LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH*

Judul Karya Ilmiah (artikel) : The capital structure: is debt just a policy or requirement?

Jumlah Penulis : 1 orang

Status Pengusul : penulis pertama/~~penulis ke 2~~/~~penulis korespondensi~~**

Identitas Jurnal Ilmiah :
a. Nama Jurnal : European Research Studies Journal
b. Nomor ISSN : 1108-2976
c. Volume, nomor, bulan, tahun : Volume XX, Issue 2A, 2017
d. Penerbit : University of Piraeus
e. DOI artikel (jika ada) :
f. Alamat web Jurnal : http://www.ersj.eu
g. ~~Terindeks di Scimagor/Thomson Reuter ISI knowledge~~ atau di .....**

Kategori Publikasi Jurnal Ilmiah (beri √ pada kategori yang tepat) :
[√] ~~Jurnal ilmiah internasional~~/Internasional bereputasi**
[ ] Jurnal Ilmiah Nasional Terakreditasi
[ ] Jurnal ilmiah Nasional/Nasional terindeks di DOAJ, CABI, COPERNICUS**

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	~~Internasional~~/Internasional bereputasi** [√]	Nasional Terakreditasi [ ]	Nasional *** [ ]	
a. Kelengkapan unsur isi artikel (10%)	3			2,72
b. Ruang lingkup dan kedalaman pembahasan (30%)	9			8,15
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9			8,15
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	9			8,15
Total = (100%)	30			
Nilai Pengusul =				27,17

KOMENTAR/ULASAN PEER REVIEWER

Kelengkapan dan kesesuaian unsur isi jurnal	Unsur isi Jurnal sudah lengkap dan sesuai
Ruang lingkup dan Kedalaman Pembahasan	Ruang lingkup dan kedalaman pembahasan sudah baik
Kecukupan dan Kemutahiran Data/ Informasi dan Metodologi	Data dan metodologi sudah baik
Kelengkapan Unsur dan Kualitas Penerbit	Sangat baik

20Nopember 2017
Reviewer I

Prof. Dr. David P. E. Saerang, SE., MCom(Hons)
NIP. 195911281986031005
Unit Kerja : Fakultas Ekonomi dan BisnisUniversitas Sam Ratulangi

* Dinilai oleh dua Reviewer secara terpisah
** Coret yang tidak perlu
*** nasional/terindeks di DOAJ, CABi, Copernicus

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH*

Judul Karya Ilmiah (artikel) : The capital structure: is debt just a policy or requirement?

Jumlah Penulis : 1 orang

Status Pengusul : penulis pertama/~~penulis ke 2~~/~~penulis korespondensi~~**

Identitas Jurnal Ilmiah :
a. Nama Jurnal : European Research Studies Journal
b. Nomor ISSN : 1108-2976
c. Volume, nomor, bulan, tahun : Volume XX, Issue 2A, 2017
d. Penerbit : University of Piraeus
e. DOI artikel (jika ada) :
f. Alamat web Jurnal : http://www.ersj.eu
g. Terindeks di Scimagor/~~Thomson Reuter ISI knowledge~~ atau di .....**

Kategori Publikasi Jurnal Ilmiah : [√] ~~Jurnal ilmiah internasional~~/Internasional bereputasi**
(beri √ pada kategori yang tepat) : [ ] Jurnal Ilmiah Nasional Terakreditasi
[ ] Jurnal ilmiah Nasional/Nasional terindeks di DOAJ, CABI, COPERNICUS**

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	~~Internasional~~/Internasional bereputasi** [√]	Nasional Terakreditasi [ ]	Nasional *** [ ]	
a. Kelengkapan unsur isi artikel (10%)	3			2,75
b. Ruang lingkup dan kedalaman pembahasan (30%)	9			8,25
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9			8,25
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	9			8,25
Total = (100%)	30			
Nilai Pengusul =				27,50

KOMENTAR/ULASAN PEER REVIEWER

Kelengkapan dan kesesuaian unsur isi jurnal	Artikel penulis memiliki kelengkapan dan unsur yang sesuai sebagai Jurnal Ilmiah
Ruang lingkup dan Kedalaman Pembahasan	Artikel penulis telah membahas secara baik permasalahan yang diteliti
Kecukupan dan Kemutahiran Data/ Informasi dan Metodologi	Data dan penerapan metodologi telah tepat
Kelengkapan Unsur dan Kualitas Penerbit	Penerbit memiliki kualitas yang baik dengan unsur-unsur yang sesuai sebagai Jurnal Ilmiah

20 November 2017
Reviewer 2,

Prof. Dr. Rusman Soleman, SE., M.Si., Ak. CA
NIP. 195905221987031001
Unit Kerja : Fakultas Ekonomi dan Bisnis Universitas Khairun

* Dinilai oleh dua Reviewer secara terpisah
** Coret yang tidak perlu
*** nasional/terindeks di DOAJ, CABi, Copernicus

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH*

Judul Karya Ilmiah (artikel)	:	The capital structure: is debt just a policy or requirement?
Jumlah Penulis	:	1 orang
Status Pengusul	:	penulis pertama/~~penulis ke-2 /penulis korespondensi~~**
Identitas Jurnal Ilmiah	:	a. Nama Jurnal : European Research Studies Journal
		b. Nomor ISSN : 1108-2976
		c. Volume, nomor, bulan, tahun : Volume XX, Issue 2A, 2017
		d. Penerbit : University of Piraeus
		e. DOI artikel (jika ada) :
		f. Alamat web Jurnal : http://www.ersj.eu
		g. Terindeks di Scimagor/~~Thomson Reuter ISI Knowledge~~ atau di .....**

Kategori Publikasi Jurnal Ilmiah : [√] ~~Jurnal Ilmiah Internasional~~/Internasional bereputasi**
(beri √ pada kategori yang tepat) : [ ] Jurnal Ilmiah Nasional Terakreditasi
[ ] Jurnal ilmiah Nasional/Nasional terindeks di DOAJ, CABI, COPERNICUS**

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Internasional/Internasional bereputasi** [ ]	Nasional Terakreditasi [ ]	Nasional *** [ ]	
a. Kelengkapan unsur isi artikel (10%)	3			2,55
b. Ruang lingkup dan kedalaman pembahasan (30%)	9			7,20
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9			7,65
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	9			7,65
Total = (100%)	30			25,05
Nilai Pengusul =				A

KOMENTAR/ULASAN PEER REVIEWER

Kelengkapan dan kesesuaian unsur isi jurnal	Amat baik
Ruang lingkup dan Kedalaman Pembahasan	Baik
Kecukupan dan Kemutahiran Data/ Informasi dan Metodologi	Amat baik
Kelengkapan Unsur dan Kualitas Penerbit	Amat baik

20 November 2017
Reviewer 1

Prof. Dr. Bambang Subroto, SE., MM., Ak.
NIP. 195212311978031012
Unit Kerja : Fakultas Ekonomi dan Bisnis Universitas Brawijaya

* Dinilai oleh dua Reviewer secara terpisah
** Coret yang tidak perlu
*** nasional/terindeks di DOAJ, CABi, Copernicus

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH*

Judul Karya Ilmiah (artikel) : The capital structure: is debt just a policy or requirement?

Jumlah Penulis : 1 orang

Status Pengusul : penulis pertama/~~penulis ke 2 /~~ ~~penulis korespondensi**~~

Identitas Jurnal Ilmiah :
a. Nama Jurnal : European Research Studies Journal
b. Nomor ISSN : 1108-2976
c. Volume, nomor, bulan, tahun : Volume XX, Issue 2A, 2017
d. Penerbit : University of Piraeus
e. DOI artikel (jika ada) :
f. Alamat web Jurnal : http://www.ersj.eu
g. Terindeks di Scimagor/~~Thomson Reuter ISI knowledge~~ atau di .....**

Kategori Publikasi Jurnal Ilmiah (beri √ pada kategori yang tepat) :
[√] ~~Jurnal Ilmiah Internasional~~/Internasional bereputasi**
[ ] Jurnal Ilmiah Nasional Terakreditasi
[ ] Jurnal ilmiah Nasional/Nasional terindeks di DOAJ, CABI, COPERNICUS**

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	~~Internasional~~/Internasional bereputasi** [√]	Nasional Terakreditasi [ ]	Nasional *** [ ]	
a. Kelengkapan unsur isi artikel (10%)	3			2,5
b. Ruang lingkup dan kedalaman pembahasan (30%)	9			8,5
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9			8,5
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	9			8,5
Total = (100%)	30			
Nilai Pengusul =				28

KOMENTAR/ULASAN PEER REVIEWER

Kelengkapan dan kesesuaian unsur isi jurnal	Kelengkapan dan kesesuaian unsur dari jurnal sudah baik
Ruang lingkup dan Kedalaman Pembahasan	Ruang lingkup dan pembahasan dari jurnal sudah baik
Kecukupan dan Kemutahiran Data/ Informasi dan Metodologi	Data dan metodologi sudah baik
Kelengkapan Unsur dan Kualitas Penerbit	Sangat baik

20Nopember 2017
Reviewer 4,

Prof. Dr. Paulus Kindangen, SE., SU., MA.
NIP. 195503041981031001
Unit Kerja : Fakultas Ekonomi dan Bisnis Universitas Sam Ratulangi

* Dinilai oleh dua Reviewer secara terpisah
** Coret yang tidak perlu
*** nasional/terindeks di DOAJ, CABi, Copernicus

The Capital Structure: Is Debt just a Policy or Requerement?

by Pontoh Winston 2

Submission date: 13-Aug-2018 03:46PM (UTC+0700)
Submission ID: 989635956
File name: 02.ERSJ_20_2A_2017_-_Bereputasi.pdf (683K)
Word count: 5315
Character count: 27073

European Research Studies Journal
Volume XX, Issue 2A, 2017

pp. 128-139

The Capital Structure: Is Debt just a Policy or Requerement?

Winston Pontoh[1]

Abstract:

The issue about debt as part of capital structure is unclear in context of trade off theory and pecking order theory in term to identify whether it is just a policy or requirement for the firms. The objective of this study is to identify the underlie theories on firms capital structure with its determinant.

This study conducts logistic regression with sample of 148 public firms listed in Indonesia Stock Exchange for period of 2011 to 2015. The result of analysis shows profitability, firm size, tangibility, and share price have relationship with capital structure.

On these results, the study reports firms with higher total debt ratio shall prefer pecking order model in determining capital structures, and firms with higher long term debt ratio shall prefer pecking order model although the result indicates the agency conflict plays role in determining capital structures, while firms with lower total debt ratio and firms with lower long term debt ratio shall prefer trade off model for capital structures.

Keywords: *Capital structure, trade off, pecking order, market timing*

JEL Classification: *D920, G020, G300, G310, G320, G330*

[1]*Fakultas Ekonomi dan Bisnis, Universitas Sam Ratulangi, Jl. Kampus Bahu, Manado, Sulawesi Utara – Indonesia 95115, winstonpontoh@unsrat.ac.id*

1. Introduction

The presence of debt is started when Luca Pacioli introduced his accounting equation in interpretation that firms are obtaining their assets by using liabilities and equities. After years, debt is always show up in most of firm's financial reports and generally attracting the investors in capital market. The existence of debt is inflicting some questions in context of capital structure, such as "is debt a requirement for most of firms in term to finance their investment activities in objective to achieve the target profit?" or "is debt just a policy for other intentions?". These issues about capital structure of the firms are still in debate around academicians especially in context of trade off theory and pecking order theory since debt has playing its own role which makes the capital structure is still a puzzle (Myers, 1984; Nechaev and Antipina, 2016; Thalassinos *et al.*, 2010; Vovchenko *et al.*, 2017; Fetai, 2015).

Myers (2001) proposes two conditional theories of capital structure for explaining why firms obtaining debt, which are trade off and pecking order. According to Myers (2001), in perspective of trade off, firms as tax payers generally shall look for optimum debt in term to get tax shield, while in perspective of pecking order, firms shall avoid debts if their internal fund such as retained earnings is sufficient for financing their expenditures or investments (Boldeanu and Tache, 2016).

In contrast, the findings by Baker and Wurgler (2002), Klein, O'Brien, and Peters (2002), Hovakimian, Hovakimian, and Tehranian (2004), Alti (2006), Elliott, Kant, and Warr (2008), Thalassinos *et al.* (2015), Allegret *et al.* (2016), Duguleana and Duguleana (2016) and Brendea (2012) show that the market timing hypothesis can become an alternative explanation about capital structures of the firms, where the valuations by investors for share prices in capital market shall trigger the effects of pecking order or trade off in flexible. As developing country, the Indonesia has many firms with various debt. Limited to the samples, based on data from Indonesia Stock Exchange (www.idx.co.id) the trends of average total debts to total assets ratio are 52.33% for year of 2011, 48.06% for year of 2012, 49.88% for year of 2013, 48.99% for year of 2014, and 50.25% for year of 2015. The trends show that the average of debt to asset ratios for firms in period of 2011 to 2015 are fluctuate in range of almost or even half by their total assets which means most assets of these firms are financed by debts. The study proceeds the next sections as follows, section 2 reviews the relevant literatures and hypothesis development. Section 3 presents the samples, variables definitions and the regression models. Section 4 presents the result and discuss the findings, and finally section 5 concludes the findings.

2. Literature Review

2.1. Trade off theory and pecking order theory

Similar to Myers (2001), Elliott, Kant, and Warr (2008) propose that the model of capital structure can be viewed in perspectives of two main theories which are trade

off theory and pecking order theory. Moreover, Elliott, Kant, and Warr (2008) explain that, in perspective of pecking order theory, the firms shall choose the equities with lower cost of capital which is implies that the firms shall finance their investments by use their internal funds then by external funds, while in perspective of static trade off theory, the firms in periodically shall adjust their capital structure until it reach the optimum portion.

Sunder and Myers (1999) prove empirically that, the mature firms tend to adopt pecking order model in term to determine their capital structure rather than trade off model. Sunder and Myers (1999) also explain that, although debts shall give tax benefit to firms but the over debts shall make the firms for the financial distress costs. According to Cheng and Shiu (2007), in view of pecking order theory, the existence of asymmetry information between insiders and outsiders makes firms use their internal fund rather than debts in term for financing the investments, and that is why pecking order assumes the firms tend to decrease their debts when they get profit. Moreover, Cheng and Shiu (2007) explain that, in view of trade off theory, the firms with better profit can get more debts easily because they have better performance, which in turn the debts shall give the tax shield for these firms.

2.2. Market timing hypothesis

According to Baker and Wurgler (2002), the market timing hypothesis is derive from common behavior of firms, where firms shall issue the shares when market price at overvalue, and repurchase it when undervalue. Moreover, Baker and Wurgler (2002) find that, firms shall have lower debt ratio when they are issuing the shares at higher market price, otherwise the firms shall have higher debt ratio when they are issuing at lower market price. In supporting these findings, Elliott, Kant, and Warr (2008) clarify that, as an application of pecking order theory, firms are more likely to issue new shares when share market prices are high or overvalued by investors which gives impact the firms shall reduce the use of debts, whereas firms with fairly valued or undervalued on their share prices are prefer to issue debt. Hovakimian, Hovakimian, and Tehranian (2004) confirming the findings by Baker and Wurgler (2002), where the relationship between pecking order theory and market timing hypothesis implies the firms shall issue their shares when the market share prices at overvalued. In addition, Brendea (2012) and Suryanto (2016) explain that, managers should have an ability to identify the perfect time to issue the shares with low cost that in turn will impact to valuation of market price which makes the cost of capital is low and gives benefit the shareholders.

2.3. Hypothesis development

2.3.1. Profitability

According to Myers (2001), in perspective of pecking order theory, if the firms have higher profitability then they shall decrease their debt ratio, while in perspective of trade off theory, if the firms have higher profitability then they shall increase their

debt ratio optimally without existence of financial distress in term to get tax benefit. Moreover, Chen (2004) confirms that, profitability is an important factor to determine capital structure of the firms.

Ha_1 : Profitability has significant effect to debt.

.2. Firm size

Titman and Wessels (1988), Břečková and Havl k (2013), Havlíček *et al.* (2013) and Rajan and Zingales (1995) suggest that, the relationship between firm size and capital structure can be viewed in perspectives of pecking order theory or trade off theory. Titman and Wessels (1988) pointing that transac n costs or market value as determinant for firms in preference for equity or debt. Titman and Wessels (1988) also clarify that, small firms are generally more leveraged with short term debts rather than long term debts or new equities because these firms are facing high transaction costs.

According to Rajan and Zingales (1995), larger firms have more chances to get large leverage because they are usually better divers ed and have less possibility to be in position of financi distress, and in this case there is a positive effect between firm size and leverage. Rajan and Zingales (1995) also explains that, the negative effect between firm size and leverage could be arise because larger firms normally have lower informational asymmetries in capital market which make these firms are re capable to issue new shares rather than issuing debts. Chen (2004) con ns that, there is a relationship between firm size and capital structure especially with long term debt but not with total debt.

Ha_2 : Firm size has significant effect to leverage.

2.3.3. Asset structure

Frank and Goyal (2003) clarify that, both for perspectives of trade off theory and pecking order theory, the increasing in investments or fixed assets shall inc se the use of debts, although Fama and French (2002) also clarify that ven negative relationship between assets and debt can be seen in perspectives of trade off theory or pecking orde eory while firms are concerning about risks and costs. Chen 04) confirms that, firms in developed countries and developing countrie se the fixed assets as collateral to get debt, and this is why the fixed asset both for trade off theory and pecking order theory is a factor which can affect the capital structure while they are being financed by debt.

Ha_3 : Asset structure has significant effect to leverage.

2.3.4. Income tax

Miller (1977) explains that, in perspective of trade off model, the values of the firm shall increase in line with increasing of debts since debt interest expenses give tax benefit for the firms. Graham (1996) confirms that, firms with higher income tax shall use higher debt compared by firms with lower income tax. According to Myers

(2001), firms as tax payers generally shall obtain the optimum debt because debt plays role as tax shield.

Ha_4 : Income tax has significant effect to leverage.

3.5. Share price

Baker and Wurgler (2002), Hovakimian, Hovakimian, and Tehranian (2004), Alti (2006), Elliott, Kant, and Warr (2008), and Brendea (2012) find that, market timing effect on firms will exist while the share prices are overvalued which makes firms reduce their use of debt. Supporting the findings by Cheng and Shiu (2007), Fenech (2008) finds that, share price will have positive effect to debt when firms decide to replace their source of fund with convertible debt which have lower cost of capital.

Ha_5 : Share price has significant effect to leverage.

3. Research Methodology

3.1. Sample

Table 1 defines the sample for this study, where 148 firms which are listed in Indonesia Stock Exchange (www.idx.co.id) for period of 2011 to 2015 are chosen. Because of different financial report structure, the study then excluding two sectors from the sample which are finance sector and property, real estate, and building construction sector.

Table 1. *Sample*

Sectors	Samples	Observed
Agriculture	10	50
Mining	15	75
Basic Industry & Chemicals	33	165
Miscellaneous Industry	18	90
Consumer Goods Industry	16	80
Infrastructure, Utilities, and Transportation	15	75
Trade, Service, Investment	41	205
Total	**148**	**740**

3.2. Variable definitions

This study uses leverage as dependent variable and measures it with dummy (coding with 1 and 0). The leverages are calculated by ratio of total debts to total assets (symbolized by DAR) and ratio of total long term debts to total assets (symbolized by LTDAR). This study separates the leverage with higher debt and lower debt by applying median value for average leverage of each firms. While the independent variables for this study are : profitability which presented by return on assets and measured by ratio of net profit to total assets (symbolized by ROA); firm size which measured by natural logarithms of total assets (symbolized by Size); asset structure which measured by ratio of total fixed assets to total assets (symbolized by Tangibility); income tax which measured by ratio of tax expense to income before

tax (symbolized by Tax); and share price which measured by closing price at the end of year after corporate action (symbolized by Price).

3.3. *Regression model*

This study conducts logistic regression analysis at significance of 0.05 for hypotheses testing and uses chi square value to determine whether the model is fit (insignificant at 0.05) or model is not fit (significant at 0.05). There are two regression models used by this study since the dependent variables are using two types of leverages. The regression models for this study are as follow:

$$DAR_{dummy} = \alpha + \beta_1 ROA + \beta_2 SIZE + \beta_3 TANG + \beta_4 TAX + \beta_5 PRICE + \varepsilon \quad (1)$$

$$LTD_{dummy} = \alpha + \beta_1 ROA + \beta_2 SIZE + \beta_3 TANG + \beta_4 TAX + \beta_5 PRICE + \varepsilon \quad (2)$$

4. Results and Discussion

4.1. *Descriptive statistics*

Table 2 presents the descriptive statistics for ratio of total debts to total assets, ratio of net profit to total assets, firm size, tangibility or asset structure, ratio of tax expense to income before tax, and share prices characteristics for firms with higher total debt, firms with higher long term debt, firms with lower total debt, and firms with lower long term debt.

Table 2. *Descriptive Statistics*

	Minimum	Maximum	Mean
Firms with higher total debt			
DAR	0.17	5.03	0.70
ROA	-1.28	3.47	0.04
Size	9.49	19.32	14.96
Tangibility	0.00	0.99	0.34
Tax	-137.65	29.79	-0.13
Price	35.00	37,000.00	1,862.61

Table 2. *Descriptive statistics (continue)*

	Minimum	Maximum	Mean
Firms with higher long term debt			
LTDAR	0.00	4.83	0.31
ROA	-1.28	3.47	0.05
Size	9.49	19.32	15.52
Tangibility	0.00	0.99	0.39
Tax	-137.65	29.79	-0.11
Price	35.00	18,000.00	2,287.44
Firms with lower total debt			
DAR	0.00	1.04	0.30
ROA	-0.27	0.75	0.09
Size	9.48	18.93	14.93
Tangibility	0.00	0.96	0.32

Tax	-0.66	4.08	0.23
Price	50.00	132,500.00	4,840.79
Firms with lower long term debt			
LTDAR	0.00	0.29	0.05
ROA	-0.35	0.75	0.08
Size	9.48	17.97	14.37
Tangibility	0.00	0.96	0.27
Tax	-4.33	1.07	0.21
Price	50.00	132,500.00	4,415.97

Table 2 shows the mean value of profitability for firms with low debts is higher rather than firms with high debts which indicates these firms have better performance and tend to increase their debts in term to get tax shield because they have higher income tax expense. Moreover, these firms have higher share prices in capital market make them have much opportunities to choose their sources of fund both of equities or debts. Otherwise, the mean value of size and tangibility for firms with high debts is higher rather than firms with low debts which indicates these firms are allocating most of their debt for financing the investment activities.

Table 3. *Logistic regression for debt policy*

	Firms with higher debt		**Firms with lower debt**	
	DAR	LTDAR	DAR	LTDAR
ROA	-1.991*	-0.207*	1.991*	0.207*
Size	0.147*	0.554*	-0.147*	-0.554*
Tangibility	-0.302	0.414*	0.302	-0.414*
Tax	-0.013	-0.197	0.013	0.197
Price	-0.282*	-0.184*	0.282*	0.184*
Chi square	0.111**	0.108**	0.111**	0.108**

**significant at 0.05*
***insignificant at 0.05 which means model is fit*

4.2. Firms with higher total debt

Table 3 shows that, profitability, firm size, and share price have significant effect to leverage which mean the hypothesis of Ha_1, Ha_2, and Ha_5 for this study are accepted, while the insignificant effect by tangibility and income tax make the hypothesis of Ha_3 and Ha_4 for this study are rejected. The negative coefficient and significant by profitability shows that, the firms with higher total debt are following the pecking order model as suggested by Myers (2001) and Chen (2004). Confirming the mean value of profitability for these firms as presented in Table 2, since their profitability are lower rather than firms with low total debts then this result indicates these firms are adjusting their capital structure by reducing debts and starting to use their retained earnings because they are enduring high debt interest expense.

The negative coefficient and significant by share price is appropriate with market timing hypothesis as proposed by Baker and Wurgler (2002), Hovakimian,

Hovakimian, and Tehranian (2004), Alti (2006), and Brendea (2012) and also supports the concept of market timing as application of pecking order model as proposed by Elliott, Kant, and Warr (2008). This result indicates these firms have tendency to replace the utilization of debt by issuing new shares beside of using their retained earnings. Myers (2001) explains, most of firms have many financing choices in term to adjust their capital structures at relatively low cost of capital. As presented in Table 2, these firms have lower share price relatively at capital market makes them have lower cost of capital when they are choose to issue new shares.

The positive coefficient and significant by firm size is appropriate with trade off model and consistent with Titman and Wessels (1988), Rajan and Zingales (1995), but also gives some ambiguous interpretation because the coefficient of profitability and share price show these firms are applying the pecking order model. In this study, the proxy for firm size is total assets which have component of tangible assets (current assets and fixed assets) and intangible assets, and the proxy for total debt which have component of short term debts (includes deferred debt interest expenses) and long term debts.

Notice for negative coefficient of tangibility although it is insignificant but the sign of this coefficient confirms that the firms with higher total debt do not have tendency to use debt in financing their investment activities or fixed assets. This result imply that the positive effect by firm size may caused by increase for short term debts in financing their current assets or deferred debt interest expenses. Under these circumstances then firms with higher total debt are applying pecking order model.

4.3. Firms with higher long term debt

Table 3 shows that, profitability, firm size, tangibility and share price have significant effect to leverage which mean the hypothesis of Ha_1, Ha_2, Ha_3 and Ha_5 for this study are accepted, while the insignificant effect by income tax makes the hypothesis of Ha_4 for this study are rejected. The coefficient of profitability for firms with higher long term debt are negative and significant which means these firms are applying pecking order model as suggested by Myers (2001) and Chen (2004). Since they have lower profitability rather than firms with lower long term debt as presented in Table 2, then these firms are tend have similar conditions as firms with higher total debt which means they are starting to use their retained earnings because enduring high debt interest expense.

Similar firms with higher total debt, the negative coefficient and significant by share price shows the effect of market timing and at once confirming the pecking order model for these firms as suggested by Baker and Wurgler (2002), Hovakimian, Hovakimian, and Tehranian (2004), Alti (2006), Elliott, Kant, and Warr (2008), and Brendea (2012). As presented in Table 2, these firms are also have lower share

market prices relative to firms with lower long term debt which makes them can issue new shares at lower costs while their prices are overvalued.

The positive significant by coefficients of firm size and tangibility may be viewed in perspective of pecking order model as suggested by Titman and Wessels (1988) and Rajan and Zingales (1995), where pecking order model suggests the firms can prefer to obtain more debt while the firms are lack for retained earnings and the cost of debt are low, which implies the firms should have optimum capital structures and do not have financial distress. Another possibility to support the explanation about this condition is agency conflict, as suggested by Jensen (1988), Myers (2001), and Aivazian, Ge, and Qiu (2005), where these firms have tendency to control their manager's behavior in creating overinvestment.

4.4. Firms with lower total debt

Similar to firms with higher total debt, Table 3 shows that, profitability, firm size, and share price have significant effect to leverage which mean the hypothesis of Ha_1, Ha_2, and Ha_5 for this study are accepted, while the insignificant effect by tangibility and income tax make the hypothesis of Ha_3 and Ha_4 for this study are rejected. The positive significant by profitability is appropriate with trade off model as suggested by Myers (2001). As clarify by positive insignificant of tangibility, the negative significant by firm size is still consistent with trade off model as suggested by Titman and Wessels (1988) and Rajan and Zingales (1995) which implies that firms with lower total debt have tendency to obtain more long term debts rather than short term debts.

The positive coefficient and significant by share price is supporting the findings by Cheng and Shiu (2007) and Fenech (2008) but inconsistent with market timing hypothesis as suggested by Baker and Wurgler (2002), Hovakimian, Hovakimian, and Tehranian (2004), Alti (2006), and Brendea (2012). As presented in Table 2, these firms have higher share price rather than firms with higher total debt which implies these firms shall face higher cost of equities as demanded by shareholders when they are prefer for equities or to issue new shares as suggested by Titman and Wessels (1988) and Fenech (2008). The positive effect by share price is also consistent with Bonaimé, Öztekin, and Warr (2014) who find that, the firms with higher debts shall have lower share prices while firms with lower debts shall have higher share prices which is appropriate with trade off model.

4.5. Firms with lower long term debt

Similar to firms with higher long term debt, Table 3 shows that, profitability, firm size, tangibility and share price have significant effect to leverage which mean the hypothesis of Ha_1, Ha_2, Ha_3 and Ha_5 for this study are accepted, while the insignificant effect by income tax makes the hypothesis of Ha_4 for this study are rejected. The positive significant by profitability is appropriate with trade off model

as suggested by Myers (2001). Confirming this result, the coefficient for share prices also have positive significant effect and consistent with Titman and Wessels (1988) and Fenech (2008) which means these firms are tend to obtain debts rather than to issue equities because they are facing higher cost of capital by investors since they have higher share prices as presented in Table 2. In this case, firms with lower long term debt are not under circumstances of market timing effect. Although it has insignificant effect, but the positive coefficient by tax income is consistent trade off model as suggested by Miller (1977), Graham (1996), and Myers (2001) and at once supporting the significant effect by profitability and share price.

The negative significant by firm size and tangibility are consistent in perspective of pecking order model or trade off model. Following Titman and Wessels (1988) and Rajan and Zingales (1995), in perspective of pecking order model with context of investments, the firms shall use their retained earnings at first and shall use debts with lower costs after the retained earnings are less which implies they shall reduce their debts at first. Fama and French (2002) suggest, the firms commonly shall use their retained earnings at first for investment activities in term to avoid the risk of debt. As the firms with lower long term debt have tendency to face higher cost of equities and looking for tax shield then their preference for debt indicates these firms are not avoiding the risk of debt, which means they are not applying the pecking order model.

Otherwise, since these firms have lower size and tangibility rather than firms with higher long term debt as presented in Table 2, then it means these firms have large opportunities for investments with high positive net present value. Fama and French (2002) suggest that, in perspective of trade off model, the firms with high value of investments shall reduce the utilization of debt because they shall get large return on investments which implies the firms with lower long term debt are applying trade off model.

5. Conclusions and Limitations

The capital structure is still a puzzle since debt has playing its own role both in perspective of trade off theory and pecking order theory. The presence of debt is inflicting some questions whether it is just a policy or requirement for the firms. This study conducts logistic regression with sample of 148 public firms listed in Indonesia Stock Exchange for period of 2011 to 2015 with objective to give some empirical evidences about capital structure. As a developing country, Indonesia has many firms with large growth opportunities which make them have various of debt in order to reach the optimum cost of capital. The result of analysis shows profitability, firm size, and share price are the most variables which affecting to debt policy, while the tangibility has effect only for certain conditions, such as firms with higher long term debt ratio and firms with lower long term debt ratio. On these

results, the study reports that, firms with higher total debt ratio shall prefer pecking order model in determining capital structures, and firms with higher long term debt ratio shall prefer pecking order model although the result indicates that agency conflict plays role in determining capital structures, while firms with lower total debt ratio and firms with lower long term debt ratio shall prefer trade off model for capital structures.

This study suggests that, firms are commonly looking the optimum debts for optimum capital structures, which means debt is not only a policy but it is also a requirement in financing the investments. In addition, the implication of these findings indicates that capital structure is not only affected by insiders but can be from outsiders or market depend on firm's requirements. Since the findings are in scope of trade off theory and pecking order theory, then this study suggests for next studies to extent the topics with agency conflict. Although the findings by this study is not absolute when it is limited to sample and phenomena in period of observation, but hope it can be the reference for the next studies about capital structure.

References

Aivazian, V.A., Ge, Y. and Qiu, J. 2005. The impact of leverage on firm investment : Canadian evidence. Journal of Corporate Finance, 11, 277-291.

Allegret, J.P., Raymond, H. and Rharrabti, H. 2016. The Impact of the Eurozone Crisis on European Banks Stocks, Contagion or Interdependence. European Research Studies Journal, 19(1), 129-147.

Alti, A. 2006. How Persistent Is the Impact of Market Timing on Capital Structure? The Journal of Finance, 61(4), 1681-1710.

Baker, M. and Wurgler, J. 2002. Market Timing and Capital Structure. The Journal of Finance, 57(1), 1-32.

Bonaimé, A.A., Öztekin, Ö. and Warr, R.S. 2014. Capital Structure, Equity Mispricing, and Stock Repurchases. Journal of Corporate Finance, 26, 182-200.

Boldeanu, T.F., Tache, I. 2016. The Financial System of the EU and the Capital Markets Union. European Research Studies Journal, 19(1), 60-70.

Břečková, P. and Havlíček, K. 2013. Leaders Management and Personnel Controlling in SMEs. European Research Studies Journal, 16 (4), Special Issue on SMEs.

Brendea, G. 2012. Testing the Impact of Market Timing on the Romanian Firms' Capital Structure. Procedia Economics and Finance, 3, 138-143.

Chen, J.J. 2004. Determinants of Capital Structure of Chinese-Listed Companies. Journal of Business Research, 57(12), 1341-1351.

Cheng, S.R. and Shiu, C.Y. 2007. Investor Protection and Capital Structure : International Evidence. Journal of International Financial Management, 17(1), 30-44.

Duguleana, L., Duguleana, C. 2016. Structural Aspects of the European Union Economy. European Research Studies Journal, 19(1), 93-128.

Elliott, W.B., Kant, J.K. and Warr, R.S. 2008. Market Timing and the Debt-Equity Choice. Journal of Financial Intermediation, 17(2), 175-197.

Fama, E.F. and French, K.R. 2002. Testing Trade-Off and Pecking Order Predictions about Dividends and Debt. The Review of Financial Studies, 15(1), 1-33.

Fenech, J.P. 2008. The Stock Market Reaction to Australian Convertible Debt Issues : New Evidence. Investment Management and Financial Innovations, 5(3), 90-100.

Fetai, B. 2015. Financial Integration and Financial Development: Does Financial Integration Metter?. European Research Studies Journal, 18(2), 97-106.

Frank, M.Z. and Goyal, V.K. 2003. Testing the Pecking Order Theory of Capital Structure. Journal of Financial Economics, 67(2), 217–248.

Graham, J.R. 1996. Debt and the Marginal Tax Rate. Journal of Financial Economics, 41(1), 41-73.

Havlíček, K., Thalassinos I.E. and Berezkinova, L. 2013. Innovation Management and Controlling in SMEs. European Research Studies Journal, 16(4), 57-70. Special Issue on SMEs.

Hovakimian, A., Hovakimian, G. and Tehranian, H. 2004. Determinants of Target Capital Structure : The Case of Dual Debt and Equity Issues. Journal of Financial Economics, 71(3), 517–540.

Jensen, M.C. 1988. Takeovers : Their causes and consequences. The Journal of Economic Perspectives, 2(1), 21-48.

Klein, L.S., O'Brien, T.J. and Peters, S.R. 2002. Debt vs. Equity and Asymmetric Information: A Review. The Financial Review, 37, 317-350.

Miller, M.H. 1977. Debt and Taxes. The Journal of Finance, 32(2), 261-275.

Myers, S.C. 1984. The Capital Structure Puzzle. The Journal of Finance, 39(3), 575-592.

Myers, S.C. 2001. Capital Structure. The Journal of Economic Perspectives, 15(2), 81-102.

Nechaev, A., Antipina, O. 2016. Analysis of the Impact of Taxation of Business Entities on the Innovative Development of the Country. European Research Studies Journal, 19(1), 71-88.

Rajan, R.G. and Zingales, L. 1995. What Do We Know about Capital Structure? Some Evidence from International Data. The Journal of Finance, 50(5), 1421-1460.

Sunder, L.S. and Myers, S.C. 1999. Testing Static Tradeoff against Pecking Order Models of Capital Structure. Journal of Financial Economics, 51(2), 219-244.

Suryanto, T. 2016. Audit Delay and Its Implication for Fraudulent Financial Reporting: A Study of Companies Listed in the Indonesian Stock Exchange. European Research Studies Journal, 19(1), 18-31.

Thalassinos, I.E., Stamatopoulos, D.T. and Thalassinos, E.P. 2015. The European Sovereign Debt Crisis and the Role of Credit Swaps. Chapter book in The WSPC Handbook of Futures Markets (eds) W. Ziemba and A.G. Malliaris, in memory of Late Milton Miller (Nobel 1990) World Scientific Handbook in Financial Economic Series Vol. 5, Chapter 20, pp. 605-639.

Thalassinos, I.E., Deceanu, L. and Pintea, M. 2010. New Dimensions of Country Risk in the Context of the Current Crisis: A Case Study for Romania and Greece. European Research Studies Journal, 13(3), 225-236.

Titman, S. and Wessels, R. 1988. The Determinants of Capital Structure Choice. The Journal of Finance, 43(1), 1-19.

Vovchenko, G.N., Holina, G.M., Orobinskiy, S.A. and Sichev, A.R. 2017. Ensuring Financial Stability of Companies on the Basis of International Experience in Construction of Risks Maps, Internal Control and Audit. European Research Studies Journal, 20(1), 350-368.

The Capital Structure: Is Debt just a Policy or Requerement?

ORIGINALITY REPORT

24%	19%	15%	14%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Arkansas State University, Jonesboro Student Paper	1%
2	www.iicies.org Internet Source	1%
3	jafas.org Internet Source	1%
4	Submitted to University of Essex Student Paper	1%
5	Submitted to Massey University Student Paper	1%
6	Niloufar Rezaie Nejad, Shaista Wasiuzzaman. "Multilevel Determinants of Capital Structure: Evidence from Malaysia", Global Business Review, 2015 Publication	1%
7	www.inderscience.com Internet Source	1%
8	Submitted to CITY College, Affiliated Institute of the University of Sheffield	1%

	Student Paper	
9	www.ersj.eu Internet Source	1%
10	"Societies in Transition", Springer Nature America, Inc, 2015 Publication	1%
11	estudiosdeadministracion.unegocios.cl Internet Source	1%
12	scholar.sun.ac.za Internet Source	1%
13	www.congressousp.fipecafi.org Internet Source	1%
14	www.efmaefm.org Internet Source	1%
15	Submitted to Bolton Institute of Higher Education Student Paper	<1%
16	lup.lub.lu.se Internet Source	<1%
17	Submitted to Bridgepoint Education Student Paper	<1%
18	doctorat.ubbcluj.ro Internet Source	<1%
19	Submitted to 7996 Student Paper	<1%

20	Mohammadi, Hojjatollah Derakhshan. "Determinants of capital structure: an empirical study of firms in Iran", International Journal of Law and Management, 2015 Publication	<1%
21	Sung Gyun Mun, SooCheong (Shawn) Jang. ""Understanding restaurant firms" debt-equity financing", International Journal of Contemporary Hospitality Management, 2017 Publication	<1%
22	Submitted to University of Newcastle Student Paper	<1%
23	Submitted to University of Strathclyde Student Paper	<1%
24	Submitted to University of Salford Student Paper	<1%
25	Abdul Rashid. "Firm external financing decisions: explaining the role of risks", Managerial Finance, 2014 Publication	<1%
26	Submitted to Taylor's Education Group Student Paper	<1%
27	finance.expertjournals.com Internet Source	<1%
28	centerforpbbefr.rutgers.edu Internet Source	<1%
29	economics.ca	

	Internet Source	<1%
30	ejournal.narotama.ac.id Internet Source	<1%
31	Submitted to Institute of Graduate Studies, UiTM Student Paper	<1%
32	espace.curtin.edu.au Internet Source	<1%
33	Submitted to University of Stirling Student Paper	<1%
34	Submitted to University of Northumbria at Newcastle Student Paper	<1%
35	2017.eres.tudelft.nl Internet Source	<1%
36	www.tandfonline.com Internet Source	<1%
37	article.sapub.org Internet Source	<1%
38	www.vckgroup.com Internet Source	<1%
39	pbr.iobm.edu.pk Internet Source	<1%
40	media.neliti.com Internet Source	<1%

41	epub.ub.uni-muenchen.de Internet Source	<1%
42	Submitted to Middlesex University Student Paper	<1%
43	Submitted to University of Exeter Student Paper	<1%
44	mpra.ub.uni-muenchen.de Internet Source	<1%
45	Osman Sahin. "chapter 19 Crisis Effects on the Capital Structure Determinants for Manufacturing Companies", IGI Global, 2013 Publication	<1%
46	aut.researchgateway.ac.nz Internet Source	<1%
47	Giacomo Morri, Fabio Cristanziani. "What determines the capital structure of real estate companies?", Journal of Property Investment & Finance, 2009 Publication	<1%
48	www.ijbmi.org Internet Source	<1%
49	pure.au.dk Internet Source	<1%
50	wps.fep.up.pt Internet Source	<1%
51	www.econjournals.com	

	Internet Source	<1%
52	www.coursehero.com Internet Source	<1%
53	umu.diva-portal.org Internet Source	<1%
54	www.diva-portal.org Internet Source	<1%
55	www.frbatlanta.org Internet Source	<1%
56	Halit Gonenc. "Comparison of debt financing between international and domestic firms", International Journal of Managerial Finance, 2005 Publication	<1%
57	dspace.stir.ac.uk Internet Source	<1%
58	etheses.nottingham.ac.uk Internet Source	<1%
59	res.mdpi.com Internet Source	<1%
60	Managerial Finance, Volume 39, Issue 12 (2013-10-05) Publication	<1%
61	openaccess.city.ac.uk Internet Source	<1%

62	www.theseus.fi Internet Source	<1%
63	www.cass.city.ac.uk Internet Source	<1%
64	Sung C. Bae, Hyeon Sook Kim, Taek Ho Kwon. "The Determinants of Foreign Currency Debt Financing: Borrower Incentives or Lender Incentives?", Asia-Pacific Journal of Financial Studies, 2017 Publication	<1%
65	dspace.lboro.ac.uk Internet Source	<1%
66	Razali Haron. "Do Indonesian firms practice target capital structure? A dynamic approach", Journal of Asia Business Studies, 2016 Publication	<1%
67	Tanveer Ahsan, Man Wang, Muhammad Azeem Qureshi. "How do they adjust their capital structure along their life cycle? An empirical study about capital structure over life cycle of Pakistani firms", Journal of Asia Business Studies, 2016 Publication	<1%
68	Rusmin Rusmin, John Evans. "Audit quality and audit report lag: case of Indonesian listed companies", Asian Review of Accounting, 2017	<1%

Publication

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	Off		