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Zakat on Bonds in Islamic Jurisprudence (Fiqh): Theory and Practice

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Abstract: Bonds are one of the contemporary financial instruments that need more understanding, clarification and research, and most studies focus on the theoretical side of bonds without addressing the practical side. Fiqh opinions focused on the provisions of zakat of bonds, their quorum and the amount of zakat. But none of the Fiqh opinions or books specialized in zakat clarified the ways for calculating zakat of bonds of all kinds in detail. In this research, the Fiqh opinion will be linked to the calculation of zakat on various bonds through the use of the principles of financial accounting. Thus, this research will provide a practical and applied reference for calculating zakat of bonds, and to be a reference in this field for each of the bond owners and the seeker of Sharia knowledge through calculating zakat of bonds and clarified more by applied mathematical examples.

Keywords: Zakat, bonds, interest, practical application.

1. Introduction

Praise be to God alone who is the one and the only, and prayers and peace be upon the Messenger of God, Muhammad, may God's prayers and peace be upon him, and upon all his family and companions.

God Almighty chose Islam for all people to be the final of the heavenly messages, and for people to serve as the comprehensive and complete reference by which they live correctly and straightly. So, this religion came with teachings that suit all the circumstances and conditions of people, no matter how they change or develop. God almighty said, "*Today I have perfected your faith for you, completed my favor upon you, and chosen Islam as your way*" (Surah Al-Ma'idah 3).

God identified the Five Pillars of Islam. The third Pillar is Zakat. God legislated this vector to achieve great benefits to society, such as purifying the money of the rich, and to be helpful for the poor and the needy, to achieve sympathy, compassion and coherence among members of the nation and society.

The Holy Quran and the Sunnah and the various Zakat books of senior Muslim scholars contained many details concerning this important pillar of Islam. It was probably legislated in the year 2 AH, as most opinions say [3].

The evidence that assures that Zakat is compulsory were included in the Holy Quran in more than one Surat, as in the verse "*Successful indeed are the believers, those who offer their Salat (prayers) with all solemnity and full submissiveness, and those who turn away from Al-Laghw (dirty, false, evil vain talk, falsehood, and all that Allah has forbidden), And those who pay the Zakat.*" (Surah Al-Mu'minun 1-4). And " And perform *As-Salat* (*Iqamat-as-Salat*) and *give Zakat and obey the Messenger (Muhammad) that you may receive mercy (from Allah)* (Surah An- Nur 56).

And in the Sunnah, Al Bukhari and Muslim included the following Hadith:

On the authority of Abdullah, the son of Umar ibn al-Khattab, who said: I heard the Messenger of Allah say, "Islam has been built on five [pillars]: testifying that there is no deity worthy of worship except Allah and that Muhammad is the Messenger of Allah, establishing the salah (prayer), paying the zakat (obligatory charity), making the hajj (pilgrimage) to the House, and fasting in Ramadhan." [5].

In the books, Muslim scholars have clarified the details related to zakat, such as the details of the conditions of its obligation, the conditions for paying it, the categories on which zakat is due, its expenditures, and so on. The categories in which Zakat was obligatory in the past were limited to gold, silver, crops, cattle and ore. As a result of the diversity and development of financial transactions in the modern era, new types of investment tools and new forms of money have emerged, such as banknotes, companies of all kinds, stocks, bonds and other forms of money. On the other hand of

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the development of financial transactions, as a result of participating and overlapping large numbers of people with each other, and with the size of business facilities, and its multiple processes, the science of money accounting has developed to meet the development of financial transactions. The need emerged for a method for registration, distribution, analysis, detail and auditing all the financial resources of new financial transactions, such as financial constraints, cost calculation, review, annual balance and budget, profits, loss and other lists and terms.

As a result of the foregoing, Muslim scholars kept pace with the development of financial transactions and set clear conditions for zakat of bonds by referring to the Noble Qur'an, the honorable Sunnah of the Prophet, the principles of Fiqh and their provisions. They documented the Fiqh opinions for calculating zakat of bonds in many different references.

1.1 Research problem

When applying the Fiqh opinions to calculate the zakat of bonds, the problem of reconciling the Fiqh opinions specified by Muslim scholars on the one hand, and the science of accounting on the other hand, with its financial statements, terminology and calculations appeared. This reconciliation between the two parties requires a profound knowledge of the Fiqh opinions for the performance of zakat, and a profound knowledge of the science of financial accounting as well. We also found that it is rare to find references or practical examples of applying the mechanisms of calculating zakat of some new types of money such as companies, stocks and bonds.

Therefore, the subject of the research deals with reconciling the Fiqh opinions of zakat on bonds, and financial accounting in a new scientific format, to be a reference for both the students and the zakat payers, and this research presents a detailed method for calculating the zakat of bonds and enriches it with various practical examples of all known types of bonds.

1.2 Research Plan:

This research was divided into an introduction, three chapters and a conclusion. The introduction included the research problem, research plan, research objectives, research importance, and research methodology, as well as previous studies.

As for the first chapter, it dealt with the zakat and bonds, and was divided into two sub sections, the first of which defined of zakat in language and Fiqh, while the second dealt with the definition of bonds in language and Fiqh and clarification of some terms related to bonds.

The second chapter was devoted to talking about the characteristics and provisions of bonds and came into three sub sections. The first sub section dealt with the characteristics of bonds, and the rights of the bond holders, while the second sub section dealt with the trading of bonds in terms of issuing bonds, buying and selling bonds, and retrieving bonds. The third sub section dealt with the provisions of trading bonds and the rule of zakat of bonds.

The third chapter dealt with the types of bonds and their zakat calculation, and it has three sub sections. The first sub section dealt with the types of bonds in general and the types of bonds in relation to the method of calculating interest. The second sub section dealt with a basic accounting introduction on how to calculate the monthly and annually interest distribution, the purchase price and the future price of bonds, and calculating Zakat of bonds (conventional bonds, zero coupon bonds and accreting interest bonds) and the method for calculating Zakat for each of them with applied examples.

The research was appended with a conclusion in which the most prominent results and recommendations reached by the research were presented.

1.3 Research objectives:

This research aims to achieve the following objectives:

1. Clarify the Fiqh of the Zakat of bonds.
2. Clarify the types of different bonds and differences between them.
3. Apply the Fiqh view to calculate zakat of bonds on different types of bonds through application of examples.

1.4 Importance of the Research:

The importance of this research is in dividing the types of bonds according to Zakat calculation. It is a new method which has not been used before. The previous books and research focused on the Sharia rule of the bonds and classified them in accordance with the issuance or the forms of bonds or according to the availability of guarantees for the bonds, and other classifications of interest to the investor that help to take the most appropriate investment decision and help them differentiate between bonds. Those classifications were appropriate for previous research objectives, which were explaining the Sharia rule of the bonds. The researcher has found that these classifications are not fit for the problem of this research because the objective of them was fit for the previous researches. The objective of this research is to explain how to calculate zakat in an applied framework. So, the researcher classified the bonds according to a new category that serves this purpose. The importance of research also lies in the applied examples to calculate zakat for each type of bond, because of the scarcity of these applied examples, and to be a reference for those interested in this area of research.

1.5 Methodology of the Research:

This research adopted the inductive approach for tracking the Fiqh of bonds, bond details and the analytical approach in explaining bond funds and their accountancy.

1.6 Literature Review:

This research is a new addition in completing what the first and the following scholars started in studying the issue of zakat. There have been some studies on this subject, including:

1. Stock Zakat, bonds and Treasury Bills, prepared by Sheikh Abdullah bin Sulaiman Al-Manea, a member of the Senior Scholarships in Saudi Arabia. This research dealt with the stocks and bonds of corporations of various agricultural, industrial and commercial types, and duplication in the output of zakat, and bond zakat [19].

2. Stock Zakat, Bonds and Treasury Bills, Prof. Dr. Wahba Mustafa Al Zahili. The objective of this research was to explain the equity zakat of all purpose's possession or trade, and the rule of zakat for funds of bond and types of bonds and the Sharia rule for the circulation of bonds [45].

3. Stocks, bonds and their rules in Islamic Fiqh, a PhD. thesis prepared by Ahmed bin Mohammed al-Khalil. This thesis aimed to contribute to bridging the gap in the Fiqh research by a specialized study that studies various aspects of stocks and bonds. The researcher addressed in details issues like stocks, bonds, their types, conditions and differences, and addressed the provisions of both stocks and bonds in Islamic law, as well as the provisions of Zakat of both stocks and bonds. The thesis was limited to the explaining of Fiqh views of the Zakat and did not show how they are applied in practice [18].

4. How to calculate Zakat of your money, Dr. Hussein Shehata. The book was written to answer a number of questions: Are invested funds in certain activities subject to Zakat? How to calculate Zakat of these funds? How are they spent in Islamic expenditures? The sections of the book focus on clarifying Fiqh judgments, accounting and applied procedures to calculate Zakat for many types of assets such as cash, trade types, industrial and craftsmen activities, real estate investments, planting, fruits, animals, and work income. The book addressed the bonds in one example and considered it matching the monetary funds. The book did not address the detailed types of bonds and the ways to calculate their Zakat [36].

5. Fiqh Az Zakat - a compared study to its provisions and philosophy in the light of the Koran and Sunnah, Dr. Yousef Al Qaradawi. The book aims to be a comprehensive reference for all sections related to Zakat and addresses all Fiqh views on Zakat. It addressed the issues of Zakat and its Fiqh provisions and differences of Fiqh views in detail. The book also showed how Zakat of cash money is calculated and also the zakat of animals, silver, gold, commerce, honey and animal products, metal wealth, ... The book addressed the details of zakat and how to be spent. The book addressed the rule of zakat on bonds and considered them a capital possessed by the holders. The book did not address the types of bonds and methods of calculating their zakat [30].

Of the above, previous studies dealt with bonds from Fiqh views, but no previous books or researches have explained how to calculate detailed Zakat for different types of bonds. Therefore, this research is devoted to bringing into harmony the Fiqh opinion to calculate bond zakat and different types of bonds by using financial accounting principles. This research provides a practical applied reference to calculating zakat of bonds, and to be a reference in this area for both Sharia studies and bond zakat supported by applied calculation examples.

2. The Zakat and Bonds

2.1 Defining Zakat in Language and Fiqh.

2.1.1 Zakat in language:

The verb zaka and its derivations mean increase and growth [20], and zakat is a root of the verb (zaka) and the two Arabic letters (z k) and the vowel in the middle indicate growth and increase [42]. So, the definition of zakat is blessing, growth, purity, righteousness, and the finest thing [2].

And Imam Abu al-Hasan al-Wahidi said zakat is a purification of money, renovation, distinguishing and increasing it. He also said: it appears that it originated from the increase. Zaka the crops is yazko means extended in a period of time, and everything that has increased means zaka. He said: Zakat is also goodness, and its origin is from an increase in goodness. It is said: Rajulon (man) Zakeyy means one who is more than a good-natured person who is a member of a good-natured group of people [25].

The word zakat appears in the Noble Qur'an with several meanings, including better than righteousness [38], as in the verse "*So we intended that their Lord should change him for them for one better in righteousness and near to mercy*." (Surah Al-Kahf 81). Also, as in "*And had it not been for the Grace of Allah and His Mercy on you, not one of you would ever have been pure from sins.*" (Surah An-Nur 21), which means who became pious among you [32].

One of the Prophet's prayers was, "*O Allah, grant to my soul the sense of righteousness and purify it, for Thou art the Best Purifier thereof. Thou art the Protecting Friend thereof, and Guardian thereof*" [26]. This prayer is related with Anur surat verse 21 mentioned above, "*But Allah purifies whom He wills*".

It also includes the verse: "*Indeed he succeeds who purifies his own self* "(Surah Al-Shams: 9) that is, he has succeeded who has purified himself purify it a lot from unbelief and sin, and reforms it with righteous deeds [38], .and the verse : "*So ascribe not purity to yourselves* "(Surah An-Najm 32) That is, do not praise yourself and thank it and be proud of your deeds [17], It is also used to mean the most blessed Halal [32], as in the verse "*and let him find out which is the good lawful food, and bring some of that to you* "(Surah Al-Kahf 19).

2.1.2 Zakat in the Fiqh: I will include one definition of every doctrine of Islamic sect because most of the other definitions are almost identical:

- **The Hanafit** giving the money to a poor Muslim who is non-Hashemite or related to a Hashemite with the condition of ending the benefit of the giver by any means for the satisfaction of Allah only [43].
- **Maliki definitions** is part of the money given to those who need it. It is taken from the money when it reaches a certain amount [14].
- **The Shafit definition** is a name of something specific, from specific money, with specific features given to a specific group of people [23].
- **El-Hagawi Al-Hanbali** defined it in Kitab Alikna' as follows: an obligatory payment from specific money given to a specific group of people in a specific time [15].

In addition to convergence of definitions in one doctrine we also note the rapprochement of doctrines and inclusion on zakat conditions. The most probable is the last definition as defined by the Hanbali because it included the rule of Zakat, while other definitions did not.

2.2 Definition of Bonds in Language and Fiqh.

2.2.1 Bonds (Sanadat) in Language:

The definition of the bond (sanad in Arabic) is everything that can be based on and depended on, such as a wall, a supporter, or something that supports; It is also said someone is a support or can be relied on [20].

2.2.2 Bonds in Terminology:

Bonds in Terminology**:** bonds have definitions, including:

- It is a debt instrument, obligating its issuer (also called the borrower or debtor) to pay the borrowed value to the lender (also called the investor) in addition to the interest, during a specified period of time [9].
- It is a financial market instrument issued by the borrower, who is then required to pay the lender (investor) the borrowed amount in addition to the amount of interest, during a specified period of time [7].
- A bond is a loan an investor offers to a corporation, government, federal agency or other organization in exchange for interest payments over a specified term plus repayment of principal at the bond's maturity date [12].
- Bonds are a legal obligation by the bond issuer, according to which it pays the bond holder a predetermined percentage of interest throughout the life of the bond, and then the bond issuer returns the original amount (the amount borrowed) to the bond holder [11].
- A bond is defined as a security for a debt, where the borrower issues bonds to collect money from investors who want to lend them money for a certain period of time. When buying a bond, the buyer of the bond lends to the issuer, which could be a government, municipality or corporation. In return for this debt, the issuer promises to pay

a specific interest rate to the buyer during the term of the bond, and the capital paid (also known as the bond's face value) is repaid when the bond matures, i.e., when the debt is due [39].

From the above we note that the last definition is the most comprehensive and accurate definition. Bonds in general are a debt tool that governments and companies use to finance their projects, by borrowing specific amounts from investors (bond holders), in return for giving them amounts in excess of the borrowing amount by a certain percentage. The borrowing period is specified before the loan is executed.

Bonds are one of the contemporary investment methods. From the investors' point of view, the bonds are beneficial to both parties in the relationship (investors and borrowers). The bond is a paper stating that its owner is a creditor to the borrowing party (the issuer of the bond) a specified amount and the bond indicates that the holder is entitled to additional amounts (interest).

2.3 Terminologies Related to Bonds.

There are some important terms related to bonds that must be clarified:

1. **Bond issuer party**: The entity obligated to pay principal and interest on a bond - is the one that wants to borrow and may be a state government or a big company [40].
2. **Bond Holder**: Is an investor who lends money to the Bond issuer by buying bonds [10].
3. **The nominal value or merit value**: Represents the required amount of bond issuer (borrower) [6].
4. **Market value (commercial) of bonds** represents the price of bonds in the financial market [44]. It is affected by many factors and may be higher or less than the nominal value.
5. **Interests or Coupon**: Annual interest rate paid by the issuer of the bonds to the investor [6].
6. **The maturity time** is the period of debt in years. The issuer after the expiration of this period returns the amount of debt (nominal bond value) to the investor, as well as the benefits according to the type of bond. The due process is the difference between the maturity date and the date of issuance of bonds [6].
7. **The due date**: is the date of the end of the debt of the bond and this date shall return the value of the bond to its holder [6].

3. The Characteristics and Provisions of Bonds.

3.1 The Characteristics of Bonds and Holders Rights.

3.1.1 Characteristics of Bonds

Bonds are characterized by fixed and variable characteristics. Fixed characteristics are those that distinguish all bonds from other investment tools, and some of these characteristics can be concluded of the previous bond definitions. Characteristics of fixed bonds include the following [35]:

- The bond is a debt of the issuer; its holder is a creditor of the issuer.
- Bonds, like stocks, are tradable.
- Bonds are instruments of fixed value, issued at a nominal value and that cannot be retailed by the issuer.
- The bond holder takes specific interest annually regardless of the company's profit or loss.
- The bond holder receives the nominal value of the bond at the maturity date.
- The bond holder has the right to get the value of the bond at liquidation and before the stockholders.

As for the variable properties of bonds, they are properties that may differ from one issue to another, and they include the following:

- Maturity period: it varies between short-term bonds and long-term bonds. Short term maturity ranges between 5 to 10 years usually, while long term maturity exceeds 10 years and may reach 30 years.
- Callable or non-callable bonds. Callable bonds can be retrieved by the issuer of the bonds and paid to the investor before the maturity date.
- Type of guarantee: that is, the bonds are guaranteed to return their face value and pay their interests on the one hand, and that they are secured against new issues on the other hand. The guarantor may be a government, or it may

be real estate, machinery and corporate assets. Bonds are of two types in terms of security: Secured bonds and unsecured bonds.

3.1.2 The Rights of the Bond Holder.

The rights of the bond holder can be inferred from the previous properties, and accordingly the bond gives the holder three basic rights:

1. The right to get fixed interest on the agreed dates, regardless of the company's profit or loss.
2. The right to retrieve the bond value at maturity date.
3. The bond holder has all the rights of the creditor towards the issuer of the bond.

3.2 Bond trading in terms of Issuing Bonds, Buying and Selling Bonds, and Retrieving Bonds.

In this section, we will review the cycle of bonds from their issuance until their retrieval in a simplified manner that fits this research, and divide it into three main parts:

3.2.1 Issuance of Bonds:

The process of issuing bonds is a complex and long process and involves several parties, but for the purposes of this research we will be limited to the basic steps associated with achieving the objectives of this research. The steps for issuing bonds as mentioned in the World Bank Group document can be summarized as follows [41]:

1. The issuer of the bonds decides that they need to borrow through the borrowing instrument (the bonds) in order to fund the implementation of a particular project.
2. The issuer of the bonds authorizes a competent authority to issue and manage the issuance of bonds (a bank or a financial institution). This competent authority acts as an intermediary between the issuer of the bonds, on the one hand, and the investors, on the other.
3. The agent places the bonds in public auction with its agreed nominal value (one of the sale methods and not the only way).
4. The interest rate may be determined by the agent or may be open to be determined by the buyer of the bonds, each investor determined the interest rate required for the purchase of bonds.
5. The bond issuer determines the interest payment mechanism and periods of payment, twice a year or annually. The most common is twice a year.
6. Investors wishing to purchase bonds submit their written bids in which the number of bonds to be purchased, as well as the interest rate required for the purchase of bonds (if not specified by the agent of the exporter).
7. The agent declares if the bond booking is covered or not, i.e., the total amounts of the buyers are equal or higher than the value of the overall bonds. The agent also selects buyers according to priorities the most important of them are:
   - If the interest rate is determined by the agent of the issuer, the priority of choosing buyers shall be in accordance with the time order of booking for purchase, the priority is for prior to booking for purchase (booking request).
   - If the interest rate is not determined by the agent, the selection priority of investors is for those with less interest rate, because this is less expensive on the issuer of bonds.
8. The investor pays the value of the purchased bonds to the agent.
9. The agent registers the names of the buyers and the number of bonds purchased by each buyer. The payment mechanism and rate of interest and the rest of the information about the booking process are documented by the official authorities.

3.2.2 Purchase and Sale of Bonds:

The bond owner has the right to collect the interests of investment periodically as long as possible. When the date of the maturity is due, the bond issuer pays the nominal value of the bond for the owner of the bond, in addition to the last payment of interest. Since the issuance of the bond and the date of maturity may extend to 30 years, the bond holder may wish to sell all or some of the bonds. The sale and purchase of bonds depends on the investor type: Is it a long-term or short-term investor or a mixture of two types.

The sale is done in steps that vary according to the type of bond and the sales mechanism adopted in the financial market in which these bonds are enlisted, as well as the buyer. In some cases, the issuer of bonds is obliged to buy as a result of the promise of purchase during the bond issue process [41]. The purchase and sale of bonds has multiple selling and steps, but this research was restricted to clarify the possibility of purchasing and selling bonds during the investment period and not the details and steps of sale and purchase.

3.2.3 Reclaiming Bonds:

As explained above, the bond holder can sell the bonds in accordance with certain conditions. The bond issuer can also retrieve the bond (re-purchase) from the holder at any time that he shall, if the sale contract contained this condition. The bond issuer usually retrieves them if the current interest rate is less than the paid interest rate of the bond and this is done to reduce the cost of borrowing by refinancing debts at a lower interest rate. The bond issuer retrieves the current bonds and issues new ones at a lower interest rate [10].

The bond issuer determines whether bonds can be retrieved or not. This type of bond is called a retrievable bond.

The retrieving of bonds is also done on the maturity date, which is the date of the end of the debt of the bond and in this date the bond issuer returns the value of the bond to the holder.

4. Provisions of Trading Bonds and Bond Zakat.

In this regard, we will review the provisions of bonds in terms of rule of trading and bond zakat as follows:

4.1 Provision of Bonds Trading.

The contemporary Fuqaha' disputed the provision of the bonds trading. The majority of them prohibited the bonds of all their types, but a minority allowed them, such as the Mufti of the Arab Republic of Egypt, Dr. Mohamed Sayed Tantawi [37]. Very few allowed bonds trading for only a particular type of bonds, and that was the opinion of Sheikh Abdul Azim Baraka and Sheikh Jadalhaq Ali Jadalhaq, the former Mufti of the Arab Republic of Egypt [37]. In the 1980s and 1990s, the majority of Fuqaha' agreed to the prohibition of bond trading of all kinds and their interests, so that the debate was completely ended because of the clarity of the concept of bonds for the scholars and specific terms and conditions for prohibiting of this financial instrument (bonds), especially after the emergence of speculative bonds and then Islamic financial instruments, which are an alternative to prohibited bonds.

Among the scholars who prohibited the trading of bonds, and their interests are:

- Dr. Yousef al-Qaradawi, the former chairman of International Union of Muslim Scholars [29].
- Dr. Saleh Al-Marzouki, Secretary General of the Islamic Fiqh Council in the The Muslim World league and a member of the Shura Council in Saudi Arabia [4].
- Dr. Saeed bin Ali bin and Haf al-Qahtani, a scholar,and a Muslim writer, his works amounted to more than eighty books, among them the most famous book (Hisn Almuslim) [27].
- Dr. Mohammed Othman Shabir, Member of the Scientific Committee of the Fiqh Encyclopedia of Kuwait, supervised by the Ministry of Awqaf and Professor in several universities such as Sharjah University, Qatar University and the University of Jordan [37].
- Dr. Mohammed Abdul Ghaffar Al-Sherif, a scholar, Islamic missionary and professor, Faculty of Sharia (Kuwait) and the Secretary-General of Awqaf in Kuwait [35].
- Dr. Walid bin Hadi, Chairman of the Fatwa and Sharia Supervisory Board of a number of Islamic financial institutions [13].

Also, The International Islamic Fiqh Academy, in its sixth cycle from 17-23 Sha'ban 1410 AH corresponding to 14-20/3/1990 CE, after reviewing the research, recommendations and results presented in the "Financial Markets" symposium held in Rabat 20-24 Rabi' al-Thani 1410 AH corresponding to 20-24 AH. 10/10/1989 AD, issued Resolution on Bonds Considering the three types of bonds; Bonds that are paid a specific interest or bonds with zero coupon or bonds with prizes are prohibited by Sharia [8], the resolution was as follows:

- Having considered that a bond is a certificate by which its issuer under- takes the liability of paying its nominal value to the bearer on its maturity along with an agreed-upon interest relating to its value or to a predetermined profit, either in lump sum or as a discount or in the form of prizes to be distributed on the basis of ballot.
- The bonds which represent a commitment to pay its amount along with an interest related to its nominal value or to a predetermined profit are prohibited in Shariah.

- The “zero coupon bonds” are also prohibited because they are loans sold at a price inferior to their nominal value, and the owners of such bonds benefit from the difference in their prices, which is considered a discount on the bonds.
- Similarly, the “prize bonds” are also prohibited because they are loans.

As for the evidence from the Noble Qur’an and the honorable Sunnah of the Prophet on which the Islamic Fiqh Council and the rest of the scholars relied for the prohibition of bonds, they are many, and some of them can be mentioned as follows:

1. "*whereas Allah has permitted trading and forbidden Riba* (usury) "(Surah Al-Baqarah 275).
2. *O you who believe! Be afraid of Allah and give up what remains (due to you) from Riba (usury) (from now onward), if you are (really) believers*". (Surah Al-Baqarah 278).
3. *O you who believe! Eat not Riba (usury) doubled and multiplied, but fear Allah that you may be successful* "(Surah Ale-Imran 130).
4. *And their taking of Riba (usury) though they were forbidden from taking it and their devouring of men’s substance wrongfully (bribery, etc.)* "(Surah An-Nisa' 161).
5. Jabir said that Allah's Messenger cursed the accepter of interest and its payer, and one who records it, and the two witnesses, and he said: They are all equal [26].

Based on the foregoing, bonds are prohibited in Shari'a and it is not permissible to trade them, and whoever does must repent and have their capital sum, they should not deal unjustly and they shall not be dealt with unjustly. God almighty said "if *you repent, you shall have your capital sums. Deal not unjustly, and you shall not be dealt with unjustly*" Surat (Surah Al-Baqarah 279).

The Islamic Fiqh Academy has specified conditions for alternatives to bonds that are compatible with Islamic Sharia. They are bonds or sukuk based on speculation for a specific project or investment activity, so that the owner has no interest or lump sum interest, but rather has a percentage of the profit of this project as much as he owns from the bonds or the sukuk. They do not receive this profit unless the profit actually took place. The council also specified detailed conditions for Islamic sukuk.

4.2 The Fatwas of the Jurists Regarding the Rulings of Zakat on Bonds:

At the beginning of this research, we mentioned the definition of a bond as: “a written pledge of an amount of debt (loan) to the bearer on a specific date, in return for an estimated interest.” It was defined as: “an exchangeable deed issued by the company that represents a long-term loan usually held through initial public offering.” Considering these definitions, bonds represent a debt owed by the issuing party, and since it is a deferred debt, it is necessary to identify the opinions of the jurists in the zakat of debt in order to reach the ruling on zakat on bonds. It should be noted here that the jurists divided the debt into two parts: The debt owed by a rich person who acknowledges it and is expected to be paid. The second is the debt that is not expected to be paid: which is owed by one who is penniless or who denies it. So, I will mention the sayings of the jurists in each section separately.

First: The Opinions of Jurists Regarding Zakat on Debt:

1. The opinions of the jurists regarding the ruling of zakat for the debt that is expected to be paid:

The jurists differed regarding the obligation of zakat for the debt that is expected to be paid and when it was due, according to more than one saying [28]:

The first saying: Zakat is obligatory on the creditor if the debt is owed by a rich man. The creditor has to pay it when it is due. They reasoned that the money is owned by the creditor, and he is able to benefit from it, so the zakat must be paid like all his money, and that it is under the rule of the money that is in his hand, and he is able to take it and dispose of it, so he must pay its zakat like a deposit [31].

The second saying: Zakat is obligatory on the creditor if the debt is owed by a rich man and the creditor collected his money. They infer that this debt is fixed in the responsibility, so it is not necessary to pay its zakat before collecting it, as if the owed is penniless, and that zakat is obligatory to console the poor and needy, and it will not be a sort of console to pay zakat of money that you do not benefit from [1].

The third saying: Zakat is not obligatory on the debt at all. The jurists who adopted this opinion reasoned that the credited money cannot be invested, and zakat is not obligatory on the money that is not invested. As long as this money is in the debt of the debtor and the creditor cannot collect it, then it is under the judgment of the non-existent, and that the possession of that money is incomplete, and zakat is not obligatory [24].

The fourth saying: Zakat is obligatory on the creditor if the owed returns the money. They inferred that: the obligation of zakat to be paid for the year when money is collected by the creditor, so zakat is calculated for one year [31].

Perhaps the most probable saying is the fourth one because the debt, even if it is owed by a rich person, there is the possibility of loss of that money, or that the owed become penniless or the money be denied the owed, and as long as these possibilities exist, the creditor is permitted to delay paying zakat until he collects it.

2. The opinions of the jurists regarding the ruling of zakat for debts that are not expected to be paid:

The jurists differed regarding the obligation of paying zakat of debt that is not expected to be paid and when it is due [45]:

The first saying: Zakat is not obligatory on a debt that is not expected to be paid until it has been collected. The zakat is paid after the passage of one year form the date of collecting the debt [31].

The second saying: Zakat is obligatory on the creditor even if the debtor is penniless, or denied the debt, or procrastinating, and the creditor pays zakat for the whole past years of the debt. They reasoned that this debt is the property of the creditor, and his possession is still the same. If he proves his debt by evidence or his opponent is no longer penniless, the judge will grant him the right to collect the debt and as long as it is owned by him, then it is permissible to dispose of it [21].

The third saying: Zakat is obligatory on the creditor if the debtor is penniless, or denied the debt, or procrastinating, and the creditor pays zakat of it for one year due [31].

Perhaps the most probable saying is the third saying, as it is based on the generalities of ease of Islamic law, and that zakat is only for what benefits a person.

Second: The opinions of jurists regarding the ruling of zakat of bonds:

The jurists differed regarding the ruling of zakat of bonds, according to three opinions:

The first saying: Zakat is obligatory on the asset of the debt only. As for the interests, there is no zakat on them, rather they are returned to their owners. This was decided by the first zakat conference in Kuwait, Dr. Wahba Al-Zuhaili [45], and Dr. Rafik Al-Masry [22], and the jurists who adopted this saying inferred a number of evidence, the most important of which are:

- The asset value of the bonds must be subject to a zakat because it is a debt owed by the debtor.
- As for interests, zakat is not required, because it is haram money, and there is no zakat on haram money, according to the most correct of the sayings of the jurists, and it is not owned, and it must be disposed of by returning it to its owners or giving it to the poor and needy.

The second saying: Zakat is obligatory on bonds like the zakat of trade goods. Dr. Yusuf al-Qaradawi [30], Dr. Saleh al-Sadlan [34], and others adopted this saying, and the proponents of this saying relied on a number of evidence, the most important of which are:

- The bonds owners earn from their them if they sell them, just as the trader earns from his goods if he sells them, and they have an estimated value in the markets when dealing with them for buying and selling that differs from their nominal value, and they are thus like trade offers, so they must take their ruling in paying zakat.
- Since the owner of the bond can sell it whenever he wants, the bond is thus under the rule of the money he has in his hand, and it is considered a debt that is expected to be paid on which zakat is required.

The third saying: Zakat must be paid on the original value of bonds in addition to their interests, unless they are taken for trade, then their zakat must be paid as zakat on trade goods. And the jurist who adopted this saying was Sheikh Abd al-Rahman al-Hulw [16], and he inferred that:

- Bonds are debts that bring interest to the creditor, and thus they differ from debts without interest. And if this interest is haram, then its prohibition is not a reason for exempting the holder of the bond from paying zakat.
- That zakat is related to the rights of others in it and that confusion is not accepted if it is not possible to know the haram.
- Saying that interest is exempt from zakat is an encouragement for people to deal with it, and it is an encouragement to deal with what is haram.

Perhaps the most probable saying is the first one, due to the strength of its evidence, and it obliges the owner of the bond to get rid of the haram interest, and it is in accordance with the general principles and of Islamic law.

5. Types of Bonds and Calculation of their Zakat.

5.1 Types of Bonds.

In this section, we review the types of bonds in two categories. The first category includes the types of bonds as classified by Arab references and previous studies, and the second category classifies the types of bonds according to the researcher's classification, which is the most appropriate classification for calculating both the interest value and the zakat value. This is as follows:

5.1.1 Types of Bonds in General:

The references, especially the Arabic ones, divided the bonds according to various different classifications, such as their relation to the issuer, or in relation to the form of issuance. Also, some references confused the types of bonds and their characteristics, so they classified bonds according to some of their characteristics, such as being callable, their maturity period, or their classification in relation to the type of guarantee, and some references classified them according to rights and privileges. We found that classifying bonds according to their characteristics is not appropriate, because they are characteristics and not classifications. Also, these characteristics may apply to more than one type of bond, so we find that it is better to classify bonds according to two types: the issuer and the form of issuance only. We reviewed the characteristics under the previous bond characteristics item.

5.1.2 Types of Bonds Related to issuer:

Bonds related to issuer are divided into two types [33]:

1. **Government bonds**: Government bonds are one of the government's borrowing instruments. They are the most secure bonds in terms of guarantees. The Government issues bonds to finance infrastructure projects such as building schools, hospitals, roads and other projects. The Government may also issue bonds to fund the current state expenditures.
2. **Corporate bonds**: If mega companies want to finance a mega new project such as the establishment of a power plant or expansion of an existing terminal, construction of an oil refining plant and other mega projects, the company may resort to the issuance of bonds as a way to finance these projects. The corporate bonds involve a risk based on the type of company and financial solvency and the nature of the project to be funded as well as investment risk in the State.

5.1.3 Types of Bonds Related to Issuance:

Also, it is divided into two types [33]:

1. **Bonds for Holder**: The bond where the name of the investor is not written on the bond certificate and the investor name shall not be registered for official authorities, and there is no record for the tracking of ownership. Property is transmitted between investors through the exchange of bond certificate, and the value of the interest is paid periodically to the holder.
2. **Nominal bonds**: In this type, the name of the investor is required for investment certificates and registration in a dedicated record to follow up investors' information. These records are updated if bonds are sold to a new investor. These records also the reference when the interest is distributed and in retrieving the value of bonds.

Many Arab researches and books have explained the types and characteristics in details because of their immediate impact on the goals of these researches, which is defining bond from an Islamic perspective. While we found that modern foreign references are no longer interested in previous classifications and are no longer addressed and focusing on processing bonds from an investment point of view and will be clarified in the following section.

5.1.4 Types of Bonds Related to Interest Rate:

This classification is regarded as the investment rating adopted by books and reference for modern foreign bonds, which is most appropriate for this research. The discussion aims to calculate Zakat bonds of different types, and this classification shows the types of bonds related to capital, profits and interests, and shows the calculation method for each type of bond, and therefore how Zakat is calculated. The bonds are divided according to this classification into four types as follows:

First: Conventional Bonds [6]:

The interest rate for this type is identified when its issued. This type of bond has a fixed percentage interest rate. In most cases, interest is paid twice a year. For example, if the interest rate for a certain issue of bonds is (4.5%) and the nominal value of 1000 dinars, the annual interest value will be (45) dinars, (22.5) dinars are paid after six months of the issuance of the bond and other (22.5) dinars are paid after a year of the issuance of the bond. This process is repeated annually until the maturity date. At the maturity date the last amount of interest is paid in addition to the nominal bond value.

Second: Zero-Coupon Bonds [6]:

This type of bond does not specify an interest rate, where the interest rate is zero, and the bond issuer does not pay annual interest to the investor. But the investor gets his profit by buying the bond at a special discount so that the purchase price of the bond is less than the selling price at the time of maturity. The difference between the purchase price and the selling price represents the investor's profit.

For example, if the selling price of a particular bond after ten years is (1000) dinars, the purchase price of the bond at present time is (463) dinars (assuming that the required interest rate is considered (8%) annually and paid once). In this case, the purchase price of the bond is calculated by calculating the time value of the selling price (1000) dinars according to the following equation:

Purchase price = selling price / (1 + annual interest rate)$^{\wedge \text{ number of years}}$.

= 1000 / (1 + 0.08)$^{\wedge 10}$

= 463 dinars

Accordingly, the investor’s profit in the event of buying this bond for (463) dinars and selling it at (1000) dinars is (537) dinars (which represents the difference between the buying and selling prices). It may come to the investor’s mind that the interest value for this type of bond is high, and it is, and the reason for this is that the bond issuer does not pay the value of the interest (profits) until after the full period has elapsed, and in the language of investment, this means reinvesting the annual interest in the next periods. For example, the profit for the first year in the previous example is not paid to the investor at the end of the first year but is reinvested for a period of nine years. The interest earned from reinvesting the interest is also reinvested, thus calculating interest on it for the remaining period in a compound form.

Third: Accreting or Step-up Bonds [7]:

Accreting bonds are very similar to Conventional bonds, with the paid rate of interest is different in each time period due to the fluctuation of the interest rates identified. The idea of Accreting bonds can be illustrated in the following example:

Example: Bonds of a value of (1000) dinars per bond were issued for a period of fifteen years, with interest paid every six months and at a variable rate every five years, as follows:

- An interest rate of (8%) annually for the first five years.
- An interest rate of (8.5%) annually for the second five years.
- Interest at (8.75%) annually for the third five years.

Accreting bonds can be imagined as three conventional bonds, each with a specific time period and a different interest rate. It is not required for this type of bond to have equal periods of time. The interest may be (8%) for the first two years, then it becomes (8.5%) for the next five years, and so on.

Fourth: Floating Rate Bonds [10]:

This type of bond is very similar to the previous type, as the interest rate in this type of bond is reviewed every specific period of time (every two years, for example) by the bond issuer and the rate is reduced or increased according to the current interest rate at the time of review.

The similarity between this type of bond and the previous type (bonds with Accreting interest) is the change of interest rate during the years of issuance. While the difference between the two types lies in knowing the future interest rates at the beginning of the bond issuance for the bonds with Accreting interest, the interest rates are not known in the floating interest rates for the following years.

Because this research is concerned with calculating zakat, and therefore what matters to us is to know the value of the bond at the time of purchase and the interest paid for the purpose of calculating the value of zakat. The value of the bond at the time of purchase and the value of the interest received will be identical to the previous type of bond (bonds with Accreting interest).

Example: A bond issued with a value of (1000) dinars as an annual floating interest paid every six months. The interest rate for the first year was defined to be (7%) and to be reviewed annually. Three years later, the interest rate at the beginning of the second year increased to be (7.25%), and at the beginning of the third-year interest rate became (7%).

5.2 Basic Accounting Introduction.

5.2.1 Calculating Monthly and Annual Interests.

The annual interests for bonds can be calculated using the following equation [11]:

Interest rate = Annual profit / Purchase price.

The above equation can be rephrased as follows:

Annual Profits = Interest rate * Purchase price.

If the profits are calculated annually but distributed every six months, the equation of the six-month period profit will be as follows:

Profits of (6) Months = (Interest Rate * Purchase Price) / 2.

Monthly profits are calculated in the same way if they are calculated annually and distributed per month:

Monthly Profits = (Interest Rate * Purchase Price) / 12.

Monthly profits can be calculated for any time period in the same way. The way for calculating profits, if they are calculated monthly or daily, is not within the scope of this research.

5.2.2 Purchase Price and Future Price of Bonds:

For the Bonds where profits are distributed periodically, the purchase price (current value) and future price (e.g. after ten years, the same maturity time) will be the same price, while the price of purchase is different if profits are not distributed periodically during the bond maturity period. This applies to zero coupon bonds, where the future value (sales value after several years) can be determined using the following equation [10]:

$$\boldsymbol{FP = PP * (\frac{1}{I})^N}$$

Where, FP: Future Price, PP: Purchase Price, I: Annual Interest Rate, N: Number of years.

The previous equation can be expressed as follows to calculate the purchase price:

$$PP = \frac{FP}{(1+I)^N}$$

5.2.3 Practical examples of Calculating Zakat of Bonds:

In this section we review how to calculate zakat of different types of bonds by providing various practical examples. The following steps will be followed in all of these examples:

1. Calculate paid cash value of the bond (purchase price).
2. Calculate the value of zakat due on the value specified in the previous item (paid cash value).
3. Calculate the value of interest.

First: Conventional Bond and Calculating their zakat:

This type of bond is the easiest in terms of calculating its zakat value, the following examples illustrated how to calculate the Zakat value:

Example 1: If you know that the nominal value of a bond is (1000) dinars with an annual interest rate of (7%), calculate the value of the annual zakat for this bond and the interest rate received to be taken out.

Solution:

Purchase price = nominal value = (1000) dinars

The value of annual zakat = purchase price * annual zakat rate

= 1000 dinars * 2.5% = 25 dinars per year

Annual interest value = 1000 dinars * 7% = 70 dinars per year.

Example 2: If you know that the nominal value of a bond is (1000) dinars with an annual interest rate of (7%), calculate the value of the annual zakat for this bond which has been owned for (3) years, and the interest rate received to be taken out.

Solution:

Purchase price = nominal value = (1000) dinars

The value of annual zakat = purchase price * annual zakat rate

= 1000 dinars * 2.5% = 25 dinars per year

The value of zakat for (3) years = value of annual zakat * Number of years

= 25 dinars * 3 years = 75 dinars.

Annual interest value = 1000 dinars * 7% = 70 dinars per year.

Total interest value = Annual interest value * Number of years

= 70 dinars * 3 years = 210 dinars.

Example 3: If you know that the nominal value of a bond is (1000) dinars with an annual interest rate of (7%) paid every (6) months, calculate the value of the annual zakat for this bond after two and a half years, and the interest rate received to be taken out.

Solution:

The value of zakat for two and a half years will be calculated for (2) years only as the third year is not finished yet (since Zakat calculated in yearly basis only), so,

Purchase price = nominal value = (1000) dinars

The value of annual zakat = purchase price * annual zakat rate

= 1000 dinars * 2.5% = 25 dinars per year

The value of zakat for (2) years = value of annual zakat * Number of years

= 25 dinars * 2 years = 50 dinars.

Annual interest value = 1000 dinars * 7% = 70 dinars per year.

Meanwhile, to calculate the total interest value it will be considered to be two and a half years since the interest rate is paid every (6) months, so,

Total interest value = Annual interest value * Number of years

= 70 dinars * 2.5 years = 175 dinars.

Example 4: If you know that the nominal value of a bond is (1000) dinars with an annual interest rate of (7%) paid every (6) months, calculate the value of the annual zakat for this bond after (2) years and (3) months, and the interest rate received to be taken out.

Solution:

The same, the value of zakat for (2) years and (3) months will be calculated for (2) years only as the third year is not finished yet (since Zakat calculated in yearly basis only), so,

Purchase price = nominal value = (1000) dinars

The value of annual zakat = purchase price * annual zakat rate

= 1000 dinars * 2.5% = 25 dinars per year

The value of zakat for (2) years = value of annual zakat * Number of years

= 25 dinars * 2 years = 50 dinars.

Annual interest value = 1000 dinars * 7% = 70 dinars per year.

Meanwhile, to calculate the total interest value in this example it will be considered to be two years only since the interest rate is paid every (6) months, so,

Total interest value = Annual interest value * Number of years

= 70 dinars * 2 years = 140 dinars.

Second: Zero-Coupon Bonds and Calculating their zakat:

As stated earlier, this type of bond has zero interest rate, and thus has no annual return on income. Instead, investors buy such bonds with a discounted rate, in the following are different examples on how to calculate zero coupon zakat.

Example 1: Ahmed bought a Zero-Coupon Bond with a purchase price of (463) dinars, to be retrieved after (10) years for (1000) dinars, calculate the value of annual zakat on this bond and the interest rate received to be taken out.

Solution:

Purchase price = 463 dinars

The value of annual zakat = purchase price * annual zakat rate

= 463 dinars * 2.5% = 11.575 dinars.

Total interest value = 1000 dinars - 463 dinars = 537 dinars (at the maturity date after10 years).

The amount of total interest value should be taken out as stated.

Example 2: Khaled bought a Zero-Coupon Bond from the government with a purchase price of (1000) dinars, the bond will be retrieved after (10) years, if we consider the annual interest rate for this bond to be (8%), calculate the value of annual zakat on this bond and the interest rate received to be taken out.

Solution:

In order to calculate the value of annual zakat for such bonds we need to know the original (purchase price) amount paid by Khaled at the time he bought the bond, to do this we will use the previous stated equation:

$$PP = \frac{FP}{(1+I)^N}$$

Where (FP) is the future price (selling price) and (I) is the interest rate and (N) is the number of years, so

$$PP = \frac{1000}{(1+.08)^{10}} = \frac{1000}{(1.08)^{10}} = \frac{1000}{2.1589} = 463.193 \text{ dinars}$$

So,

Annual zakat value = purchase price (PP) * annual zakat rate

= 463.193 * 2.5% = 11.580 dinars.

Total interest value (after 10 years) = selling price – purchase price

= 1000 dinars – 463.193 dinars = 536.807 dinars

Third: Accreting or Step-up Bonds and Calculating their zakat:

The method of calculating Zakat of this type of bond is the same method of calculating the first type of bond (conventional bonds) as each time period is considered as a separate bond. The following examples illustrate the method of calculating Step-up bonds zakat:

Example 1: consider that the nominal value of a bond is (1000) dinars, and the annual interest value at (7%) for the first five years, then the annual interest rate will be (8%) for the second five years, calculate the value of total zakat for ten years for this bond and the interest rate received to be taken out (ten years later).

Solution:

Purchase price = nominal value = (1000) dinars

The value of annual zakat = purchase price * annual zakat rate

= 1000 dinars * 2.5% = 25 dinars

Value of zakat after (10) years = annual zakat value * number of years

= 25 dinars * 10 years = 250 dinars.

Interest value for the first (5) years:

Annual interest value = 1000 dinars * 7% = 70 dinars per year

Interest value for the following (5) years:

Annual interest value = 1000 dinars * 8% = 80 dinars per year

Total interest = interest for the first (5) years + interest for the next 5 years

= (70 dinars * 5 years) + (80 dinars * 5 years) = 750 dinars

This total interest of (750) dinars should be taken out.

Example 2: consider that the nominal value of a bond is (1000) dinars, and the annual interest value at (7%) which is paid every (6) months for the first three years, then the annual interest rate will be (6%) for the second fourth years, calculate the value of total zakat for this bond, and the interest rate received to be taken out (seven years later).

Solution:

Purchase price = nominal value = (1000) dinars

The value of annual zakat = purchase price * annual zakat rate

= 1000 dinars * 2.5% = 25 dinars

Value of zakat after (7) years = annual zakat value * number of years

= 25 dinars * 7 years = 175 dinars.

To calculate the interest value for (7) years:

Interest value (for first 3 years) = 1000 dinars * 7% * 3 years = 210 dinars.

Interest value (for the second 4 years) =

1000 dinars * 6% * 4 years = 240 dinars.

Total interest = interest for the first (3) years + interest for the next 4 years

= (210 dinars) + (240 dinars) = 450 dinars

This total interest of (450) dinars should be taken out.

Example 3: consider that the nominal value of a bond is (3000) dinars, and the annual interest value is paid every (6) months according to the following:

- Interest rate of (8%) yearly for the first five years of the bond life.
- Interest rate of (8.5%) yearly for the second five years of the bond life.
- Interest rate of (8.75%) yearly for the third five years of the bond life.

calculate the value of total zakat for this bond, and the interest rate received to be taken out, for each of the following cases:

1. After (7) years.
2. After (8) years and (9) months.
3. After (12) years and (4) months.

Solution:

Purchase price = nominal value = (3000) dinars

The value of annual zakat = purchase price * annual zakat rate

= 3000 dinars * 2.5% = 75 dinars

1. Calculating Zakat value and interest rate received after (7) years:

Value of zakat for (7) years = annual zakat value * number of years

= 75 dinars * 7 years = 525 dinars.

Interest value (for first 5 years) = 3000 dinars * 8% * 5 years = 1200 dinars.

Interest value (for following two years) = 3000 dinars * 8.5% * 2 years = 510 dinars.

Total interest value for the first (7) years = 1200 + 510 = 1710 dinars

2. Calculating Zakat value and interest rate received after (8) years and (9) months:

Value of zakat for (8) years = annual zakat value * number of years

= 75 dinars * 8 years = 600 dinars.

Interest value (for first 5 years) = 3000 dinars * 8% * 5 years = 1200 dinars.

Interest value (for following 3 years and 6 months) = 3000 dinars * 8.5% * 3.5 years = 892.5 dinars.

Total interest value for the first (8) years = 1200 + 892.5 = 2092.5 dinars

We consider the next period as 3.5 since the interest is paid every six months,

3. Calculating Zakat value and interest rate received after (12) years and (4) months:

Value of zakat for (12) years = annual zakat value * number of years

= 75 dinars * 12 years = 900 dinars.

Know we calculate total interest value for the (12) years since the months will be dropped (six-month period is not completed) as follows:

Interest value (for first 5 years) = 3000 dinars * 8% * 5 years = 1200 dinars.

Interest value (for following 5 years) = 3000 dinars * 8.5% * 5 years = 1275 dinars.

Interest value (for following 2 years) = 3000 dinars * 8.75% * 2 years = 525 dinars.

Total interest value for the first (12) years = 1200 + 1275 + 525 = 3000 dinars

Fourth: Floating Rate Bonds and Calculating their zakat:

This type of bond is very similar to the previous type. The difference in the description of the bond (the question formula), so we limited it to only two examples.

Example 1: Electricity Company issued bonds for public subscription, where the nominal value of each bond is (5000) dinars. The interest rate was (8%) at the beginning of the issuance to be paid twice a year. When the company reviewed interest rate at the beginning of the second year, it decided to pay the same percentage. The interest rate also remained at (8%) for the third and fourth years after review. At the beginning of the fifth year, the company decided to reduce the interest rate to become (7%) and fixed it for the sixth year at the same percentage. Calculate the value of zakat on this bond and the interest rate received to be taken out, after six years.

Solution:

We sum up interest rates as follows:

- (8%) interest annually for the first four years of the bond time.
- (7%) interest annually for the fifth and sixth years of the bond time.

Purchase price = nominal value = (5000) dinars.

The value of annual zakat = purchase price * annual zakat rate.

= 5000 dinars * 2.5% = 125 dinars

Zakat value for (6) years = annual zakat value * number of years

= 125 dinars * 6 years = 750 dinars

Interest calculation for (6) years:

Interest value for the first 4 years = 5000 dinars * 8% * 4 years = 1600 dinars

Interest value for the following two years = 5000 dinars * 7% * 2 years = 700 dinars

Total interest value = interest for the first 4 years + interest for the following two years

= 1600 + 700 = 2300 dinars.

Example 2: The Water Company issued bonds for public subscription, where the nominal value of each bond is (2000) dinars. The interest rate was (6%) at the beginning of the issuance to be paid twice a year. When the company reviewed interest rate at the beginning of the second year, it decided to increase the interest rate to be (6.5%). The company, after reviewing, also decided to increase the interest rate the third at (7%) for the third and fourth years of the bond lifetime. Calculate the value of zakat on this bond and the interest rate received to be taken out, after three and a half years.

Solution:

We sum up interest rates as follows:

- (6%) interest annually for the first year of the bond time.
- (6.5%) interest annually for the second year of the bond time.
- (7%) interest annually for the third and fourth years of the bond time.

Purchase price = nominal value = (2000) dinars.

The value of annual zakat = purchase price * annual zakat rate.

= 2000 dinars * 2.5% = 50 dinars

Zakat value for (3) years = annual zakat value * number of years

= 50 dinars * 3 years = 150 dinars

And for the half year no zakat as zakat is paid annually.

Interest calculation for (3.5) years:

Interest value for the first year = 2000 dinars * 6% * 1 year = 120 dinars

Interest value for the second year = 2000 dinars * 6.5% * 1 year = 130 dinars.

Interest value for the next period (1.5 years) = 2000 dinars * 7% * 1.5 year = 210 dinars.

Total interest value = interest for first year + interest for second year + Interest for the following 1.5 years

= 120 + 130 + 210= 460 dinars.

6. Conclusion and recommendations:

6.1 Results

The most important results are:

The most important research results are:

1. There are several types of bonds that vary depending on their type.
2. Bonds are often acknowledged debts, so zakat is obligatory on them, and the jurists have opinions at the time of their performance, whether they are paid immediately or upon collecting them.
3. The obligation of zakat on the creditor if the even if the debtor is penniless or does not acknowledge the debt and there is no evidence for the creditor, he pays zakat of it for one year after receiving it.
4. Zakat is due on the value of the original bond; Because it has material value, it is a financial debt owed by its issuers in favor of its owners, and the provisions of zakat on money apply to it.
5. As for the interest in bonds, there is no zakat on them, and they are returned to their owners or distributed to the poor and needy.
6. The prohibition of dealing in bonds does not preclude the existence of the reason for zakat: which is the full ownership of a growing quorum, even if it is an estimate.
7. introducing mathematical equations and calculating both usury interests (Riba) value to be taken out by Muslim, and the way of calculating zakat for each type of bond.

6.2 Recommendations

As for recommendations, the researcher proposes the following recommendations:

1. Expansion in practical application to calculate the zakat of modern funds such as zakat of stocks.

2. To develop and use computer software to calculate zakat of each type of money that is subject to zakat.

Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

References:

[1] Ibn Abidin. Muḥammad Amin, *Ḥashiyat Radd al-Muḥtar ʻalá al-Durr al-Mukhtar Sharḥ Tanwir al-Abṣar*, Dar al-Fikr, Beirut: edition 3, Vol. 2, p. 334, (1966).

[2] Anis. Ibrahim, Muntaṣir. 'Abd al-Ḥalim, al-Swalḥy. 'Aṭiyah, Aḥmad. Muḥammad Khalaf Allah, *al-Mu'jam al-Wasiṭ*, Maktabat al-Shuruq al-Dawliyah, edition 4, Bab Zakka, p. 396, (2004).

[3] Al-Asqalani. Al-Imam Aḥmad Ibn ʻAli Ibn Ḥajar, *Fatḥ al-Bari Sharḥ Ṣaḥiḥ al-Imam Abi Abdallah Muḥammad Ibn Isma'il al-Bukhari*, al-Maktabah al-Salafiyah, Cariro: edition 1, Vol. 3, p. 266, (1959).

[4] Al-Baqmi. Ṣaliḥ ibn Zabin al-Marzuqi, *Sharikat al-Musahamah fi al-Niẓam al-Sa'udi*, Jami'at Umm al-Qura, Kulliyat al-Shari'ah wa-al-Dirasat al-Islamiyah, Riyadh: p. 395, (1986).

[5] Al-Bukhari. Al-Imam Abi Abdallah Muhammad Ibn Ismail, *Sahih al-Bukhari*, Dar Ibn Kathir, Beirut: edition 1, Kitab al-Iman, Hadith Raqm 8, p. 12, (2002).

[6] Choudhry. Moorad, *An Introduction to Bond Markets*, John Wiley & Sons, New York: edition 3, (2006).

[7] Choudhry. Moorad, *The Bond and Money Markets: Strategy Trading Analysis*, Butterworth-Heinemann, United Kingdom: edition 1, (2001).

[8] Council of the International Islamic Fiqh Academy. Sixth Session, *Resolution No. 60 (6/11),*https://iifa-aifi.org/ar/1813.html , *last accessed* Feb. 2022, (1990),

[9] Fabozzi. Frank J., *Bond Markets: Analysis and Strategies*, Prentice Hall, United States: edition 4, (1999).

[10] Fabozzi. Frank J., Drake. Pamela Peterson, *Finance: capital markets, financial management, and investment management*. John Wiley & Sons, New Jersey: edition 1, (2009).

[11] Faerber. Esme, *All About Bonds, Bonds Mutual, Funds and Bond ETFs*, McGrow Hill, United States: edition 3, (2008).

[12] FINRA. Financial Industry Regulatory Authority, *Type of Investments*, https://www.finra.org/investors/learn-to-invest/types-investments/bonds , accessed Feb. 2022, (2022).

[13] Hadi. Walid, *Uṣul Dabṭ al-Mu'amalat al-Mu'aṣirah*, Markaz al-Kitab lil-Nashr, Cairo: edition 1, p. 202, (2011).

[14] Al-Ḥaṭṭab. Abu abdallah Muḥammad ibn Muḥammad ibn 'Abd al-Raḥman al-Maliki al-Maghribi, *Mawahib al-Jalil fi Sharḥ Mukhtaṣar al-Shaykh Khalil*, Dar al-Riḍwan lil-Nashr, Amman: edition 1, Vol. 3, p. 1, (2010).

[15] Al-Ḥijjawi. Sharaf al-Din Abu al-Naja Musa ibn Aḥmad al-Maqdisi, *al-Iqna' fi Fiqh al-Imam Aḥmad Ibn Ḥanbal*, Dar al-Ma'rifah, Cairo: edition 1, Vol. 1, p. 242, (1978).

[16] Al-Ḥulw, ʻAbd al-Raḥman, *Ta'qib Awradahu ʻala' Baḥth fi Suwar Zakat ʻAruḍ al-Tijarah al-Mu'aṣirah*, al-Nadwah al-Sabiʻah li-Qaḍaya al-Zakah al-Mu'aṣirah, Kuwait: (1997).

[17] Ibn Kathir. al-Ḥafiẓ Abi al-Fida' Isma'il ibn 'Umar al-Qurashi al-Dimashqi, *Tafsir al-Qur'an al-ʻAẓim*, Dar Ibn Ḥazm, Beirut: edition 1, p. 1784, (2000).

[18] Al-Khalil. Ahmad Ibn Muhammad, *al-As'hum wa al-Sanadat wa Aḥkamuha fi al-Fiqh al-Islami*, Dar Ibn al-Jawzi, Dammam: edition 2, (2005).

[19] Al-Manaya. Abdullah Ibn Sulayman, *Zakat al-As'hum wa-al-Sanadat wa 'Idhwnat al-Khizanah*, Kuwait: Eleventh Symposium on Contemporary Zakat Issues, (2001).

[20] Ibn Manẓur. Muḥammad Ibn Mukarram ibn ʻAli al-Anṣari, *Lisan al-ʻArab*, Dar al-Ma'arif, Cairo: edition 1, (1980).

[21] Al-Mardawi. Ala' al-Din Ali ibn Sulayman ibn Aḥmad ibn Muḥammad, *al-Inṣaf fi Ma'rifat al-Rajiḥ min al-Khilaf*, Maṭba'at al-Sunnah al-Muḥammadiyah, Cairo: edition1, Vol. 3, p. 21, (1956).

[22] Al-Maṣri. Rafiq Yunus, *Zakat ʻAruḍ al-Tijarah*, al-Nadwah al-Sabi'ah li-Qaḍaya al-Zakah al-Mu'aṣirah, Kuwait:

p.136, (1997).

[23] Al-Mawardi. Abu al-Ḥasan 'Ali ibn Muḥammad ibn Ḥabīb al-Baṣri, *al-Ḥawi al-kabir fi Fiqh Madhhab al-Imam al-Shafi'i*, Dar al-Kutub al-'Ilmīyah, Beirut: edition 1, Vol. 3, p. 71, (1994).

[24] Ibn Mufliḥ. Ibrahim ibn Muḥammad ibn AbdAllah, *al-Mubdi' fi Sharḥ al-Muqni'*, Dar al-Kutub al-'Ilmiyah, Beirut: edition 1, Vol. 2, p. 298, (1997).

[25] Al-Nawawi. Al-Imam Abi Zakariya Muḥyi al-Din, *Kitab al-Majmu' Sharḥ al-Muhadhdhab lil-Shirazi*, Maktabat al-Irshad, Istanbul: edition 1, Vol. 5, p. 295, (1980)

[26] Al-Nisaburi. Abu al-Ḥusayn Muslim ibn al-Ḥajjaj al-Qushayri, *Ṣaḥiḥ Muslim*, Dar al-Kutub al-'Ilmiyah, Beirut: edition 1, (1991).

[27] Al-Qaḥṭani. Sa'id ibn Ali ibn Wahf, *al-Zakah fi al-Islam fī Daw' al-Kitab wa-al-Sunnah*, Markaz al-Da'wah wa-al-Irshad: Riyadh: Alqṣb, edition 3, Vol. 3, p. 205, (2010).

[28] Al-Qannaṣ. Muḥammad ibn abdallah, *Zakat al-As'hum wa al-Sanadat*, Majallat al-Shari'ah, Jami'at al-Qaṣim, Riyadh: Vol. 2, No. 2, p. 577, (2009).

[29] Al-Qaraḍawi. Yusuf, *Fiqh Az Zakat*, Maktabat Wihba, Doha, Qatar: edition 25, p. 495-496, (2006).

[30] Al-Qaraḍawi. Yusuf, *Fiqh al-zakah – Dirasah Muqaranah l'ḥkamha wa-Falsafatiha fi Daw' al-Qur'an wa al-Sunnah*, Maktabat Wahbah, Doha: Qatar, edition 1, p. 527, (2006).

[31] Ibn Qudamah, Abu Muḥammad AbdAllah ibn Aḥmad ibn Muḥammad, *al-Mughni*, Maktabat al-Qahirah, Cairo: edition 1, Vol. 4, p. 270, (1969).

[32] Al-Qurṭubi. Abi AabdAllah Muḥammad ibn Aḥmad, *al-Jami' li-Aḥkam al-Qur'an wa-Almbyn li-ma Taḍammanahu min al-Sunnah wa' āy al-Furqan*, Mu'assasat al-Risalah, Beirut: edition1, Vol. 15, p. 179, (2006).

[33] Raḍwan. Samir Abd-al-Ḥamid, *Aswaq al-Awraq al-Maliyah*, al-Ma'had al-Alami lil-Fikr al-Islami, Dirasat fi al-Iqtiṣad al-Islami, edition 1, p. 293-296, (1996).

[34] Al-Sadlan. Ṣaliḥ, *Zakat al-As'hum wa al-sanadat*, al-Dar al-'Alamiyah lil-Kitab al-Islami, edition 1, p. 15, (1989).

[35] Al-Sharif. Muḥammad Abd al-Ghaffar, *Aḥkam al-Suq al-Maliyah*, Majallat Majma' al-Fiqh al-Islami, Vol. 6, p. 963-969, (1990).

[36] Shihatah. Husayn Husyan, (2018), *Kayfa Tahsb Zakat Malik*, Mufakeroon Addawlyoon, Cairo: (2018).

[37] Shubayr. Muḥammad Uthman, *al-Mu'amalat al-Maliyah al-Mu'aṣirah fi al-Fiqh al-Islami*, Dar al-Nafa'is lil-Nashr wa-al-Tawzi, Amman: edition 6, p. 216-219, (2007).

[38] Al-Ṭabari. Muḥammad Ibn Jarir ibn Yazīd, *Tafsir al-Ṭabari min Kitabat Jami' al-Bayan 'an Ta'wil āy al-Qur'an*, Mu'assasat al-Risalah, Beirut: edition 1, (1994).

[39] US Securities and Exchange Commission. Glossary: B, https://www.investor.gov/introduction-investing/investing-basics/glossary/b , accessed Feb. 2022, (2022).

[40] US Securities and Exchange Commission. Glossary: Issuer, https://www.investor.gov/introduction-investing/investing-basics/glossary/issuer , accessed Feb. 2022, (2022).

[41] Van der Wansem, Patrick B. G.; Jessen, Lars; Rivetti, Diego. *Issuing International Bonds: A Guidance Note*. MTI Global Practice Discussion Paper; No. 13. World Bank Group, https://openknowledge.worldbank.org/handle/10986/31569, Washington: p. 11-32, (2019).

[42] Ibn Zakariya. Abi al-Ḥusayn Aḥmad Ibn Faris, *Mu'jam Maqayis al-Lughah*, Dar al-Fikr, Beirut: edition 1, Vol. 3, p. 17, (1979).

[43] Al-Zayla'i. 'Uthman ibn 'Ali al-Ḥanafi, *Tabyin al-Haqa'iq Sharḥ Kanz al-Daqa'iq*, Maktabat Amdadyh Maltan, Pakistan: edition1, Vol. 1, p. 251, (1897).

[44] Al-Zuḥayli. Wahbah Muṣṭafa, *al-Mu'amalat al-Maliyah al-Mu'aṣirah*, Dar al-Fikr al-Mu'aṣir, Damascus: edition 1, p. 363, (2002).

[45] Al-Zuhayli. Wahbah Muṣṭafa, *Zakat al-As'hum wa-al-Sanadat wa 'Idhwnat al-Khizanah*, Kuwait: Eleventh Symposium on Contemporary Zakat Issues, (2001)