

Chapter I

Introduction

1.1 Background

As a method of financing, a firm has several choices available, the main ones being equity financing, internal financing, and leverage financing. However, major theories regarding financing, such as the pecking order theory Donaldson (1961) or the trade-off theory Kraus & Litzenberger (1973) has brought forward the fact that there are risks associated to each means of financing. Firms should then be aware of the specific risks associated with each method of financing. It is arguable that since leverage is relatively more accessible compared to equity financing, firms should then be much more aware of the risks associated with leverage and how it may lead to financial decay instead of prosperity. Through his research, Baxter (1967) argued that an unbalanced and high amount of leverage that a firm has would increase the cost of capital by a large amount due to what he described as the “risk of ruin”. This is due to the piling interest payment that would be worse when interest rates increase. Firms should also know dearly that leverage has several components other than interest rate and the amount of leverage received. One of the most significant component is maturity structure, as Z. He et al. (2012) explained in their research that firms could suffer losses due to agency costs when they rollover their maturing debts, and even equity holders may face potential losses due to the profit they may have had stake to being used to pay debtors.

It must be noted that, however, the effect of rollover risk, and the distress that is brought by it is still a running argument, as different research seemed to have produced different results, as they seem to be based on different assumptions, while also using similar, but different variables and different regressors. For example, He et al. (2016) through their research regarding rollover risk seemed to have found evidence linking shorter maturity to a higher risk premium. However, when replicating the research through a dynamic model, Chen et al. (2020) instead produced an opposite result to He et al. (2016). They tried to explain this phenomenon by assuming that high risk firms, which should be priced with a higher premium, tends to choose longer maturity debt offerings, hence seemingly giving sign that debt maturity length is positively related with equity return and premium. This type of opposing results although based on similar hypothesis regarding debt maturity and equity return has been described as the distress puzzle, as there still to not have been a clear resolution to this argument.

Another theory that could contribute to this argument is the relationship between maturity and stock price crash. Dang et al. (2017) have shown that companies that adopts more short term leverage has a lesser probability of their stock price crashing. A reason to this conclusion is that short term debt tends to be associated with a higher level of debtor monitoring, leading to less risk. This implied a negative relationship between maturity and equity return. However, seemingly creating another puzzle, Della Seta et al. (2020) has produced evidence that firms that possesses debt with shorter maturity tends to have a higher level of

flexibility, hence a higher appetite for risk taking, implying a negative relationship between maturity and equity return.

A point I would like to make is that the majority of the research done regarding this topic was performed on developed markets, such as the USA or the European market, where the relative efficiency of the markets would make the premium related to leverage, maturity and the subsequent rollover risk would be reflected appropriately well in the market. Hence, to shed a light on how relatively inefficient markets (such as those in developing countries) processes and reflects the risks regarding the aforementioned factors, I deemed it suitable for the Indonesian equity market to be used as the subject of this research.

Hence, understanding the ongoing argument regarding maturity and equity return, and my justification for the research environment, this research aims to build on the research by Friewald et al. (2022) to find out how debt maturity is viewed in the Indonesian stock market, and will strive to provide reasoning towards the results produced.

1.2 Research Questions

Following along the lines of Friewald et al. (2022), this research will attempt to answer the following questions regarding specifically the Indonesian stock market:

- Is a firm's refinancing intensity related to its stock return?
- Is a higher premium demanded for debt refinancing risk in comparison to leverage?

Along the lines with the question this research aims to answer, this research has an objective of gathering enough evidence regarding the relationship between refinancing intensity, leverage and equity return. This research also has a second objective, which is to find evidence that a return premium is demanded by the market towards the debt refinancing risk, which is represented by RI (refinancing intensity) and to compare it with leverage premium.

1.3 Research Purposes

Keeping in-line of the questions this research aim to answer, it can then be concluded that this research had the following purposes:

1. Observe whether a firm's refinancing intensity is related to its stock return, and see the nature of the relationship
2. Observe whether the market demands a higher premium for debt refinancing risk in comparison to leverage

1.4 Research Limitations

This research had the following limitations:

1. The data used is limited to the ones available in the Capital IQ database, which was highly limited regarding debt maturity structure
2. There was a lack of available information regarding Indonesia specific return factors, such as FF or q-Factors
3. Due to the lacking nature of how Indonesian companies reports on leverage in the past (pre 2004), the beginning of the research period had to be limited to only from 2004