

Islamic Monetary Policy and Rastin Swap Bonds

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Abstract

Purpose: This paper aims to examine monetary instruments in Islamic central banking framework. As a conclusion, to revive Islamic monetary policy, we should provide some public equity-based instrument as a necessary replacement for conventional bonds and treasury bills to activate non-usury open market operations.

Design: We define a type of new negotiable bond as: “Rastin Swap Bonds (RSBs)”, which is based on swapping money between two persons for two different periods.

Findings: RSB is a financial paper that observes the right for the lender to borrow an equal amount to his lending from the borrower. Four types of RSBs in domestic money and foreign currency are defined, and their Sharia allowances and monetary, fiscal, and financial effects are evaluated.

Research limitations: This bond is a novel design, and it is required to be more elaborated for further practical development and adjustment.

Practical implications: Islamic central banking is not different from conventional central banking as a whole, but the role of an Islamic central bank in conducting monetary policy is restricted to use interest-free monetary instruments in an environment that commercial banks are obliged to implement non-usury banking operations.

Social implications: Islamic financial instruments should be usury-free and efficient in applying monetary, fiscal, and financial policies at different levels of the central bank, government and commercial banks and non-banking money and financial institutions. Rastin Swap Bond will serve as an important instrument for resource mobilization and will be a primary vehicle for the development of the Islamic capital market and central banking operations.

Originality/value: Conventional interest-bearing bonds are not allowed in Islamic central banking. This restriction mostly distinguishes Islamic central banking from the conventional one in implementing monetary policy.

Article Type: Technical paper

Keywords: Islamic Central Banking, Monetary Instrument, Rastin Swap Bond, Rastin Banking, Monetary Policy, Fiscal Policy, Finance.

JEL: G21, G28, H81

I. Introduction

Monetary policy is the process by which monetary authority controls the supply of money, usually through interest rate targeting to promote economic growth and stability. In early Islamic governments, this task was done through *Baytul-Mal* (treasury) operations, and it was mixed with government fiscal policy. Since money at that period composed of gold coins (Dirham and



Dinar)¹, and supply of gold had always been stable, and fiat money and credit were not applicable, then monetary expansion mechanism² did not actually exist as it is in recent and current times.

As similar as conventional central banking, main functions of Islamic central bank are defined as maintaining price stability and fulfilling macroeconomic goals or reduction of damages of the performance of the monetary system and controlling liquidity and supervising banking operations. Although Islamic central banking is not different from conventional central banking as a whole, the role of an Islamic central bank in conducting monetary policy is restricted to use interest-free Islamic monetary instruments, and commercial banks are obliged to implement non-usury banking operations³.

Islamic financial instruments should be usury-free and efficient in applying monetary, fiscal, and financial policies at different levels of the central bank, government and commercial banks and non-banking money and financial institutions. Conventional interest-bearing bonds are not allowed in Islamic central banking. This restriction mostly distinguishes Islamic central banking from the conventional one in implementing monetary policy. Furthermore, monetary authorities are legally responsible for supervising commercial banks and money and credit funds and institutions. Islamic central bank, as well as Islamic commercial banks, is not allowed to use usury-based banking operations. This also brings some new different supervisory duties to monetary authority and implementation of monetary policy as well.

Objectives of central banking, as well as monetary policy, are also similar to conventional systems but considering usury prohibition. The objectives such as prosperity of the whole humanity and economic stability, stabilizing domestic and external values of money⁴, promotion of sustained and balanced economic growth, mobilizing resources for economic development, and improvement of income and wealth distribution and so on - though with different emphases - are considered in both Islamic and conventional central banking systems. Both systems do not bear inflation, deep and prolonged recessions and unemployment because of misery to society and destroying economic welfare.

Functions of Islamic central banking are also similar to conventional one such as regulating the money supply, influencing bank-financing direction, providing measures of safeguarding, and ensuring prudent banking and banking supervision.

Major monetary policy in conventional banking systems is conducted through open market operations and by buying and selling Treasury bonds and other similar valuable papers. But these bonds and papers are not actually usable in interest-free banking because they are linked to some interest rates that are not lawful in Islamic Sharia. In order to conduct Sharia-compliant monetary policy, the Islamic central banks need an innovative usury-free financial instrument, and without this, the open market operations for monetary policy do not work.

The purpose of this paper is to introduce the new innovative financial instrument, namely "Rastin Swap Bonds" that can be substituted instead of conventional papers and bonds for Islamic financing purposes. In this paper, we will have a look at the Sharia allowances of monetary policy and touch some technicalities about money, interest rate, and economic fluctuations and monetary stabilization policy. Monetary instruments, financial papers, and Islamic considerations about these instruments are critical in Islamic central banking as well as government fiscal financing and private sector financing. We will discuss them in the next sections of the paper. We will introduce the new instruments of "Rastin Swap Bonds" in different types and both in domestic money and foreign currency. We will discuss the Sharia compliance of these papers and will examine the monetary, fiscal, and financial effects of "Rastin Swap Bonds". We used the IS-LM approach just to show the monetary, fiscal, and financial effects of Rastin Swap bonds. The conclusion and references are the last sections of this paper.

2. Sharia Allowances of Monetary Policy

The aim of Islam is the exaltation of humankind and the full height of dignity in humanity. Exaltation means qualitative and quantitative improvements in human beings. Generally, reason and Sharia both are complements to each other, and all Sharia rules are based on reason and wisdom theosophically. Moreover, the best method of decision making in Islam is based on consultation. By this concept, we can conclude that regarding consensus, Islam accepts solving social problems via consultation. The Holy Quran orders: "**Conduct their affairs by mutual consultation**".⁵ This is a general legislative rule that authorizes

¹ - See: M.U. Chapra (1996), Monetary management in an Islamic economy, Islamic Economic Studies, Vol. 4, No. 1, December.

² - B. Bidabad (2014) General monetary equilibrium. Lap Lambert Academic Publishing, OmniScriptum GmbH & Co. KG, ISBN: 978-3-659-54045-5.

³ - Chapra, M. U. (1985). Toward Just a Monetary System. *Journal of King Abdul Aziz University: Islamic Economics*, Vol. 2, 109-115. Mills, P. S and Presley, J. R. (1999). *Islamic Finance: Theory and Practices*. Palgrave MacMillan, USA.

⁴ - Chapra, M. U. (1985). Toward Just a Monetary System. *Journal of King Abdul Aziz University: Islamic Economics*, Vol. 2, 109-115.

⁵ - Surah of Shura, Verse 38. وَأَمْرُهُمْ شُورَىٰ بَيْنَهُمْ.

decision-making through consultation. The general rational rule and custom limitations are clear in this method. All new legal institutions and rules can be defined by this command. Principally, theosophy of legislating some Sharia commandments and leaving many others by the Holy Prophet (PBUH) is due to this subject that the obligation and prohibition of many partial commands in different times and places are different. Thus, not all the subjects were legislated; and making a decision about them were left to honest reason and wisdom that by considering different conditions and observing the situation of people the best expedients be adopted. This was an introduction to the institutionalization of monetary authority and policy, but considering that legislation in the prohibition of permissible (*Mobah*) activities is just allowed in the realm of Islamic Sharia and not more. Quran states that:⁶ **"If you do it not, take notice of war from Allāh and His Messenger: but if you turn back, you shall have your capital sums: Deal not unjustly, and you shall not be dealt with unjustly"**. This verse is about usury (*Riba*), and we can infer that from personal money management level up to the monetary policy (and even at level of international monetary and exchange management) the adopted policies should not supply money with more than its market price that means "unjustly"; and the other side is "unjustly".

Supervision policies in Islam are in the prevention of swindle in the transaction, but not economic interfere. This also determines supervision responsibility and neutrality of monetary authority. In present western economies, such as the United States, the Federal Reserve System is a private corporation that its major stockholders are American bankers (often from three major banking families). However, the Federal Reserve Act⁷ forces neutrality but actually absolute neutrality is a matter of debate in United States monetary system.

3. Money, Interest and Economic Fluctuation

Liquidity has two equivalent definitions as the sum of money and quasi-money (in sources side) or the sum of net domestic and foreign assets (in uses side) of consolidated (debit-credit) account of the banking system. The increase of government fiscal deficit and commercial banks credits leads to an increase of net domestic assets of the banking system; while the balance of payment surplus increases net foreign assets. Both of these expand money and managing them is a task of monetary policy to ensure that money growth satisfies economic needs. Government fiscal deficit increases liquidity in the economy and could lead to increase in prices and continue to lower the purchasing power of government budget in next period and new fiscal deficits and increases in money supply again and thus contributes to an inflationary process. Treasury bill is an effective instrument, which makes the government capable of borrowing from the economy. The central bank conducts monetary policy by a transaction of T-bills, and facilitates government fiscal policy and manages the circulating money. Because of the existence of interest rate in treasury bills, they are not legitimate from Sharia point of view in Islamic banking, and practically, application of this instrument is forbidden by Islamic law. Thus, in the absence of interest rate, government borrowing is not simply done, especially from the private sector. Moreover, not all public projects are financeable through regular financing procedures. This is the main trouble with Islamic monetary policy in action. It is argued that then how will government budget deficits be financed? The raw answer to this question lies in minimizing wasteful public and private spending to reduce demand for credit and restructuring the entire financial system to meet the genuine funding needs of the public sector in light of Islamic teachings.⁸ The notions, though seem interesting but are not actually operational.

The balance of payments surplus as a source of money expansion depends on many domestic and international economic behaviors such as current and capital accounts balances and exchange rates that its monetized value has its own effects on net foreign assets of the banking system.

Money market bifurcates the bank's behavior into two markets, namely saving-deposit and investment-credit markets in line with the studies of Bidabad⁹ (2004, 2010). In one hand, the demand of bank for deposits intersects supply of deposits (saving

⁶- Surah of Baqarah, Verse 279. **فَإِنْ لَمْ تَفْعَلُوا فَأْذَنُوا بِحَرْبٍ مِنَ اللَّهِ وَرَسُولِهِ وَإِنْ تُبْتُمْ فَلَكُمْ رُؤُسُ أَمْوَالِكُمْ لَا تَظْلُمُونَ وَلَا تُظْلَمُونَ.**

⁷ Federal Reserve Act, December 23, 1913. <http://www.llsdc.org/attachments/files/105/FRA-LH-PL63-43.pdf>

⁸ Chapra, M. U. (1983). Monetary Policy In An Islamic Economy. In Ziauddin Ahmad, et al (eds.), *Money and Banking in Islam*, Islamabad: Institute of Policy Studies, pp. 27-68.

⁹- Bidabad, Bijan, Economic-juristic analysis of usury in consumption and investment loans and contemporary jurisprudence shortages in exploring legislator commandments. Proceeding of the 2nd International Islamic Banking Conference. Monash University of Malaysia. 9-10 September 2004. Reprinted in: National Interest, Journal of the Center for Strategic Research, Vol. 2, No. 1, winter 2006, pp. 72-90. Tehran, Iran.

<http://www.bidabad.com/doc/reba-en.pdf>

Bidabad, Bijan (2010) Stabilizing Business Cycles by Profit and Loss Sharing Banking System and Ethic Economics.

<http://bidabad.com/doc/pls-business-cycles.pdf>



schedule) and fixes deposit interest rate. On the other side, the bank creates another market by supplying credit funds that intersects demand for credit (investment schedule) and fixes loan interest rate. In view of this, the bank stands between two markets of supply and demand for money funds in the money market.

In case that consumption increases, the supply of bank deposits (saving) will fall. As a result, there will be an increase in the deposit interest rate. The increase in deposit interest rate cannot instantly increase loans interest rates, because loan contracts have been fixed for a longer period, and the bank has to wait until contracted maturity to increase the loan interest rate. Therefore, the bank will face loss during this period and thereafter in the next period; it will be compensated by increasing the loan interest rate by a time lag. This lag, from an economic point of view, creates a special dynamic relationship between supply and demand for money. Bidabad (2004, 2010), Bidabad and Hassan (2017)¹⁰ mathematically show that because of this lag, the relationship between these two variables (supply and demand for money) is a second-order difference equation that is able to create economic cycles. In other words, fluctuation of the real economy is induced by fluctuations in the money market. The most important effect of elimination of interest rate (as it is raised by Islamic banking) is to bridge investment and saving through the rate of return in the real economy.

This subject is doubly important to Islamic monetary policy in both subjects of stabilization policy and open market operations on non-usury valuable papers and bonds.

4. Monetary Instruments and Islamic Considerations

Monetary authorities use different instruments, which can generally be classified into three groups of quantitative, qualitative, and prudential instruments. Usually, quantitative monetary instruments change the money supply through monetary expansion mechanism. This mechanism practically creates money through depositing money in banks and banks' loans. Qualitative instruments are directive monetary arrangements in the distribution and allocation of loans and credits within different economic sectors. Interest rate locates at the central core of all these instruments. Prudential instruments are those measures that are used to ensure well-functioning of commercial banks.

Open market operation is one of the most important quantitative instruments. In this way, monetary authority buys or sells bonds and valuable papers and change the amount of high powered money in the economy. In a capitalist monetary system, the transaction of these papers is based upon variable interest rates and involves usury, and cannot be used in the interest-free or Islamic banking systems. The problem remains as a matter of debate if the central bank buys and sells private securities and corporations' equities.¹¹ In this case, open market operations actually distort the relative values of the private sector's assets. If central bank purchases and sells stocks of public sector corporations, just distorts relative prices and advantageous of public enterprises; but purchase and sale of private sector equities are highly questionable and affects private shareholders benefits of transacted and non-transacted entities and may also involve corruption.¹²

The discount window is an instrument at which commercial banks can sell some of their financial papers at discounted rates to the central bank to solve their liquidity needs. By changing this rate, the central bank can affect the banks' volume of free resources and their credit capabilities accordingly. This instrument is very helpful when banks need a loan to get enough liquidity. This method uses interest rate, hence cannot be used in the Islamic banking system.

Monetary authorities sometimes force the banks to keep a certain percentage of their assets in the form of bonds. The purpose of this *reserve requirement* policy is to prevent money expansion through reduction of free reserves of banks.

Legal reserve rate is known as credit brake, is another quantitative monetary instrument. It has many capabilities in harnessing banking credits. This rate has a vast range of effects on controlling the bank's credits through controlling monetary expansion mechanism. With this rate, a non-interest-bearing obligation is applied to banks. A slight increase in this rate is costly for banks, since, it blocks some of their resources in the central bank.

¹⁰ Bijan Bidabad, Abul Hassan (2017), *Dynamic Lag Structure of Deposits and Loans Interest Rates and Business Cycles Formation*. Journal of Financial Regulation and Compliance, Vol. 25 Issue: 2, pp.114-132. <http://dx.doi.org/10.1108/JFRC-09-2016-0078>

¹¹ Khan, M. Akram (1982) Inflation and the Islamic Economy: A Closed Economy Model, in M. Ariff (ed.), *Monetary and Fiscal Economics of Islam*. Jeddah: International Centre for Research in Islamic Economics.

Siddiqi, M. Nejatullah (1982) Islamic Approaches to Money, Banking and Monetary Policy: A Review, in M. Ariff (ed.), *Monetary and Fiscal Economics of Islam*. Jeddah: International Centre for Research in Islamic Economics.

¹² Chapra, M.U. (1996), Monetary management in an Islamic economy, *Islamic Economic Studies*, Vol. 4, No. 1, December.



Obligations to *keep shares of assets in bonds* is another quantitative instrument that central bank forces commercial banks to keep a certain percentage of their asset in the form of bonds. The purpose of this policy is to prevent monetary expansion through the reduction of free reserves of commercial banks.

Credit rationing and *credit ceiling* are more popular monetary instruments in developing countries; because of their undeveloped financial infrastructures. Credit ceiling is allotted to each sector and to each bank. This instrument is inefficient economically and from a resources allocation viewpoint. It can be used in Islamic monetary policy. However, the issue of the penalty of the nonconforming bank remains unsolved.

Qualitative instruments practically direct banks' credits and restrict or divert the banks' financing through limiting or encouraging credits to desired sectors. Bank's *credit provision limits*, *credit ceilings*, defining the *method of allocation of deposit funds*, *value-oriented allocation of credit*, *selective credit control*, *margin requirements*, *maximum and minimum interest rates* are considered as qualitative instruments. *Lender of last resort* refers to the loans provided to face liquidity crises through interest-free loans with or without a service charge. Generally, qualitative instruments do not have the necessary capabilities to help monetary authorities reaching goals efficiently.

Prudential instruments, as stated before, are the measures for secure banking. *Minimum capital requirements*, *maximum exposure restrictions*, *mandatory appropriation of profits*, and *moral suasion* are of prudential measures.

Specific interest-free instruments are also considered for Islamic monetary policy. In this context, the *profit sharing ratio* is used as a signaling device as the interest rate, but it is not desirable and even not Sharia-compliant that central bank interferes in private contracts of trade partners. Profit sharing ratio can influence the demand and supply of money. *Refinance ratio* and *lending ratio* both are in the opposite direction of the *cash reserve ratio*. The contractionary monetary policy requires a lower refinance ratio, and changes in lending ratios would increase policy effectiveness. The *public share of demand deposits* instrument is used to divert some part of demand deposits to the public treasury, enabling to finance socially beneficial projects. *Value-oriented allocation of credit*, *interest-free loan (Qarzul Hashanah) ratio*, *maximum and minimum markup ratios* are other instruments in this class.

In view of the above discussions, it should be mentioned here that the monetary instruments of the conventional banking system could not help a central bank for controlling liquidity in an Islamic economy; because the most important monetary instrument, which is open market operations is not applicable. Therefore, there is a need to innovate appropriate monetary instruments suitable for usury-free conditions. As a conclusion, to revive Islamic monetary policy, we should provide a necessary replacement for conventional bonds and treasury bills to activate non-usury open market operations; that is some public equity-based instrument.

5. Financial Papers

Islamic financial activities based on Islamic faith must stay within the limits of Islamic law in all actions and deeds. To conduct Islamic monetary policy, innovative Sharia complied financial instruments are necessary. This shortage exists in countries such as Sudan and Iran that eliminated the conventional banking system and substituted it with a non-usury one, and others countries, such as Bangladesh, Brunei, Indonesia, Jordan, Kuwait, Malaysia and the United Arab Emirates that partially use non-usury operations. In this regard, Brunei, Indonesia, Malaysia, Sudan, and UAE have already launched some Islamic monetary instruments such as Sukuk as the first step in this direction. However, these instruments are controversial among Islamic scholars, and the majority of them believe that such contracts are not Sharia compliant.¹³

The main Islamic constraint of prevailed bonds or papers in Islamic countries is due to the necessity of having a real project or asset counterpart in the real sector. From a conventional viewpoint, contractionary/expansionary monetary policies may not directly link to real projects or business activities.¹⁴ For instance, the contractionary monetary policy is done by selling government bonds by the central bank as monetary instruments, which does not need to have a counterpart or asset-backed in the real sector. This contradiction is one of the main constraints of applying Islamic instruments in an interest-free central banking system. Another solution to this problem is based on interest-free swaps of funds.

Various bonds, notes, bills, etc. are debt securities that people buy them and lend their funds to issuer and issuer is committed to paying principal and interest back at maturity. Usually, bonds are guaranteed by the issuer, government, or government-affiliated organizations, or they are asset-backed securities so that some assets such as credit cards or payable loans cover the papers.

¹³ Mansoori, M. T. (2010), *Fiqh Regulations on Finance and Business Transaction*, Ulil Alba Institute, Pasca Sarjana Universitas Ibn Khaldun, Bogor, Indonesia.

¹⁴ Rabin, A. A. (2004). *Monetary Theory*, Edward Elgar Publishing, Massachusetts, USA.



Mortgage-Backed Securities, Collateralized Mortgage Obligations (CMO), and Collateralized Debt Obligation (CDO) are kinds of these securities. These papers include government bonds, municipal securities, corporate securities, asset or mortgage-backed securities, government-affiliated organizations securities, foreign government securities, and supranational securities. Securities issued by the government are treasury bills, treasury notes, treasury bonds, or perpetual bonds that are similar in financial structure but differ just in the interest rates. All of them might be sold before maturity at reduced prices. Their maturities are from a few days to 30 years, and some of them are even perpetual or take several decades. Banker acceptance papers, commercial papers, and deposit certificates are also various kinds of bonds used for short-term financing. Bonds might be issued at a fixed rate, floating rate, reference-rate (usually LIBOR or EURIBOR) or zero-coupon. Interest Only (IO) and Principal Only (PO) might also be transacted in separate. In inflation-Linked (indexed) bonds, the nominal yield is adjusted by inflation rate (Treasury Inflation Protected Security "TIPS"). Some notes are linked to stocks, financial or GNP indices (Equity-Linked Notes). Bearer or anonym bonds are in opposition to registered bonds in which only the owner can claim the debt. Some bonds do not even have a written paper certificate (Book-Entry Bond). We can also mention Lottery Bonds, War Bonds, Serial Bonds, Revenue Bonds, and Climate Bonds as other kinds of bonds.

Callable Bonds allow the issuer to call the holders and buy back the bonds before maturity. Accordingly, in the case of decreasing interest rates, the issuer can prevent losses by buying back and obtain a cheaper loan. Opposing this kind of bond is Puttable Bond (Put Bond or Retractable Bond) allows the holder to apply them to the issuer and sell them back before maturity. Some bonds are both puttable and callable. The prices of these bonds are calculated by deducting call option or put option prices from the straight bond price.

Subordinated Bonds have the lowest right in liquidation when the issuer becomes bankrupt; at first, other bond's tranches (Senior Bonds) will be settled, and the remainder will be paid to Subordinated Bonds. Therefore, they have higher risk rate in comparison with other bonds.

Financial papers are generally classified into Negotiable and Non-negotiable classes. Private debt securities (PDS) are those negotiable and non-negotiable papers that are issued by corporations, and the issuer is bounded to pay the profit periodically and the principal at maturity to paper holder. On the other hand, private debt papers can be classified into two main groups of equity-linked debt securities and non-equity-linked securities. The first papers are transformable to issuer's company shares, and their holders can be regarded as company shareholders, while the second group cannot be transformed into shares and the issuer can raise short, medium and long terms financing by these debt papers. These papers can also be transacted in the secondary market.

Interest-free securities have become increasingly popular over the last decade, both as means of raising government finance through sovereign issues and as a way for corporate entities to obtain fund through corporate *Sukuk*. In 2000, there were only three *Sukuk*-type bonds worth \$0.3 billion. In 2004 there were 64 issues worth almost \$7 billion, and in 2007 the figure exceeded \$90 billion with more than 119 issues.¹⁵ It is assessed that the advantage of *Sukuk* is that it is compliant with Sharia¹⁶ though many others do not agree.¹⁷

Debt purchase and substance purchase in the non-usury transaction of debt-based financial papers are controversial to be based on innovating Islamic monetary instruments. Despite jurists' view that believes transaction of debt-based papers is *Reba*, these transactions are conducted in forms of *Murabaha*, Partnership, and *Ijarah* (rent) contracts.

Purchase of substance is a contract¹⁸ in which in the first case, the seller sells a good to the buyer at a certain price on credit terms; and then the buyer sells the same good at a lower price to the seller in cash. In the second case, a third party enters into the transaction. The primary seller sells the good at a certain price to the buyer by credit. Then the buyer sells the good to the third person at a lower price but in cash. Then the third person sells the good to the original seller at the same price in cash and pays his debt to the first buyer. Hanafi and Shafei jurists have different views about this type of transaction. Some of them approve it in the case of existing a third person, and some approve it as detestable (*Makrouh*) in the absence of a third person but agree that transaction pillars are fulfilled¹⁹. Hanbali and Maliki jurists disapprove this kind of contracts and

¹⁵ Moody's (2007). Focus on the Middle East. *Inside Moody's*, Winter, p. 4.

Moody's (2008). Focus on the Middle East. *Inside Moody's*, Winter, p. 4.

¹⁶ Wilson, R. (2008). Innovative in the Structuring of Islamic sukuk securities. *Humanomics*, Vol. 24 (3), 170-181.

¹⁷ Mansoori, M. T. (2010), *Fiqh Regulations on Finance and Business Transaction*, Ulil Alba Institute, Pasca Sarjana Universitas Ibn Khaldun, Bogor, Indonesia.

¹⁸ - Wahbah al-Zuhayli, *Al-Fiqh al-Islami wa Adillatuh*, 3rd ed., Vol. 4, Damascus: Daral-Fikr, P. 466; Muhammad Wafa, *Abraz, suwar al-buyu al-fasidah*, Egypt, 1984, P. 40.

¹⁹ - Including transaction contract, good and enumeration (money) and two parties of transactions.



believe that they are not Sharia compliant²⁰. As it is clear, in both cases, they only appear to be different, and regarding the purpose²¹ of this transaction, they are kinds of Sharia tricks. Moreover, debt is the obligation of paying money or peer; in other words, selling the debt to the third person is called debt purchase.²² Debt purchase may be in cash or credit. In credit case, the debt is again sold in credit, which is not right from Sharia scholars' viewpoints and is regarded as a transaction of debt-by-debt²³. In the case of cash, selling the debt to a third person in cash is not accepted by some Sharia scholars; Shafei scholars confirm it, while Maliki scholars conditionally accept²⁴. Debt-based securities are divided into two groups of Coupon Bond²⁵ and Zero Coupon Bond²⁶ securities.

Because of the Riba-based form of Islamic Zero Coupon Bonds, the transaction of these debt-based papers at a lower price than face value, regardless of not receiving any interest until maturity, has no application in usury-free central banking. On the other hand, although Islamic Zero Coupon Bonds observe transaction pillars and using debit and substance purchases contracts, their transactions are not Sharia-compliant, because of using tricks to pretend to comply with Sharia.

Mortgage Backed Securities (MBS) were used by selling mortgage loans for the first time in the United States in 1938 and Islamic banks interested in applying it. American government appointed a governmental organization to buy housing loans and resale them to investors. In Iran, the prudential regulations of transforming mortgage claims into securities were passed by Credit Committee of Central Bank in 1998 and were confirmed by the Higher Council of Stock Exchange in 1999²⁷. In these securities, the principle and profit of papers should be guaranteed by legal entities. By considering the guaranteed profit (interest) of these papers, they have skepticism of Riba and are not usable in a true interest-free banking system.²⁸

In order to use appropriate monetary instrument and policy that are mostly based upon transaction of bonds, we need true Islamic financial innovations, which in addition to complying with Sharia, could be efficient. Rastin Swap Bonds (RSBs) are defined to remove this shortage. RSBs can be used as Islamic monetary, fiscal and financial instruments in Islamic banking at different levels of central banking, commercial banking, treasury and commercial entities in the conventional banking system as well as Islamic system.²⁹ Furthermore, these bonds may be issued in domestic money and foreign currency as well. This

²⁰ - Wahbah al-Zuhayli, Vol. 4, P. 468; Al-Mausu'at al-fiqhiyyah, Vol. 9, P. 96.

²¹ - All contracts are due to the intents.

²² - The first Islamic Private Debt Security (IPDS) was issued in form of "advance purchase loan" (Salaf) contract in Malaysia in 1990 for a multinational company. A group of financiers bought the securities in form of some assets and sold them at higher prices including cost and profit margins to the issuer of securities. This transaction is a debt purchase contract.

²³ - Wahbah al-Zuhayli, Bay' al-dayn fi al-dhart'at al-Islamiyyah, P 23.

²⁴ - Al-Sadiq Abd al-Rahman al-Gharyani, Al-Muamalat Ahkam wa Adillah, 2nd ed., 1992, PP. 190; M. Tawfiq Ramadan al-Buti, Al-Buyu al-Shaiah wa athar dawabit al-mabi ala shariyyatiha, Beirut: Dar al-Fikr al-Muasir, 1998, PP. 370-378.

²⁵ - Islamic Coupon Bond: Coupon defines the profit share of the debt-based paper issued based on *Murabahah Notes Issuance Facilities* (MuNif) and future (*Al-Bai Bithaman Ajil*: ABBA) contracts. The holders of these papers receive fixed profit every six months from the issuance time to maturity. At the first stage, the establisher sells the asset to the issuer SPV (Special Purpose Vehicle) of the papers based on substance purchase contract, and in the second stage, the issuer publishes the papers (primary and secondary including principle and profit) under trustee supervision. In the third stage, papers will be sold to investors according to debt purchase contract. These papers can be transacted in secondary market.

Muhammad Arham, Islamic perspectives on marketing, Journal of Islamic Marketing Vol.: 1 Issue: 2, 2010.

²⁶ - Islamic Zero Coupon Bond: Zero coupon papers with fixed yield were introduced in 1982. These papers had no profit coupons from issuance time to maturity. Instead, investors and buyers of the papers receive principle and interest at maturity. These papers are sold to buyers at lower price than their face value, and are bought back by issuer at face value. Interest rate is used in discounting the face value of the papers at purchase time, but no profit is paid until maturity. These papers are based upon debt purchase contract; and are not legitimate beside some jurists, and are assimilated to use Sharia trick.

²⁷ - <http://www.econews.ir/fa/NewsContent.aspx?id=108111>

²⁸ - See: <http://banki.ir/akhbar/205-gozarash/1446-markazi3>

²⁹ - Bidabad, Bijan, Abul Hassan, Ben Ali Mohamed Sami, Mahmoud Allahyarifard. (2011). *Interest-Free Bonds and Central Banking Monetary Instruments*. International Journal of Economics and Finance. Vol. 3, no. 3, August, pp. 234-241. DOI: <http://dx.doi.org/10.5539/ijef.v3n3p234>

<http://www.ccsenet.org/journal/index.php/ijef/article/download/11665/8300>



instrument is defined in Rastin Banking System³⁰ in Iran, but it has not been used operationally yet. Rastin Swap Bonds are fully new, and there is no more previous literature on the subject except the author's papers and books.

6. Rastin Swap Bonds (RSBs)

Rastin Swap Bond is a financial paper that observes the right for the lender to borrow an equal amount to his lending from the borrower. The lender can sell his paper on the market at market price. In this bond, no interest rate is determined, but the market price of the bond is determined at each transaction in the market, and thus, the return of the bond is not fixed and not predetermined.

Four types of Rastin Swap Bonds are: (i) Central Bank RSB to be issued by central bank, (ii) Bank RSB to be issued by commercial banks, and money and credit institutions supervised by central bank, (iii) Treasury RSB to be issued by government treasury, and (iv) Commercial RSB to be issued by private or corporate entities through an agent bank. All these bonds are issued by the new exchange (*Mubadalah*) contract³¹ defined in Rastin Banking.

The financial structure of Rastin Swap Bonds is substantially different from conventional bonds and bills. In RSBs, while there is no interest, the funds will be offered to the other party in the form of "debt equal to future loan", or "loan equal to future debt" with "time-drawing right". This also differentiates RSBs from conventional bonds, as the latter are interest-bearing securities, whereas RSBs are basically, non-interest-bearing financial investment certificates and with ownership claims. Similar to conventional debt securities, RSBs may be issued for a fixed period. The period variation is due to specific rules.

Each type of RSBs can be transacted in the secondary market, but the transactions are permitted for different groups of seller and buyers (central bank, commercial banks, treasury, and public) for specific types of RSBs. RSBs pricing will be formed on a base of demand for and supply of money rather than the fixed interest rate for the fixed period. The interest rate of RSBs is zero, but the return is not fixed due to market bonds' prices changes. Thus, interest rate rigidity vanishes, and when the economy goes toward the recession, price (return) of RSBs become lower and reduces the cost of using money resources; and vice versa for the case of going toward prosperity. That is, RSBs has a built-in automatic adjustment mechanism, which stabilizes the economy. In other words, we can say that RSBs prices will be commensurate with the capital return of the real economy.

Rastin Swap Bonds are issued under certain conditions with a face value. Accordingly, by buying \$A bonds with a maturity of N months, the buyer will have the right to obtain \$A interest-free loan for a period of N months from the issuer of bonds. The buyer and seller will agree on fixing combinations of \$A and N months so that the buyer can choose a ratio smaller, equal or larger than one from \$A in proportion with N months in such a way that the result of the amount of money multiplied by time, be equal to $A \times N$. For example, buyer instead of the \$A can borrow $\$A/2$ for 2N months at the Nth month, or $\$A/3$ for 3N months at the Nth month. Where, in all cases, the result will be equal to $\$A \times N$. That is: $(\$A/2) \times (2N) = (\$A/3) \times (3N) = \$A \times N$ or generally speaking, instead of \$A, we will receive $\$A/k$ for $k \times N$ months after the N months. The parameter k can be agreed mutually by the parties, or offered by the buyer. This procedure is depicted in figure I.

Generally, RSBs have two periods and two maturity dates. The first period is equal to N months from the selling time to the

Bidabad, Bijan, Abul Hassan, Ben Ali Mohamed Sami, Mahmoud Allahyarifard (2011). *Interest-Free Bonds Financial Innovation, A Monetary Instrument for Economy at Crisis*. Journal of Economic Cooperation and Development (JECED). 32, 1, 55-70. http://www.sesric.org/jecd/jecd_articles/ART10102201-2.pdf

³⁰ Rastin Banking has been compiled not to only eliminate *Riba*, but also to institutionalize various teachings of justice and Islamic ethics in banking activities. Good points of Rastin Banking in all fields of banking, financial, economic, ethical, social and international activities are so expanded that it can be regarded as a base to improve banking structure. This system has been partially installed in Bank Melli Iran; and is going to become a dominant prevalent banking system in Iran. Persian and English documents of Rastin Banking including detailed explanation of this banking method are accessible through <http://www.bidabad.com> in full texts in Persian and English languages. "Draft of Rastin Banking Bill" and its "Operational Bylaw of Rastin Banking" are also accessible through the cited link. See also: Bidabad, Bijan. (2014). *New Operational Islamic Banking System, Volume One, Theoretical Foundations*, LAP Lambert Academic Publishing, OmniScriptum GmbH & Co. KG, ISBN: 978-3-659-54463-7.

Bidabad, Bijan. (2014). *New Operational Islamic Banking System, Volume Two, Application Issues*, LAP Lambert Academic Publishing, OmniScriptum GmbH & Co. KG, ISBN: 978-3-659-55210-6.

³¹ In exchange (*Mubadalah*) contract, one person (*Mobadil*) (exchanger) undertakes to give the ownership of a certain asset (*Badal*)/(exchanged asset) to the other party (*Motabadil*)/(one who receives the exchanged asset) for a defined period; and the other person also undertakes to give the ownership of same amount (*Mobaddal*) to the first person (*Mobadil*) for equal period.



first maturity, and the second period is from the first maturity date (N) until the payback date of funds ($kN+N$) or second maturity date. The first maturity is when the seller of papers is obliged to provide the loan equal to $\$A$ for N months, or $\$A/k$ for kN months to the buyer. Therefore, the first maturity occurs at the end of N months. The second maturity is the end of the contract when the seller will receive back his funds after $kN+N$ months after selling time.

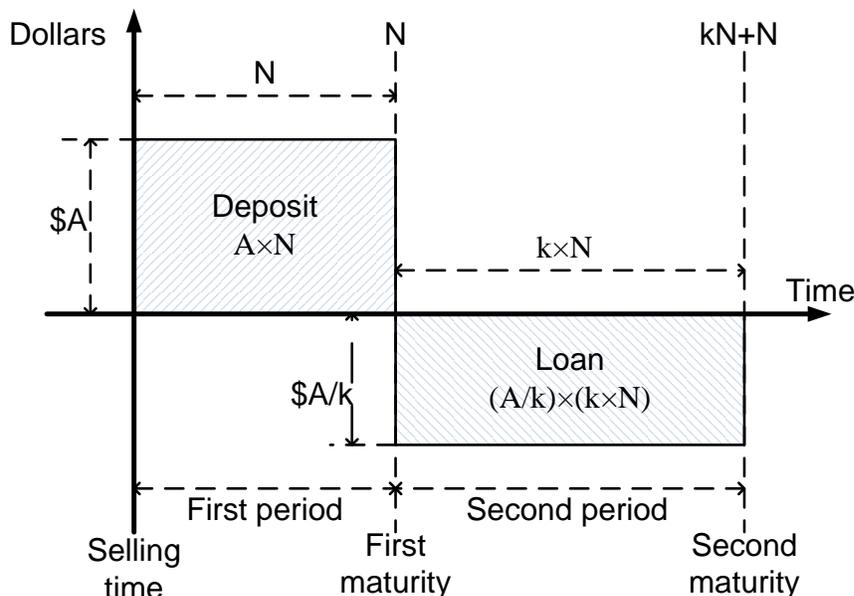


Figure 1. Two-Phases Maturity of Rastin Swap Bonds

The buyers are limited to buy specific types of RSBs. (i) If the issuer is Treasury (Treasury RSB), then the buyer is a central bank. (ii) If the issuer is a central bank (Central Bank RSB), then the buyers are government, banks, and those financial institutes who have prudential and legal reserves beside the central bank. Since banks have prudential and legal reserves at the central bank, they will not face loan defaults. (iii) If the issuers are commercial banks and financial institutes (Bank RSB), then the buyers are the central bank, treasury, other banks, and financial institutes. (iv) If an agent bank is an issuer (Commercial RSB), then all people, banks, entities, and government can buy the RSB. Accordingly, they can transact RSBs in the secondary market.

For the first three types of RSBs, there is no need for extra collaterals due to the existing legal arrangements, but Commercial Rastin Swap Bonds need appropriate mechanism to be arranged to decrease default probability to zero. For this reason, the seller provides a (first) guarantee equal to the face value of bonds at the time of issuance and surrenders it to buyers. At the end of the first period, the buyer will be obliged to surrender the same bank guarantee to the seller of bonds. After returning the funds back from the seller to buyer – at the end of the first period – the first guarantee is canceled. Another (second) guarantee is to be issued again for the second part of borrowing. At the end of the second period –after returning the funds back from the buyer to the seller – the second guarantee will also be canceled. All these operations are done through an agent bank.

7. Rastin Foreign Exchange Swap Bonds

Similar to RSBs in domestic money, foreign exchange nominated RSBs can also be issued. The only difference is that both loans of Rastin Foreign Exchange Swap Bonds should be in one unique currency; except for the Central Bank Rastin Foreign Exchange Swap Bonds that can be in two different currencies for the first and second periods. Similar to RSBs, the four kinds of Rastin Foreign Exchange Swap Bonds can be issued. The issuers, sellers and buyers of Rastin Foreign Exchange Swap Bonds are as cited before.

In neither cases, especially when one foreign exchange is used for the first period, and another foreign exchange is used in the other period, no skepticism of usury exists.

The monetary effect of issuing Rastin Foreign Exchange Swap Bonds is similar to issuing RSBs in domestic money and in addition, it has a stabilizing effect on supply and demand of foreign exchange. The Central bank can use it to manage the

exchange rate and balance of payments by changing the short-term supply of various foreign exchanges. When the bonds' face values for both periods would be the same foreign exchange, there will be a possibility for risk coverage (hedging) arrangement for the second period. This instrument has different effects when the foreign exchanges are unique or different in the two periods of RSB. If the exchange rates are the same in both periods, it will hedge the buyer for future fluctuation of the exchange rate in the second period; and if different exchanges are used in the two periods, the hedging effect will be in the second-period exchange.

8. Sharia Allowances of Rastin Swap Bonds

Essentially, usury occurs in loans, and loans have two different kinds of consumption and investment loans. Investment loans result in profit/loss, and the loan itself is not for spending or consumption. Consumption loans are used for everyday life uses.³² Sharia prohibition reasoning mostly concern consumption loans³³.

“Transaction usury” is defined as transacting a measurable commodity/money with a surplus amount of the same commodity/money. Because of the excessive amount paid to the other party; this transaction involves usury, and is prohibited by Sharia. In “transaction usury”, transacting equal amount along a period is not considered, but transacting with an extra amount is the focus of attention. That is why Rastin Swap Bonds do not enter into the domain of “usury transaction”; because its financial activity is not based upon transaction of extra amount, just equal amounts are bartered along two periods, and creditor obtains no surplus.

In “loan usury”, a person gives a loan (money or commodity) and receives it back with a surplus. In “loan usury”, the surplus has not necessarily the same type or quality of the original commodity and includes any kind of surplus. Rastin Swap Bonds are not “loan usury” as well.

The spiritual reference of the verses 278-281 of Surah of *Baqarah*: “Your capitals will be yours, you won’t suppress and will not be suppressed” approves the correctness of Rastin Swap Bonds³⁴. This is because according to “your capitals will be yours”, the principal loan will be returned to the lender, and in order to prevent doing any oppression, or being oppressed “you won’t suppress and will not be suppressed”, he will receive loan in an equal amount of what he had lend, which exactly complies the meaning of this verse.

Many of monetary and banking activities are regarded as new subjects in civil laws of many countries. Civil laws have not reckoned all transaction contracts and has just mentioned some evidence such as pure transaction contract, conditional transaction, forward deal, spot transaction, over the counter transaction, future (*Salaf*) and prepaid (*Salam*) purchase, irrevocable transaction, optional transaction, valuable metals transaction, unauthorized transaction and etc. Therefore, we will not be wrong if we consider RSB with its similarities to “transaction contract”, while the possessory right is suspended during the period of the contract.

Promissory contracts seem to be a solution for the legal framework for RSB. New “counter-loaned contract” in which two parties decide to deposit a specific asset with the other party for the same period, and also “counter-trust contract” can be defined in this regard. But, revocability of promissory contracts creates difficulty for application of “counter-loaned contract” and “counter-trust contract” and “donation against loan contract” with zero donations in applying Rastin Swap Bonds³⁵. In this connection, the application of “time-barter contract” is not meaningless. Accordingly, we define “time-barter contract” in which a party lends an asset to the other party, in order to receive the same asset from him in future without considering that one of

³² - Bidabad, Bijan, Economic-juristic analysis of usury in consumption and investment loans and contemporary jurisprudence shortages in exploring legislator commandments. Proceeding of the 2nd International Islamic Banking Conference. Monash University of Malaysia. 9-10 September 2004. Reprinted in: National Interest, Journal of the Center for Strategic Research, Vol. 2, No. 1, winter 2006, pp. 72-90. Tehran, Iran. <http://www.bidabad.com/doc/reba-en.pdf>

³³ - Surah: Baqarah, Verse 267. God will vanish usury and increase charity. «يَمْحَقُ اللَّهُ الرِّبَا وَيُزِيلُ الصَّدَقَاتِ».

³⁴ - «يَا أَيُّهَا الَّذِينَ آمَنُوا اتَّقُوا اللَّهَ وَذَرُوا مَا بَقِيَ مِنَ الرِّبَا إِن كُنْتُمْ مُؤْمِنِينَ. فَإِن لَّمْ تَفْعَلُوا فَأْذَنُوا بِحَرْبٍ مِّنَ اللَّهِ وَرَسُولِهِ وَإِن تُبْتِغُوا فَلَئِمَّ رُؤُوسَ أَمْوَالِكُمْ لَا تَظْلُمُونَ وَلَا تُظْلَمُونَ. وَإِن كَانَ ذُو عُسْرَةٍ فَنَظِرَةٌ إِلَىٰ مَيْسَرَةٍ وَأَن تَصَدَّقُوا خَيْرٌ لَّكُمْ إِن كُنْتُمْ تَعْلَمُونَ. وَاتَّقُوا يَوْمًا تُرْجَعُونَ فِيهِ إِلَى اللَّهِ ثُمَّ تُوَفَّى كُلُّ نَفْسٍ مَّا كَسَبَتْ وَهُمْ لَا يُظْلَمُونَ».

O! Believers, care about God; leave what is left through usury. But if you don't, you should know that you are fighting against God and his messengers; and if you repent, your capitals will be yours. You won't suppress and will not be suppressed. If your debtors are poor, give them time until they obtain money; and if you bestow, it will be much better for you if you understand. Beware of the day you return to God, and then whatever obtained, will be returned to everybody; and they will not be suppressed.

³⁵ - Bidabad, Bijan, Legal analysis of Interest-Free Bonds <http://www.bidabad.com/doc/legal-analysis-of-non-usury-bonds.pdf>

them is assets and the other is its price. If we consider the loan contract without surplus, “time-loan contract” might also be defined. We may define “time-loan contract” according to which each party loans the possession of his own specific asset to the other and the other party will loan back the similar asset with similar quality and amount to him at maturity, and if he cannot render the same asset, he should pay its spot price at the time of contracting. In all of these frames, one deposits some asset with the other person, and he will pay back the same amount at the maturity without any surplus or privilege.

9. Monetary Effects of Rastin Swap Bonds

Rastin Swap Bond will serve as an important instrument for resource mobilization and will be a primary vehicle for the development of the Islamic capital market. Sole³⁶ argues that expanding the range of financing opportunities by different institutions by developing *Sukuk* is likely to deepen the financial sector as well as the economy as a whole. Therefore, the effects of issuing RSBs by the central bank, commercial banks, government treasury, and private entities separately will enormously contribute to real sector economy.³⁷

Central Bank Rastin Swap Bond practically decreases the free balances of banks and blocks them by the central bank in the first period. It will also oblige the central bank to provide banks with the same amount in the second period. After the end of the second period, the central bank will line out the issued papers. Since these operations will affect high-powered money, it may create the contractionary monetary effects in the first period and expansionary monetary effects in the second period. The Central bank can define A, N, and k parameters according to the position of the economy in recovery, prosperity, recession, and crisis during business cycles to decrease the severity of economic fluctuation. This policy is similar to the fine-tuning monetary policy in conventional central banking.

Since these bonds can be transacted in the secondary market, they will have an automatic adjustment mechanism through the relationship between bond price and interest rate. Whenever the interest rate is high, the transaction price of the RSBs will fall in the first period and will increase the incentive for banks to put their sources besides the central bank. Hence, they can obtain more funds in the second period. During prosperity, when the interest rate is high, it will limit the free balances of banks and will prevent the expansion of the business cycle domain. On the contrary, when interest rates are low, the price of RSB will increase during the first period and decrease the incentive for banks to buy these papers from the central bank to obtain more funds in the second period. This means that during the economic crisis, when interest rates are low, it will expand the free bank balances and will not let the business cycle expands and aggravate the crisis. The Central bank can adjust the supply of these bonds through their prices, and by changing the volume of high-powered money affects liquidity and hence will affect interest rates. Accordingly, RSBs can substitute conventional bonds in Islamic central banking because they have a zero interest rate.

When expected inflation and expected interest rates are different in the first and second periods, the result will be somehow different. If the expected natural interest rate in the second period is more or less than the first period, it will have different effects on the supply and demand of RSBs. The more is the expected natural interest rate in the second period; the more will be the price of RSBs in the first period and vice versa. Similarly, the less is the expected natural interest rate in the second period; the less will be the bond price in the first period. This issue is very important from the monetary policy viewpoint in adjusting and stabilizing economic activities. In addition, it causes expectations to have an essential role in credit behavior of banks. That is if banks expect an increase (or decrease) in the natural interest rate during the second period, they will adapt to increasing (or decreasing) supply policy for RSBs. From an economic point of view, this mechanism can be a factor that dampens business cycles oscillation.

The RSBs' effects are different in continuous stable inflation. If the expected inflation rate is not different in both periods, inflation will not affect the RSBs' prices. Because, both the buyer and seller expect that the rates of returns of RSBs are the same in two successive periods with fixed expected inflation rate (*Ceteris Paribus*), and the price of RSB does not change due to inflation expectation. Otherwise, different RSB prices will be expected in the secondary market. If the average expected inflation rate in the first period is less than the average expected inflation rate in the second period, then the RSBs prices will be higher in the first period than the second period. On the other hand, if the average expected inflation rate in the first period is higher than the average expected interest rate in the second period, we will have an opposite case and RSB prices in the first period will be less than the second period.

The interest rates of deposits and credits in other markets also have important effects on supply, demand, and price of RSBs in the secondary market in the first and second periods regarding the length of the periods and different positioning of the business

³⁶ - Sole, J. (2007). Introducing Islamic banks into conventional banking system. Working Paper No. 07/175, IMF, Washington, DC.

³⁷ Bidabad, Bijan, Mahmoud Allahyarifard. Usury-Free Bonds and Islamic Central Banking Monetary Instruments. 2010.

<http://www.bidabad.com/doc/Islamic-banking-bond-en.pdf>



cycle.

Foreign Exchange RSBs affects exchange rates through monetary and exchange effects. Changes in the supply of domestic currency will affect the economy through monetary channels and will make differences in internal and external interest rates.

When the central bank buys Treasury Rastin Swap Bonds, it will have expansionary monetary effects in the first period and contractionary monetary effects in the second period.

10. Fiscal Effects of Rastin Swap Bonds

Managing government fiscal policies in the usury-free environment as well as implementing monetary policy is facing with the basic trouble of usury nature of conventional bonds. Therefore, it is necessary to introduce non-usury treasury bills to manage government budget deficit/surplus for successive years³⁸. Fiscal policies are generally a collection of policies applied to fulfill macroeconomic targets or to prevent losses causing from government fiscal performance. Government Treasury in managing government income and expenditure flows uses different instruments to adjust government budget in such a way that the government not to be faced with deficit/surplus and provide necessary maneuvers for expansionary/contractionary fiscal policies. Fiscal tune policy similar to monetary tune policy is done through government bonds managements. Bond prices are set in secondary market commensurate with other financial assets. If interest rate increases, the price of bonds will decrease, and if the involved risk of the other assets increase, the price of bonds will increase because bonds have collaterals and guarantees and they usually have less default risk. Variation of bank interest rates and rate of return and maturity of other assets and bonds will change the supply and demand of bonds. Inflation expectation will also decrease the real yields of bonds and their prices. But the most important instrument for the fiscal policy, which is the Treasury bill, cannot be applied in usury-free systems because it involves usury.

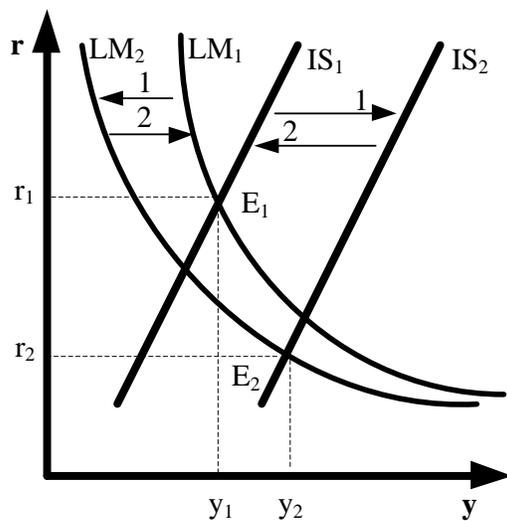


Figure 2. Financing government budget deficit effects by Treasury RSB

Treasury RSB provides necessary conditions for financing government deficit, and the government can adjust her budget policies by transacting these papers. When the central bank buys these papers, in the first period increases the supply of high-powered money in the economy and creates a commitment for the government to deposit the same amount with the central bank at the second period. After the second maturity, the central bank receives back the deposited funds; the issued Treasury RSB will get out of circulation. Since these activities affect the monetary base, it will have monetary and fiscal expansionary effects in the first

³⁸ Fouad H. Al-Salem, Islamic financial product innovation, International Journal of Islamic and Middle Eastern Finance and Management Volume: 2 Issue: 3, 2009.

period and contractionary effects in the second period.³⁹

These effects are shown in figure 2 through the IS and LM curves. At first, the equilibrium is at point E_1 and moves to point E_2 after the purchasing Treasury RSB by the central bank and then at the beginning of the second period moves back to point E_1 again. Therefore, in the first period, the interest rate (r) will decrease, and production (y) will increase, but in the second period, the effects are reversed.

When the government buys Bank RSB, lead to an increase in government fiscal resources in the first period, but the volume of liquidity is not affected. In the second period, the same amount of banks' free reserves, which had been reduced in the first period will increase and will have a contractionary fiscal effect on the government budget. The volume of liquidity in the economy will not change in either of periods. This effect is shown by the movement of the IS curve in figure 3. Equilibrium is at E_1 at the beginning; after government purchase of Bank RSB, it will move to the equilibrium point of E_2 . The IS curve will return to E_1 at the beginning of the second period. Therefore, it decreases interest rate (r) and increases production (y) in the first period, but in the second period, the reaction will be reversed. Government purchase of Commercial RSB has similar effects.

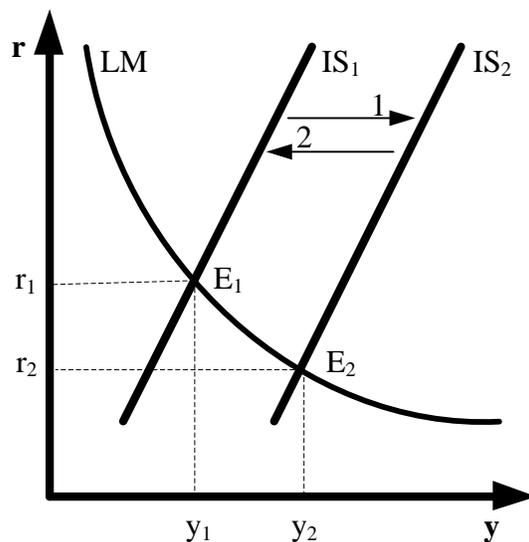


Figure 3. Financing government budget deficit effects by Bank RSB

11. Financial Effects of Rastin Swap Bonds

Bank Rastin Swap Bond will not increase the liquidity. This is because these operations will likely to be lagged borrowing of banks from each other. Hence, as much as free balances of one bank decreases, the free balances of other banks increase in the first time period, and vice versa will be in the second period. This will result in no change in the liquidity of the economy and is neutral in the sense of monetary policy effects. It will only finance the banks, which may not have enough liquidity and adjust banks' liquidity risk. If the central bank buys Bank RSB, it will have expansionary monetary effects in the first period and contractionary monetary effects in the second period.

The monetary effect of Commercial Rastin Swap Bonds is neutral but promotes money resources allocation.

12. Conclusion

Practically, there are some shortages and inefficiencies with different types of Sukuk for monetary policy purposes specifically for the short term treasury Sukuk. Moreover, some Islamic banks simply deposit money with other funds as well as central banks with no interest, and in return, they will become qualified for interest-free loans. This is also the case for many interest-free

³⁹ - Bidabad, Bijan, Interest-Free Treasury Bonds (IFTB), Islamic Finance and Legal Clarifications, 2011.
<http://www.bidabad.com/doc/interest-free-t-bond-feqhi-en.pdf>

depositing and loan in the Qarzul-Hashanah operations, but the main problem with this type of operations is the determination of durations and amounts for deposit and loan in such a way that both sides do not earn something extra as *riba*. This is quite understandable that in the contemporary financial market almost nobody enters into the transaction if there is no gain and surplus for him, and this surplus in lending and borrowing money would enter into what is defined as *riba*. Moreover, conventional depositing for loan operation does not use any financial instrument to make the market efficient. Different types of Rastin Swap Bond remove these shortages at different levels of financing from retail financing to central bank monetary and government fiscal policies.

Rastin Swap Bonds are new Islamic monetary and financial instrument and have not examined in action yet, and there is no statistical evidence about the practical consequence of the adoption of these bonds.

At first glance, Rastin Swap Bonds will offer new instruments to the financial markets according to the market needs and in a sharia-compliant way. These bonds are purely monetary and do not back to an asset such as Sukuk and therefore, does not relate monetary operations to real estates and tangible assets that make many operational deficiencies in practice.

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