

CHAPTER 1

INTRODUCTION

1.1 Background

Market Timing Theory is a theory that links management's financing decision to the capital market situation. Management is believed to do equity financing when the company has high Market to Book Ratio (the share price is overvalued), whereas switching to debt financing if the cost of debt is relatively low (Baker & Wurgler, 2002). This theory has emerged in recent period as a new promising concept to determine the right financing decision.

Market Timing Theory is commonly observed on equity financing rather than on debt financing by many researchers. Baker and Wurgler (2002), Setyawan and Frensidy (2012), and Hovakimian (2001) investigated many financial factors influencing the company's decision to do Initial Public Offering of shares (equity financing). Welsch, Kayhan & Titman (2004), Lemmon, Robert and Zender (2005), and Huang and Ritter (2005) examined the persistent effect of Market Timing on IPO companies.

In Frank and Nezafat research paper (2010), it was stated that Boney, Comer & Kelly (2005) expressed concern on the non-existence of research that examines Debt Market Timing despite the fact that Market Timing is a major investment strategy employed more often by bond fund managers compared to stock fund managers. The research of Frank and Nezafat was considered as a pioneer for investigations on debt market timing.

Corporate bond has grown rapidly in Indonesian capital market since the beginning of 2003 (Asian Development Bank (ADB) Team, 2012). Although corporate bonds are listed in Indonesian Stock Exchange, most transactions still traded Over The Counter (Asian Development Bank (ADB) Team, 2012). In the first two months of 2012, 6.75 trillion rupiah has been raised in the bond market compared to only 2.32 trillion rupiah in Initial Public Offerings (IPOs) and right issues in the stock market (Indonomics, 2012).

The reason behind Indonesian bond's popularity are the ongoing decline of Indonesian interest rates and the Indonesian bonds rating that has been upgraded to investment grade credit rating by Fitch Rating Agency in 2012 (Bloomberg, 2012). This fact has provided an idea that many large Indonesian companies are nowadays prefer debt to stock financing due to the great bond market condition in Indonesia.

Indonesian companies that are willing to issue bonds must conform to Bapepam-LK (Badan Pengawas Pasar Modal dan Lembaga Keuangan) and Indonesian Stock Exchange regulations. Before doing public offering of corporate bonds, the companies must go through some standardized and timely processes regulated by Bapepam-LK. There are 290 outstanding corporate bonds in Indonesian Stock Exchange until February 2013 that were not subordinate corporate bonds, not Syariah or SUKUK corporate bonds. However, the 3-year and 7-year maturity corporate bonds that were issued during 2009 until 2011 are only 33 in total. All these corporate bonds are those that were issued through Exchange Traded.

As it is known that Market Timing is being utilized more often as an investment strategy in real business bonds issuance rather than stock issuance, henceafter a paper about Debt Market Timing is worth to be investigated. Moreover, the Indonesian bond market's prospect that continuously getting better in recent years has becoming one reason why this research is worth to be investigated. The result is expected to help worldwide companies' management in future bonds issuance decision.

The fact that there are still few works investigated Debt Market Equity implies there is still wide aspects of Debt Market Timing that can and needs to be explored. However, taking such topic also challenging because not so many theories have mentioned about it and henceforth only a few theories can be used as a basis for paper works' supporting documents.

Unlike most papers that investigated the relations between financial factors in doing Market Timing, the author of this paper is going to examine whether corporate bond managers has the ability to time bond issuance that generates the most profitable financing, which has low interest rate. Graham and Harvey (2001) found that interest rate is the most determinant aspect in making debt policy decision. The managers will be most likely to issue bonds on dates that the interest rates are deemed to be remarkably low to benefit from the low interest payment along the bond's maturity.

This topic, Debt Market Timing Ability, is still rare in the area especially in Indonesian context. Hencefore, this research paper is costructed based on study previously done by Frank and Nezafat in 2010 for the United States context.

To investigate the sample's ability to time the bond issuances, the research is going to formulate a feasible alternative bond issuing decisions (counterfactuals) in a one-week (5 working days) window within the actual issuance date. In other words, the author observes not only the government bond rate in corporate bond issuance date, but also the government bond rates 2 days before and 2 days after the actual issuing date ($r-2$, $r-1$, r , $r+1$, $r+2$). To construct standard error, the author utilized Bootstrapping method by resampling the data 1000 times for each window. The application of time window within actual issuance date and the construction of bootstrap data has already been applied by Frank and Nezafat (2010) to test Debt Market Timing in The United States context.

The best date to issue bonds will be depicted by the date that has the lowest cost of debt within the time windows. However, the ability of managers to issue bonds at the right timing will be analyzed not by simply comparing the government bond rate at t (on the corporate bond actual issuance date) to the window, but by comparing it to the bootstrapped window (1000 data each working days) since bootstrap window shows data with lower standard error.

If managements have perfect ability to do debt market timing, within the bootstrapp time window they will be more likely to issue bonds on the date that has the lowest interest rate (r_{\min}). If they do not have debt market timing ability, they issued bonds at the average cost (r_{mean}). On the other side, if they have the worst ability to time debt financing, they issue at the date on which the cost is high (r_{\max}). One Sample T-Test is going to be implemented to check whether the mean of actual window and bootstrap window is statistically different from each

other, to check the validity of utilizing bootstrap window rather than actual window.

1.2 Scope

This research focuses on examining the ability of managers to determine the best date to issue bonds with the lowest possible cost of debt within the actual issuance dates (5 working days window). The counterfactual set constructed from Bootstrap will represent the distribution of rates from each actual window. Data used is limited to the representative companies that issued more than 1 bond with maturity of three-year and seven-year bonds through ETC during year 2009-2011 time period. The data will be interpreted using One Sample T-Test in order to test the hypothesis for the overall conclusion by comparing the rates on actual window only at time t to all rates in the bootstrap window. This test will also be implemented to calculate the mean difference between actual data and bootstrap data.

1.3 Aims and Benefits

1.3.1 Aims

- a. To investigate Indonesian companies' ability to time the bond issuances through the construction of counterfactual data set (5 working days window).
- b. To test whether the bootstrap window is feasible to be used as a measurement of determining the best issuing dates instead of actual window.

- c. To investigate the real business treatment to the risk free rate for the bond issuance decisions in Indonesian context.

1.3.2 Benefits

- **Benefits for Management**

This paper is expected to provide a better measurement for management to time the perfect issuing date within a given period of time through the use of counterfactual sets. Thereafter, the issuing company can generate the highest possible profit from the right issuance timing and also be spared from the unnecessary loss from the bad issuance timing.

- **Benefits for Researchers**

The thesis will provide a greater understanding of and adds the collection of Debt Market Timing. With the empirical study in Indonesian context, hopefully this paper can enlighten other students or academicians in this topic. Even more, researchers can also find other interesting aspects for further investigations or even try to formulate other better measurement to time the bond issuance.

1.4 Structures

This research paper will be divided into 5 chapters, which are:

Chapter 1: Introduction

The first chapter introduces the general knowledge of Market Timing Theory in Indonesian capital market and the identification of the necessity to investigate Debt Market Timing. Furthermore, this chapter also writes down the scope of the research, methodology, aims, benefits, and a brief description of the thesis structure.

Chapter 2: Theoretical Foundation

Chapter 2 encloses the controversial theories of financing decision and the emergence of Market Timing Theory as the new theory expected to give enlightenment to the debate. The concept of the application of Market Timing Theory in Debt Market as well as the characteristics of the Indonesian corporate bonds issuance will be disclosed. Furthermore, this chapter covers also previous researches done that being used as the supporting data and basis to conduct this thesis paper.

Chapter 3: Research Methodology

The chapter defines the methodology used to conduct this research. The data being used are the 3 year and 7 year maturity corporate bonds being issued by representative companies that issued more than 1 bond within 2009 and 2011 time periods. This data is obtained from Indonesian Stock Exchange website. From each corporate bond issued, the author extracts government bonds benchmark rates within the bonds issuance date (5 working days window). Each window is bootstrapped 1000 times to provide distributions and more robust data. In an

attempt to assist hypothesis testing and to compare actual data with bootstrap data, One Sample T-Test is implemented.

Chapter 4: Research Findings

Chapter 4 reveals the result from the research being conducted and a brief explanation of the findings for each bond basis, each company basis and overall conclusion of the representative companies' ability to do debt market timing. Additionally, the standard error for both actual data and bootstrap data will also provided by One Sample T-Test result.

Chapter 5: Conclusion and Recommendation

This last chapter gives summary of the research and concludes the research of whether the Indonesian companies have the ability to time debt market in an attempt to issue bonds. The evaluation of research's limitations and suggestions for better subsequent studies will be covered in this last chapter.