

## CHAPTER I

### INTRODUCTION

#### 1.1 Research Background

A positive macroeconomic condition will affect investment's climate on the country. The government regulation in monetary policies is important for market condition because the policies will lure many investors to enter the market and invest their funds in form of stock, bond, mutual fund, and other derivative instrument in capital market.

Investment in new plant and equipment requires money- often a lot of money. To cover the cost of investment, they need to raise more cash from investors. The cash may produce by selling additional shares of stock or by borrowing money in the bank. If the company needs cash only for short term, they may borrow the cash from the bank, but if it is needed for long-term investments, company will issue a bond.

Bonds as long-term investment always have some risk that a company or municipality will not be able to come up with the cash to repay its bonds, but investors in government issues can be confident that the promised payments will be made in full and on time. The interest rates on government bonds are benchmarks for all interest rates. Companies can't borrow at the same low interest rate as governments, but when government rates shifted upward or downward, corporate rates follow more or less proportionally (Brealey, Myers, & Allen, 2008).

There are some advantages for corporate in using bonds (ICMA, 2013): (1) corporate bonds offer investors relatively secure term investment and predictable cash flow – regular income payments through the life of the bond, together with the return of the initial capital at maturity, or the early realization of market value at sale in the secondary market if the investor's cash flow needs change (2) corporate bonds issuance promote greater availability of information for investors and informed assessment of credit risk (3) good matching to cash flow needs.

For investors, when buying bonds, they will obtain fixed interest / coupon periodically every 3 months, 6 months, or 1 year until maturity date. In maturity date, the issuer has to pay the bonds based on the par value of the bonds. One important thing should be known as an individual investor is huge of capital needs to be used for investment in bonds. Bonds usually traded in units of 1 billion Rupiah with minimum book-entry transfer 50 million Rupiah. Factors that affect the change of bonds price is relatively different with factors affect the change of stock price. Bond has specific factors that affect the change of bonds price, these factors are term to maturity and coupon rate. Beside term to maturity and coupon rate, SBI rate as tool to control the market operation and banking system is also effect the yield/return of bonds.

Low interest rate of SBI gives investor few choices of investment alternatives. This condition cause people prefer to choose bond as alternative of investment. When the interest rate decreased, bond issuer will offer lower yield which make the price of bond increases. Interest rate is benchmark of bond price. Investor expectation of interest rate is the main moving power in stock market.

In first quarter of 2009, interest rate of SBI shifted downwards 1 percent and the price of bond shifted upwards to 9.86 percent. Then in the fourth quarter, interest rate of SBI decreased 1.75 percent, but the price of bond also decreases 2.46 percent. This condition showed inconsistency relationship between interest rate of SBI and bond. This fact is contrary to Ibrahim (2008) who found the raise of interest rate increases bond yield and cause lower bond's price. The result of the research is different compare to Thompson and Vaz (1990) which found that interest rate has no significant impact to the bond yield.

Bonds with shorter duration are less sensitive on interest-rate changes compared with bonds with longer duration (Ivanovskia, Stojanovskib, & Ivanovskac, 2013). Investor prefer to bond with shorter duration because it has lower risk. But lower risk means investor will get lower yield compared to the bond that has higher risk.

Kempf & Uhrig-Homburg (2000) stated beside liquidity, the price of bond depends on coupon rate. Higher the coupon rate, higher the yield. High coupon rate cause the investor obtains higher benefits. When the rate of coupon is high, the price change of bond also increases. The effect of coupon rate to the price change of bond is positive. (Donald H, 1972) The coupon rate of return would make the firm equally well-off at the end of the time horizon of the investment whether it pursued the proposed project or invested identical amounts at the same time and coupon rate in bonds maturing when the projects ends.

Debt securities especially issued by public offering have to be rated by rating agencies listed in Bapepam (OJK) since 1995. (Fabozzi, 2000) Bond rating is

important to estimate the ability of the issuer to live up to its future contractual obligations. High and low the risk rate of bond will affect the bond rating of a company. Two biggest rating companies in Indonesia are (1) PEFINDO Ltd (Pemeringkat Efek Indonesia) and (2) Kasnic Credit Rating Indonesia Ltd (Moody's Indonesia).

The sluggish economic growth in US and Europe has a large impact on most part of Indonesia economy during 2009-2013. The collapse of Lehman Brothers in September 2008 has caused a worldwide financial crisis which in 2009 developed into global economic downturn. The flow effects of quantitative easing have a large impact to the emerging markets. Duca, Nicoletti and Martinez (2014) found that the results of US Quantitative Easing had a large impact on corporate bond issuance, especially in emerging markets, and that flow effects (i.e. portfolio rebalancing) were the main transmission channel of QE. Indonesia's government bond yield curve shifted downwards in June 2009 from end of December 2008 levels for most maturities under 15 years. The downward shift reflects improving confidence in the economy as inflationary pressures continued to ease and macroeconomic conditions have improved. Easing inflationary pressures and improving macroeconomic conditions caused Bank Indonesia to lower its benchmark rate to a record low of 6.5 percent. The central bank has reduced its key rate by a total of 275 basis points year-to-date.

During 2009-2013 the bond fund raised in primary market was fluctuated. Based on the data from Indonesia DMO, KSEI, on 2012, issuance of both

government and corporate bonds raised Rp 228.4 trillion from primary debt market, or 32.9 percent higher than previous year.

**Table 1.1**  
**Indonesia Bonds Fund Raised in Primary Market (trillion Rp)**

Issuer	2009		2010		2011		2012	
	Value	%	Value	%	Value	%	Value	%
<b>Government</b>	143.9	82.9	91.1	71.79	126.7	73.49	159.1	69.66
<b>Corporate</b>	29.7	17.1	35.8	28.21	45.7	26.51	69.3	30.34
<b>Total</b>	173.6		126.9		172.4		228.4	

Source: Indonesia DMO, KSEI

From the total issuance, 69.66 percent was coming from government issuance, and the rest 30.34 percent was raised from corporate sectors. There are some factors caused the rise of corporate issuance in 2012, (1) lower interest rate and (2) stable inflation. In fourth quarter of 2012, interest rate was in level of 5.75 percent. Lower interest rate pushed issuers to find source of funding in bond market rather than in bank institutions. Lower yield of SUN also encouraged impairment of coupon rate of corporate bond. The impairment of SUN's yield caused the yield of corporate bond was considered more attractive. This condition provided benefits for issuers or corporate to issue bonds.

Based on the table 1.1, corporate bonds outstanding value grew significantly in 2011 to IDR146.969 billion. The number of new issuance of bonds throughout 2012 amounted to 68, an increase from the 46 issuances the year before.

**Table 1.2**  
**Corporate Bond**

	2009	2010	2011	2012	Q1-2013
<b>Listed Issuer</b>	86	83	96	99	91
<b>Number of Listed Bond (Series)</b>	223	242	299	347	354
<b>Outstanding Value (Rp Billion)</b>	88.452	114.817	146.969	187.461	196.435
<b>New Issues</b>					
<b>Issuer</b>	29	24	36	51	12
<b>Bond Issuance</b>	37	34	46	68	34
<b>Outstanding (Rp Billion)</b>	29.684	38.381	45.928	69.256	69.256

Source: www.idx.co.id

The values of these issuances were totaled to Rp 69.26 billion and US\$20 million, and were issued by 51 issuers. The increase in value of corporate listings in 2012 constituted the highest value of bond listings compared to the previous year and 2013.

**Table 1.3**  
**Top 10 Outstanding by Business Sector (2012)**

No	Business Sector	Outstanding (billion Rp)	% Total
1	Banking	75.121	34.9
2	Financial Company	58.512	27.2
3	Infrastructure	20.868	9.7
4	Telecommunications	15.103	7.0
5	Consumer Goods	8.424	3.9
6	Property & Construction	8.008	3.7
7	Mining Oil & Natural Gas	7.840	3.6
8	Wood Based and Agro Industries	5.086	2.4
9	Automotive, Related Industry	2.439	1.1
10	Poultry	2.300	1.1
Total Top 10		203.701	94.6

Source : Indonesia Bond Market Directory 2011

Over the year of 2012, multifinance sector was dominated corporate bonds issued. Financial sector like banking and multifinance issued numerous bonds

because encouraged by the needs of fund and refinancing. During this year, Indonesia economic growth remained solid driven by stable domestic demand and increased in investment. Declining yield that occurred throughout 2012 pushed down the cost of funds for a new bond issuance in both government and corporate bonds. On 2012, issuance of both government and corporate bonds collectively raised Rp 228.4 trillion from primary debt market, 32.9 percent higher than the previous year. From the total issuance, 69.7 percent was coming from government issuance, while the 30.3 percent rest was raised by corporate sectors. The issuance of corporate bond increase 53.7 percent from Rp 45.1 trillion into Rp 69.3 trillion on 2012.

Local institution investors prefer to choose corporate bond as one of their portfolio of investment because providing higher return compared to other financial instrument. Annual return of corporate bond trading reached 16.3 percent higher than return of bank deposit rate that only reached 6.1 percent. The reason in choosing bond as the topic of this research is because bond issuance is one of the sources of funding alternative for domestic companies. The trend of bond market in Indonesia in recent years is positive, even though many risks faced. Indonesia bond market grew 6.8 percent in the end of fourth quarter of 2013. Government interest rate, term to maturity and coupon rate affect the bond return/yield spreads. Thus, this study will analyze about the relationship between government interest rate, term to maturity and coupon rate to the corporate yield spread in Indonesia for period 2009 up to 2013.

## **1.2 Problem Statement**

After reviewing the described background, the author formulated the problem in this research as follows:

- 1.2.1 Is there cointegration between SBI rate corporate and yield spreads both in short-run and long-run relationship.
- 1.2.2 Is there cointegration between time to maturity and yield spreads both in short-run and long-run relationship.
- 1.2.3 Is there cointegration between coupon rate and yield spreads both in short-run and long-run relationship.

## **1.3 Scope of the Research**

In order to limit the discussion on the issues and acquire clearer direction for researcher in the research, some boundaries are made on the following issues:

- 1.3.1 The corporate bonds selected for this research is corporate bonds listed in IDX period 2009-2013.
- 1.3.2 Bond yield spread is the difference between corporate bond yield and 10-year government yield.
- 1.3.3 Corporate bond is under maturity date in order to find data of prevailing price.
- 1.3.4 Coupon is fixed rate.
- 1.3.5 Corporate foreign currency is excluded from the research.
- 1.3.6 Corporate bonds rating has been issued by PEFINDO



#### **1.4 Originality of Writing**

The author compiled this research on his own except where otherwise indicated. All writing, analysis, and conclusion in this research are conducted and explored by the author.

#### **1.5 Objective of the Research**

Based on the problem statement, the objectives of the research are:

- 1.2.4 To analyze whether there is cointegration between SBI rate corporate and yield spreads both in short-run and long-run relationship.
- 1.2.5 To analyze whether there is cointegration between time to maturity and yield spreads both in short-run and long-run relationship.
- 1.2.6 To analyze whether there is cointegration between coupon rate and yield spreads both in short-run and long-run relationship.

#### **1.6 Benefit of the Research**

Several benefits of this research are:

##### **1.6.1 The investors**

The research will encourage investors to learn more about bonds and concern other things on investing besides return for optimal result.

##### **1.6.2 The author**

This research will give more education for the author especially for long-run or short-run equilibrium relationship between Yield Spreads and some factors that may affect it.

##### **1.6.3 The other researchers**

Other researchers can use this research as the reference for further research and try different things that the author had not included in this research.

#### 1.6.4 The readers

Research will receive more knowledge on capital market by reading this research especially corporate yield spread.

### 1.7 Writing Systematic

#### CHAPTER I INTRODUCTION

This chapter consists of background of the research, problem statement, scope of the research, originality of writing, objective of the research, benefit of the research, and writing systematic.

#### CHAPTER II LITERATURE REVIEW

This chapter consists of the theoretical background, previous research, and hypothesis development.

#### CHAPTER III RESEARCH METHODOLOGY

This chapter describes sample used, data and data gathering, variable and variable measurement, and method of analysis and hypothesis testing.

#### CHAPTER IV DATA ANALYSIS

This chapter provides and presents the analysis of data, also discusses the result obtained from the observation.

#### CHAPTER V CONCLUSION AND RECOMMENDATIONS

This chapter consists of conclusion, managerial implication, limitation of the research, and suggestion for the further research.

