# The Effect of Corporate Sustainability Disclosure on Cost of Capital in ASEAN Banking Sector: The Moderating Role of Financial Performance



## **UNDERGRADUATE THESIS**

Submitted as Partial Requirement to Complete Undergraduate Degree Faculty of Economics and Business Diponegoro University

Submitted by:

## FATTIYA MAHARANI PUSPARIDA 12030112130221

FACULTY OF ECONOMICS AND BUSINESS
DIPONEGORO UNIVERSITY
SEMARANG

2016

## THESIS APPROVAL

Author Name

: Fattiya Maharani Pusparida

Student Number

: 12030112130221

Faculty/ Department : Economics and Business/ Accounting

Thesis Title

: THE EFFECT OF CORPORATE

SUSTAINABILITY DISCLOSURE ON COST OF

CAPITAL IN ASEAN BANKING SECTOR: THE

MODERATING ROLE OF FINANCIAL

**PERFORMANCE** 

Thesis Supervisor

: Puji Harto, S.E., M.Si., Akt., Ph.D

Semarang, March 7<sup>th</sup> 2016

Supervisor,

(Puji Harto, S.E., M/Si., Akt., Ph.D)

NIP. 197505272000121001

## **SUBMISSION**

Author Name : Fattiya Maharani Pusparida

Student Number : 12030112130221

Faculty/ Department : Economics and Business/ Accounting

Thesis Title : THE EFFECT OF CORPORATE

SUSTAINABILITY DISCLOSURE ON COST OF

CAPITAL IN ASEAN BANKING SECTOR: THE

MODERATING ROLE OF FINANCIAL

**PERFORMANCE** 

Has been presented and defended in front of the Boards of Reviewers on March 22<sup>nd</sup>, 2016 for fulfilling the requirement to be accepted.

The Reviewers Board:

1. Puji Harto, S.E., M.Si., Akt., Ph.D.

2. Dul Muid, S.E., M.Si., Akt.

3. Dr. Agus Purwanto, S.E., M.Si., Akt.

iii

( Aund )



## **Declaration of Originality**

I, Fattiya Maharani Pusparida, hereby declare that this thesis is real and accurate to be my own work, especially written for partial requirement to complete Undergraduate Program of Accounting, and has not been presented in any other occasion before. I bear full responsibility for my undergraduate thesis.

Fattiya Maharani Pusparida

March 7<sup>th</sup>, 2016

## MOTTO AND DEDICATION

## تَجْأَرُونَ فَإِلَيْهِ الضُّرُّ مَسَّكُمُ إِذَا ثُمَّ اللَّهِ فَمِنَ نِعْمَةٍ مِنْ بِكُمْ وَمَا

"And whatever of blessings and good things you have, it is from Allah. Then, when harm touches you, unto Him you cried aloud for help." – Qs. An-Nahl: 53

"Acquire knowledge, learn tranquility and dignity." – Umar ibn Al-Khattab (ra).

## I dedicate this thesis for:

My beloved mom, Nunik Farida
My beloved dad, Bambang Prayitno
My dearly loved sisters, Fanniya Dyah Prameswari
and Faradila Rosyida Azmi
My family
And all my dear friends

## **ACKNOWLEDGEMENT**

Alhamdulillahirabbil'alamin, all praise is due to Allah; Lord of the worlds. This thesis which entitled "The Effect of Corporate Sustainability Disclosure on Cost of Capital in ASEAN Banking Sector: The Moderating Role of Financial Performance" has been finally presented to fulfill one of requirements in accomplishing the Bachelor Degree on Faculty of Economics and Business of Diponegoro University. I do realize that in accomplishing this thesis, there are many people who give their help, support, wishes, and time for me. Therefore, I would gladly thank to:

- Dr. Suharnomo, SE., M.Si., as the Dean of Faculty of Economics and Business, Diponegoro University, and all of and all of lecturers and staffs for the knowledge, encouragement and support.
- 2. Fuad, SET., M.Si., Ph. D as the Head of the Accounting Department, Faculty of Economics and Business, Diponegoro University.
- 3. Puji Harto, S.E., M.Si., Akt., Ph.D as my great supervisor which constantly support, guide and giving valuable suggestions for this thesis.
- 4. Kuschayo Budi Prayogo, as my Academic English teacher. Thank you for all the lessons and help so that I finally succeed to write my thesis in English.
- 5. My beloved family; Mom, Dad, and my siblings, thank you for the enormous support, encouragement, suggestions and life guidance which motivates me to go beyond the limit and gain catch all my dreams.

- 6. Harley Sulistyo Ginting Suka who always encourages me to finish this up, accompanies me during the high and low tides, and be my best mind-sharing friend. I wish all of our dreams come true, and all the best for us.
- 7. My dearest girls; Alfi Rosa Mustika for always support and argue with me, Deanidis Asyifa for being my best share-mates, Hana Fatasia for being the wisest one, Puspa Fadila for the kindness, and Riza Faradilla for the support and love, thank you for all your help and all the wonderful college times. Hope that our friendship will lasts, girls!
- 8. Audia Cendekiawati, my bestfriend who struggle together with me in doing this research. Thank you for everything, we have learned a lot, good luck for our dreams.
- 9. Mahasiswa Pariwisata; Harley, Audia, and Rendi. Thank you for being my favorite tripmates whenever I need refreshment during the hard times.
- 10. GE-FSLP Scholars 2012: Shatila, Andro, Ninda, Yuki, Desi, Dina, Oryza, Anton, and Nabil. Thank you so much for all the inspiration, memories, and life advices sharing. I'm blessed to be the part of these extraordinary people.
- 11. All of my friends and classmates in Accounting batch 2012, thanks for the memories, togetherness, and being such a family.
- 12. Boards of RnD division of EECC; Rina and Fika, all of other boards and rangers of EECC, thank you so much for the joyfull times.
- 13. All of the super girls of SAMAN ECONOMICS and UPK Tari FEB UNDIP, thank you for the good times and experiences.

14. Keluarga Mahasiswa Akuntansi (KMA) for all the experience and

togetherness, especially Kabinet Mata Air 2012; Mbarep, Ando, Hana,

Sheyla, Ajeng, Iva, Rafly, and Hunter.

15. KKN Nogosaren family; Ajeng Vania, Fani, Ihsan, Lalang, Rahma, Natalia,

Fardi, and Eliezer. Thank you for the kindness, memories, and support.

16. My high-school squad: Savitri, Diana, Devy, and Yani, thank you for all the

wishes and million supports.

17. All people who have helped me in accomplishing my thesis and bachelor

degree in Accounting, Economics and Business Faculty, Diponegoro

University, which I could not mention them one by one.

Semarang, March 7<sup>th</sup>, 2016

Fattiya Maharani Pusparida NIM. 12030112130221

viii

## **ABSTRACT**

This study aims to investigate the effect of overall and partial sustainability disclosure to corporate cost of capital, and also examine the moderating effect of financial performance on the relationship. This research adopted the GRI G3.1 indeces to measure sustainability disclosures. The cost of capital was calculated by weighting all source of cost of capital in WACC method, while financial performance is measured by three proxies; CAR, ROE, and NIM.

Population of this research was all listed banks in ASEAN countries' stock exchange market for the year of 2011-2014. Partial Least Squares (PLS) Analysis on SmartPLS 3.0 was used to examine the data. This research indicated that banks with more sustainability disclosure attracts lower cost of capital. However, if it examined partially, the economic aspects tend to increase the cost of capital. Furthermore, better financial performance is shown to have no effect on the relationship between overall sustainability aspects disclosure and cost of capital. Nevertheless, partially investigation found that a better financial performance strengthen the effect of social aspect diclosure in lowering cost of capital.

Keywords: cost of capital, WACC, sustainability banking, sustainability disclosure, financial performance

## **ABSTRAK**

Penelitian ini bertujuan untuk menguji pengaruh pengungkapan aspekaspek keberlanjutan perusahaan secara keseluruhan maupun parsial terhadap biaya modal, serta menguji efek moderasi kinerja keuangan pada hubungan tersebut. Penelitian ini menggunakan indeks GRI G3.1 untuk mengukur pengungkapan keberlanjutan. Biaya modal perusahaan dihitung dengan metode WACC, sedangkan kinerja keuangan diukur dengan tiga proksi; CAR, ROE, dan NIM.

Populasi penelitian ini adalah perbankan yang terdaftar di bursa efek pada negara ASEAN pada tahun 2011-2014. Analisis *Partial Least Square* (PLS) pada SmartPLS 3.0 digunakan untuk menguji data penelitian. Penelitian ini mengindikasikan bahwa bank yang mengungkapkan aspek keberlanjutannya dapat memperoleh biaya modal yang rendah. Namun secara parsial, pengungkapan aspek ekonomi justru meningkatkan biaya modal. Lebih lanjut, kinerja keuangan yang baik ternyata tidak memiliki pengaruh pada hubungan antara pengungkapan keberlanjutan secara keseluruhan dan biaya modal. Namun, pengujian secara parsial menunjukkan bahwa kinerja keuangan yang baik memperkuat pengaruh pengungkapan aspek sosial dalam menurunkan biaya modal.

Kata kunci: biaya modal, WACC, keberlanjutan perbankan, pengungkapan keberlanjutan, kinerja keuangan

## TABLE OF CONTENTS

| TITLE PAGE                                      | i    |
|---|------|
| THESIS APPROVAL                                 | ii   |
| SUBMISSION                                      | iii  |
| CERTIFICATE OF ORIGINALITY                      | iv   |
| MOTTO AND DEDICATION                            | v    |
| ACKNOWLEDGEMENT                                 | vi   |
| ABSTRACT  | ix   |
| ABSTRAK   | X    |
| TABLE OF CONTENTS                               | хi   |
| LIST OF TABLES                                  | xiii |
| LIST OF FIGURES                                 | xiv  |
| LIST OF APPENDICES                              | XV   |
| CHAPTER I INTRODUCTION                          |      |
| 1.1 Background                                  | 1    |
| 1.2 Problem Formulation                         | 6    |
| 1.3 Research Objectives                         | 6    |
| 1.4 Contributions of Study                      | 7    |
| 1.5 Structure of Study                          | 8    |
| CHAPTER II LITERATURE REVIEW                    |      |
| 2.1 Underlying Theories                         | 9    |
| 2.1.1 Stakeholder Theory                        | 9    |
| 2.1.2 Signalling Theory                         | 11   |
| 2.1.3 Sustainability Reporting                  | 12   |
| 2.1.4 Global Reporting Initiatives (GRI) Index  |      |
| 2.1.5 Cost of Capital                           | 14   |
| 2.1.5.1 Cost of Equity Capital                  | 14   |
| 2.1.5.2 Cost of Debt Capital                    | 16   |
| 2.1.5.3 Weighted Average Cost of Capital (WACC) | 17   |
| 2.1.6 Financial Performance                     | 17   |

| 2.2 Prior Researches                                 | 18   |
|--|------|
| 2.3 Theoretical Framework                            | 21   |
| 2.4 Hypotheses Development                           | 22   |
| CHAPTER III RESEARCH METODOLOGY                      |      |
| 3.1 Operational Variables Definition and Measurement | . 26 |
| 3.1.1 Dependent Variable                             |      |
| 3.1.2 Moderating Variable                            |      |
| 3.1.3 Independent Variable                           |      |
| 3.2 Population and Sample                            |      |
| 3.3 Data Source                                      |      |
| 3.4 Data Collection Method                           | .31  |
| 3.5 Analysis Method                                  | . 32 |
| 3.5.1 Descriptive Statistic                          | . 33 |
| 3.5.2 Measurement Model (Outer Model)                | . 33 |
| 3.5.3 Structural Model (Inner Model)                 | .34  |
| CHAPTER IV RESULTS AND DISCUSSIONS                   |      |
| 4.1 The Description of Research Objects              | . 35 |
| 4.2 Data Analysis                                    | .36  |
| 4.2.1 Descriptive Statistic Analysis                 | . 37 |
| 4.2.2 Measurement Model Evaluation                   | . 38 |
| 4.2.3 Structural Model Evalation                     | .40  |
| 4.2.4 Hypotheses Test Result                         | 43   |
| 4.2.5 Interpretation and Discussion                  | . 47 |
| CHAPTER V CONCLUSIONS AND SUGGESTIONS                |      |
| 5.1 Conclusions                                      | 52   |
| 5.2 Limitations                                      | . 53 |
| 5.3 Suggestions                                      | . 53 |
| RIRI IOGRAPHY  | 55   |

## LIST OF TABLES

| Table 2.1 Summary of Previous Researches                 | . 20 |
|--|------|
| Table 3.1 GRI G3.1 and FSSS Numbers of Indicators        | . 29 |
| Table 4.1 Research Object Description                    | . 36 |
| Table 4.2 Descriptive Statistic Results                  | . 37 |
| Table 4.3 Outer Weights                                  | 39   |
| Table 4.4 Outer VIF Values                               | 40   |
| Table 4.5 Path Coefficients of Overall Research Model    | . 44 |
| Table 4.6 Path Coefficients of Submodel 1 and Submodel 2 | 44   |

## LIST OF FIGURES

| Figure 2.1 The Stakeholder Model  | 10 |
|-----------------------------------|----|
| Figure 2.2 The Research Framework | 22 |
| Figure 4.1 Overall Research Model | 41 |
| Figure 4.2 Submodel 1             | 42 |
| Figure 4.3 Submodel 2             | 42 |

## LIST OF APPENDICES

| APPENDIX A. List of GRI G3.1 and FSSS Indicators | 59 |
|--|----|
| APPENDIX B. List of Research Samples             | 67 |
| APPENDIX C. SmartPLS Reports                     | 69 |

## **CHAPTER I**

## INTRODUCTION

## 1.1 Background

As the response of the global attention on sustainability development issue, companies all around the world have extensively published CSR (Corporate Social Responsibilities) or sustainability reports. A survey on sustainability reporting practice showed that approximately three quarters of companies in many countries reported their sustainability in 2013; for example, 76% companies in America, 73% companies in Europe, and 71% companies in Asia Pasific published the reporting (KPMG, 2013). The sustainability reporting practice has grown gradually over the years and has been taken as a corporate behaviour (KPMG, 2013). This practice rose as the result of business sustainability failure cases, such as Enron in 2001 and WorldCom in 2002, which resulted in stakeholders' scepticism in business activity (White, 2006). Moreover, Fry et.al. (1982) stated that this behaviour is also motivated by the corporate strategy to be more competitive in global market.

One factor influencing company's strategy in facing the global competition is the disclosure of the company's non-financial activities through sustainability reports, that consist of economic, environmental, and social aspects. Dhaliwal et.al. (2011) reported that firms are able to develop a better relationship with their stakeholders by disclosing more sustainability information as they convey positive messages in their sustainability reports. As a result, the sustainability information

builds corporate reputation and further attracts public support (Fry et al, 1982). Furthermore, the disclosure of sustainability aspects created not only opportunities but also challenges related to the risk and return in their relationship with investors (Ng & Rezaee, 2015). Therefore, corporate sustainability disclosure is considered an important tool in creating a better strategy for a company.

In financing strategy, disclosure of sustainability information is also considered to be the key to reduce the financing costs or the cost of capital. Companies are able to show their values to the stakeholders through sustainability reporting, especially to their capital suppliers. By showing their values, companies can reduce their risks then consecutively lead an ease of capital attainment and cheaper financing costs (El Ghoul et al, 2011; Bassen et al, 2006). Accordingly, Sharfman and Fernando (2008) and Feldman et al (1997) found that investors perceive a company's risk more favourable if the company pays attention to sustainability. This enhanced perception can finally cause the lower cost of capital (Sharfman and Fernando, 2008).

The low level of the cost of capital is important in doing business. Cost of capital is known as the price the firm pays for the use of money in form of minimum acceptable return that the firm get from certain sources (Madura, 2012). Simply, the cost of capital arise when a company obtain capital, whether equity capital or debt capital because both the investors and debtors are expected to be paid for their contributions to the company. By maintain a low cost of capital, a company will be more stable, predictable and less riskier (Madura, 2012). Moreover, Echterling et al

(2015) explained that controlling cost of capital cause easiness in making decision related to corporate budgeting and investment.

The main concern of the recent research topics related to corporate capital is the information of corporate sustainability. Some prior researches found optimistic evidence that corporate sustainability disclosure can actually draw a better financing opportunities for companies. For example, the disclosure of sustainability information is successfully proved to be able to reduce asymmetri information between managers and investors, and consequently lower the cost of capital in US companies (Dhaliwal et al, 2011; El Ghoul et al, 2011; Sharfman and Fernando, 2008). CSR or sustainability information based on Global Reporting Initiatives (GRI) guidance is also confirmed to able to decrease asymmetri information and raise market value for Finland firms (Schadewitz & Niskala, 2010). Accordingly, in UK firms, research conducted by Murray et al (2006) found that firms with greater sustainability disclosure obtain high returns on their investments. In other words, the disclosure of sustainability information is considered to be able to help companies to get better financing prospects.

However, some researchers debate the effect of sustainability disclosure to corporate financing activity. For example, Reverte (2009) claimed that there are no significant effect of CSR disclosures to corporate financing activity in Spanish firms. Moreover, unlike the findings reported in western countries, some researches conducted in Asian companies have been empirically shown to have quite different results; the sustainability disclosure did not affected corporate financial performance or corporate capital. Feng et al (2014) found that firms with higher

disclosure of CSR enjoying lower cost of equity capital in North America and Europe, but not in Asian. Lasmin and Nuzula (2012) also indicated that environmental or social disclosure did not impress investors in Japanese companies. Similarly, Xu and Yang (2010) claimed that sustainability issue in Chinese companies had no effect on their corporate activity because of the lack of CSR value awareness in the country. Likewise, Muirhead et al (2002) reported that 60% of Asian managers rate CSR or sustainability issue as a useless tool to rise finacing performance or opportunities. In brief, the evidence shows that the effect of corporate sustainability on financing opportunity is remain ambiguous in Asian countries.

The findings of prior researches may still vary because of some reasons. First, those researchers did not compare the same industry sectors which can make major difference in results. Second, there are still limited researches regarding sustainability disclosure effect in developing countries, as Lasmin & Nuzula (2012) stated that awareness toward sustainability value in developing countries may differs from the developed ones, which make the investors have different impression to non-financial investments. Third, prior researchers mainly study the effect of sustainability disclosure and cost of capital at the same year. The disclosure is usually conducted at the end of period, thus the effect of disclosure to the financing cost will not be ensured if it is examined in the same period.

Understanding the findings of previous researches, this research is focused on fulfilling the research gap and provide an empirical study related to sustainability disclosure effect on the cost of capital by focusing the research on one sector in

developing countries. The sample of this study is the banking sector in ASEAN region. Banks are chosen to be the sample of research because this sector has a wide range of stakeholders; for example the multinational companies, SMEs (small and medium enterprises), individual citizens, governments and many more stakeholders that will highlight the sustainability of banking sector. Jeucken and Bouma (1999) stated that as an intermediary organizations, banking sector holds a unique position in sustainable development issue. Furthermore, ASEAN region are chosen to be the sample of this research for the Southeast Asian nations are mostly developing countries. ASEAN has become an attractive foreign direct investment target not only because of its market size and the wealth of natural resources but also due to its stable economic environment (Central Bank of Malaysia, 2013). Moreover, ASEAN will integrate their economies through ASEAN Economic Community (AEC) at the beginning of 2016. The AEC will transform ASEAN into a region with free movement of goods, services, commodities, investment, skilled labor, and freer flow of capital (ASEAN, 2014). In this process of integration of ASEAN economies, banking sector is considered as a crucial driver (Central Bank of Malaysia, 2013). Thus, this reasons makes banking sector in Southeast Asian Nations are more attractive to be examined.

This research will not only examine the effect of sustainability disclosure to the future cost of capital (next year's cost of capital) but also examines the moderating effect of banks financial performance on the relationship between sustainability disclosure and cost of capital. According to Botosan (2006), the higher the financial information delivered to the stakehoders, the lower the

company's cost of capital. Moreover, Dhaliwal (2014) indicated that firms with better financial performance have more resources to do social or environmental activities in order to get better prospects in the future. Francis et al (2004) concluded that firms with good performance tend to have lower cost of capital. Thus, it is interesting to find the interaction of financial performance on the relationship of sustainability disclosure and cost of capital.

#### 1.2 Problem Formulation

Prior researches about disclosure of corporate sustainability and corporate financial performance have been carried a lot in the developed countries but further investigation about sustainability issue and the cost of capital is still lack with vary results in developing countries. Lasmin & Nuzula (2012) stated that the different results of investigations may caused by the poor understanding about the important of sustainability development in developing countries. Moreover, limited study has investigated the moderating role of financial performance in this relationship before. Therefore, the aim of this study is to provide an empirical investigation through questions:

- a. Does overall and partially sustainability disclosure affect cost of capital?
- b. Does financial performance moderates the relationship between overall and partial sustainability disclosure and the cost of capital?

#### 1.3 Research Objectives

The purpose of this study was to investigate the effect of sustainability disclosure to the cost of capital and the financial performance as a moderating tool to the relationship between sustainability disclosure to the cost of capital in

ASEAN banking sector during 2011-2014. In order to fully understand the study, the purpose of this study was broken down into two objectives, which were:

- 1.3.1. to investigate the effect of overall and each dimension of sustainability disclosure to cost of capital
- 1.3.2. to investigate the moderating effect of sustainability disclosure to the cost of capital, in overall and partial disclosure.

## 1.4 Contributions of Study

Contribution of this study is based on background, problem formulation and research objectives. There are several contributions, such as:

- 1. For researchers, the result of this study is expected to give contribution on sustainable development study especially in developing countries.
- For the management of the companies, the result of this study is expected
  to raise awareness of the importance of corporate sustainability disclosure
  in controlling the cost of capital
- For investors, the result of this study is expected to be used as a consideration in decision making process regarding investment in sustainable companies.
- 4. For society, the result of this study is expected to give knowledge in order to control the corporate behavior in doing unsustainable practice.

## 1.5 Structure of the Study

#### CHAPTER I: INTRODUCTION

This chapter consists of background, problem formulation, research objectives and purposes, and the structure of this research.

## CHAPTER II: LITERATURE REVIEW

This chapter consists of theories and concepts formed from the basic and relevant study underlying this research. In addition, to explain the theory and the relevant concepts, this chapter also explains the previous researches and the hypothesis development.

#### CHAPTER III: RESEARCH METHODS

This chapter describes research design, type and source of data, data collecting method, research object and data analysis. This research is using quantitative approach with regression analysis software of SmartPLS 3.0.

#### CHAPTER IV: RESULT AND ANALYSIS

This chapter explains the research object, data analysis that consists of descriptive statistic, hypothesis test result and interpretation of results.

## **CHAPTER V: CONCLUSION**

This chapter consists of conclusion that can be drawn from the analysis result, research implications, the limitations of the study and suggestions for future research.