

## Unconventional monetary theories in modern Middle Eastern economic schools amended october 2019

By Tohid ATASHBAR †

**Abstract.** In this study, we classify the unconventional monetary views found in the modern Middle East economic literature into five main categories. These five categories include 1) Full reserve-like approach to the banking system, 2) Commodity/Asset-backed monetary systems or Currency board-like frameworks, 3) Interest-free approach to the banking system, 4) Bank-free approach to the banking industry, and finally 5) Public money or monetary guidance approach to the monetary system. Additionally, we identify a collection of ideas as hybrids or combinations, some of which are in their developmental stage and are receiving significant attention and support. Our review of these approaches summarizes their theoretical foundations, historical and current advocates, and relevant policy recommendations.

**Keywords.** Monetary economics, Unconventional theories, Middle Eastern schools.

**JEL.** F21, F68, O53, K23.

### 1. Introduction

Money and banking are sometimes referred to as one of the most important inventions in human history. However, it is also believed that if monetary structures are developed inadequately or inappropriately, they can become destructive weapons that can be unleashed against economic and social systems.

Different schools of thought, reflecting their philosophical, theoretical or ideological roots, have different approaches to this issue. In the Middle East, which is the cradle of some of the earliest civilizations and the source of some old social and philosophical ideas, there has been a historical focus on monetary systems.

These ideas were usually passed down in the context of philosophical writings and were not categorized within a purely economic framework. The previous century, with its development of the banking industry and of economics as an academic discipline, witnessed the addition of mathematical and modern micro/macro language to the literature of money and banking.

Due to their unique theoretical and philosophical foundations, many of the theories developed in the Middle East differ from conventional approaches to money and banking. This research is the first systematic step

† Senior Researcher and Advisor at Parliament Research Center of Iran, Iran.

☎. 86 18273195610 ✉. atashbart@majlis.ir

## Journal of Economics Bibliography

in identifying and distinguishing various unconventional approaches in the "modern" literature on money and banking in the Middle East.

The term modern is used because ancient to old approaches were often developed and presented in a holistic sense, with an unclear boundary between economic knowledge and philosophy. In contrast, the approaches of recent decades have mainly been expressed in modern academic language and have the potential to be understood in the context of modern economic literature.

The time scope of this study of texts is the past five decades. The geographical area of the study is the Middle East (scholars born in or with the nationality of Middle East countries), and the language of reviewed texts are English, Arabic, and Persian. Given these restrictions, similar texts from other countries such as Indonesia, Malaysia, and Pakistan have not been reviewed or mentioned in this study.

To increase the readability of this summary for outsiders, technical details are avoided, and simple descriptive language is used to present the results. To limit the number of classifications and increase the straightforwardness of the big picture depicted in this study, minor disputes have been sidestepped and the ideas with significant common points have been classified into the same group.

## 2. Modern monetary thought in the Middle East

As previously stated, this study examines the concepts of money and banking in recent decades; an era is known for its modern thinking in this field. For this purpose, we identify five distinct schools of thought in this field based on their distinctive principles. It is noteworthy that none of the mentioned schools in this study openly identified themselves with such categories. They often referred to themselves by obscure or mixed titles, making it difficult to identify themselves from other philosophical or economic schools of thought. Hence, we categorized them based on their most important or the most frequently cited element or principle they emphasized, making it easy to draw a big picture. According to our study, these schools are as follows:

### 2.1. Full reserve-like approach to the banking system

There is a set of thinkers and economic theorists who have developed arguments against the fractional reserve banking system, which often include an implicit defense of the full reserve system or similar banking arrangements, as visible in various publications (which are listed in the bibliography). Among those thinkers are Mirakhor (2014, 2017), Dallali Esfehani (2002, 2005, 2006, 2016), Al-Jarhi (1980, 1981a, 1981b, 1983, 2003, 2004a, 2004b, 2005, 2013), Bakhshi Dastjerdi (2004a, 2004b, 2007, 2009, 2011a, 2011b, 2011c), Hosseini Dolatabadi (2016, 2018, 2019), Mojahedi Moakher (2011, 2013, 2015, 2016), Izadkhasti (2014, 2017), and Vaez Barzani (2013, 2015). Those arguments can be summarized as follows:

## Journal of Economics Bibliography

- Fractional reserve banking is neither morally defensible nor economically efficient and stable/sustainable. This system, by providing the possibility of creating money from nothing<sup>2</sup>, benefits the system itself or people who have access to it at the expense of others.

- Money in this system, from the moment of creation, is created as public debt and bankers' assets, and through the mechanism of interest, both debt and assets increase.

- The amount of debt created is ultimately unpayable, mathematically speaking, and is continuously increasing because the money at the moment of creation just covers the principal of the debt without considering the interest needed to service the debt in full.

- While fractional reserve banking is justified as a mechanism serving the public interest, the money in this system is mainly created for the benefit of private bankers or for the private benefit of individuals at the public banks.

- The creation of financial value in this system, through inflation, leads to a reduction in the value of the real assets of the people. In fact, inflation is the tax of the banking system on the real wealth and income of the people. The banking sector's owners and associates, by creating financial assets and, consequently, real assets for themselves from thin air, simultaneously create debt for the non-bankers and reduce the value of their assets by inflation.

- In order to maintain the macroeconomic balance and sustainability of the system, the banking system has to play with the amount of money in the economy or in circulation through Open Market and other banking operations. During this operation, they have to purchase and sell debt securities mainly issued by themselves, once more creating financial assets and then real assets for themselves.

- This banking model, by artificially attempting to maintain equilibrium in the economy, leads to economic cycles of inflation and recession and intensifies the business cycles.

- Fractional reserve banking, with justifications that include its capacity to create an economic boom by injecting money into the economy, uses tools such as frightening politicians into increasing taxes and removing them from their positions if they oppose such measures. Defenders of such a system also purchase political influence and, most importantly, convert their desired schemes into legally binding local and international laws, trying to install and strengthen its unsustainable system of artificial exploitation.

- The bottom line, according to this school, is that the fractional reserve system is economically unstable and unsustainable, morally indefensible, and socially unfair. Hence, it should be replaced by a system that is more accountable, stable, efficient, and fair.

- In this school, the proposed policy recommendation is to move into a 100 percent reserve system that could be implemented in a variety of ways,

<sup>2</sup> Creation of credit from nothing is explained - by or without using endogenous theory of money - through the possibility of creating one unit of credit based on a fraction of the base credit/money unit.

## Journal of Economics Bibliography

including by moving to narrow banking, return to the gold system, or other strategies. This school is not a defender of currency boards; however, in practice, their implications and results can be similar to those described above.

The idea of a full-reserve banking structure and similar plans can be traced to the near-Middle Eastern region (Pakistani, Sudanese, Turkish) and scholars including Khan (1986a, 1986b, 1989, 1990, 1994, 2010, 2015) and Abu-Saud (1976, 1986, 2006).

### 2.2. Currency board-like frameworks

In the words of some of the thinkers who mainly are under the influence of Haeri Shirazi (2012a, 2012b), the need to move towards creating a monetary system based on authentic or physical assets, instead of credit money, has been discussed. In these works, the central bank should be obliged to create a system or replace the current arrangement with a system that, instead of issuing credit-based money, issues and circulates a currency based on a commodity or asset with "intrinsic credit" such as gold. The following points can be traced to this group:

- In a system similar to that in the traditional economic literature of the currency boards, the central bank or its amended version or the monetary authority is responsible for issuing currency and banknotes in the country on a one-to-one (or any other fixed or publicly announced ratio) valid backing of a credible commodity or asset (for example, gold). Monetary authority should adjust this relationship so that all local currency notes can be converted into a reserve currency and vice versa.

- The supporters of a currency board-like system usually combine conventional defenses for currency boards with ideological, local and national views. For example, the proposition that moving to a currency board-like system causes the economy to be invulnerable to external threats is a familiar theme in most of these works.

- In the later works of the advocate of this theory, as in the works of Motavalli Emami (2018) and Gholami (2019), one prominent argument relates to the prevention of economic turmoil - especially to what is called the drying up of the root of inflation - by reforming the current form of money creation and moving to a system similar to that of a currency board.

- There is also a view that, because money is created without being backed-up by commodities or assets, it favors the people close to the monetary system and simultaneously reduces the wealth and income of others by generating inflation. So, it causes or intensifies both economic inequality and poverty. Thus, moving towards money based on commodity-based credit instead of fiat money can lead to a reduction in poverty and inequality.

- One of the other arguments often observed in the works of defenders of this idea is that the increasing disproportion and disparity between the real sector of the economy, on the one hand, and the monetary/financial sector, on the other, is attributable to the system that creates fiat money,

T. Atashbar, JEB, 8(2), 2021, p.97-113.

## Journal of Economics Bibliography

ultimately resulting in economic turbulence and recessions. So, it is argued that moving towards a reform of the monetary system and a more fundamental change, backed by commodities such as gold, would prevent a disproportionate monetary expansion and, consequently, lessen the degree of mismatch between the real sector and the financial sector, reduce the sporadic turbulence, and smoothen the business cycles.

- One of the motives behind the support of currency board-based reforms is that it should enhance the fairness of monetary arrangements or what is called the prevention of oppression caused by credit money. For example, it is said that inflation reduces the purchasing power of the fiat money, so the lender suffers a loss. As a result, the borrower must pay interest to avoid the lender's imposition while, simultaneously, the borrower cannot gain extra value by borrowing money. This is because, for example, he may spend the borrowed money on necessary consumable goods or medical expenses and may suffer a loss by paying interest. However, when money is backed by commodities, even though those assets become more expensive or cheaper in the market, there will be no need or less need to collect and pay that extra amount during lending and borrowing because the real measure of money lent and borrowed is the quantity of that commodity (For example, kilograms for gold—not the price or purchasing power of it - regardless of the fact that the price changes in commodities such as gold are generally insignificant). Thus, both lender's and borrower's sides are not oppressed, and they move one step forward toward a fairer monetary framework.

- It is commonly said that because of the strict budget constraints on commodity-backed money creation systems, governments cannot create money to compensate for their deficits. In this way, the government's fiscal discipline improves, and deficits cannot be monetized by generating inflation and imposing taxes. The proponents of this system say that it is true that the commodity-backed money system disallows the government from artificially stimulating the economy during recessions, but the system's sustained benefits outweigh their costs. They say that such situations are temporary because money is "neutral" and cannot increase potential output in the long run.

- Defendants of this system state that monetary policy in the "normal structure" of the monetary sector—without the creation of credit money and using commodity-based money—is "unnecessary" or that the need for such a policy will be much less.

- This group argues that a system-wide replacement of the currency board-like structure instead of the conventional central bank would put money into passive territory and paralyze the state in its current form, leaving it out of the "artificial engine of growth", which in fact is a fraudulent scheme, to pay for emergency needs or development programs. However, the right and natural way of creating such policies involve the resources obtained by taxing the value-added of economic effort, not the money printing machine. They argue that the use of artificial means, although it may

T. Atashbar, JEB, 8(2), 2021, p.97-113.

## Journal of Economics Bibliography

be a remedy and relieve pain in the short run and in one part of the economy, results in the cost of inflicting severe medium- or long-term pain on the other parts.

- Proponents of currency board-like reforms believe that the traditional view that claims currency board-like arrangements conflicts with national political independence of countries (because the states cannot create the needed resources by themselves and are compelled to borrow from other countries) is not logically defensible. Supporters of currency board-like systems insist that creating monetary resources in the credit money system is a kind of tax policy carried out through inflation taxes, while the government can collect real taxes instead of artificial taxes. However, governments do not follow that policy because of electoral and political reasons and not because of pure economic reasoning. Moreover, the traditional systems are also borrowing from other countries, which relates to the management of the economy and not to the type of money created and circulated.

### 2.3. PLS/Interest-free approach to the banking system

Among the scholars who take an profit and loss sharing (PLS)/interest free approach to banking are the following: Al-Sadr (1982, 1983), Kahf (1978, 1981, 1982, 1992), Chapra (1982, 1992, 1995), Hosseini Beheshti (1964, 1990, 2008), Motahari (1985), Namazi (2005), Mirakhor (1989, 1990, 1991, 1993, 1994, 1995, 1986a, 1986b, 1987, 1996, 1999, 2000, 2007, 2010, 2011, 2012, 2013a, 2013b, 2013c, 2015), Tootoonchian (1996, 2000), Razavi (2014, 2018), Mousavian (1999, 2006, 2013, 2014a, 2014b) and Sobhani (1995, 2003, 2014, 2017). This approach, in comparison with modern unconventional approaches, dates back to more distant times. These scholars support the idea of a more participatory banking system, seeing it as preferable to the conventional lending model. Some common points are as follows:

- In the PLS (PLRS)<sup>3</sup> banking system, the structure of banking operations is preserved, but the conventional interest rate system does not hold such that all loans are paid out in the form of participation in profit and loss. In other words, if a profit from the economic activity of the borrower is created, it is divided as the gain between the lender and the borrower, according to their contract, and if it is not profitable, then there will be no interest. Also, if the loss arises as a result of the economic activity arising

<sup>3</sup> PLS, without clarifying the risk factor and without considering the conceptual context of the idea, "may" refer to sharing of profit and loss at the end of a given contract (Which is an ex-post concept). However, to eliminate the risk subsidy, the sharing ratio has to be negotiated at the beginning of the contract when the outcome of the contract is unknown (ex-ante). This requirement makes the decision for the provider of finance capital and the receiver of the capital subject to risk and uncertainty. Therefore, at the beginning of a contract, it is the sharing of the risks of the success/failure of the contract which influences the negotiations on the parameter of PL sharing at the end of the project, which makes PLRS just a more representative expression of the PLS idea (To avoid hyper/paratextual misinterpretations of the main idea).

## Journal of Economics Bibliography

from the receipt of a loan, this loss, if not insured, must be divided between the borrower and the bank.

- This banking system operates with maximum "risk-sharing" between the bank and the client, and there is no possibility of receiving risk-free profits by the lender as the guaranteed interest.

- In this system, any degree of interest, positive, zero or negative, without risk sharing is considered reckless and unfair. So, the proponents of the system tend to name the system as interest-free, and not the zero-interest-rate system, because zero or even negative interest rate can sometimes be a characteristic of traditional banking.

- In this monetary and banking system, the role of financial information management systems to monitor financial operations and profit or loss of economic activities for the entire value chain is vital from the moment the loan is received from the financial sector up to its economic result in the real sector. Without a comprehensive IT system, loans cannot be individually assessed and the task of separating profit or loss is not feasible in each case. In such systems with a shared pool of loans, usually, profit and loss are aggregated in whole or in aggregate for specific sectors such as agriculture and industry and are considered for all or similar loans.

The idea of PLS or interest-free banking can be traced back to other near-Middle Eastern (Indo-Pakistani, Turkish, Indonesian, Malaysian) scholars including Siddiqi (1981, 1982, 1983a, 1983b, 2004, 2009), Rahman (1979a, 1979b) and Ariff (1982a, 1982b, 1988, 2008).

### 2.4. Bank-free/Non-bank approach to the banking industry

This school, which is similar to the PLS school but more radical, can be traced back to the works of academics such as Samsami (2010, 2014, 2016), Davoudi (2002, 2010), and Hassani (2017). The main features of this school of thought can be summarized as follows:

- It supports the idea that due to the intrinsic nature of the banking system, which they say is the interest-based lending, a fair and real reform within this system "by maintaining the traditional structure of the bank" is not possible.

- In their view, the approaches preserving the structure of the bank by making some changes and trying to make it more reasonable or fairer are minimal, nominal, fake or unfeasible and are doomed to fail in most cases.

- In their view, the economy does not need the bank, but the lenders need the bank more than the economy and, hence, pursue their needs and have developed the banking system in the name of the needs of the economy. The need for finance can be solved by a non-bank institution.

- This view has the same basic approach to the banking sector as the PLS, but the main difference is that it does not consider bank reforms as a way of reforming the banks.

- What this school proposes as the alternative or the only "real" solution to reform the banking sector is not inherently a bank, but a company performs the following tasks. Firstly, it can enter into a partnership in some

T. Atashbar, JEB, 8(2), 2021, p.97-113.

## Journal of Economics Bibliography

projects with its customers (the relationship between the customer and the bank is one of partnership, not one of lending-borrowing) and divide the risks and profits/losses between themselves. Secondly, the company can provide loans with a zero interest rate to customers who need money not for economic activity but rather for urgent consumption (the company can act as a cooperative charity-like institution, taking money from members, providing loans to needy individuals, and receiving the principle without receiving interest).

- This school sees the main problem as interest-based lending and not as one of money or the creation of credit in the banking system. Hence, it is generally assumed that there is no need for a full reserve system and that the monetary institution or company can sustain itself with a system for deposits much like the fractional reserve system.

### 2.5. Public money and monetary guidance approach to monetary arrangements

This circle of intellectuals, who are younger and more modern than the previous circles based on non-traditional monetary thought, have relied mainly on endogenous monetary concepts to promote their ideas. They advocate a more "active" monetary leadership in the form of a development-oriented central bank. From this perspective, the independent central bank is, in fact, a proxy to promote private and not public interests, and hence, "directing" money creation for the public interest is necessary.

These intellectuals support the idea that due to the intrinsic nature of money creation and specifically due to the endogenous mechanism of money creation on the balance sheet of banks, the current system is both theoretically weak and ineffective in meeting its goals, including inflation targeting.

The thoughts of this circle, which is also called the "money/credit guidance school" are to some extent shared with Modern Monetary Theory (aka MMT) in the current literature, especially regarding issues such as financing development plans (of or off the budget).

More well-known thinkers in this school are Yazdanpanah (2014, 2016a, 2016b, 2017, 2019a, 2019b, 2019c), Doroudian (2016a, 2016b, 2018, 2019a, 2019b), Dehghan Dehnavi (2019), Nasiri Aghdam (2019), Shakeri (2019a, 2019b), Rohani (2018) and Bani Taba (2019).

Some common concepts in the works published by this circle are as follows:

- The creation of money in the fractional reserve system is done in an endogenous manner, without the complete control of the central bank, by the banking system, so the conventional set of monetary governance and regulation, based on the theory of exogenous money creation, is ineffective. Therefore, monetary governance must be revised and improved, and current and conventional regulations should be replaced by a new set of regulations and a new framework for monetary policy. There is also a less famous



## Journal of Economics Bibliography

version of this school that insists on credit guidance without insisting on endogenous theory of credit.

- Money is a debt instrument that is not necessarily related to goods and is essentially a social phenomenon or consensus with economic functions.

- Money as an institutional construction has a role to play beyond just mediation between economic agents. It is at the forefront of today's economy. It is not neutral nor can it ever be neutral. It is an institutional possibility that can add to the wealth and value of the economy in the form of association with some other institutional arrangements and inputs.

- Money brings together the factors of production and fills the gap between investment and return on capital. From this angle, money is not merely an intermediary in the exchange of manufactured goods but rather a factor that precedes the production of any product such that if it is not applied correctly, production does not proceed.

- The economy, especially when it is not in full employment, is usually constrained in its institutional capabilities (one of whose main components is money), not physical restrictions, and money can overcome this gap.

- The agenda of the central bank must be to guide the flow of money and thus realize the economy's potential, and so the central bank has an operational function and an agenda that goes beyond targeting inflation.

- The central bank, even if independent, faces difficulties in achieving its inflation goals and is continually being affected by developmental factors (by incidental events such as floods and earthquakes, the government's policy of supporting job creation or the abandonment of specific industries such as the carbon publishing industries). Consequently, whether directly or indirectly, it becomes impossible for the bank to do its job effectively. Therefore, it is advisable that the monetary authority should proactively (not passively) respond to these developmental phenomena. Given that the largest economies in the world have used their monetary engines to jump-start their economies, why should developing countries limit themselves to taxes, subsidies, and similar concepts? There is great potential for monetary policy and the central bank to contribute to development, and that fact should not be ignored.

- Other unconventional ideas in this area, such as the move towards a full reserve system or currency boards, are not realistic and even fictional,

depriving the economy of its considerable capacity described as "development based on the creation and direction of money"<sup>54</sup>.

### 3. Hybrid approaches

Typically, unconventional monetary theories do not limit their scope to their principal core and extend themselves by creating theoretical coalitions with similar schools. Also, there are hybrid branches in the literature that are created based on a mixed or selected composition of theories, in an attempt to provide a more comprehensive view. With the review of non-conventional monetary literature, the following hybrids can be identified:

- Hybrid of full reserve-like and PLS schools (some works by and narrations/interpretations from Mirakhor, Dallali Esfehni, Hosseini Dolatabadi, Bakhsi Dastjerdi)
- Hybrid of bank-free and full reserve-like approaches (some narrations/interpretations from Sobhani, Hassani, Samsami, Davoudi, etc.)
- Hybrid of currency board-like schools and PLS (some narrations from Hayeri Shirazi)
- Hybrid of PLS and monetary guidance school (some narrations from Doroudian, Yazdanpanah, etc.)

### 4. Marginal unconventional branches

Along with more well-known non-conventional monetary ideas, there are some emerging ideas that focus on the technical aspects of the monetary system. These ideas, which mainly use the blockchain platforms and similar technologies, emphasize concepts such as promoting a "distributed" money creation system, the de-monopolization of money creation, individualism in monetary arrangements, the movement toward global public money,

<sup>4</sup> On the contrary, the supporters of competing unconventional ideas, such as the proponents of full reserve-like systems or currency board-like systems, are responding that they (proponents of credit guidance theory), instead of looking for the root cause of inefficiency, inequality and instability in the banking system, justify their ideas with the explanation that the creation of money in partial reserve system is necessary/prerequisite for development, and the current system cannot be reformed as dramatically as proposed by advocates of the full-reserve system or other schools. In other words, they say that the current system is a "necessary evil" and must be controlled and pushed in the right direction, instead of being fundamentally reformed. But the main question is that regardless of the development benefits of monetary guidance, does the supporters of this idea accept responsibility for the disadvantages of this system, such as unfairly benefiting other stakeholders in the banking system—owners and those who have access to the credit—or the second-round receivers of the money created in the system? (Assuming that it can be completely used for development purposes in the first stage).

<sup>5</sup> There are other thinkers, like Peighami (2015, 2018), who are not among the circle of advocates of money guidance school, but similarly, believe in the endogeneity of money creation and insist of the need to direct money through the fundamental banking reform. However, this group believes that the government or monetary authority should target keeping people's purchasing power in check and stable by creating money, without worrying about the inflation or "zeros of the currency" because the zeros in the currency issued by the banking system are not important and can be dropped later.

network money, and so on. Such views are still in their embryonic stage and are yet to find significant support among economic advocates of unconventional views.

### 5. Conclusion

With a review of the monetary literature published in recent decades by Middle Eastern scholars, several non-conventional circles can be identified. Among the most important common attributes of these circles is the opposition to the fractional reserve arrangement in the banking system, along with the attempt to increase "fairness" in the banking system and the defense or more risk sharing in financial activities. The solutions proposed by these unconventional schools to reform the status quo are mainly in the form of one or a combination of different approaches, including moving to a full reserve system in central banking and banking system governance, replacing fiat credit money with commodity-based money that has intrinsic value, establishing a currency board monetary authority instead of conventional central bank, instituting an interest-free profit and loss sharing banking system based lender-borrower relations in the banking business and, ultimately, monetary guidance to enhance development in favor of public interests in money creation process.

These ideas or branches or hybrids of them are now in a phase of growth and expansion, and it is expected that during the next global or regional banking crisis, one of these methods, or a combination of them, will emerge as an alternative to the system currently in place.

### References

- Al-Jarhi, M., 1980. A Monetary and Financial Structure for an Interest-Free Economy: Institutions, Mechanism & Policy.
- Al-Jarhi, M.A., 1981. A Monetary and Financial Structure for an Interest-Free Monetary Economy: Institutions, Mechanism, and Policy. In Seminar on Monetary and Fiscal Economics, Islamabad.
- Al-Jarhi, M.A., 1981. The Relative Efficiency of Interest-Free Monetary Economies: The Fiat Money Case. *Theoretical Studies in Islamic Banking and Finance*, pp.37-74.
- Al-Jarhi, M.A. and Iqbal, M., 2001. Islamic banking: answers to some frequently asked questions. Occasional paper, 4.
- Al-Jarhi, M.A., 1983. A Monetary and Financial Structure for an Interest-Free Islamic Economy: Institutions, Mechanism, and Policy. *Money and Banking in Islam*, Islamabad: IPS & Jeddah: KAAU, pp.69-88.
- Al-Jarhi, M.A., 2003. September. Islamic Banks & Universal Banks: Need For Leveled Playing Field. In A paper presented to the International Seminar on Islamic Banking: Risk Management, Regulation, and Supervision, organized by the Ministry Finance Indonesia, the Central Bank Indonesia, and the Islamic Research and Training Institute, Jakarta, Indonesia, September (Vol. 30).
- Al-Jarhi, M.A., 2004. Islamic banking and finance: Philosophical Underpinnings. *Islamic banking and finance: Fundamentals and contemporary issues*, 47, pp.13-24.
- Al-Jarhi, M.A., 2004. Remedy for banking crises: What Chicago and Islam have in common: A comment. in *Islamic Economic Studies*, 11 (2).
- Al-Jarhi, M.A., 2005. The case for universal banking as a component of Islamic banking. *Islamic Economic Studies*, 12(2) & 13(1).
- Al-Jarhi, M.A., 2013. Gaps in the Theory and Practice of Islamic Economics. *Journal of King Abdulaziz University: Islamic Economics*, 362(3390), pp.1-12.
- Al-Sadr, M.B., 1982. *Iqtisaduna (Our Economics)*, Dir al-Ta'aruf Lelmatbuat (printing house), Beirut. [Arabic]
- Al-Sadr, M.B., 1983. *Al-bank al-larabawi fi al- Islam (Interest bank in Isalm): A proposition to replace interest and a study of all aspects of the activities of banks in the light of Islamic jurisprudence*, Dir al-Ta'aruf Lelmatbuat (printing house), Beirut. [Arabic]
- Askari, H., Iqbal, Z., Krichenne, N., and Mirakhor, A., 2011. *The stability of Islamic finance: Creating a resilient financial environment for a secure future (Vol. 736)*. John Wiley & Sons.
- Askari, H., Iqbal, Z., Krichene, N., and Mirakhor, A., 2012. *Risk sharing in finance: The Islamic finance alternative*. John Wiley.
- Askari, H., Iqbal, Z. and Mirakhor, A., 2014. *Introduction to Islamic economics: Theory and application*. John Wiley & Sons.
- Askari, S.E., Pourkazemi, M.H., Biabani, J. and Dallali, E.R., 2016. An Axiomatic Analysis of the Effects of Interest Rate on the Inflation and Convergence Speed in Achieving to Equilibrium in a Banach Space. *Quarterly Journal of Applied Theories of Economics*, 3(1), pp.115-138.
- Bakhshi Dastjerdi, R. 2004. Examination of Origins and Effects of Interest Rate with Emphasis on Samuelson Biological Interest Rate in an OLG Model, Doctoral Dissertation, Isfahan University. [Farsi]
- Bakhshi Dastjerdi, R. 2007. Theoretical Investigation of the Effects of Interest Rate on Inter & Intra temporal Resource Allocation. Research Project, Unpublished, University of Yazd. [Farsi]
- Bakhshi Dastjerdi, R. and Dallali, E.R., 2004. An Introduction to Subjective Origins of Interest from Bohm-Bawerk's viewpoint (a critical study). *The Quarterly Journal of Economic Research*, (13). [Farsi]
- Bakhshi Dastjerdi, R., & Dallali, E.R., 2011. *Pathology of Interest Theory and Conventional Banking System*, Yazd: University Press, First Edition .39. [Farsi]
- Bakhshi Dastjerdi, R., 2011. The Impact of Intertemporal Justice on Economic Growth with Emphasis on Time Preference in the Iranian Economy. *The Economic Research*, 11(1), pp.19-41. [Farsi]

## Journal of Economics Bibliography

- Bakhshi Dastjerdi, R.B., and Dallali, E.R., 2011. Equity and economic growth, a theoretical and empirical study: MENA area. *Economic Modelling*, 28(1-2), pp.694-700.
- Bakhshi, D.R., Dallali, E.R. and Hosseini, J., 2009. Time Preference and Its Effects on Intertemporal Optimization of Economic Resources, A Critical Viewpoint. *International Economics Studies*, 34 (1), Pp. 69-78. [Farsi]
- Bastanifar, I. and Vaez Barzani, M.V., 2015. A New Framework for Hegemonic Analysis of Monetary Policy: The Case of Iran. *Iranian Journal of Economic Studies*, 4(1), pp.27-52. [Farsi]
- Bastanifar, I., Vaez Barzani, M.V., Dallali, E.R., and Bakhshi, R., 2013. Alternative Conditions to Time Inconsistency Equilibrium of an International Monetary Policy. *International Economic Studies*, 42 (1), pp 57-67. [Farsi]
- Chapra, U, 1982. "Money and Banking in Islamic Economic".in Ariff, Mohammad (Ed). *Monetary and Fiscal Economics of Islam* (p.145 – 176). 1st edition. Jeddah, International Centre for Islamic Economics King Abdulaziz University.
- Chapra, U., 1992. *Islam and the Economic Challenge*.1st edition. USA: The Islamic Foundation.
- Chapra, U., 1995. *Towards a Just Monetary System*. United Kingdom: The Islamic Foundation.
- Dallali, E.R., 2002. An Introduction to Ramsey's Mathematical Theory of Saving, *Journal of Faculty of Administrative Sciences and Economics*, 26. [Farsi]
- Dallali, E.R., 2005. Ways to Reach to a Society without Reba, Forth Conference of Islamic Economics, University of Tarbiat Modares. [Farsi]
- Dallali, E.R., 2006. Theoretical and Practical Time Preference Rate, *Science and Development Journal*, (25). [Farsi]
- Dallali, E.R., and Vaez Barzani, M., 2016. Impact of Time Preference on Economic Growth. *The Economic Research*, 16(3), pp.155-179. [Farsi]
- Davoudi, P., 2002. Theoretical foundations of money and bank in Islam, The second meeting of Islamic economic studies, Islamic Research Foundation, Mashad. [Farsi]
- Dehghan Dehnavi, M.A., 2019. The role of development banks in credit guidance, Money and Development Conference, Allame Tabatabayee University, Tehran [Farsi]
- Doroudian, H., 2016. A fundamental question from the advocates of interest-free banking plan, Mobin Institute, Tehran. [Farsi]
- Doroudian, H., 2016. Anti-recession power of hard money, Mobin Institute, Tehran. [Farsi]
- Doroudian, H., 2018. Why are anti-money-creation prescriptions misleading? Mobin Institute, Tehran. [Farsi]
- Doroudian, H., 2019. A clear reading of central bank independence and critical attitudes toward it, Money and Development Conference, Allame Tabatabayee University, Tehran. [Farsi]
- Doroudian, H., and Yazdanpanah, M., 2019. A Critical Evaluation of Conventional Central Banking and Banking Framework, Suggesting Alternative Model for Iran, Unpublished/Forthcoming book. [Farsi]
- Faramarzi, A., Dallali, E.R., and Samadi, S., 2013. Determining The Optimum Rate Of Money Issue With Use Of Overlapping Generation Models (Case Study: Iran). *Journal of Financial Economics (Financial Economics and Development)*, 7 (25), Pp. 9-30.
- Gholami, M., 2019. PoulTala (GoldMoney), Online Course, META institute, Isfahan [Farsi]
- Haeri Shirazi, M., 2012. In Islam, money should not work, Compilation by Mostafa Omranian, Fatemiyeh Publications, Yasouj. [Farsi]
- Haeri Shirazi, M., 2012. World fiat currency and Islamic money, Fatemiyeh Publications, Yasouj. [Farsi]
- Hassani, A., 2017. Modern (New) Islamic finance system, Mirase-Anbia Publications, Qom. [Farsi]
- Hosseini, S.A., Dallali, E.R., Barzani, M.V., Dastjerdi, R.B. and Parvardeh, A., 2013. The Effects of Interest Rate on the Optimal Consumption Path in a Bewley Model with the Co-existence of Currency and Credit1. *International Journal of Academic Research in Business and Social Sciences*, 3(8), p.520.
- Hosseini Beheshti, S.M., 1964. Banking and financial laws of Islam, *Shia School (Maktab-e-Tashayo)*, 11, pp.32-43.[Farsi]

## Journal of Economics Bibliography

- Hosseini Beheshti, S.M., 1990. Usury in Islam, Office of Islamic Culture Publication, Tehran. [Farsi]
- Hosseini Beheshti, S.M., 2008. Banking, interest and financial laws of Islam, Foundation for the Publishing of Works and Thoughts of Dr Beheshti, Tehran. [Farsi]
- Hosseini Dolatabadi, S.M., 2016. the nature of the bank and its implications for Islamic banking studies, *Islamic economics studies (Motaleate Eqtesade Eslami)*, 8(2), pp. 173-198. [Farsi]
- Hosseini Dolatabadi, S.M., 2018. The Arrangements of Money Creation in Conventional Economics and Islamic Economics with Emphasis on Reserve Requirement Ratio, PhD Thesis, Tehran University. [Farsi]
- Hosseini Dolatabadi, S.M., 2019. An introduction to nature and governance of money creation in the fractional reserve banking system, Money and Development Conference, Allame Tabatabayee University, Tehran. [Farsi]
- Iqbal, Z. and Mirakhor, A., 1987. Islamic banking (Vol. 49). International Monetary Fund.
- Iqbal, Z. and Mirakhor, A., 1999. Progress and challenges of Islamic banking. *Thunderbird International Business Review*, 41(4-5), pp.381-405.
- Iqbal, Z. and Mirakhor, A., 2011. An introduction to Islamic finance: Theory and practice (Vol. 687). John Wiley & Sons.
- Iqbal, Z. and Mirakhor, A. eds., 2013. Economic development and Islamic finance. The World Bank.
- Izadkhasti, H. and Dallali I.R., 2014. The nature and necessity of money and interest in the capitalist system: a critical approach, Arastoo Publications. [Farsi]
- Izadkhasti, H., 2017. An Analysis of the Impact of Credit Creation on the Fractional Reserve Banking System on Macroeconomic Variables in Iran, *Economic issues*, 14 (27), pp. 9-34. [Farsi]
- Kahf, M., 1978. The Islamic Economy: Analytical Study of the Functioning of the Islamic Economic System. Plainfield, Indiana: The Muslim Students' Association of the United States and Canada
- Kahf, M., 1981. Islamic economics. Kuwait, Darolghalam, Second edition. [Arabic]
- Kahf, M., 1982. Fiscal and Monetary Policies in Islamic Economy. In Ariff, Mohammad (Ed). *Monetary and Fiscal Economics of Islam* (p. 125 – 137). 1st edition. Jeddah, International Centre for Islamic Economics King Abdul-Aziz University.
- Kahf, M.S., and Taquillah Khan, 1992. Principles of Islamic Financing: A Survey. Jeddah, Saudi Arabia: IRTI.
- Khan, M.S., and Mirakhor, A., 1986. The framework and practice of Islamic banking. *Finance and development*, 23(3), p.32.
- Khan, M.S., and Mirakhor, A., 1989. The financial system and monetary policy in an Islamic economy. *Journal of King Abdulaziz University: Islamic Economics*, 1(1).
- Khan, M.S., and Mirakhor, A., 1990. Islamic banking: Experiences in the Islamic Republic of Iran and Pakistan. *Economic Development and Cultural Change*, 38(2), pp.353-375.
- Khan, M.S., and Mirakhor, A., 1991. Islamic banking (Vol. 88). International Monetary Fund.
- Khan, M.S., and Mirakhor, A., 1994. Monetary management in an Islamic economy. *Journal of King Abdulaziz University: Islamic Economics*, 6(1).
- Khan, M.S., and Mirakhor, A., 2015. Theoretical studies in Islamic banking and finance. BookBaby.
- Kiaee, H., Abrishami, H. and Sobhani, H., 2013. Islamic banking performance vs its conventional counterpart: using stochastic optimal control method. *Journal of Islamic Economics, Banking, and Finance*, 113(3792), pp.1-21.
- Komeijani, A., Abrishami, H. and Rohani, S.A., 2018. The nature and procedure of money creation in the banking system; the critique of current views and its implications, *Bi-quarterly Journal of Iran's Economic Essay (Jastarha-ye Eqtesadi)*, 15(29), pp.1-30. [Farsi]
- Mirakhor, A., 1993. Equilibrium in a non-interest open economy. *Journal of King Abdulaziz University: Islamic Economics*, 5(1).
- Mirakhor, A., 1995. Theory of an Islamic financial system. *Encyclopedia of Islamic Banking*.
- Mirakhor, A., 1996. Cost of capital and investment in a non-interest economy.

## Journal of Economics Bibliography

- Mirakhor, A., 2000. General characteristics of an Islamic economic system. Anthology of Islamic banking, Institute of Islamic banking and insurance, London, pp.11-31.
- Mirakhor, A. and Zaidi, I., 2007. Profit-and-loss sharing contracts in Islamic finance. Handbook of Islamic banking, 49, pp.25-37.
- Mirakhor, A., 2010. Islamic finance? Risk sharing in an age of crises.
- Mirakhor, A. and Bao, W.Y., 2013. Epistemological foundation of finance: Islamic and conventional. Economic Development and Islamic Finance, 25, pp.1755-1315.
- Mirakhor, A. and Iqbal, Z., 2013. An introduction to Islamic finance: Theory and practice. Wiley.
- Mirakhor, A. and Askari, H., 2017. Ideal Islamic Economy: An Introduction. Springer.
- Moghadam, V., Ehsan, A.A., Heidari, M.R., Vaez Barzani, M., 2017. Rule or Discretion in Islamic Central Banking, *Eghtesad-Islami*, 17 (66), Pp. 101-131. [Farsi]
- Mojahedi, M.M., Dallali, E.R., Samadi, S. And Bakhshi, D.R., 2011. Developing an Overlapping Generation Model of Fractional Reserve Banking Activity with Emphasis on Maurice Allais's Approach. *Journal of Economic Modeling Research*, 5, Pp. 47-74. [Farsi]
- Mojahedi, M.M.M., Dallali, E.R., Samadi, S. And Bakhshi, R., 2013. The Study of Islamic Viewpoint and Western Approach to Subjective Concept of Money and Credit. *Journal of Economic Research and Policies*, 21 (65), Pp. 201-230. [Farsi]
- Mojahedi, M.M.M., and Dallali, E.R., 2015. Time Inconsistency in Fractional Reserve Banking, Interpretation of M. Allais's Criticism to Interests 'equilibriums In Credit Mechanism. *Journal of Economic Research and Policies*, 23(74), Pp.75-97. [Farsi]
- Mojahedi, M.M., Dallali, E.R. And Bakhshi, D.R., 2016. A Critical Analysis of the Conventional Banking System: Mathematical Approach from the Viewpoint of Maurice Allais to the Creation of Credit. [Farsi]
- Motahari, M., 1985. Usury, Bank, Insurance, Sadra Publication, Tehran. [Farsi]
- Motavalli Emami, M.H., 2018, Monetary System online course, META institute, Isfahan. [Farsi]
- Mousavian, S.A., 1999. Islamic Banking, Monetary and Bank Research Institute, Tehran. [Farsi]
- Mousavian, S.A., 2006. Interest-free banking from the point of view of Shahid Sadr, *Eghtesad-e-Eslami*, 21, pp 71-102. [Farsi]
- Mousavian, S.A., 2013. A Critique of Contemporary Views on Interest, *Ketab-e-Naghd*, 65 & 66, pp 227-302 [Farsi]
- Mousavian, S.A. and Meisami, H., 2014. Review of new perspectives on interest and banking usuary, *Islamic financial researches*, 6, pp 7-36. [Farsi]
- Mousavian, S.A., 2014. A new model of interest-free banking, *Eghtesad-e-Eslami*, 23, pp 11-50. [Farsi]
- Namazi, H., 2005. Economic Systems, Enteshar Publications, Tehran. [Farsi]
- Nasiri Aghdam, A., 2019. Developmental central banking; concept, implications, experiences, Allame Tabatabayee University, Tehran. [Farsi]
- Peighami, A., 2015. An introduction to the endogeneity of money, and its implications for Iran's economy, Parliament Research Center, Report No. 14496.
- Peighami, A., 2018. People's purchasing power should be maintained by creating money; zeros of the currency are not important. FarsNews Agency. News-ID: 13970614000291. [Farsi]
- Qobashi, N., and Banitaba, S.M., 2019. Monetary theory of production and the role of money in development, Money and Development Conference, Allame Tabatabayee University, Tehran. [Farsi]
- Rashidian, S., Mojahedi, M.M., Amini, A., and Masuminia, A., 2018. A Critique of Subjective Origins of Interest Rate, A Rational Approach Based on Islamic Philosophy. *Economic Researches*, 53 (3), pp 597-617. [Farsi]
- Razavi, M., 2014. Islamic Banking in Iran, Iranian Institute for Banking Education, Tehran [Farsi]
- Razavi, M., 2018. International Islamic Banking, SAMT Publications, Tehran. [Farsi]

## Journal of Economics Bibliography

- Sameti, M., Dallali, E.R. And Karnameh, H.H., 2012. The Impact of Macroeconomic Instability on the Banking Sector Lending Behavior in Iran (1974-2009). *Trend (Trend of Economic Research)*, 19 (60), Pp. 5-28 . [Farsi]
- Samsami, H., and Davoudi, P., 2010. Toward the elimination of usury from the banking system: (from theory to practice), DanayeeTavanayee Publications, Tehran. [Farsi]
- Samsami, H., 2014. The cost of creating money in the conventional banking system and the Islamic financing solution, *Economic Research (Pazhooheshnameye Eqtesadi)*, 14(55), pp. 71-103. [Farsi]
- Samsami, H., 2016. The notion of a bank without interest is like making the meat of a pig halal by Islamic style slaughtering, Tasnim News Agency. [Farsi]
- Shakeri, M., 2019. The necessity of transition to a developmental central bank? MehrNews Agency. News ID: 4603495. [Farsi]
- Sobhani, H., 1995. Evaluation and Analysis of Interest-free banking operations, *Economic Journal of Ferdowsi University*, 3, pp. 77-102. [Farsi]
- Sobhani, H., 2003. A Comparative Study on Capital Formation in the Usury and Non-usury Economic Systems., *Iran economic review*, 8(8), pp. 89-97. [Farsi]
- Sobhani, H., and AmirAli, M., 2014. Research about extracting the right and justice criteria in interest-free banking. *Islamic Economics Journal (Eqtesad-e-Eslami)*, 14(55), pp. 89-119. [Farsi]
- Tootoonchian, I., 1996. Money and Banking Economics, Monetary and Banking Research Institute, Tehran. [Farsi]
- Sobhani, H. and Doroudian, H., 2017. Feasibility Assessment of "Money Creation by the Banking System" In the Islamic Banking, *Eghtesad-E Islami*, 16 (64), Pp. 31-54. [Farsi]
- Tootoonchian, I., 2000, Money and Islamic Banking and comparing it with Capitalistic Systems, Tavangaran Publication, Tehran. [Farsi]
- Ul Haque, N. and Mirakhor, A., 1986. Optimal profit-sharing contracts and investment in an interest-free Islamic economy.
- Vaez Barzani, M., & Bastanifar, I., 2010. Designing SPMP of the central bank of the Islamic Republic of Iran, the 21Th annual conference of Islamic banking. [Farsi]
- Yazdanpanah, M., 2014. Capitalist-credit money, and development ethics, World Interdisciplinary Network for Institutional Research Conference, London.
- Yazdanpanah, M., 2016. The specific structure of the endogenous money in Iran, the upcoming crisis and the opportunity to realize a dynamic economy based on internal capacities (a lecture report at Central Bank) Mobin Institute Website. [Farsi]
- Yazdanpanah, M., 2016. Why are our current beliefs about Monetary base, liquidity, money creation, and monetary policy not truthful? Jostarhaye Mobin (Online publication of Mobin Institute), 18. [Farsi]
- Yazdanpanah, M., 2017. Creation of credit, coordination effect and the possibility of economic jump due to developmental monetary policymaking, Jostarhaye Mobin (Online publication of Mobin Institute), 48. [Farsi]
- Yazdanpanah, M., 2019. The foundations of the link between money and development in a system where banks are the creator of funds, not its intermediary, and its implications for Iran's economy, Money and Development Conference, Allame Tabatabayee University, Tehran [Farsi]
- Yazdanpanah, M., Doroudian, H. and Shakeri, M., 2019. MMT, credit guidance, and economy moving with credit (investment), EqtesadOnline Website. [Farsi]
- Abu-Saud, M., 1976. Interest-Free Banking. In the *first conference on Islamic Economics, Mecca*.
- Abu-Saud, M., 1986. Contemporary Economic Issues: Usury and Interest. Zakat & Research Foundation
- Abu-Saud, M., 2002. Money, Interest, and Qirad, in IIUM Journal of Economics and Management, 10 (1)
- Ahmad, M., Masood, T. and Khan, M.S., 2010. Problems and prospects of Islamic banking: a case study of Takaful.
- Ariff, M., 1982. Monetary and Fiscal Economics of Islam (p.145 – 176). 1st edition. Jeddah, International Centre for Islamic Economics King Abdulaziz University.



## Journal of Economics Bibliography

- Ariff, M., 1982. Monetary Policy in an Interest-Free Islamic Economy–Nature and Scope. *Monetary and Fiscal Economics of Islam*, Jeddah: International Center for Research in Islamic Economics, King Abdulaziz University, pp.287-302.
- Ariff, M., 1988. Islamic banking. *Asian-Pacific Economic Literature*, 2(2), pp.48-64.
- Bader, M.K.I., Mohamad, S., Ariff, M. and Shah, T.H., 2008. Cost, revenue, and profit efficiency of Islamic versus conventional banks: international evidence using data envelopment analysis
- Hibatallah, S., 2012. Reserve Requirements in Islamic Banking System: A Critical Survey, *Islamic economics journal*, 1(1).
- Khan, M.S., and Mirakhor, A., 1986. The framework and practice of Islamic banking. *Finance and development*, 23(3), p.32.
- Khan, M.S., 1986. Islamic interest-free banking: a theoretical analysis. *Staff Papers*, 33(1), pp.1-27.
- Khan, M.S., and Mirakhor, A., 1989. The financial system and monetary policy in an Islamic economy. *Journal of King Abdulaziz University: Islamic Economics*, 1(1).
- Khan, M.S., and Mirakhor, A., 1990. Islamic banking: Experiences in the Islamic Republic of Iran and Pakistan. *Economic Development and Cultural Change*, 38(2), pp.353-375.
- Khan, M.S., and Mirakhor, A., 1991. Islamic banking (Vol. 88). International Monetary Fund.
- Khan, M.S., and Mirakhor, A., 1994. Monetary management in an Islamic economy. *Journal of King Abdulaziz University: Islamic Economics*, 6(1).
- Khan, M.S., and Mirakhor, A., 2015. *Theoretical studies in Islamic banking and finance*. BookBaby.
- Rahman, A., 1979. *Banking and Insurance*. Vol.4, 1st edition, London: The Muslim Schools Trust
- Rahman, A., 1979. *Economic Doctrines of Islam*. Muslim Schools Trust.
- Siddiqi, M.N., 1981. *Muslim economic thinking: a survey of contemporary literature* (Vol. 1). International Centre for Research in Islamic Economics, King Abdul Aziz University.
- Siddiqi, M. N., 1982. "Islamic Approach to Money, Banking and Monetary", in Ariff, Mohammad (Ed). *Monetary and Fiscal Economics of Islam* (p. 25 – 38). 1st edition. Jeddah, International Centre for Islamic Economics King Abdulaziz University.
- Siddiqi, M.N., 1983. *Banking without interest* (Vol. 5). Leicester, UK: Islamic Foundation.
- Siddiqi, M.N., 1983. *Issues in Islamic banking*. Islamic Foundation.
- Siddiqi, M. N., 2004. *Riba, Bank Interest and The Rationale of Its Prohibition*, 1st edition Jeddah: Islamic Research and Training Institute.
- Siddiqi, M.N., 2004. *Riba, bank interest and the rationale of its prohibition*. Jeddah: Islamic Research and Training Institute.
- Siddiqi, M.N., 2009. The current financial crisis and Islamic economics. *Insights*, 1(3), p.141.



### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by-nc/4.0>).



© 2021. This work is licensed under  
<http://creativecommons.org/licenses/by-nc/4.0> (the “License”).  
Notwithstanding the ProQuest Terms and Conditions, you may use this  
content in accordance with the terms of the License.