Investors can buy sukuk in primary market, then investors can bring marketable securities into secondary market. Main function in this regular market in Malaysia is to facilitate investors for sell and buy an existing Islamic marketable securities before maturity date.

Bursa Malaysia implements their regular exchange type that is bai' al-dayn aqad. Bai' means sale, and dayn means debt. So that bai' al dayn can be interpreted as trading debt<sup>45</sup>.

In Islamic view, case of name change from debt become Islamic instrument without fundamental transformation still can not be allowed.

Table Corporate Securities issues Maiaysia					
Tahun	Secirities	Bonds	Sukuk		
2002	Issue	137	34		
	Value (RM Billions)	38.362	17.654		
2003	Issue	87	31		
	Value (RM Billions)	35.279	12.048		
2004	Issue	75	49		
	Value (RM Billions)	32.679	15.161		
2005	Issue	52	64		
	Value (RM Billions)	3 1.952	34.321		
2006	Issue	49	77		
	Value (RM Billions)	35.43 6	39.953		

Table Corporate Securities Issues Malaysia

Source: Central Bank (BNM), 2007

## C. Modeling Analysis

System thinking or Kaffah approach can be conducted in many models. This research shows how System Dynamics method on Sinlammim method is derived by three aspects: source analogue with god as a macro economy, result analogue with human as a bonds, and feedback analogue with pray as a opportunity.

For this sukuk modeling, there are some assumptions to build analysis such as system boundaries in macro economy, endogenous factor for bonds and sukuk, and exogenous factor for opportunity.

The main source of reference used in this study is statistical data, macro economics, monetary, and conventional capital market, as well as Islamic Capital Market in Indonesia and Malaysia during 2002-2006. Those data are read by System Dynamics methods (Non Linier System Thinking) the methodology of thinking approach in the system with comprehensive and dynamics paradigm through multi discipline studies. For computation, this study has taken many advantages from Stock Flow Diagram technique (the formulation modeling base on Powersim version 2005).

#### 1) Mental Model

The first phase in System Thinking to use System Dynamics method is mental model. Modeler made simple correlation among variables to reflect the system, boundaries, and endogenous factor.

In this research, mental model will reflect correlation between macro economy and marketable securities, and feed back between marketable securities and macro economy by opportunity. Growth of macro economy in both countries

Indonesia and Malaysia will effect banking and finance market including financial instrument like bonds and sukuk.

The increasing of sukuk trading will give more opportunity for market players. Then market players will earn more investments to boost macro economy as well. Then this loop will make circle to generate more and more better value, this call positive loop.

# Ekonomi Malaysia Peluang Ekonomi Coligasi Konvensional Indonesia Coligasi Syariah Syariah Indonesia

Diagram Mental Model Of Sukuk

Source: Result Analysis, 2008.

## D. Result Analysis

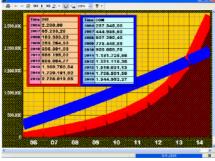
# 1) Analysis Result On Sukuk

Based on quantitative analysis and mathematic formula which already converted in Powersim module, below is the quantitative analysis in Islamic Economic. This module shows simulation result and indicator table for intervention scenario with tax incentive and SB SN issues give the best result to see sukuk value in the next 5-10 years.

# 2) Sukuk Graph

Based on simulation result and indicator table for designer scenario, the graph shows scenario with tax incentive and SBSN issues give the best result to see sukuk value in the next 5-10 years.

Graph System Dynamics Modeling On Indonesia And Malaysia Sukuk



Source: Roikhan Mochamad Aziz, The Sukuk Modeling In Indonesia And Malaysia On System Dynamics Method, Dissertation, Doctoral, State Islamic University (UIN) Syarif Hidayatullah Jakarta, May 2008.

In the research of System Dynamics on Sukuk shows that:

- a. The increasing of Sukuk value is effected by Sovereign Sukuk (SBSN) issues, as a high increasing in conventional bonds after Government Debt Securities (SUN) issues.
- b. The Sukuk development until year 2015 will be effected by macro economic, so it need sensitivity scenario for interest rates (SB I) and market share to anticipate any changing.

#### 4. Conclusions And Recommendation

## A. Conclusions

System Thinking in Islam is Kaffah Thinking. Kaffah Thinking as a concept has a method. One of methodology in Kaffah concept is Sinlammim method.

Islam has big picture to build new paradigm with three basic scientific method:

- 1. Ontology of economic system is Islam
- 2. Epistemology of new system is Kaffah economics
- 3. Axiology to implement economics are good and bad.

System Thinking in Islam is Kaffah Thinking. Kaffah Thinking as a concept has a method. One of methodology in Kaffah concept is Sinlammim method. And Sinlammim method has a tool to use in research that is Digital Root. To read numbers  $(1,2,3,4,5,6,7,8,9,10,11,12,13, ... \Box)$  can be summed all numbers one by one in digital root formula.

In the case of Sukuk, the value Indonesia Sukuk in year 2015 was higher than the value of Malaysia Sukuk. Although during year 2002-2006 as the beginning of Sukuk development (BapepamLK Decree, Kep-386/BL/2007) the market capitalization is very low than Malaysia Sukuk (Securities Commissions, Quarterly Report, Kuala Lumpur, SC, 2007). Indonesia Sukuk policy analysis can be effected by sensitivity of Bank Indonesia Certificate (SBI) and their market share, also Indonesia Sukuk prospect will be reached by structural intervention through tax incentives and Government Sukuk Securities (SBSN) issues This research shows that:

- 1. The increasing of Indonesia Sukuk value is effected by SBSN issues, as a high increasing in conventional bonds after Government Debt Securities (SUN) issues.
- 2. Indonesia Sukuk index is higher than Malaysia Sukuk, this will attract more investments in Indonesia Sukuk
- 3. The Indonesia Sukuk development until year 2015 will be effected by macro economy, so it need sensitivity scenario for SBI and market share to anticipate any changing.

Indonesia Sukuk value will reach Rp 2.726.019 Billions in year 2015 above Malaysia Sukuk value Rp 1.944.952 Billions through tax and SBSN intervention policy.

#### **B.** Recommendation

Indonesia will have broad value of Sukuk in the next 5 years later. Because there is fundamental rules of Sukuk that must have underlying assets. Those assets in Indonesia should relate with the growth of economy for all sectors especially in Islamic economy sector.

Indonesia will have better economy which multiplied by every single resources from advantages assets all around Indonesia region.

The revival of economy in Indonesia can simultaneous show the revival of Islamic instruments in Indonesia.

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