

Research Article

How to Account for Bond Transactions?

Annisa Audina Purba¹, Aditya Mulia Sembiring², Iskandar Muda³

Abstract

The purpose of this paper is to assist investors in viewing investment products other than stocks, namely bonds. so that investors will be able to sort out investment products that suit them and the current market conditions. Types of this research qualitative methods. This study was conducted by collecting literature on the capital market, bonds, stock exchanges, and various opinions on bonds, both in Indonesia and other countries. This study provides various information about bonds so that we are able to decide on investment in bond products. Bonds are a form of acknowledgment of debt from the issuer of the bond (issuer) to the bond holder where the bond issuer is obliged to pay the coupon and principal value (par) of the bond in accordance with the time specified in the bond. The term of these bonds is generally longer than loans obtained from banks so that for issuers who have long-term projects, funding through bond issuance is more suitable.

Keywords: investment products, bond issuance, current market conditions

1. INTRODUCTION

In terms of the investment world, bonds are one of the products offered so that a person/business entity can invest. Indeed, we can interpret investment as how we can manage our money/our business funds in order to produce/achieve the financial goals we want. For example, there are various crises/unstable world economy, then one of the ways to secure our financial line/excess money is with investment products and the best at that time was bonds. Although there are many other investment products such as interest rates, mutual funds, stocks, etc. In addition, this investment is one of our efforts to help build the economy of a country. In Indonesia, there are 2 bonds in the capital market, namely government bonds and corporate bonds. and along with the development of the times, many private companies and state-owned enterprises in terms of adding business capital have an alternative to making bonds (debt securities). Infrastructure development which will achieve the vision and mission of a country both in terms of economy and other things. In the private sector, companies will be the driving force of economic activity in a country and will create a good economic wheel. Bonds for bond makers/sellers whose main purpose is for the company/bond seller to have a loan of money from investors with all the existing provisions, such as the payment of a certain value to buyers or investors/creditors which we often call coupons. Coupons are one thing that can make us interested in investing in bond products, one of which is because the interest is consistent (fixed) so it is very safe for investors who do not want their funds to be affected by inflation or market value prices. In addition, bondholders can estimate their profits. and can be used as collateral for bank loans or traded at varying prices. Bonds, if we look at the issuer of bonds, there are 4 types, namely the issuer of the Central Government, Regional Government, State-Owned Enterprises, and Private Companies. one of them is because the interest is consistent (fixed) so it is very safe for investors who do not want their funds to be affected by inflation and market value prices. In addition, bondholders can estimate their profits and can be used as collateral for bank loans or traded at varying prices. Bonds, if we look at the issuer of bonds, there are 4 types, namely the issuer of the Central

^{1,2,3} University of Sumatera Utara, Medan, Indonesia

Government, Regional Government, State-Owned Enterprises, and Private Companies. one of them is because the interest is consistent (fixed) so it is very safe for investors who do not want their funds to be affected by inflation and market value prices. In addition, bondholders can estimate their profits and can be used as collateral for bank loans or traded at varying prices. Bonds, if we look at the issuer of bonds, there are 4 types, namely the issuer of the Central Government, Regional Government, State-Owned Enterprises, and Private Companies.

According to Zumir (2012), debt bonds issued by the government or companies to obtain funds. The issuer will usually pay a certain amount of interest or often called a coupon, for example six months later on the maturity date (maturity) the principal debt will be returned to the bond holder. In addition to the various types of bonds, investor interest in bonds in Indonesia is certainly influenced by promising profits. For bondholders, if the company goes into bankruptcy, the funds that have been invested by bondholders will be prioritized to be returned compared to shareholders because bonds are debt securities that must be paid first. However, Another reason bonds are in demand in Indonesia is the return or yield obtained by investors in the bond market. Fixed income obtained from the return on investment in bonds is one of the reasons why bonds are quite attractive in Indonesia. Generally, investors will also choose securities that are able to provide certainty with a high bond return value so as to provide benefits in the future. Although unable to compete with government bonds, bonds issued by corporations also experienced an upward trend from year to year. The sharpest increase occurred in 2010 after the economic crisis in 2008 and 2009. In 2010 the outstanding value of corporate bonds was IDR 115,347.66 billion with a trading volume of IDR 103.771. Regardless of government or corporate bonds, the rising number indicates that people are very interested in investing in bonds. As government bonds, government bonds offer other advantages over corporate bonds. As discussed earlier, government bonds have low risk and are even considered risk free. This is an opportunity for the government to increase efforts to raise funds through the bond market.

Together with bank loans, corporate bonds make up more than half of a corporation's capital structure. To date, the US corporate bond market amounts to \$10 trillion, accounting for about 60 percent of non-financial corporate debt financing (Contessi et al., 2013). Arguably, the market is a formidable force in influencing corporate policy. The direction of impact, however, may be suboptimal. Both shareholders and bondholders are the main stakeholders who want the company's performance. However, the goals and interests of those who determine a company's policy on risk taking are often different. This conflict of interest can lead to bondholder intervention that is inconsistent with maximizing shareholder wealth value (Dewatripont and Tirole, 1994; Aghion and Bolton,

Shareholders' willingness to take risks can be justified by rewards such as their call. Bondholders, on the other hand, are constrained from the upside potential and, therefore, are generally skeptical of higher risk. Typically, bondholders restrain the company from taking excessive risk by establishing an ex ante agreement in bond indentures. However, within the framework of Grossman and Hart (1986), the ex post contract was incomplete which resulted in modification and renegotiation. Unlike private debt such as bank loans where renegotiation is frequent, rewriting of public debt contracts such as bonds is never achieved in practice due to certain regulatory frictions (Gertner and Scharfstein, 1991). Therefore, when bondholders are dissatisfied with the way the company is run,

2. LITERATURE REVIEW

The Indonesian capital market is engaged in stocks and bonds, where shares are managed by the Jakarta Stock Exchange (JSX). Meanwhile, bonds are managed by the Surabaya Stock Exchange (BES) (Leli, 2017). Kasmir, (2005), states that bonds are debt instruments for companies that want to obtain capital, the profits from buying bonds are realized in the form of coupons. Sudarsono, (2004) also said that bonds are debt securities from an institution or company that are sold to investors to get fresh funds. Investors will get a set return in the form of a certain interest rate that varies greatly depending on the strength of the issuer's business. This interest rate can be paid on a fixed or tiered basis.

How to Account for Bond Transactions?

Bonds, on the other hand, will remain as a safe haven for the stock market when the crisis worsens. The stock market is sensitive enough to react to any changes in the market, while bonds are rather stable or influenced indirectly by forces because they have a bulge on asset returns and guarantee liquidity (Siahaan and Robiyanto, 2021) Stocks and bonds are the two most popular securities in Indonesia. Capital market. Stocks and bonds have differences, seen from the understanding and rights of the securities holders. Shares are securities that are investment in nature, meaning that if someone buys a share of a company, that person has invested in the company, otherwise bonds are debt securities. This means that if someone buys a bond of a company, then he has lent funds to the company. In the case of liquidation or dissolution of the company, shareholders will get the final shares after the company's assets are sold, while bondholders will have priority over the sale of these assets (Hendy, 2008 and Silalahi et al., 2020).

Bonds are offered to the public through an Initial Public Offering. The party that makes the public offering of bonds is called the issuer. Bond issuers are referred to as debtors or those who receive debt, while investors are creditors or debtors and bondholders. Bonds are classified as long-term debt, so that in the long term, various possibilities can occur to the bond issuer or issuer, for example the company's business experiences a decline so that it loses and eventually the company goes bankrupt or is liquidated, and so on. unexpected events such as economic crises, natural disasters and so on. Therefore, in investing, investors must be careful, this is because in every interaction there must be risks that arise,

A society with a conservative principle that prefers fixed income, then bonds are an option for investing as people with retirement needs. Benefits of interest or coupon given bonds tend to remain. By investing in fixed income instruments, community pension funds will be safer. In addition, the public views bonds as one of the underlying alternatives of public companies or government institutions issuing bonds as an alternative to medium and long term financing such as business expansion, new machinery purchase, new investment or infrastructure development financing, as bond interest rates are lower than the interest rate Bank loans, while the investor side also benefited because it can provide a higher rate of return of bank deposits (Edward, 2007)

Bonds issuers receive loans from bondholders with regulated conditions, both regarding the maturity date of debt repayment, interest paid, amount of repayment and other provisions. Bonds listed on the stock exchange can be traded in the same way as stock transactions. Bond prices are determined by the forces of supply and demand in the market. In bond transactions, investors must pay commission fees to brokers, but are not subject to transaction fees by the stock exchange (Leli, 2017).

Our primary result in this part of empirical analysis is that the bonds market continues to play its traditional role as a hedge for equity market at least on average. however, in times of crisis, corporate bonds of Singapore and Thailand play a strong function as a safe haven. Meanwhile, for government bonds, Singapore government bonds are the only instrument that are able to act as a strong save haven when stock prices drop significantly, COVID-19 crashing the market into a loop, investors in Singapore and Thailand should add more corporate bonds into their portfolios as it is proven to be a strong safe haven. Thus, due to the expected return, investors in Singapore suggested to keep investing in both corporate and government bonds (Siahaan and Robiyanto, 2021) the main problem of bond trading transaction is the contract of trustee. So the author finds a new theory that is the theory of "equilibrium agreement". The theory of the equilibrium agreement is based on achieving a balanced state. The equilibrium word on one side is limited by the will (raised by consideration or favorable circumstances), and on the other hand by the belief (of the ability to) manifest the desired result or result (Pakpahan, 2017). Thailand corporate bond, Singapore corporate bond and Singapore government bond successfully acted as a robust safe haven during the crisis. Overall, the findings implied that corporate bonds and government bonds were able to hedge the risks of market shocks related to COVID-19 pandemic (Siahaan and Robiyanto, 2021) The theory of the equilibrium agreement is based on achieving a balanced state. The equilibrium word on one side is limited by the will (raised by consideration or favorable circumstances), and on the other hand by the belief of the ability to) manifest the desired result or result (Pakpahan, 2017).

Thailand corporate bond, Singapore corporate bond and Singapore government bond successfully acted as a robust safe haven during the crisis. Overall, the findings implied that corporate bonds and government bonds were able to hedge the risks of market shocks related to COVID-19 pandemic (Siahaan and Robiyanto, 2021) The theory of the equilibrium agreement is based on achieving a balanced state. The equilibrium word on one side is limited by the will (raised by consideration or favorable circumstances), and on the other hand by the belief (of the ability to) manifest the desired result or result, The Balancing Theory of this Agreement puts more emphasis on the balance position of the parties because in its journey the form of imbalance is a manifestation of the absence of accepting the wishes of the parties in the agreement that it is based on the action where the existence of one of the higher parties, causing the other party can not do much Which causes the other party to accept or reject the situation. Terms of the Agreement Theory of Equilibrium in order that any exchange that culminates in a fair enrichment, can be viewed as a fair exchange then an achievement must be balanced by contra achievement. Reciprocal exchange is a key concept for the creation of justice (Pakpahan, 2017).

3. METHODS

This study was conducted by collecting literature on the capital market, bonds, stock exchanges, and various opinions on bonds, both in Indonesia and other countries. This study provides various information about bonds so that we are able to decide on investment in bond products.

4. RESULTS AND DISCUSSION

4.1. Result

The issuance of bonds by the Government or other parties is with the main objective of receiving fresh funds, and for investors, bond products will be able to give good sentiment to their wealth, such as with the Covid-19 case when the market was unpredictable, Bonds with a fixed return method (fixed interest) and without any guarantees is one of the most appropriate investment products. Apart from avoiding fluctuations in market value, we are also able to provide positive support to both the government and private companies. There are many yields (calculated profits) on bonds, as nominal yield is the annual coupon interest income paid to bondholders. Singapore is a place for bond investment that investors think is safe, or as Pakpahan (2017) said, government bonds, Singapore govern-ment bonds are the only instrument that are able to act as a strong save haven when stock prices drop significantly. However, some investors still have a fear in terms of investment, this is what makes some people think about being able to be fair to all, both to bond issuers and investors. One that was conveyed was the theory of balance or reciprocal exchange which aims to be fair and balanced. Pakpahan, (2017) stated that the Balancing Theory of this Agreement puts more emphasis on the balance position of the parties because in its journey the form of imbalance is a manifestation of the absence of accepting the wishes of the parties in the agreement that it is based on the action where the existence of one of the higher parties, causing the other party can not do much Terms of the Agreement Theory of Equilibrium in order that any exchange that culminates in a fair enrichment, can be viewed as a fair exchange then an achievement must be balanced by contra achievement. Reciprocal exchange is a key concept for the creation of justice.

4.2. Discussion

Bonds listed on the capital market are coded. This bond code is intended to distinguish one bond from another, for the purpose of searching and organizing data on a computer and to indicate the characteristics of the bond. For example, for the Surabaya Stock Exchange (BES) capital market, bonds are coded 12 characters long. The code for this bond is as follows:

- a) AAAA: the abbreviation of the name of the bond issuing company
- b) BBB : code for the number of bonds issued
- c) CC : interest rate (if it has multiple interest rates) and options derivative.
- d) D : type of bond, namely B (Bonds), C(Convertible Bonds), W(Bonds

How to Account for Bond Transactions?

with warrants), T (Medium Term Notes), Y (Money Market), and M (Miscellaneous).

e) E : type of interest rate, namely F (Fixed Rate), Z (Zero Rate/Discount) and V (Variable can be in the form of Floating Rate, Revenue sharing, fixed and floating rate, etc)

f) FG : Code from scriptless. (Jogiyanto, 2014: 184)

Bond yields are bond income that can be obtained from bond yields and bond interest. Bond calculation analysis to determine the reward for the investigation of bonds can use several yield measures, including:

1. Nominal Yield Dan Current Yield

Nominal yield is the annual coupon interest income paid to bondholders. The coupon interest rate is expressed as a percentage of the face value.

$$\text{Tingkat Kupon} = \frac{\text{Penghasilan Bunga Tahunan}}{\text{Nilai Nominal}}$$

Current Yield is the annual coupon interest income divided by the market price of the bond.

$$\text{Current Yield} = \frac{\text{Penghasilan Bunga Tahunan}}{\text{Harga Pasar Obligasi}}$$

2. Yield To Maturity (YTM)

Yield To Maturity (YTM) is the compound rate of return that investors will return and receive if the bond buyer is at the current market price and holds the bond until maturity. Yield to Maturity is a yield measure that is commonly used because this yield reflects the compounded rate of return expected by investors, if the two assumptions required are met.

3. Yield To Call (YTC)

Yield to call (YTC) is the yield obtained on bonds that can be bought back (callable). This bond allows the issuer to be able to pay off or buy back the bonds that have been issued from the hands of investors who hold the bonds (before maturity). usually bonds that have a great chance to be repaid before maturity are bonds that are sold at a premium price, for example: high coupon bonds and have a market price above par value.

The YTC formula is as follows:

YTC is calculated the same as the YTM calculation, with a note that the par value variable is replaced with call price so that the form of the equation is as follows:

4. Realized (horizon) Yield

Realized (horizon) yield or realized yield is the level of return expected by investors from a bond, if the bond is resold by investors before maturity. In addition, the realized yield (horizon) can be used to estimate the level of return that can be obtained by investors using certain trading strategies. the realized yield formula is as follows:

$$P = \sum_{t=1}^{2h} \frac{Ci/2}{\left(1 + \frac{RY}{2}\right)^t} + \frac{Pf}{\left(1 + \frac{RY}{2}\right)^{2h}}$$

Calculating the realized yield that is close to the same calculation is also used with the YTC and YTM estimates with the following equation:

Table 1. The YTM and YTM Estimates

Yield Size	Utility
Normal Yield	Measuring coupon rate
Current Yield	Measuring current level of income
Yield To Maturity (YTM)	Measuring the expected rate of return if the bond is held until maturity

Yield To Call (YTC)	Measuring the rate of return expected to be repaid (Call) before maturity
Realized (horizon) Yield	Measuring the rate of return

5. CONCLUSION

Bonds are an alternative to meet the company's funding needs and also an alternative for capital owners to place their funds. Bonds are a form of acknowledgment of debt from the issuer of the bond (issuer) to the bond holder where the bond issuer is obliged to pay the coupon and principal value (par) of the bond in accordance with the time specified in the bond. The term of these bonds is generally longer than loans obtained from banks so that for issuers who have long-term projects, funding through bond issuance is more suitable. In addition to the private sector, the government sector also uses bond instruments as an alternative to raising funds to support government performance. Thus the wider community has the opportunity to actively participate in supporting the running of the government in addition to the community benefiting from the coupons that have been set, and many things that we can get in bond products, although the return is quite small, if we compare it with the stock market, bonds with unstable market conditions are a very ideal choice. In addition, by fixing a bond's return, it is able to create comfort and security for investors, in addition, the price changes in value when buying and selling also occurs, and bonds can be used as collateral for disbursement of funds at the bank, this makes bonds quite popular. Singapore is one of the countries where bonds are quite popular because investors feel safe.

REFERENCE

1. Contessi, S., Li, L. and Russ, K. (2013). Bank vs. Bond Financing Over the Business Cycle, *Economic Synopses*, No. 31.
2. Dewatripont, M. and Tirole, J. (1994). A theory of debt and equity: diversity of securities and manager-shareholder congruence. *The Quarterly Journal of Economics*, 109(4). 1027-1054.
3. Edward, (2007). Analysis of Factors Influencing Changes in Bond Prices, Diponogoro University, Semarang
4. Grossman, S.J. and Hart, O.D. (1986). The costs and benefits of ownership: a theory of vertical and lateral integration. *The Journal of Political Economy*. 94(94). 691-719.
5. Gertner, R. and Scharfstein, D. (1991). A theory of workouts and the effects of reorganization law. *The Journal of Finance*. 46(4). 1189-1222.
6. Hendy M. F. (2008). *Capital Market Questions and Answers*, Jakarta. grammar.
7. Cashmere. (2005). Banks and Other Financial Institutions. Jakarta : PT. King Grafindo Persada.
8. Leli, M. (2017). Sharia Bond Transactions (Overview of Bond Transactions According to Sharia Principles), *Sharia Scientific Journal*. 16(1). 53 – 63.
9. Pakpahan, E.F. (2017). Reconstruction Of Bonds Arrangements In Indonesian Capital Market Justice-Based Value. *International Journal of Law Reconstruction*. I(1). 36-54.
10. Siahaan, G. E. D., and Robiyanto. (2021). Bond As A Safe Haven During Market Crash: Examination Of Covid-19 Pandemic In Asean-5. *JMK*, 23(1). 1–9.
11. Silalahi, A. D., (2020). The Effect of Financial Information On Investment Decisions Of Individual Investors In Indonesia Stock Exchange. *Junior Scientific Researcher*, 6(1), 41-47. https://www.jsrpublishing.com/userfiles/files/archive_pages/96/Article._Alistraja._JSR_Journal_Vol.VI_No.2_2020.pdf
12. Sudarsono, H. (2004). *Islamic Banks and Financial Institutions Description and Illustration*. Yogyakarta: Eonesia
13. Zumir, Z (2012). *Bond Portfolio*. Jakarta: Salemba Empat