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# A COMPARATIVE STUDY BETWEEN ISLAMIC AND CONVENTIONAL REPO IN MALAYSIA

SITI NURAH HARON

Institute of Islamic Banking and Finance, International Islamic University Malaysia. Email: <u>nurahharon89@gmail.com</u>

RUSNI HASSAN

Institute of Islamic Banking and Finance, International Islamic University Malaysia. Email: <u>hrusni@iium.edu.my</u>

SYED AHMED SALMAN Faculty of Business and Accountancy, Lincoln University College, Malaysia. Email: <u>salmaniium@gmail.com</u>

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#### ABSTRACT

A sound and stable financial system are essential to any banking and financial system's regulators. Bank Negara Malaysia (BNM), the Central Bank of Malaysia, has enforced several monetary policy tools to ensure an ideal money supply level in the market. Numerous monetary policy tools are adopted by policymakers and market regulators worldwide, such as open market operations, statutory reserve deposits, and discount policies. Among these market mechanisms, many central banks favored open market operations due to their ease of use and flexibility. This paper aims to analyze Islamic and conventional repos in Malaysia. The method of this study is based on library research. Open market operations involve purchasing and selling securities or short-term financial instruments such as the central bank's repurchase agreements (repo). Islamic repo performs similar functions as those of the conventional market, except that Shari'ah laws and principles bound these functions. In other words, it provides an avenue for money market participants to invest short-term surplus funds or to obtain shortterm funding in a Shari'ah-compliant way. The Islamic repo's main distinct structure uses a host of Shari'ah-compliant contracts, whereas the conventional repo is primarily designed based on loans. In the modern Islamic financial industry, Islamic repo alternatives such as bilateral Islamic repo, collateralized *murabahah*, and the SBBA in the case of the Malaysian market are said to have a great deal of potential to serve the liquidity need of market participants.

Keywords: Conventional, Islamic, Repos, Malaysia.

# INTRODUCTION

Zakat A repo is a concurrent sale and repurchase of an asset, typically involving security. Hegazy and Ismael (2015) defined repo as a sale of protection with a repurchase commitment at a specific date and a pre-determined price. In practice, the selling party sells a security to the buying party at a pre-determined price. Subsequently, on the buy-back date, the original seller buys back the original buyer's security at the actual purchase price plus the interest amount charged on the implied loan created in the whole transaction (Al-Shobili, n.d.; Fleming and Garbade, 2003; Norris, 2011). Repo binds both selling and buying parties to carry out their obligations. The seller is obliged to sell and transfer the underlying securities to the buyer at a specific date and pre-determined price and later repurchase the securities from the original buyer. The buyer is entitled to purchase the seller's underlying securities and subsequently sell back the same securities to the actual seller at a specific date and pre-determined price.

Since the US Federal Reserve first promulgated it in 1918, the repo has become a significant component of today's global money markets. According to Choudhry (2004), it is evident that market players, including securities houses, investment banks, fund managers, corporate treasurers, and local authorities, have shown a greater preference for repo usage in recent years due to its effectiveness and flexibility. He further explained that repos are one of the most effective instruments for open market operations adopted by many major central banks worldwide. Due to the increase of non-bank funding and disintermediation, the rising level of public debts, greater awareness of counterparty risk, liquidity need to cover short positions, and a high collateral rating consists primarily of government debts.

One of the unique features of repo includes the buyer's right to sell the underlying securities to one of the unique features of repo, consists of the buyer's right to sell the underlying securities to a third party without referring to the court or the seller in the case of the original seller's inability to repurchase the securities. It is because repo is an outright contract for the sale of securities. Apart from that, repo allows the buyer to transfer profits and returns to the seller during the contract period as the seller has undertaken to purchase the underlying securities at maturity (Shrar, 2012; Al-Fiza; 2015; Hegazy and Ismael, 2015).

Meanwhile, in the Islamic sphere, an alternative monetary policy tool for conventional repo, the so-called "Islamic repo," has been introduced, serving as a *Shari'ah*-compliant financial instrument to enhance the Islamic liquidity level Interbank Money Market (IIMM). Modified to comply with *Shari'ah* principles, the Islamic repo performs similar functions as its conventional counterparts. It includes becoming a liquidity management tool, a platform for secondary trading of money market instruments, and an avenue for monetary policies conducted by the Central Bank (ISRA, 2016). The introduction of the Islamic repo is anticipated to provide an additional avenue for the participants of IIMM to source their funding requirements, thereby addressing the issue of the lack of *Shari'ah*-compliant money market instruments in the market.

# THE PRACTICE OF REPO IN THE CONVENTIONAL MARKET Definition of Repo

A repo is an agreement between two parties where the repo seller (borrower) sells securities to the repo buyer (lender). The repo seller agrees to buy back equivalent securities at a pre-agreed price at a set future date. The Repo buyer lends the cash loan to the seller, which is collateralized by the underlying securities. A master agreement is documented, which states all customary provisions like the representations and warranties. The agreement also lays out requirements for marking to market and margin maintenance and close-out and netting provisions in the case of default.

Maturities of the repo can vary from overnight to a year. There are three types of repo maturities as follows:

- i. Overnight Repo: A repo refers to a 'one-day maturity' transaction because it lasts only one day.
- ii. Open Repo: A repo with no specified maturity and the interest rate would change daily depending on current money market conditions. In this case, the lender agrees to lend money with no end date; therefore, the agreement can be terminated any day.
- iii. Term Repo: A repo with a specified maturity. There are no restrictions on the maximum period for repos to be undertaken; however, on average, term repos are for one week but can also be for much more extended periods.

# Characteristics of Repo

Repo serves the different needs of each contracting party and brokers and dealers. Repo allows the seller to use financial securities as collateral for comparatively low-cost cash funding at a fixed interest rate. For the buyer, repo is a collateralized investment platform to invest cash for the short term at a competitive rate. Repo also enables dealers to deal in higher volume, thus providing an inexpensive and efficient way of financing the marketable securities on their books.

Repo is particularly attractive to banking institutions and other participants of the money market due to its distinct features as stated below.

- i. Liquidity: Repo allows banks to invest cash overnight. It makes repo an essential component in liquidity management, and it is argued that the size of the Repo market can strengthen the liquidity rule.
- ii. Yield advantage: Historically, Repo, compared to its traditional money markets instrument like the Treasury Bills, time deposits, or agency discount notes, has provided additional yield, which varies depending on the repo's maturity date and its credit quality.
- iii. Flexibility: Fund cash flows directly to the daily principal amount of the repo, allowing the transaction to be conducted during the latter half of the day.

# Types of Repo

Bilateral Repo and Tri-part Repo are the two primary short-term repos in the international money market.

# 1) Bilateral Repo

In Bilateral Repo, the repo buyer (lender) buys securities from the repo seller (borrower) to agree that the repo seller will buy back the equivalent securities at a pre-determined price at a fixed future date. The repo seller (borrower) collects cash from the repo buyer (lender) and simultaneously delivers the underlying securities to him on the agreement's first transaction. On the date set to buy back securities, the process is reversed. The repo buyer (lender) returns the securities to the repo seller (borrower), who transfers the borrowed amount and interest back to the lender. The workings of a bilateral repo are shown in Figure 1. To summarize the operations, a bilateral repo transaction involves the following steps:

i. The seller transfers the ownership of the underlying securities to the buyer;

- ii. Ownership of any additional securities is transferred as part of margin maintenance;
- iii. The buyer transfers ownership of equivalent securities to the seller at the date of maturity.



Figure 1: Mechanics of a Bilateral Repo Transaction

# 2) Tri-party Repo

A tri-party repo differs from a bilateral repo. It involves a tri-party custodian (e.g., custodian bank and international clearing organization) who acts as an agent of the two contracting parties (e.g., cash borrower and cash lender). The tri-party custodian is responsible for operational efficiency, including transaction settlement, custody of securities, collateral allocation, valuation, marking to market, and collateral substitution. The three parties to the repo transaction agree to a collateral management service agreement. The agreement creates an "eligible collateral profile," which enables the repo buyer to define its risk appetite regarding the collateral held against a cash loan. For example, a more risk-averse repo buyer may wish to have highly liquid assets such as primary market securities and government bonds as collateral. A less risk-averse repo buyer may be prepared to take less liquid and highly volatile assets as collateral. Such as the non-investment grade bonds, which can be sold, although difficult, at higher price volatility to recover the cash in the event the repo seller defaults. The mechanics of a tri-party repo transaction are presented in Figure 2.



Figure 2: Mechanics of a Tri-Party Repo Transaction

# Risks Associated with Repo

Repo is a collateralized transaction; however, it is subjected to counterparty risk if the borrower fails to buy back the lender's securities. Repo is modeled bearing that if the repo seller defaults on his obligation, the repo buyer takes over the underlying securities. A loss is incurred if the proceeds from liquidating the securities are lesser than the agreed-upon resale price (the principal loan amount plus accrued interest). Repos are generally over-collateralized and subjected to mark-to-market margin calls to mitigate the risk.

# CONCEPT OF SHARI'AH-COMPLIANT REPO

# What Makes Islamic Repo Different?

The Islamic repo performs similar functions compared to its counterparty, except these functions are based on *Shari'ah* laws and principles. It is a platform that provides money market participants to invest and obtain short-term surplus funds in a *Shari'ah*-compliant manner. The Islamic repo's distinctive feature is that it utilizes layers of *Shari'ah*-compliant contracts, while the conventional repo is based on loan. A feature unique to Islamic repo is that it not only caters to Islamic financial institutions but can also be utilized by conventional banks,

insurance companies, and other players in the market. Table 1 draws out a comparison between the *Shari'ah*-compliant repo and its traditional counterpart.

	Islamic Repo	Conventional Repo
Issuance process	The relevant market regulator must be approved with an additional <i>Shari'a</i> h compliance approval from Shari'ah advisory board/authority.	The relevant market regulator must approve it.
Types of structure	Structured based on <i>Shari'ah</i> contracts such as <i>bay' al-inah</i> , <i>murabahah</i> , and <i>wa'ad</i> .	Structured based on loan contract.
Investors	Both Islamic and conventional investors.	Conventional investors only.

Table 1: Comparison between Islamic and Conventional Repo

# Structures of Islamic Repo

This study provides a review of Islamic repo structures in the subsections below. There are two main structures of Islamic repo available in the international money markets, namely: (i) sell and buy-back agreement (SBBA) practiced in Malaysia and; (ii) collateralized *murabahah* as proposed in the IIFM's Reference Paper on *I'aadat al-Shira'ah* (Repo Alternative).

# 1) The Malaysian Practice of Sell and Buy Back Agreement Issuance of the BNM's Guidance on SBBA

In Malaysia, to enhance liquidity in Islamic banks, the BNM issued Guidance Notes on the Sell and Buy Back Agreement (SBBA) in August 2002 (which was later revised on 28 June 2013). Apart from its primary objective to facilitate the issuance of SBBA by the Malaysian Islamic banks, the Guidance Notes on SBBA aims:

- i. To become the source of reference on the main features of the SBBA transaction;
- ii. To encourage uniform and consistent practices of the SBBA process;
- iii. To define the primary requirements in handling SBBA transactions; and
- iv. To ensure adherence to Shari'ah principles.

It is stated in the BNM's Guidance Notes that a valid SBBA transaction shall consist of the following:

- i. A party commits to sell Islamic securities. The other party commits to purchase the Islamic securities, and both parties mutually agree to execute the reversal at a fixed date in the future.
- ii. The transaction results in transferred ownership of the Islamic securities under SBBA.
- iii. Following the prevailing foreign exchange Administration (FEA) rules on borrowing, Islamic banking institutions are permitted to engage in SBBA transactions with a non-resident for foreign exchange administration purposes.

Apart from the above, Guidance Notes has also drawn out several essential elements of an SBBA transaction, which are as follows.

- i. Basis of trading: Trade of SBBA transactions shall be based on price.
- ii. Transfer of ownership: Islamic securities ownership will be transferred from the seller to the buyer when sold under SBBA.
- iii. Dealing in SBBA transaction: Parties involved in the trade may carry out the SBBA transactions through money brokers or direct dealing. The terms of SBBA and the type of Islamic securities, SBBA price, tenure, and settlement date is negotiated and agreed upon between the parties. The various facets of risk assessment shall be considered before the SBBA transaction is concluded.
- iv. SBBA Agreements: The parties shall enter into two separate agreements.
  (1) First agreement the SBBA seller sells the Islamic securities to the SBBA buyer at an agreed-upon price and settlement date, (2) Second Agreement the SBBA buyer promises to sell the Islamic securities back to the SBBA seller. In contrast, the SBBA seller promises to buy back the securities at an agreed-upon price and maturity date. For the market to maintain its integrity and ensure the smooth operation of the IIMM, the parties must adhere to their promises.
- v. Initiation of SBBA transaction: On the value date, the SBBA seller may execute the trade by selling the specified securities and transferring them to the SBBA buyer at an agreed cash price. The SBBA seller transfers the securities ownership to the SBBA buyer to conclude the first agreement on the SBBA.
- vi. Matured SBBA transaction: On the settlement date, the SBBA buyer executes the first SBBA transaction's reversal by selling the specified Islamic securities back to the SBBA seller for an agreed-upon cash price as promised.

The Guidance Notes also mention that financial instruments that are eligible to be used under an SBBA transaction comprise scripless securities affected under Real-Time Electronic Transfer of Funds and Securities systems (RENTAS). Such as GII, BNNN, Khazanah Bonds, *Sanadat Mudharabah* Cagamas, IPDS, and non-scripless securities such as IAB, Green Bankers' Acceptance, NIDC, INID, non-scripless IPDS. These eligible financial instruments must be deemed compliant with *Shari'ah* principles.

### **BNM's Definition of SBBA**

SBBA has become widely recognized among capital market participants as an alternative money market instrument that serves similar functions as the conventional repo. The features and mechanisms of SBBA have been modified from the existing traditional repo to comply with *Shari'ah* principles. SBBA is defined in paragraph 4.1 of the revised BNM's Guidance Notes on SBBA as (BNM, 2013, p. 4):

"an Islamic repurchase agreement (Repo-i) transaction whereby a party (SBBA seller) sells the underlying Islamic securities at an agreed price to the other party (SBBA buyer. Subsequently, the SBBA buyer and SBBA seller enter into another agreement whereby the former promises to sell and the latter to buy back the securities on a specified future date and at an agreed price."

Whereas a reverse SBBA is defined in paragraph 4.2 of the Guidance Notes as (BNM 2013, p. 4):

"an Islamic reverse repurchase agreement transaction whereby the SBBA buyer purchased Islamic securities at an agreed price from the SBBA seller. Subsequently, the SBBA buyer and SBBA seller enter into another agreement whereby the former promise to sell and the latter to buy back the securities on a specified future date and at an agreed price respectively."

#### Mechanics of SBBA

In the practice of SBBA in Malaysia, the contracting parties must enter into separate agreements independent of one another. Also, the BNM requires that at least one of the parties in an SBBA transaction be an Islamic banking institution. The first agreement involves a sale of underlying securities by the seller (e.g., Islamic bank) to the buyer (e.g., investors) at a specified price agreed upon by both parties. This agreement is an outright sale; hence the securities will cease to be part of the Islamic bank's investment portfolios. The second agreement is a forward purchase agreement. The buyer promises to sell back the securities to the original seller, who also promises to buy back the securities at a predetermined price on a specified future date. Figure 3 illustrates the mechanics of an SBBA transaction.



Figure 3: Mechanics of an SBBA Transaction

On trade date: The SBBA seller sells the Islamic securities to the SBBA buyer and transfers securities' ownership to the buyer for an agreed cash amount, concluding the first transaction. The SBBA buyer and the SBBA seller both promise to sell and buy back the equivalent securities at an agreed price and maturity date.

On maturity date: On the date of maturity, the SBBA buyer shall perform the initial SBBA transaction's reversal by selling the equivalent Islamic securities back to the SBBA seller at an agreed-upon price (principal amount plus profit margin).

# 1) Computation of SBBA Proceeds

Regarding the value and maturity of an SBBA contract, the BNM has specified that the amount of SBBA proceeds shall at least be RM50,000 and must have a fixed maturity that must not exceed one year. The proceeds from an SBBA transaction, which uses a discounted instrument as the underlying asset, can be calculated using the formula provided by Omar et al. (2013) below. It is worth

noting that different procedures may apply to different types of underlying Islamic securities.

SBBA Price = 
$$FV\left[1 - \frac{r \times t}{36,500}\right]$$

Where:

FV = Face value r = Annual profit rate t = number of days

# Comparison between SBBA and Conventional Repo

Table 2 provides the differences between repo offered in the conventional market and SBBA traded in the IIMM.

Criteria	Conventional Repo	SBBA
Contract	A single contract concludes two transactions.	Two independent contracts conclude two separate transactions.
Documentation	Written legal documentation specifies the rights and obligations of each contracting party.	Each transaction requires separate legal documentation.
Price	The amount of interest is disclosed separately from the selling price.	Prices are quoted independently for the first and subsequent transactions.
Margin variation	Margin variations are allowed.	No margin variations.
Substitution right	The seller has substitution rights to substitute assets with another if they decide to do so.	Substitution of underlying assets is not allowed without consent from the buyer.
Payment of manufactured dividend	The buyer pays the manufactured dividend to the seller and the coupon payment received from the securities issuer.	The forward selling price includes the return margin payable to the buyer.

Table 2: Comparison between SBBA and Conventional Repo

# IIFM's I'aadat al-Shira'ah (Repo Alternative) Structures

The IIFM has proposed four possible structures equivalent to the conventional repo in its reference paper issued on *I'aadat al-Shira'ah* (IS), namely: (i) bilateral system; (ii) bilateral structure with different undertakings; (iii) three-party system, and (iv) collateralized IS.

# 1) Bilateral IS Structure

This bilateral structure involves a sale for spot value and purchases for an agreed forward date and price, as illustrated in Figure 4.



Figure 4: Mechanics of Bilateral I'aadat al-Shari'ah

Step 1: The seller sells the *Shari'ah* complaint purchased securities to the buyer on a spot basis. The transaction completes once the securities' title is transferred to the buyer against an agreed-upon price for the securities.

Step 2: The seller commits to buying back equivalent *Shari'ab*-compliant securities from the buyer at an agreed-upon date called the 'repurchase date.' Or a notice is served to the seller by the buyer in the event of a default. A repurchase price is calculated using a set formula.

Step 3: The buyer agrees to sell equivalent securities at the seller's request. But only if the purchase undertaking is not executed within the agreed maturity period. Or in the event of a default. The buyer undertakes to sell equivalent securities at the seller's request only if the purchase undertaking is not exercised within an agreed period from maturity or following the service of a notice of an event of default on the buyer.

### 2) Bilateral IS Structure with Different Undertakings

The IIFM also considers implementing the bilateral IS structure using two different undertakings (*wa'adan*). The mechanics of the *wa'adan* structure are presented in Figure 5.

Spot transaction: The seller sells underlying securities to the buyer on a spot basis (e.g., 5 January 2017) against payment of the market price (e.g., USD 100 million).

Forward transaction: The seller gives a unilateral undertaking to purchase the underlying securities from the buyer: (i) on a future date (e.g., 7 February 2017) at a pre-determined price (e.g., USD 120 million) or (ii) following service of a notice of default on the seller if certain agreed events occur. On the other hand, the buyer provides a unilateral undertaking to sell the underlying securities to the seller: (i) on a future date (e.g., 9 February 2017) at a predetermined price (e.g., USD 121 million) or (ii) following service of a notice of default on the buyer if certain agreed events occur.



Figure 5: Mechanics of Bilateral *I'aadat al-Shira'ah* with Two Different Undertakings

### 3) Three Party IS Structure

The IIFM's document also introduces a *Shari'ab*-compliant repo structure involving three parties called a "Three Party IS." The system is different from a conventional tri-party repo because rather than acting as an agent in the traditional arrangement, the third party plays the principal role (despite acting in an intermediary capacity between the buyer and the seller). The mechanics of the three-party IS structure is presented in Figure 6.

Step 1: The seller sells securities to an independent third party (e.g., broker, clearing agent, custodian bank, and the likes) against cash payment.

Step 2: The third-party immediately sells the securities to the buyer against cash payment.

Step 3: The seller undertakes to buy equivalent securities from the buyer at maturity at a specified agreed price.



Figure 6: Mechanics of Three Party I'aadat al-Shari'ah

# 4) Collateralized IS Structure

The IIFM's Collateralized IS uses a commodity *murabahah* structure secured by assets as collateral in case of default with segregated safekeeping and a margin maintenance mechanism to support risk management. This mechanical *murabahah* repo structure was used in the first-ever Islamic repo transaction worth USD 20 million. It was concluded by the National Bank of Abu Dhabi (NBAD) and the Abu Dhabi Islamic Bank (ADIB) against the Malaysian Abu Dhabi government-related entity Sukuk on 3 August 2011. Figure 7 presents the mechanics of the collateralized IS structure.

Step 1: The buyer purchases commodities from broker one against cash payment of cost price.

Step 2: The buyer sells the purchased commodities to the seller against deferred payment of purchase price (cost plus profit).

Step 3: The seller delivers assets as collateral (e.g., Sukuk) to pay the deferred purchase price.

Step 4: The seller sells the commodities to broker 2 to obtain cash (cost price).

Step 5: The seller pays the deferred purchase price to the buyer, and the buyer releases the collateral to the seller.



Figure 7: Mechanics of Collateralized I'aadat al-Shari'ah

# CONCLUSION

Repo or repurchase contract is a window that facilitates a bank or a financial institution to obtain money in the short term. This paper comprehensively compared the practices of conventional and Islamic repos in the context of Malaysia. The standard repos are based on interest, while Islamic repos are based on *Shari'ah* compliance. An exciting feature of the Islamic repo is that it can be utilized by Islamic financial institutions, conventional banks, insurance companies, and other market players. In the Malaysian context, the Islamic repo product is called a 'sell and buy-back agreement' (SBBA). *Shari'ah* Resolution has

designed *Shari'ab* principles in Islamic Finance No. 71 issued by the Shari'ah Advisory Council (SAC) of Bank Negara Malaysia (BNM), in which the application of the "sale and buy back" contract has been approved. SBBA refers to a combination of deals consisting of a sale contract followed by an undertaking to repurchase the underlying asset (wa'd). For instance, two contracting parties enter into a sales contract whereby the original seller subsequently promises to buy back the buyer's underlying asset at a stipulated date, given that the buyer agrees to it. This trade arrangement is a valid conditional sale contract as the pre-agreed conditions do not affect the first contract's objective and validity (e.g., selling the underlying asset) initiated and the transfer of underlying ownership asset.

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