

Quranic Perspective on Commercial Transaction (Trade) and Riba: Thousand Years of Banking Theories and Practices

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Abstract

Al Quran describes the prohibition of *Riba rā* $b\bar{a}$ $w\bar{a}w$ ($\varsigma \leftrightarrow \varepsilon$) (often translated as usury) and permission of commercial transaction or trade ($b\bar{a}$ $y\bar{a}$ ' $ayn \varepsilon \varepsilon \varepsilon \cdot \varepsilon$). We conducted a desk-study reviewing and analysing the historical connection between these two and their current implications through empirically proven and attested central bankers' modern banking theories and practices. We anchored our study on the etymological and ontological approaches. We specifically applied the spectrum of Al Quran (AQ) Chapter Al-Baqarah (2), verse 275 (AQ, 2:275) as the benchmarks. We discovered the root of the propagation of legalized *riba* through banks operating licenses issued by the government (temple *biya*' ($\varepsilon \cdot \varepsilon$)) as a derivative of trade ($b\bar{a}$ $y\bar{a}$ ' $ayn \varepsilon \varepsilon \cdot \varepsilon$)). This makes the current permissible legal, commercial transaction or trade no longer isolated from prohibited *riba*. We argue that under the current banking practices and infrastructure, no transaction is *riba*-free, including those under Islamic banking and finance. Mitigating this requires immunized national banking practices that are detached from international banking systems and infrastructure.

Keywords: Quranic finance, Islamic banking, Debt history, Trade, Commercial transaction, Riba, Usury, Slavery

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1. Introduction

In this paper, we are peeking into 5000 years of the history of debt, trade, and *riba*, primarily based on the works of Graeber (2011) and Michael Hudson¹ (e.g., 1992, 1993, 2018). The discussions and writings on *riba* and/or usury—despite their meanings might be different, we are using these terms interchangeably—with their relevance to banking practices being unsettled, even at the religious levels such as in Islam, Christianity, Buddhism, and Hinduism. Muslim scholars agree that *riba* is forbidden, but they could not incisively concord with its contextualization regarding money and banking. *Riba* is often referred to as charging (excessive) interest on loaned money, and while most held that this is forbidden, the rest are on the "depends on the context" side. In our view, *riba* does not necessarily mean interest and is not always relevant to money. Dictum-wise, the root word of *riba* (\bigcirc) has hundreds of meanings. Some argue that *riba* is categorized as *riba an-nasiya* that is charging interests that expand the principal amount (Razi, 2008) 'in cash and/or credit' or as *riba al-fadl* which is an exchange of unequal quantities or qualities of commodities (Investment and Finance, 2013; Nethercott and Eisenberg, 2012; Razi, 2008). The word '*nasiya*' implies postponement, deferment, or delay,

¹ Prof Michael J Hudson has written extensively on debt and trade history and analysis. Here we mentioned only three of them. His writing collections are found here https://michael-hudson.com/(28 Mar 2022). Refer details in reference for Hudson (1933a, 1993b, 2002, 2011, 2018c, 2019).

while the word '*fadl*' signifies to increase, add, expand, or surpass. Another term for *riba* for loans in 'hard cash' (not credit money or 'soft or electronic *e-cash*' generated by computer) is *riba* of old times (*riba al-jahiliyya*), and a price for time over the borrowing period, which deals with borrowing coin-money, goods and/or commodities.

Despite Pakistan becoming the first country to declare nationwide in 2000 that current banking interest taking and paying (*ar-riba*) is *haram* (forbidden) based on Islamic jurisprudence (Usmani, 2006), the issue remains unsettled. This is simply judging by the modern banking practices that are based on three banking theories, namely financial intermediary banking (FIB), fractional reserve banking (FRB), and Credit Creation (CC) or also known by Post Keynesians as endogenous money (EM). For example, Pakistan has banking systems that transact cross-international boundaries. Also, it borrows money with interest from international (development) banks, such as the World Bank, and Asian Development Bank.

No single country conducts international trade and cross-country financial transactions without engaging the banking systems (Centre for Applied Research, 2015). This includes Islamic banking and/or finance, whose primary constructs or building blocks are similar to any commercial banks but with different facades. All of them must operate within the banking infrastructure, which were developed following the three banking theories and practices.

Numerous writings have been produced and argued about the application of the term 'usury' or mostly translated as '*riba*' and their relevance to trade or commercial transactions. Yet there is no unifying view on its meaning and contextual application. Let alone thoroughly analyse its application under the most prevalent banking theories and practices. Even the second Caliph, Umar b. al-Khattab, who is one of the closest companions (*Sahabah*) of the Prophet Muhammad, peace be upon him (ﷺ), noted.

"There are three things. If God's Messenger had explained them clearly, it would have been dearer to me than the world and what it contains: (These are) kalalah, riba, and khilafah." (Sunan Ibn Majah, Book of Inheritance, Vol. 4, No. 2727; Ibn Majah notes: "According to al-Zawa'id, the authorities of its isnad are reliable, but it has munqati* chain of transmission", p. 113; *Munqati means an interrupted, broken or discontinuous chain.

This indicates that didactics and discourses on *riba*, particularly those of Quranic references, could be categorized as *Mutashabihaat* (the verses having ambiguity in their meaning) and verses that are clear in essence (*Muhkamaat*). We will use both and furnish historical background and empirical analysis on debt, finance, and modern banking theories and practices. The contradictions compound the problem on *Mutashabihaat*-ness not only within the hadiths (or the 'true saying' and 'reported statements and conducts') of the Prophet Muhammad (\cong), also the hadiths and Quran.² This is because many jurists or authors "*have a penchant for selective use of hadiths as textual evidence.*" (Farooq, 2009, p.113). Avoiding this, our paper principally applies Al Quran.

We attempt to fill the gap between verses that are *Mutashabihaat* and *Muhkamaat* by looking specifically into the difference between commercial activities or trade ($b\bar{a} y\bar{a} 'ayn \notin \varphi \Rightarrow and usury$ (*riba*) $r\bar{a} b\bar{a} w\bar{a}w$ ($\varphi \neq \varphi$) in the Al Quran (AQ) Surah (Chapter) Al-Baqarah (2) Ayah (verse) 275 (AQ, 2:275) and their relevance to today's banking practices. We anchor our analysis on this verse as the word *riba* has many entries in the dictionaries, which hints its linguistic context is far and wide. We will show that historically debt with interest payment, and/or *riba*, were practiced—as far as the record shows—during Babylonia's King Hammurabi ruling in ancient Sumer and Mesopotamia civilizations which is about 5000 years ago (Graeber, 2011; Hudson, 1992, 2018a). This continues throughout all known prophets (*Nabi*) and messengers (*Rasul*) assignments until today's modern society. Most of—if not all—literatures on *riba* are not incorporating the history and empirical test results of debts, finance and banking theories and practices in their analysis and discussions.

Graeber (2011, p. 64) was curious why primordial-debt theorists have not said much about Sumer or Babylonia's debt practices. Mainly since Mesopotamia is where the loaning money at interest was first invented and that it was where the world's first nation state was established. The closest that incorporates the modern theories and data on banking practices—without reference to the empirical results—is the work of Usmani (2006) titled *"The text of the historic judgment on interest given by the supreme court of Pakistan."*

Our paper is answering the question relevant to $(riba) r\bar{a} b\bar{a} w\bar{a} w (\varrho - \upsilon)$ and $b\bar{a} y\bar{a} a (\psi - \upsilon)$, and their interconnectedness, and leaving other derivatives of $(- \upsilon)$ and $(- \upsilon)$ not elaborated because is beyond our paper's scope. We begin by looking at the meaning of some Arabic words, their roots, and their corresponding

² We are not providing examples as these are well documented in many literatures. For example: *Hadiths Contradict the Qur'an*. https://www.qurania.org/hadiths-contradict-the-quran.html

words in English and Bahasa Indonesia. These words are Surah Al Baqarah, AQ, 2:275; Surah Ali Imran, AQ, 3:13; and Surah An-Nisa, AQ, 4:30. Following this, we elaborate debt practices in the past 5000 years and their relevance to those Arabic words. Subsequently, we expound on the three banking theories and practices, followed by conclusion and recommendation.

2. Literature Review

The following verses are the foundations for our study.

Verse (2:275)³

Those who consume interest cannot stand [on the Day of Resurrection] except as one stands who is being beaten by Satan into insanity. That is because they say, "Trade is [just] like interest [riba]." But Allah has permitted trade and has forbidden interest [riba].⁴

Verse (3:130)

O you who have believed, do not consume usury [*riba*], *doubled and multiplied, but fear Allah that you may be successful.*⁵

Verse (4:29)

O you who have believed, do not consume one another's wealth unjustly but only [in lawful] business by mutual consent. And do not kill yourselves [or one another]. Indeed, Allah is to you ever Merciful.

Another translation of the same verse (4:29)

O believers! Do not devour one another's wealth illegally, but rather trade by mutual consent. And do not kill 'each other or' yourselves. Surely Allah is ever Merciful to you. – The Clear Quran, Dr. Mustafa Khattab.⁶

Etymology

We derive our primary sources of information on the Arabic word meanings from;

- 1. Al-Quran translations from *The Quranic Arabic Corpus*⁷
- 2. The online Arabic-English Lexicon by Edward William Lane, published by (London: Willams and Norgate 1863).⁸-
- 3. Belajar Bahasa Al-Quran, Metoda "Belajar Aktif Kata PerKata Lewat Intra/Internet" 9,10

1. Trade¹¹

Al-bay 'u the trade (2:275:18) or *al-bay* 'a [the] trade (2:275:23) with the root of $b\bar{a} y\bar{a}$ 'ayn (\downarrow ,

The root $b\bar{a}$ yā 'ayn (ψ φ) occurs 15 times¹² in the Quran in four derived forms:

- 1. Six times as the verb bāya ((بَابَعْ) to pledge allegiance; you have contracted.
- 2. Once as the verb tabāya ' (تَنَابَعُ) to make commercial transaction; the trade; any trade; sale.
- 3. Once as the noun biya ' (بينع) churches.

³ Unless stated otherwise, all Quranic translation are of Sahih International.

⁴ We consider this verse (*ayah*), in terms of the meaning of *trade* and *interest* as *Mutashabihaat*.

⁵ For the meaning of *usury*, we consider this verse as as *Mutashabihaat*, whilst for the *doubled* and *multiplied*, as *Muhkamaat*.

⁶ For the meaning of *mutual consent*, we believe the verse as *Muhkamaat*.

⁷ https://corpus.quran.com/ (18 Dec 2021)

⁸ Lane's Lexicon - Classical Arabic dictionary. http://www.tyndalearchive.com/TABS/Lane/ (18 Dec 2021)

⁹ http://quran.bblm.go.id/ (18 Dec 2021)

¹⁰ Note: The translations provided are brief semblances intended as a guide to the meaning. One Arabic word may have a range of substances depending on context.

¹¹ See also the relevant words such as *tijāratan* a transaction or trade (2:282:99) *tijārat* (بَجْرَة) (equivalent to *bay 'a* (-2, 2, 3, 3, 5, 5)) which root is $t\bar{a}$

¹² https://corpus.quran.com/qurandictionary.jsp?q=byE#(2:275:18)

4. Seven times as the noun bay (البَعْنَ) – bargaining; the trade; in your transaction; any trade; sale; the business.

Some of the (selected) entries in the Lane's Arabic-English Lexicon - Classical Arabic dictionary (Lane, n.d., 1863, pp.284-285) are;

- 1. He sold it: and he bought it ... or this last signifies he offered it for sale, or exposed it to sale: ... as well as ... signifies he bought it. ...
- 2. The primary signification of it is the exchanging, or exchange, of property; or the making an exchange with property; as in the phrases ... [an exchange of property bringing gain], and ... [an exchange of property occasioning loss]: and this is a proper signification when it relates to real substances: but it is tropically used to signify the making that contract [of sale and purchase]; because this is the means of giving [and obtaining] possession: ...
- 3. You say also, ... he made a covenant, a compact, an engagement, or the like, with him, respecting it, or to do it: and ... [they made a covenant, ... respecting, or to do, the thing, or affair] ... [Agreement or laws by the government]
- 4. [A Christian church;] a place of worship ... pertaining to the Christian: ... or, as some say, a Synagogue of the Jews: ...
- 5. An article of merchandise [a thing] ...

2. Riba

Al-riba (despite it does not mean so, however, mostly translated as the usury) (2:275:20), which root is $r\bar{a} b\bar{a}$ $w\bar{a}w (\mathfrak{g}, \mathfrak{g})$. The triliteral root $r\bar{a} b\bar{a} w\bar{a}w (\mathfrak{g}, \mathfrak{g})$ occurs 20 times¹³ in the Quran in eight forms:

- Four times as the verb rabat (رَبَتْ) to increase, to swell; to grow
- Twice as the verb rabbaya (زَبَّي) to bring up
- Twice as the verb arbā (أَرْبَى) to increase, to make numerous
- Once as the noun *rib* $(\zeta usury)$.
- Seven times as the noun riba (رَبَوْل) usury
- Twice as the noun rabwat (زَبُونَ) on a height; a high ground
- Once as the active participle $r\bar{a}b\bar{i}$ (\tilde{c}) rising
- Once as the active participle rābiyat (رَّابِيَة) exceeding

Some of the entries in Lane's Arabic-English Lexicon - Classical Arabic dictionary (Lane, n.d., pp.1023-1024) are;

- 1. The ground [being rained upon] became large and swelled. ... means and [become s large, and swells; or] increases: the latter means "and rises."
- 2. It (a thing, ...) increased, or augmented. ... It increased by usury. ... means And what ye give of forbidden addition in commercial dealing, [i. e. of usury,] ... or what ye give of anything for the sake of receiving more in return, ... and this is not forbidden accord. to most of the expositions, though there is no recompense [from God] for him who exceeds what he has received, ... in order that it may increase the possessions of men, ... it shall not increase with God, ... nor will He bless it: ... meaning, in order that ye may increase [the property of men], or in order that ye may have forbidden addition [or usury therein]. ... Also It became high.
- 3. An elevation of ground, or elevated ground... or an elevated place: so called because it is high: ... which explains as meaning' elevated sands, ... but higher and softer than the latter; the latter being more compact and rugged; ... he says, has in it depression and elevation; it produces the best and the most numerous of the herbs, ...
- 4. I reared him, fostered him, or brought him up; ... namely, a child: ... or anything of what grows, or increases, such as a child, and seed produce, and the like; ... [Thus ... signifies I reared, or cultivated, plants or trees.] ... is said of a tree [as meaning It produces blossoms, but does not mature its produce] ...
- 5. *I removed*, or eased [loosening], [his cord with which he was being strangled; ... meaning, his straitness]; ...

¹³ https://corpus.quran.com/qurandictionary.jsp?q=rbw#(2:275:20)

- 6. An excess, and an addition: ... an addition over and above the principal sum [that is lent or expend]: but in the law it signifies an addition obtained in a particular manner: ... [i. e. usury, and the like; meaning both unlawful, and lawful, interest or profit; and the practice of taking such interest or profit:] it is in lending, (Zj, T,) or in buying and selling, (S,) and in giving: and is of two kinds; unlawful, and lawful: the unlawful is any loan for such one receives more than the loan, or by meant of which one draws a profit; [and the gain made by such mean :] and the lawful is a gift by which a man invites more than it to be given to him, or a gift that he gives in order that more than it may be given to him; [and the addition that he so obtains:] ... [it generally means] an addition that is obtained by using food ... for food ... or ready money for ready money, to be paid at an appointed period; or by exchanging either of such things for more of the same kind': ... or the taking of an addition in lending and in selling: ... [but although (and are both applicable sometimes in the 'same case; neither of them can be properly said to be generally explanatory of the other ...
- 7. [I]s a term specially employed to signify profit obtained in the came of a delay of payment: and ... to signify profit obtained by the superior value of a thing received of that of a thing given. ...
- 8. Excess, excellence, or superiority; ... so in the saying, ... [Such a one possesses excess, or excellence, or superiority, over such a one]. ... And An obligation, a favour, or a benefit.
- 9. Increasing, or augmenting ... And He punished them with a punishment exceeding other punishments.

*Riba*¹⁴ means to *collect by gathering*, *to bundle* or *bundling*. Notes:

- 1. The word *riba*, with its root , has a host of meanings. There are 21 pages (pp.1003-1024) of entries in Lane's Arabic-English Lexicon Classical Arabic Dictionary. This suggests that the application of which is highly particularized.
- 2. Notice that trade bāya ((بَانِعْ) and riba (رَبُوْ) are always in pairs mentioned in Al Baqarah (2:275).
- 3. The trigger of trade and *riba* is different. Trade is triggered by the seller, while *riba* is by the borrower or those in a weaker position. In other words, trade impairs the seller, whereas *riba* is the borrower or the needy. If the trader does not sell her goods, there will be no problems. Likewise, if she does not borrow, there will be no *riba* issues. It is true that everyone has needs and eventually borrows something from someone. Thus, both the Bible and Al Quran prescribe debt forgiveness and almsgiving to relieve the borrower and/or the needy, not only from his obligation to pay back, and potentially being preyed upon for paying more, but also from their troubles. These two distinctions once grasped will make it easier to see the permission and promotion of trade and prohibition of *riba*. This becomes critical when evaluating today's banking practices.

3. Tijara (Trade and/or Commercial Transaction)

Tijāratan business; a transaction (4:29:12).

The triliteral root $t\bar{a}$ $j\bar{l}m$ $r\bar{a}$ ($\dot{-}$ $\dot{-}$ $\dot{-}$) occurs nine times¹⁵ in the Quran as the noun *tijārat* ($\dot{-}$ $\dot{-}$) meaning commerce, transaction, trade.

Some of the entries in the Lane's Arabic-English Lexicon - Classical Arabic dictionary (pp.297-298) are;

- 1. He practised traffic, merchandise, or commerce; trafficked; traded; dealt; sold and bought; (V;) employed property for the purpose of gain. (A.) You say, ... [He practised a profitable, or lucrative, traffic]. ... [Such a one traffic on land and sea]. ...
- 2. [The practice of traffic, merchandise, or commerce; traffic; trade; selling and buying;] ... of him who sell and buys for gain; ... the seeking of pain by selling and buying.
- 3. Merchandise, meaning what is sold and bought, of goods, or commodities, or household furniture, and the like; ... merchant; one who practises traffic, merchandise, or commerce; a trafficker; a trader, tradesman; a dealer; one who sell and buys; ...
- 4. One who sells and buys for gain: ... or the latter, a she-camel that is goodly, and saleable, or in much demand: (A:) or that is easy of sale when offered, by reason of her excellence: ... or simply, that is easy of sale, or in much demand:
- 5. As though, by reason of her beauty, or goodliness, and fatness, she sold herself:

¹⁴ http://quran.bblm.go.id/?id=6076

¹⁵ https://corpus.quran.com/qurandictionary.jsp?q=tjr#(4:29:12)

4. Mutual Consent

Mutual consent tarādin or tarād (تَرَاض) (AQ, 4:29:14).

The triliteral root $r\bar{a} \, d\bar{a} d \, w\bar{a} w \, ()$) occurs 73 times¹⁶ in the Quran, in eleven derived forms. These numerous forms convey the meaning of (to be) pleased, satisfied, agreed, approved, pleasure, pleasing, and *mutual consent*. Thus, *tarādin* means *mutual consent and pleasing to all parties involved*. Another word anecdotally, 'win-win and smile-smile' instead of 'win-win but smile-begrudge' solution.

Some of the entries in the Lane's Arabic-English Lexicon - Classical Arabic dictionary (Lane, n.d., pp.1099-1100) are;

- 1. [Respecting a woman whose consent to her marriage has been asked,] ...testifies, or declares, her permission [or consent]; because permission indicates ... [I was pleased with him, or I liked him, or approved him, or chose him, or preferred him, as a companion]...
- 2. *He* [approved him, or] chose him, or preferred him; ... or judged him, to befit; for his companionship, and his service...
- 3. They agreed among themselves in being pleased, contented, or satisfied, with it; or in liking, or approving, it.
- 4. Means [I When they agree, or consent, among themselves; or] when they are pleased, well pleased, content, [among themselves,] every one of them with his [or her] companion.
- 5. Hence the trading. ... [Selling, or buying, is only resultant from mutual agreement, consent, or content, or approval] ... [Mutual agreement, or consent, to it, or mutual content with it, or mutual approval of it, happened, or took place] ...
- 6. And Obeying, or obedient ... on the authority ...
- 7. Applied to a thing, ... or a person, ... Found pleasing, ... pleasing, contenting, or satisfying; or with which, or with whom, one is pleased, ... or liked, or approved ... or seen, or judged, to befit for a thing or an affair...

5. Doubled and Multiplied

The seventh and eighth words of AQ, 3:130, $ad \, \bar{a}fan$ doubled (3:130:7), and $mud\bar{a} \, \bar{a}fatan$ multiplied (3:130:8) were preceded by Al-*riba* or $r\bar{a} \, b\bar{a} \, w\bar{a}w$ ($\upsilon \, \upsilon \, \upsilon$) (3:130:6)¹⁷ the *usury*, the same trilateral word in AQ, 2:275. The two words of $ad \, \bar{a}fan$ and $mud\bar{a} \, \bar{a}fatan$ share the same triliteral root of $d\bar{a} \, d \, \bar{a}yn \, f\bar{a} \, (\bar{\omega} \, \gamma \, \bar{a})$. These two words are clear and concise in their meaning, especially when paired with Al-*riba* or $r\bar{a} \, b\bar{a} \, w\bar{a}w$ ($\upsilon \, \upsilon$).

Synthesizing Definitions

For this paper, we confined the meaning of the Arabic words as follows:

1. Trade

Al-bay u the trade (2:275:18) or Al-bay a [the] trade (2:275:23) with the root of $b\bar{a} y\bar{a}$ and $(\dot{z}, \dot{z}, \dot{z})$. The exchange of (only) tangible assets. No intangibles are involved. One might argue that ideas or opinions given by consultants or advisors are intangible assets. We can say that as long as no ill-intention (fraud or deceit) and both parties are in a balanced position and pleased with each other, they are tangible as the idea comes from the 'sweat' of minds. It also refers to the temple, government, contract, constitution, laws, rules and regulation (see biya (\dot{z}) – churches)

2. Riba – Usury – Offspring

Al-riba [the] usury (2:275:20) which root is $r\bar{a} b\bar{a} w\bar{a}w$ ($\iota + \iota$).

- 1. It involves transactions of tangible assets being doubled and multiplied through legal and illegal means.
- 2. It deals with intangible assets (e.g., credit money) being converted into tangible assets. Werner (2017) shows that 97% of the money in circulation is credit money created by banks *ex-nihilo*, and only 3% is hard cash.
 - In the case of e-money and the like (e.g., coupons, vouchers, gift cards), as long as no interest is charged and it does not need to be paid back, in our view, it is not *riba*.
- 3. It comes from fraudulent practices, irrespective of whether it is lawful or not.

¹⁶ https://corpus.quran.com/qurandictionary.jsp?q=rDw#(4:29:14)

¹⁷ In the AQ, 3:130:6, the last number shows the word sequence. Thus number 6 shows it is the sixth word in the verse 130, Chapter (Surah) Ali-Imran (3).

- 4. It derives from an unbalanced and unjust transaction, including an unfair judgment by the juries and courts. For example, the court ruling above and beyond (swell or increase) the prosecutors' or law's demand.
- 5. It is closely relevant to something inflated or deflated, including economic inflation and deflation.
- 6. Receiving a gift in return for favour, such as in the case of rent-seeking. For example, members of parliaments received a gift in exchange for passing a law that benefits certain entities. This is known as rent-seeking practice. In some jurisdictions, receiving gifts while in official duties might be lawful.

3. Tijara

Tijāratan business; a transaction (4:29:12) with a triliteral root of $t\bar{a}$ jīm $r\bar{a}$ ($\dot{z} \neq c$)

- 1. Buy, transport, sell and delivery of goods [or things] on mutual consent.
- 2. All parties agree, are pleased, and are happy and consent among themselves. This includes marriage or contract of parties.

Debt and usury chronicles: relevance to riba and trade

Interest-bearing debt was invented around the third millennium BC, before 2500 BC, in Mesopotamia. The first records are from about 2500 BC when interest rates of about 20% (Hudson, 2020). Graeber (2011) argues that the theory of money invention to replace complicated barter systems, such as burdensome practice for the people to haul their goods to the market or barter points, is unfounded as he could not find any shred of evidence supporting this. On the contrary, he shows that the first agricultural states and empires around 3000 BCE (circa 5000 years ago) used credit systems for trading and transaction, predating the invention of coins and cash around 700 BCS. This gave birth to the division of society into creditors and debtors. He shows that the governments (palaces and temples) created markets and coins.

Coinage was produced to pay the mercenary soldiers, who spent them in the local markets. The government then decreed that people must accept and use coins in daily transactions, especially in the local markets, as the taxes would be collected as coinage. The government used them to finance the wars. In the absence of government laws that forced people to use official money, people tend to invent their own medium of exchange, making it difficult for temples and palaces to collect alms and taxes. This account leaves a message that the credit system was established by coercion (or laws)—which the masses unconsciously accepted through the government's official hand. Thus, some might argue that this falls into mutual consent (trade and $Tar\bar{a}din$); however, given the absent of choices, as in the meaning of a woman chooses her suitor amongst the candidates and both, the woman and man are pleased with each other (trade and $Tar\bar{a}din$), it can be contended that the mutual consent is absent. This signifies the present of *riba*.

3. Conceptual Framework

Case in discussion

For thousands of years, the struggle between rich and poor was mainly in the form of conflicts between creditors and debtors who argued against each other about the rights and wrongs of interest payments, debt peonage, amnesty, repossession, restitution, the sequestering of sheep, the seizing of vineyards, and the selling of debtors' children into slavery (Graeber, 2011, p. 8). Around 2400 BCE, advancing loans—generally in the form of seeds, grains, or money for purchasing agricultural tools—by wealthy merchants to peasants who were in financial problems by taking collateral in case they were not able to pay.

The surety started with the borrowers' possession equivalent to the value of the loans but later expanded to what the lender lusted. Usually began "with grain, sheep, goats, and furniture, then moved on to fields and houses, or, alternately or ultimately, family members. Servants, if any, went quickly, followed by children, wives, and in some extreme occasions, even the borrower himself. These would be reduced to debt-peons: not quite slaves, but very close to that, forced into perpetual service in the lender's household-or, sometimes, in the Temples or Palaces themselves." (Graeber, 2011, pp. 64–65). Despite it was commenced as trade, this describes an indication of *riba* in which the money owed but not paid for whatever reasons, including delay in payment (*riba*). This causes the borrowers' properties, workers and their family members, and even the borrower

him/herself (riba; bundled or altogether gathered)¹⁸ to be confiscated and turned into the lender's property.

The borrower and his/her family members were enslaved, put under servitude, or even sold as slaves, simply for being tardy-or defaulting- in the repayment. We can portray the situation where the borrowers and lenders justified their conditions. The borrower would argue that he came for assistance and agreed to some terms which he expected the lender—mostly his neighbours or fellow villagers—would be lenient when defaulted. On the other hand, the borrower would justify his conditions legally by insisting that the loan was not of mutual aid, but a commercial relationship committed through a contract (Graeber, 2011, p. 86).

Wait! What if the borrower had agreed to the collateral conditions, including collateralizing his entire family and freedom? The borrower (See note on *riba*'s trigger) has agreed to the contract and pledged his allegiance to them (trade). Does this fall into trade or *riba*?

Trade (also *Tijara*) refers to buying and selling based on an agreement. Or bought and sold an article of merchandise (trade). Nothing implies a confiscation of (*riba*; bundled) properties¹⁹ (tangible assets) in place of a failed promise (intangible asset). Surely, in the past, slaves were merchandise taken and displayed by merchants for sale, trade, or exchange with other commodities. The merchants might have obtained the enslaved people by raiding a village or country or buying them from their families, captors, or sellers.

Arguably, slaves, who were the family members of the borrowers, were obtained from *riba* as the loan swelled, increased, and multiplied (*riba* and multiplied) from the original sum borrowed. The most crucial argument we put forward is that the element of *riba* has annulled the trade circumstance in the sense that the lender was elevated (*riba*) or in "Such a one possesses excess, or excellence, or superiority, over such a one. ... And An obligation, a favour, or a benefit; ..." (*Riba*) over the borrower. Our point is the levelled or balanced position between the seller and buyer is no longer present. Thus, they obtained the merchandise through haram (illegal or forbidden) means (See *riba* on gain obtained both legally and illegally).

The practice of taking someone's wife as debt collateral was pervasive and appeared to disturb the social order in Sumer. Around 2350 BC, the laws of Urukagina specifically sanctioned that a wife could not have two husbands. This prohibits a wife in an extramarital relationship with another man, likewise a man with someone's wife. To prevent this, the law of Urukagina was implemented (Hudson, 2018b). But perhaps because of this, the lenders up their *ante* by requesting their borrower's wife, whom they might have their lust for, as collateral. Under this contractual arrangement, it was permissible to have one's wife or human being as collateral. This reflects a person's wishes for another's wife were common during that time. It was mostly seen in the borrowing practices in which a borrower would have collateralized his loans with his wife. Most probably at the lender's option and/or request, who might have lustfully eyed the borrower's (mostly their fellow neighbour) wife. These ladies were expected to serve the lender and their household, including providing sex services.

"Again, for the poor, this meant that family members became commodities that could be rented or sold. Not only could one dispose of daughters as "brides" to work in rich men's households, tablets in Nuzi show that one could now hire out family members simply by taking out a loan: there are recorded cases of men sending their sons or even wives as "pawns" for loans that were clearly just advance employment in the lender's farm or cloth workshop." Graeber (2011, p. 284).

The compounded (or bundled) danger of *riba* was vividly elaborated by Saint Ambrose's De Tobia's homily in Milan in 380 BC. He describes a situation wherein the fathers were forced to sell their children, debtors who hanged themselves because of disgrace. He expressed that usury must be regarded as brutal robbery, even murder (Graeber, 2011, p. 284). The following verses from the Bible explain the issues briefly.

Bible, Deuteronomy 5:21

New International Version

"You shall not covet your neighbour's wife. You shall not set your desire on your neighbour's house or land, his male or female servant, his ox or donkey, or anything that belongs to your neighbour."

Similarly, Al Quran reminds the lender and borrower to act justly and not consume each other's wealth (AQ, 4:29) and, specifically for the borrower, not to "kill your children for fear of poverty. We provide for them and for you. Indeed, their killing is ever a great sin." (AQ, 17:31). Note: 'kill your children' might mean to sell or pawn them.

The ultimate test to the 'Case in discussion' will be through verse AQ, 3:130, *ad* '*āfan* doubled (3:130:7) and *mudā* '*afatan* multiplied (3:130:8). Has the loan doubled? And multiplied? Yes, to both! It started with

¹⁸ See footnote 9

¹⁹ Riba, in most cases, implies properties (plural) instead of property (singular).

borrowing grains or money but ended up losing his lands, workers, wife and children, and even himself. Then, we can safely conclude the practice was *riba* even if it was based on agreement (trade and *Tarādin*) or protected under legal provisions by the state (temple or *biya* '($\frac{1}{2}$) - *churches*). AQ, 3:130 uses the word *riba* or $r\bar{a}$ $b\bar{a}$ $w\bar{a}w$ ($g \leftarrow g \sim g$) (AQ, 3:130:6) and immediately followed by *ad* ' $\bar{a}fan$ doubled (3:130:7) and *mudā* '*afatan* multiplied (3:130:8). These conditions of *ad* ' $\bar{a}fan$ and *mudā* '*afatan* (as an inseparable unit) put a cap on any profit obtained in trade. Beyond this, we contend that it is no longer considered a trade but *riba*, irrespective of their commencement as a legal trade.

Let's revisit AQ, 2:275. "Those who consume interest [riba] cannot stand [.] except as one stands who is being beaten by Satan into insanity. That is because they say, "Trade is [.] like interest [riba]." But Allah has permitted trade and has forbidden interest [riba].²⁰

The verse indicates a condition of becoming insane as one cannot differentiate—or they might know but ignore (or ignorance of)—the difference between what is permitted and prohibited and yet conducts the transaction under the pretension of permissible gain. (See *riba* being legal and illegal increase and *riba* being doubled and multiplied) and elevated (*riba*).

We argue the accord on trade but the prohibition on *riba* in Al Baqarah (AQ, 2:275) were connected to the past practices of excessive gain in lending that involved the temples (*biya* $(\underline{i}, \underline{j})$) and palaces (or government) in terms of permissibility through laws and regulations. This continues to the present time under the modern financial and banking systems operating under the government's legal frameworks.

Let us retrospect the borrower's situation when he/she has no other choices and "forced" to agree to the lender's terms and conditions. This shows a situation in which there is no mutual agreement (trade, *Tarādin*) based on a balanced position (trade). One party is "elevated" (*riba*) or "superior" (*riba*) over the other. Thus, when an element of force, partiality, or imbalance is present, the transaction (or trade) could fall into *riba*. Therefore, when drafting and finalizing an agreement, it is a moral obligation for equality and balanced conditions (nobody is elevated, *riba*) that outweighs the legal mandate to complete the transaction. This is where AQ, 2:282-283 becomes critical.

O you who have believed, when you contract a debt for a specified term, write it down. And let a scribe write [it] between you in justice. ... So let him write and let the one who has the obligation dictate. And let him fear Allah, his Lord, and not leave anything out of it. But if the one who has the obligation is of limited understanding or weak or unable to dictate himself, then let his guardian dictate in justice. And bring to witness two witnesses from among your men. And do not be [too] weary to write it, whether it is small or large, for its [specified] term. That is more just in the sight of Allah and stronger as evidence and more likely to prevent doubt between you, except when it is an immediate transaction which you conduct among yourselves. For [then] there is no blame upon you if you do not write it. And take witnesses when you conclude a contract. Let no scribe be harmed or any witness. For if you do so, indeed, it is [grave] disobedience in you. And fear Allah. And Allah teaches you. And Allah is Knowing of all things. (AQ, 2:282).²¹

We just learned the historical account of *riba* in a broader sense. This practice was witnessed and experienced by all prophets and messengers, including Prophet Isa (Jesus) and Muhammad (\cong). Accordingly, we reckon that one of the underlying reasons of *riba* prohibition in AQ, 2:275 are these particular accounts when the loan becomes swollen (*riba*) which includes something that is being bundled (*riba*), on the one hand, different that the 'original format' of the loan (e.g., grain, money), and on the other, larger (doubled and

²⁰ Riba does not necessarily mean interest. See etymology.

²¹ Notes:

^{1. &}quot;the one who has the obligation dictate" and "let his guardian dictate justice" connote the government's laws, rules and regulations to protect the citizens. This implies that the guardian (or government) must protect its citizens from *riba* practices and/or unfair and unjust trade. For example, the law that allows credit card transactions with exorbitant interest rates.

^{2.} In our view, " immediate transaction" refers to buy and sell (Trade), generally done on the spot. Lending money or commodities could be on the spot, but the repayment will extend beyond the place (spatial) and time (inter-temporal).

multiplied) than the original sum plus extra gains being bundled (*riba*) (e.g., lands, house, slave/workers, wife, daughters) as contractually agreed (trade).

4. Results and Discussion

4.1 Foundation: banking theories, practices and governance

The word usurer means those who lend money and the biggest money lender is the bank. Hence, we approach the usury (*riba*) through banking theory and practices.

"usurer (n.)

late 13c., "one who lends money at interest," but later especially "one who lends money at an exorbitant rate of interest," from Anglo-French usurer, Old French usurier, usureor, from Medieval Latin usurarius "money-lender, usurer," from Latin usurarius (adj.) "pertaining to interest; that pays interest," from usura.²²

Galbraith (1975, p. 5) expresses that knowing how banks work is essential. He says that "[t]he studies of money, above all other fields in economics, is the one in which complexity is used to disguise truth or to evade truth, not to reveal it."

Before proceeding, the following evidence is essential to prepare us for understanding how banking systems work.

- The modern banking system manufactures money *out of nothing* (Angas, 1937; Hawtrey, 1923, pp. 20–21; Werner, 2014, 2016, p. 361).
- Rothbard (2008, p. 98) asks where did the money come from? "It came—and this is the most important single thing to know about modern banking—it came out of thin air. Commercial banks—that is, fractional reserve banks—create money out of thin air. Essentially, they do it in the same way as counterfeiters. In this way, they fraudulently extract resources from the public, from the people who have genuinely earned their money. There is one exception to the equivalence: The law fails to treat the receipts as counterfeit."²³
- The Chicago Federal Reserve Bank (Nichols and Gonczy, 1992, p. 11) (1st ed., 1961), "Of course they [Banks] do not really pay out loans from the money they receive as deposits. If they did this, no additional money would be created."
- The Bank of England states; "Whenever a bank makes a loan, it simultaneously creates a matching deposit in the borrower's bank account, thereby creating new money." (McLeay et al., 2014, p. 15)
- Graeber (2011, p. 52) "What we call "money" isn't a "thing" at all, it's a way of comparing things mathematically, as proportions: of saying one of X is equivalent to six of Y.²⁴
- The International Monetary Fund (IMF) shows a simplified chart on bank money creation (Figure 1) and expresses;

"New funds are produced only with new bank loans (or when banks purchase additional financial or real assets), through book entries made by keystrokes on the banker's keyboard at the time of disbursement. This means that the funds do not exist before the loan and that they are in the form of electronic entries—or, historically, paper ledger entries—rather than real resources (Kumhof and Jakab, 2016, p. 51).

²² Usury - Etymology, origin and meaning of usury. https://www.etymonline.com/word/usury

²³ This refers to the above quotes on money created *out of thin air or nothing* or *ex-nihilo*. The creation from *nothing into something* shows a condition of *riba* being doubled and multiplied. Even at 0.01 gain from zero is already doubled and multiplied.

The element of fraud annuls trade which leaves us with *riba*. This is compounded by the laws (See AQ, 2:282-283) that fail to protect the people (Also, see trade and *riba*)

 $[\]frac{24}{24}$ Since modern banking's money is not a "thing" or a tangible commodity, we argue that the element of trade is not present. Therewith *riba* is arguably practiced. Certainly, it can be reasoned that a promise is as good as money or (intangible) commodity to the extent that no confiscation of tangible assets in case of default.

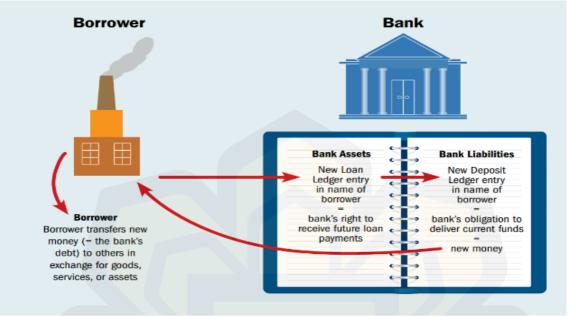


Figure 1: Bank Money Creation Process (Notice there is no deposit from external sources)

Source: The IMF, Kumhof and Jakab (2016: p. 52).

Notes:

- Here, the *riba* appears not present as arguably this is a trade in which both parties, the bank, and borrower, agree to lend and borrow something that of an existence (previously deposited cash) even with interest payments. However, the principle of doubled $ad'\bar{a}fan$ and multiplied $mud\bar{a}'afatan$ still applies. Thus, using the rule of 72^{25} , we can estimate when the loan will be doubled. Assume the interest is 5%; therefore, 72/5=14.4 years. Beyond this, the lender and borrower are risking taking and practicing *riba*. We argue that the government that allows this to happen through its banking laws shares the responsibility of practicing *riba*.
- Unless, of course, both parties (lender and borrower) mutually agree without one being superior (*riba*) to the other and the terms and conditions are not strangling, which needs to be unsnarled (*riba*), the borrowing transaction can be considered as trade. Although this might appear simple, the banks, with the auspices of the banking laws, in most cases is superior to the borrower.

At this juncture, we can now see that modern money, starting at the end of the 19th century, was created *exnihilo* or *out of nothing* and not backed by tangible assets or 100% reserve. The only protection, or value, is the laws and people's trust. With their licenses under the government's enacted banking laws, the bank loaned from nothing (intangible) to something (tangible). Thus, expanded (*riba*) this to the customers who are obliged to return the principal (Doubled 'and' multiplied) plus interest (multiplied) in the form of tangible assets. Hence, as per AQ, 2:175 warns us not to equate trade—as banking operates under contract or legal framework—and *riba* (expansion) or money supply from nothing (*ex-nihilo*). Additionally, the AQ, 3:130 indicates *riba* $r\bar{a}$ $b\bar{a}$ $w\bar{a}w$ ($\psi \in \psi$) being doubled *ad* $\bar{a}fan$ and multiplied *mud* \bar{a} *'afatan*. Thus, we can now see that *riba*—through the financial system—is being 'legally' practiced nationwide and internationally. Let us now look at the banking theories and practices based on 5000 years of debt, banking, and finance history.

4.2 Banking theories and practices

Here, we briefly share the banking practices that have been empirically tested—possibly for the first time in the 5000 years of banking history—by Werner (2014, p.16). Werner (2014, 2016) and the IMF (Gross and Siebenbrunner, 2019) provide comprehensive literature reviews on these three banking theories and their time frame.

²⁵ Rule of 72 Definition, Formula, & Calculation. https://www.investopedia.com/terms/r/ruleof72.asp

4.2.1 Financial intermediation banking (FIB) (or loanable funds—LF)

First, FIB is the most dominant theory which holds that banks are merely financial intermediaries. They gather deposits (\$100), mostly in cash, from patient savers and lend them out (\$80) to customers or impatient spenders and charge interest. The Bank of England classifies this as a common misconception "...that banks act simply as intermediaries, lending out the deposits that savers place with them." (McLeay et al., 2014, p. 15).

As quoted by the IMF (Gross and Siebenbrunner, 2019, p. 30) "Federal Reserve Bank of Chicago 1994: "Of course, [banks] do not really pay out loans from the money they receive as deposits. If they did this, no additional money would be created. What they do when they make loans is to accept promissory notes in exchange for credits to the borrowers' transaction accounts. Loans (assets) and deposits (liabilities) both rise by [the amount of the loan]."

4.2.2 Money multiplier or Fractional Reserve Banking (FRB)

Second, the FRB theory adopts that bank collectively create money via multiple deposit expansion by using a fraction of the money in their possession as the basis for credit generation. A bank with \$100 cash deposit in its entire holding can lend out \$1,000 (10 times) under the 10% reserve rule (Nichols, 1992: p.11). Indonesia adopts 10% rules per its Bank of Indonesia's law²⁶. Here, we already see the role of the temple or government through banking laws. Frederick Soddy (1877-1956), a Nobel Prize winner in chemistry, and a political ecologist, has quixotically criticized not only this FRB practice but also compounded interests as unsustainable and against the second law of thermodynamics of entropy.²⁷ The Fed nullified this requirement on 26 March 2020 (The Fed, 2020)²⁸ which means any bank can lend out money with zero reserves (Nichols, 1992: p. 3).

Werner (2014, 2016), Keen (2014), and Moore (1983), and a growing number of central banks, for example, the Fed (Carpenter and Demiralp, 2012) and the Bank of England (McLeay et al., 2014), have mathematically, empirically, and practically proven that both FIB and FRB theories are untenable, factually incorrect and not reflecting reality hence are indefensible. Some literatures classified FIB and FRB as LF.

Notwithstanding, it was on their official publication on *Modern Money Mechanics*, since its first edition in 1961 (Nichols and Gonczy, 1992), The Fed (Ihrig et al., 2021) eventually admitted the *"fact that reserve requirements have no essential role in an ample-reserves regime. So, mathematically, the money multiplier equation is literally no longer definable."* Although this might seem harmless, many textbooks and university curriculums have reflected this around the world. This includes (almost) all central banks and their national banking act. For example, Bank of Indonesia with the Law No.23 (1999).

4.2.3 Credit Creation (CC)

Third, the CC, also known as endogenous money (EM), is the most dominant theory and is currently practiced around the world in which banks require neither deposits nor reserves. The Bank of England describes that money creation begins when a client signs the Loan Agreement (LA). They state that *"The bank, therefore, creates its funding deposits, in the act of lending in a transaction that involves no intermediation whatsoever."* (Jakab and Kumhof, 2015: p. ii). All the banks need for credit money creation is a signed LA or promissory note (PN). This is the oldest banking theory in modern civilization, based on 5000 years of practice (Positiva Pengar, 2021; Rose, 2010; Werner, 2016). Werner (2014, p. 14) in the first-ever practical empirical test of 5000 years of modern banking, observed in real-time and in an actual bank environment. A BBC³⁰ crew was filming the entire process from LA signing until he received the credit money into his bank account. The entire process took 35 minutes in contrast to the fund disbursement by the Multilateral Development Banks (MDBs), e.g., World Bank, IMF, Asian Development Bank, and Islamic Development Banks, which takes over 5, up to 10 years (Ingratubun et al., 2021).

Almost immediately after Werner (2014) published his study, the central bankers came out in concert, admitting the long-held suspicion that banks create money out of nothing or *ex-nihilo*. This includes the muchcited publication by the Bank of England (McLeay, *et al.*, 2014) of which Graeber (2014) commented, "*[i[n]*

²⁹ Notes: The increase (*Riba*) of nine times (\$900) from \$100 is governed by the 10% reserve requirement law (or temple, see trade). Governing by law (or contract) is an indication of trade; however, the increase (*riba*) itself is already doubled *ad afan* and multiplied *mudā afatan*. Hence, it appears as *riba*, although the deposit of \$100 seems not *riba*.

³⁰ The British Broadcasting Corporation. https://www.bbc.com/

²⁶ Adopted based on Indonesia, Article 62.b, Law No.23 (1999) on Bank Indonesia.

²⁷ Refer Daly (1986) for further reading.

²⁸ Reserve Requirements. https://www.federalreserve.gov/monetarypolicy/reservereq.htm (8 Sep 2021)

other words, everything we know is not just wrong-it's backwards. When banks make loans, they create money."

Ravn (2015, p. (minute) 25)³¹ expresses that "lending and other terminology seems to be hidden behind a veil we don't really know what's going on in banks it's not the classical veil of neutrality that money has usually been seen as but it seems like maybe a veil of deception." (Emphasized) He further quoted Häring (2013) Lending and other terminology hidden behind a veil. Not veil of neutrality, but a veil of deception".

Werner (2017) expresses: "The developing country debt is in fact a form of predatory lending to ensure that the former colonies remain, in economic terms, in the hands of their former masters. Thus, it is becoming apparent that the central banking narrative of scarce money and scarce savings has been a hoax.

From the "Top Secret Banker's Manual. For Bankers Only" (Schauf, 2003, pp. 25 and 34):

The bankers' own secret, inside manual explained fraud in the factum, UCC 3-305. This means that the party who did not write the agreement had no reasonable opportunity to obtain the knowledge of the terms (p.25, emphasized).³²

I talked to a number of those bank auditors and they admitted the banking system was a fraud, but they could get away with it because no one could explain it in court or they could use smoke and mirrors to hide the truth (p.34).

Deception and/or hoaxing could easily make a legitimate trade becomes illegitimate, thus *riba* (See *riba*, when it could come from both legitimate and illegitimate transactions).

Conundrum

Banking, finance, and debt have been questionably absent from the mainstream academic textbooks. The theories that present in most literature is the FIB and FRB whilst the CC or EM have mostly disappeared from the textbook since early 20th century although, they entered the literature in the late 18th century. This has some researchers wondered.

"The failure by leading economists to incorporate banking in their economic theories has been identified as a significant and costly weakness. Likewise, it has been pointed out that the macro-economic feedback of banking activity had been neglected in finance research." Werner (2016, p. 361).

Several authors depicted the current banking system as fraudulent (Rothbard, 2008; Schauf, 2003), deceptive (Ravn, 2015), and a hoax (Werner, 2017). Thus, with these elements of misrepresentation thus fraud, we can argue that given the current banking and finance infrastructure, most of them, irrespective of which (Islamic or non-Islamic) appear as practicing 'legalized' *riba*. We founded our arguments upon the legal infrastructure (the temple/government) that allows the current banking and finance to operate, and the acceptance of paper money created *ex-nihilo* as legal tender. Thus, the lender, people, and government shared the same responsibility.

The knowledge of banking, finance, and debt in the context of CC or EM has been obnubilated from the public's understanding. This could qualify any banking transaction beginning 20th century as *riba* as it creates money from nothing (*ex nihilo*) into something (doubled and multiplied) and charges interest (multiplied), which process was purposedly obscured from the public's eyes until Werner (2014) completed his empirical test. Central bankers (e.g., Bank of England, Bank of Canada, Bundesbank, Federal Reserve Bank) confirmed his results.

³¹ Banks don't lend money, they create it: Demystifying monetary and banking terminology. https://www.youtube.com/watch?v=rvh403-PnsU (28 Mar 2022)

³² Almost (if not) all loan agreements with the banks were drafted and prepared by the banks and the debtors almost have no say in it.

5. Conclusion and Recommendation

Implication of our study

Our results may have impacted some firmly held beliefs (Cognitive Dissonance) that the current banking system is not *riba* but trade. Furthermore, it has implications for the academic literature and Islamic banking and finance textbooks. Additionally, the national banking rules, regulations, and laws in some countries with many Muslim populations.

Conclusion

We have expounded on the *riba*—which largely does not mean usury—and trade from Quranic interpretations with historical correlations and their relevance to today's banking practices. We can safely say that all (without exception) banking and/or financing through banking—irrespective of their façade as Islamic banking and/or finance—at their core skeleton structure are practicing *riba*. This is based on the prevailing banking practices that has been empirically tested, proven, and attested by many central bankers, and the 'appearance' of trade' in the form of legal, operational licenses awarded by the government (temple).

Recommendation

Given the current international banking and finance infrastructure, it is almost impossible to have *riba*-free banking, finance, and trade. Unless each nation independently has its Quranic- or Q-based (e.g., AQ 2:275) localized banking (QLB) system and infrastructure that is not connected to international banking systems and infrastructures. Also, it is protected by national and possibly international laws. Surely this does not (yet) provide 100% *riba*-free for international trade and banking unless a separate system and legal infrastructure are developed for it.

References

Angas, L. L. B. (1937). Slump ahead in bonds. Somerset Publishing Company.

- Carpenter, S., & Demiralp, S. (2012). Money, reserves, and the transmission of monetary policy: Does the money multiplier exist? *Journal of Macroeconomics*, *34*(1), 59–75.
- Daly, H.E. (1986). The economic thought of Frederick Soddy. In: Kauffman, G.B. (Eds.). *Frederick Soddy* (1877–1956). Chemists and Chemistry, 6. Springer: Dordrecht. https://doi.org/10.1007/978-94-009-5297-3 14
- Farooq, M. O. (2009). Riba, interest and six hadiths: do we have a definition or a conundrum?. Review of Islamic Economics, 13(1), 105-141.

Galbraith, J. K. (1975). Money: whence it came, where it went. Princeton University Press.

Centre for Applied Research (2015). Financial Flows and Tax Havens. Combining to Limit the Lives of Billions of People. Global Financial Integrity. https://www.gfintegrity.org/wpcontent/uploads/2016/12/Financial_Flows-final.pdf

Graeber, D. (2011). Debt: The first 5000 years. Penguin: UK.

Graeber, D. (2014, March 18). The truth is out: Money is just an IOU, and the banks are rolling in it | David Graeber. *The Guardian*. https://www.theguardian.com/commentisfree/2014/mar/18/truth-money-iou-bank-of-england-austerity

Gross, M., & Siebenbrunner, C. (2019). Money creation in fiat and digital currency systems. IMF Working Papers, 19. https://doi.org/10.5089/9781513521565.001

Häring, N. (2013). The veil of deception over money: How central bankers and textbooks distort the nature of banking and central banking. *Real-World Economics Review*, 62, 2-18.

Hawtrey, R. G. (1923). Currency and credit. Longmans: Green.

- Hudson, M. (1992). Did the phoenicians introduce the idea of interest to greece and italy-and if so, when. Greece Between East and West: 10th-8th Centuries BC, 128-143.
- Hudson, M. (1993a). *The lost tradition of biblical debt cancellations*. Henry George School of Social Science: New York.

Hudson, M. (1993b). The rich ruleth over the poor, and the borrower is slave to the lender. 87.

Hudson, M. (2002). Reconstructing the origins of interest-bearing debt. *Debt and economic renewal in the ancient near east. Bathesda, MD: Capital Decisions Limited*, 7–58.

- Hudson, M. (2011, December 3). Democracy and debt. https://michael-hudson.com/2011/12/democracy-anddebt/
- Hudson, M. (2018a). And forgive them their debts: Lending, foreclosure and redemption from bronze age finance to the jubilee year. ISLET.
- Hudson, M. (2018b, April 28). Jesus: The economic activist. https://michael-hudson.com/2018/04/jesus-the-economic-activist/
- Hudson, M. (2018c, November 16). Everything You Thought You Knew About Western Civilization Is Wrong. https://michael-hudson.com/2018/11/everything-you-thought-you-knew-about-western-civilization-iswrong/
- Hudson, M. (2019, February 1). *Heeding the lesson of the ancients*. https://michaelhudson.com/2019/02/heeding-the-lesson-of-the-ancients/
- Hudson, M. (2020, March 23). Debt and power. https://michael-hudson.com/2020/03/debt-and-power/
- Ihrig, J., Weinbach, G. C., & Wolla, S. A. (2021, September). Teaching the Linkage Between Banks and the Fed: R.I.P. Money Multiplier. https://research.stlouisfed.org/publications/page1econ/2021/09/17/teaching-the-linkage-between-banks-and-the-fed-r-i-p-money-multiplier?s=09
- Ingratubun, M. A., Fahly, A. P., Cahyadie, B., Nizara, N. I., & Rantini, R. R. (2021). Dutch curse on Indonesia: Unemployment by Asian Development Bank (ADB) loan projects. *Gadjah Mada International Journal of Business*, 23(2), 113–136.
- Investment and Finance. (2013, March 24). Islamic Finance, Riba. https://www.investment-and-finance.net/islamic-finance/r/riba.html
- Keen, S. (2014). Endogenous money and effective demand. Review of Keynesian Economics, 2(3), 271–291.
- Kumhof, M., & Jakab, Z. (2016). The truth about banks. Finance & Development, 53(1). IMF.
- Lane, E. W. (n.d.). Arabic-English Lexicon by Edward William Lane. London: Willams & Norgate 1863. Retrieved March 6, 2022, from https://www.tyndalearchive.com/TABS/Lane/
- McLeay, M., Radia, A., & Thomas, R. (2014). Money creation in the modern economy. *Bank of England Quarterly Bulletin*, Q1.
- Moore, B. J. (1983). Unpacking the post Keynesian black box: Bank lending and the money supply. *Journal* of Post Keynesian Economics, 5(4), 537–556.
- Nethercott, C. R., & Eisenberg, D. M. (2012). *Islamic finance: Law and practice*. Oxford University Press: Oxford.
- Nichols, D., & Gonczy, A. M. L. (1992). Modern money mechanics: a workbook on bank reserves and deposit expansion. Federal Reserve Bank of Chicago.
- Positiva Pengar. (2021, April 27). Webinar with Michael Hudson: A 4000-year perspective on economy, money and debt. https://www.youtube.com/watch?v=O_btd7wuslc
- Razi, M. (2008). Riba in Islam. Fiqh of contemporary issues. Canada: Toronto.
- Ravn. (2015, October 26). Banks don't lend money, they create it: Demystifying monetary and banking terminology. https://www.youtube.com/watch?v=rvh403-PnsU
- Rose, A. (2010, April 22). Debt: The first five thousand years. Long Now. https://longnow.org/ideas/02010/04/22/debt-the-first-five-thousand-years/
- Rothbard, M. N. (2008). The mystery of banking. Ludwig von Mises Institute.
- Schauf, T. (2003). Top secret banker's manual. Rev. 09/12/03, 150.
- Usmani, M. T. (2006). The text of the historic judgment on interest given by the supreme court of Pakistan. https://www.semanticscholar.org/paper/The-Text-of-the-Historic-Judgment-on-Interest-Given-Usmani-Usmani/70f4cecfd8928ba461764922ff39c98568365d99
- Werner, R. A. (2014). Can banks individually create money out of nothing? The theories and the empirical evidence. *International Review of Financial Analysis*, *36*, 1–19.
- Werner, R. A. (2016). A lost century in economics: Three theories of banking and the conclusive evidence. *International Review of Financial Analysis*, 46, 361–379.
- Werner, R. A. (2017). Shifting from central planning to a decentralised economy: do we need central banks? – Professor Werner. https://professorwerner.org/shifting-from-central-planning-to-a-decentralisedeconomy-do-we-need-central-banks/