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ORIGINAL RESEARCH

Investigating Capital Structure Speed of Adjustment (SOA) of Indonesian Companies for Corporate Value

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Abstract The objective of this study is to evaluate influence of growth potential, profitability, company size, ratio between capital structure and its target, short-term loan, asset maturity, growth of GDP and inflation rate towards capital structure SOA. The study involved secondary data in the form of financial reports from manufacturing companies listed in Indonesian Stock Exchange (ISE) published in ISE website, www.idx.co.id, and National Bureau of Statistics data about Indonesian economy published in www.bps.go.id, National Bureau of Statistics. From the result of partial adjustment model estimation, significant leverage lag shows that Indonesian manufacturing companies adjust their capital structure towards target leverage with SOA of 64.73% per year. This finding confirms in Darminto and Manurung (J Bus Manag 1(1):35–52, 2008) that capital structure SOA of Indonesian companies is relatively faster than that in the developed countries like USA (30%) (Flannery and Rangan in J Financ Econ 79(3):469–506. http://doi.org/10.1016/j.jfineco.2005.03.004, 2006). Capital structure SOA of manufacturing companies in Indonesia is similar to Ramjee and Gwatidzo (Medit Account Res 20(1):52–67, 2012)'s study on capital structure SOA of manufacturing companies in South Africa (between 62.3 and 65.5% per year). Originality of this study is capital structure measurement used in the study. Until recently, two major theories, trade-off theory and pecking order theory, have been used to explain capital structure of companies. Previous studies evaluated both theories separately. This study is based on "dynamic trade-off theory" in which the trade-off theory and pecking order theory are evaluated simultaneously instead of partially.

Keywords Capital structure · Manufacturing industry · Speed of adjustment

JEL Classification G30 · O16 · G34

Introduction

Theories on capital structure are developed after Modigliani and Miller (1958)'s article about capital structure of company was published. Since then, studies on capital structure of company have been conducted all over the world. The trade-off theory predicts that particular optimum level of leverage (debt ratio) is needed to identify relationship between capital structure and company value. The pecking order theory stated that funding decisions follow particular hierarchy in which external internal financing sources come before external ones. When a company uses external funding, a loan (debt) is preceded by funding with additional capital from a new shareholder (external equity). Based on the pecking order theory, company does not have clear definition about debt ratio.

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Funding timing theory states that the main determinant of the use of corporate capital structure is timing of financial funding condition (Baker and Wurgler 2002). Company generally does not care whether it is financed with debt or equity; instead, it selects a form of financing that, at some point in time, seems to be more appreciated by financial funding. Funding timing theory explains that there is not any optimal capital structure, in which capital structure decisions are result of the company's efforts to decide suitable timing of the capital funding.

Since the emergence of various theories on capital structure, there seems to be a competition to prove one best theory. Findings of previous studies are different from one another, but some are able to draw conclusion on the most suitable theory that can explain capital structure of companies. Myers (1984) wrote an article entitled "the capital structure puzzle," similar to Black (1976)'s "the dividend puzzle" to describe how little information about how company chooses its capital structure we know. In fact, capital structure decision-making is complicated and involves a lot of factors. Fama and French (2005) suggested that both the trade-off model and the pecking order model have serious problems, and it may be the time to put the empirical horse races between the two theories on hold. Both theories are complementary to each other because these can help explain some aspects of funding decision-making.

Scholars have conducted studies on target capital structure. Graham and Harvey (2001) conducted survey towards CFOs of American and Canadian companies. The study showed that 81% of the CFOs have established either fixed or estimated target debt ratio. Ang et al. (1997) who conducted survey in Indonesia also found out that 87% of companies have optimum limit for debt. Bancel and Mittoo (2004) and Brounen et al. (2004) also obtained similar findings, which support target leverage desired by managers. Other researchers used different approaches, for example using target capital structure as endogenous variable and investigating whether companies make adjustment to their capital structure meet particular target. Using the later approach, De Miguel and Pindado (2001) found that companies adjusted their capital structure to match target. Researchers investigating capital structure target are Ozkan (2001), Fama and French (2002), Korajczyk and Levy (2003), Mao (2003), Frank and Goyal (2004), Hovakimian et al. (2004), Ju et al. (2005), Leary and Roberts (2005) and Flannery and Rangan (2006), among others.

Target leverage does not necessarily mean that the trade-off theory alone is able to explain capital structure of company. Leary and Roberts (2005) suggested that evaluation towards the trade-off theory generally assumes that rebalancing leverage to meet target is not cost-effective. These transaction costs can be the cause why companies use the pecking order theory as a basis to sequence their funding sources. Leary and Roberts (2005) postulated that companies are actively rebalancing leverage to stay within the optimum range. The finding is consistent to Myers and Majluf (1984)'s pecking order predictions with modifications that prioritize internal funding but tend to lean towards external funding when investment needs are high.

Fischer et al. (1989) proposed a model of dynamic capital structure. The dynamic capital structure theory states that companies can systematically deviate from their target leverages, although their choice of capital structure is in line with the trade-off theory. Hovakimian et al. (2002) also used the term dynamic and stated that the dynamic trade-off theory is a compromise version of the trade-off and the pecking order theory. The dynamic trade-off theory stated that leverage ratio of companies can deviate from their target for some time, and when the gap between the ratio and the target is enough, manager shifts the ratio back towards the target. The pecking order model explains short-term deviation but the trade-off theory explains about it in the long run.

Other dynamic capital structure concepts refer to the dynamic econometric model Jalilvand and Harris (1984) initiated to explain capital structure adjustment of companies. Fischer et al. (1989), Hovakimian et al. (2002), Jalilvand and Harris (1984)'s dynamic capital structure theories are similar in terms that capital structure of company may be different from its target and the company makes efforts in order that the capital structure meets the target. Studies on capital structure adjustment behaviour generally use Jalilvand and Harris (1984)'s dynamic model that can calculate speed of adjustment (SOA). Huang and Ritter (2009) stated that the most important issue of capital structure research today is to estimate how fast company can adjust its target leverage. When company can make the adjustment quickly, the funding timing theory is not an important theory to explain capital structure of company.

In physics, speed refers to velocity (Wilson 1901: 125). Speed only shows how fast objects move. Speed is generally expressed as distance divided by time, but if the time is fixed then speed can be expressed by distance alone. Speed of different moving objects can be compared by measuring how much distance these objects travel when they move within the same observation interval. The fastest object is one that moves the furthest. Structure speed of adjustment (SOA) of capital structure shows how far company can change its capital structure to meet its target within particular period of time. Every company needs a different amount of time so that its capital structure meets the target. Based on the previous studies, standardized measurement of capital structure SOA is to mention how much capital structure adjustment a company makes or

percentage of ratio between the actual capital structure and its target.

Optimal capital structure or target in the trade-off theory model will maximize company value; thus, the faster company adjusts its capital structure to meet the target, the easier it is for company to achieve its maximum value. It is critical to run analysis on how characteristics of company and macroeconomic affect SOA.

Frank and Goyal (2008: 183) stated that capital structure target is not observable, and as a consequence, company should provide an estimated number. Jalilvand and Harris (1984), De Miguel and Pindado (2001), Flannery and Rangan (2006) integrated the model of capital structure target estimation in one partial adjustment model which simultaneously estimates SOA. SOA is measured based on comparing percentage of actual leverage change and targeted leverage change. Based on the partial adjustment model, coefficient of capital structure adjustment (δ) is obtained by identifying regression coefficient of lagged leverage towards leverage. The regression coefficient of the lagged leverage is denoted by "θ," and coefficient of capital structure SOA (δ) is $1 - \theta$, where $| \theta | < 1$.

Drobetz and Wanzenried (2006) are first researchers who substituted the determinant function of capital structure SOA into the partial adjustment model. Based on Drobetz and Wanzenried (2006)'s model, a variable is said to affect capital structure SOA when interaction between the variable and lagged leverage has significant influence towards leverage. Interaction is multiplication of capital structure SOA (determinant variable) and the lagged leverage. Variable interaction can show moderation relationship. Therefore, when a variable strengthens or weakens relationship between the lagged leverage and the leverage, the variable influences capital structure SOA (influence δ).

Fama and French (2002) found that capital structure SOA in the USA was slow (between 7 and 18% per year), while Lemmon et al. (2008) found a faster SOA, which is 25%. Flannery and Rangan (2006) were also studying the dynamic capital structure in the USA and even obtained a faster estimated SOA of 35.5% per year for funding leverage and 34.2% per year for book leverage. Ozkan (2001) stated that the SOA in the UK is approximately 57% per year. Darminto and Manurung (2008) mentioned that adjustment towards target leverages in Indonesia is relatively fast (around 44% per year). Conducting similar study in the same setting, Wetty (2013) argued that the average SOA in Indonesia is 83% or almost double that of Darminto and Manurung (2008).

The findings of Darminto and Manurung (2008) and Wetty (2013) are quite interesting because the capital structure adjustment in the developing countries is faster than that in the developed countries. The findings do not support some previous researchers that examined capital structure dynamic across countries. Antoniou et al. (2008) stated capital structure speed of adjustment (SOA) depends heavily on financial system and corporate governance traditions of a country. Drobetz et al. (2015) suggested that on average, companies from bank-based countries have slower capital structure SOA than those from funding-based countries. Clark et al. (2009) mentioned that companies in developing countries that protect creditor and stockholder rights adjust their capital structure more quickly. Researchers still question factors that determine capital structure SOA of companies in Indonesia.

Elsas and Florysiak (2011) stated that weakness of the dynamic regression model on the capital structure is assumption that all companies have the same capital structure SOA. Previous studies obtain heterogeneous capital structure adjustment rate due to different samples and different econometric estimators, rather than exploration of cross-sectional differences. These heterogeneous findings encourage some researchers such as Banerjee et al. (2000), Lööf (2004), Drobetz and Wanzenried (2006) and Lemma and Negash (2014) to examine factors that influence capital structure SOA. Previous studies investigating factors that affect capital structure SOA provided different findings; these studies showed that company growth, company size, the amount of deviation with the target and macroeconomic are some of the factors that influence capital structure SOA.

Dewi and Ramli (2017) stated that the factors affecting the company's capital structure were sales stability, asset structure, operating leverage, growth rates, profitability, taxes, controls, management attitudes, attitudes giver loans, market conditions, internal market conditions, and financial flexibility. Previous empirical studies have linked adjustment costs and financial flexibility to characteristics of company such as growth opportunities, size, profitability, deviations of the capital structure from the target and risk. Barclay and Smith (1995) argue that when a company chooses debt as a source of funding, then it should also consider time frame of the debt. Considering the importance of short-term debt as funding source in Indonesian companies, it is necessary to evaluate how much impact short-term debt has towards capital structure SOA. One of the variables used to measure financial flexibility is assets maturity; but this variable has not been applied in studies that investigate determinant factors of capital structure SOA. Therefore, asset maturity is involved as one of the variables in this research. Hackbart et al. (2006) stated that in addition to characteristics of company, economic condition also affects capital structure dynamic.

Growing companies change their capital structure more easily by choosing various alternative sources of funding. Drobetz and Wanzenried (2006) and Elsas and Florysiak

(2011) found evidence that company growth had a positive effect towards capital structure SOA. Banerjee et al. (2000), Lööf (2004) and Wetty (2013) found the opposite result that is company growth had negative influence towards capital structure SOA. Lemma and Negash (2014) revealed that growth did not have significant influence towards capital structure SOA. Mukherjee and Mahakud (2010) stated that growth has significant positive influence towards capital structure SOA when the capital structure is measured using book value of leverage, whereas growth has negative influence towards the capital structure SOA when capital structure is measured by funding value of leverage.

Harjito (2011) states that a more profitable company will tend to use financing from retained earnings before using debt or equity (equity). Lemma and Negash (2014) found evidence that profitability had significant positive influence towards capital structure speed of adjustment (SOA). Naveed et al. (2015) reported the opposite finding, showing that profitability had negative influence towards capital structure SOA. Naveed et al. (2015) described his findings based on the agency theory. Profitable companies use debt as instrument to manage free cash flow and thus, decreasing capital structure SOA.

Large companies generally have better access to external funding sources than smaller companies. Banerjee et al. (2000), Lööf (2004), Haas and Peeters (2006), Flannery and Hankins (2007), Mukherjee and Mahakud (2010) found that company size has positive influence towards capital structure SOA. Elsas and Florysiak (2011), Flannery and Rangan (2006) reported the opposite finding in which company size had negative influence towards. Drobetz and Wanzenried (2006) explained that company size had negative influence when capital structure was measured using book value of debt to total capital ratio only. Lemma and Negash (2014) reported that company size has positive influence towards capital structure SOA when capital structure is measured by long-term leverage ratio; company size had significant negative influence effect when capital structure is measured using total leverage ratio.

Drobetz and Wanzenried (2006) argue that company adjusts its capital structure more quickly when the capital structure has deviated far enough from the target since some adjustment costs are fixed cost. Drobetz and Wanzenried (2006), Mukherjee and Mahakud (2010), Elsas and Florysiak (2011) describe ratio between capital structure and its target has positive influence towards capital structure SOA. This ratio is measured by absolute value, which means the measurement does not distinguish whether the deviation is over levered or under levered. The finding is at the opposite of Wetty (2013) that the ratio between capital structure and its target has negative influence towards capital structure SOA. The findings of Banerjee et al. (2000) and Lööf (2004) are different from that of Drobetz and Wanzenried (2006) where in most of the models and sample groups the influence is not significant, Banerjee et al. (2000) and Lööf (2004) argue that these findings indicate a low cost of adjustment in companies in UK that become samples of these studies.

Ria and Lestari (2015), stating that if the income variability is high, the business risk of the company will be high so that the resulting profit tends to fluctuate, which means unstable income, with a high business risk companies tend not to reduce debt. At the opposite, Elsas and Florysiak (2011) argue that companies facing high business risk have pressure to adjust their capital structure faster making risk has positive influence towards capital structure SOA. Difference type of risk being involved may be the reason why these studies have different findings. Elsas and Florysiak (2011) use default risk measured using Standard and Poor's credit rating. Rashid (2015) postulated that companies need shorter time to make capital structure adjustment risk level is low; it happens because cost of adjustment is lower when company-specific risk and macroeconomic risk are low. Type of risk commonly used in studies on capital structure is business risk (Booth et al. 2001; Ramjee and Gwatidzo 2012; Pornpen Thippayana 2014; Chen et al. 2014). This study is going to use business risk as one of the determinants of capital structure SOA.

Kim et al. (2006) reported that companies that use more short-term debt in their debt structures can adjust leverage more easily and faster than those with low levels of short-term liabilities. Kim et al. (2006) argue that short-term debt provides financial flexibility because short-term debt can be upgraded or repaid more easily than long-term debt. Aybar-Arias et al. (2012) supported Kim et al. (2006)'s finding on the positive effect of short-term debt on capital structure SOA. Based on the agency theory, short-term debt requires managers to periodically provide information for investors in order to evaluate returns and risks allowing investors to use new information to reevaluate debt when it is due.

Very few studies investigating how much influence short-time debt towards capital structure SOA. Nevertheless, when researchers do, their findings may be conflicting to those of Kim et al. (2006) and Aybar-Arias et al. (2012). Factors to take into account are short-term debt risks. Guedes and Opler (1996) explained that short-term debt increases liquidity risk, but companies may not be able to get long-term debt since investor constantly seeks for high rate of return to compensate long-term credit risk. Based on the statement, when limited access to other funding source is the reason for company to take short-term loan, this will obviously have negative influence towards capital structure SOA. Jun and Jen (2003) postulated that short-term loan

has more cost advantage than long-term debt but the former causes refinancing risk and interest rate risk. Both risks can increase adjustment cost. In bad economy, companies may not be able to get as much loan as they expected and, as a result, are facing financial difficulties, for example Asian economic crisis that leads to increase in default premium. Dollar and Hallward-Driemeier (2000) stated that prior to Asian economic crisis, manufacturing companies in Thailand manage to maintain high investment level because of their short-term debt, and eventually, there is maturity mismatch between obligation and investment. Dollar and Hallward-Driemeier (2000) also showed that the companies can hardly carry out structural adjustment programme from international financial institution.

Since manufacturing companies in Indonesia rely heavily on short-term loan in their loan structure and thus, it is important to identify impact of the short-term loan policy towards capital structure SOA in the sector. Rahmawati and Harto (2014) showed that average ratio of short-term loan to total loan in manufacturing companies in Indonesia is 70.59 percent. Sheikh and Wang (2011) argue that unreliable bond funding and high cost of long-term loan from banks are two reasons why manufacturing companies depend heavily on short-term loan. Positive impact short-term loan has towards SOA indicates good financial flexibility; however, when things happen otherwise, it may indicate limitations in accessing other funding sources that has negative influence towards capital structure adjustment.

Until recently, empirical studies show that characteristic of corporate assets that is frequently associated with capital structure SOA is number of assets as a proxy of company size. Jun and Jen (2003) and García-Teruel and Martínez-Solano (2007) used asset maturity level to measure financial flexibility of companies. Asset maturity is timing of cash flow generated by company's assets. The shorter asset maturity is, the faster cash is generated. Faulkender et al. (2012) stated that cash flow affects decisions to adjust leverage. Short asset maturity means good financial flexibility because company's assets are able to generate cash flow faster. Based on the theory, company with shorter asset maturity has faster capital structure adjustment. Researchers should investigate how much influence asset maturity has towards capital structure SOA because there is not any research that focus on correlation between asset maturity and capital structure SOA.

Macroeconomic factors have influence towards capital structure SOA. Drobetz and Wanzenried (2006) and Drobetz et al. (2015) reported that companies can adjust their capital structure to its target more quickly in good economic conditions. At the opposite, Lemma and Negash (2014) showed that capital structure SOA in poor countries is faster than that in developed countries. Some variables commonly used as indicators of macroeconomic condition are growth of Gross Domestic Product (GDP), inflation rate and interest rate. These indicators are related to each other, for example inflation rate is closely related to interest rate or known as the Fisher hypothesis. In this study, indicators of macroeconomic condition are growth of GDP and inflation rate.

Lemma and Negash (2014) mentioned that GDP growth and inflation rate have positive influence towards capital structure SOA. Wetty (2013) reported that GDP growth has negative influence towards capital structure SOA, but inflation rate has positive influence towards capital structure SOA. On the other hand, Öztekin and Flannery (2012) stated that GDP growth has positive influence towards capital structure SOA and inflation rate has negative influence towards capital structure SOA.

Studies on capital structure in Indonesia show that a lot of companies in Indonesia use loan in their capital structure. Ang et al. (1997) show that average leverage of Indonesian companies is 41%. Faccio et al. (2001) mentioned that average D/TA in Indonesia is 35.2%, the third after South Korea and Thailand (1996 observation). Cheng and Shiu (2007) showed that loan ratio of Indonesian companies is the highest (66.8%) among 45 sample countries (1998–2001). According to Mahadwartha and Ismiyanti (2008), average D/TA between 1995 and 2003 is 63.13%. Darminto and Manurung (2008) concluded that leverage condition of Indonesian companies is above the optimum leverage. Denis and McKeon (2012) who examined corporate debt that actively improves leverage suggested investment is the cause of high leverage in the capital structure of the samples.

Welch (2004), MacKay and Gordon (2005) and Frank and Goyal (2009) stated that the average leverage of companies has influence towards their capital structure decisions. Leary and Roberts (2014) postulated two explanations about similar capital structure behaviour among similar companies. The first is due to similar institutional environment and characteristics. Secondly, companies adjust their financial policy as response to financial policies and characteristic changes in similar companies. Titman and Wessels (1988) argue that due to large discrepancy in capital structure between industrial sectors, it is vital to investigate capital structure theory using limited samples, for instance Titman and Wessels (1988) who focused on manufacturing sector in their study. Jalilvand and Harris (1984), Titman and Wessels (1988), Kim et al. (2006), Mukherjee and Mahakud (2010), Sheikh and Wang (2011), Utami (2012) and Chadha and Sharma (2016) are other examples of capital structure studies that focus on manufacturing companies.

Harris et al. (1994) stated that financial liberalization in Indonesia in 1983 has a major impact on the manufacturing

sector as credit volume increased very rapidly. This high financial leverage increases return to equity in the extreme. World Bank publication in 2012 mentioned that after receiving an award, since the 1997–1998 Asian economic crisis, reputation of Indonesian manufacturing sector has been faded. It is due to their lower performance compared to other manufacturing companies in the neighbouring countries and other economic sectors. Increasing global commodity trading in the recent years causes economic growth in Indonesia. Exports of commodities and primary resources have increased significantly, and this has attracted large amounts of investment. However, although their service sector shows increasingly positive tendency, Indonesian manufacturing sector has not been able to regain its original dynamism.

The Ministry of Industry shows that the industrial sector, particularly the non-oil manufacturing sector, experiences rapid growth or even higher that the growth of the national GDP since 2011. The growth of manufacturing industry sector in 2013 is 6.10%, while the growth of the national GDP is only 5.78%. The same trend occurred in 2014 and the first quarter of 2015 where the growth of manufacturing industry sector is higher than the growth of the national GDP.

Based on the elaboration, it is pivotal to investigate capital structure SOA of manufacturing companies listed in Indonesian Stock Exchange. Antoniou et al. (2008) stated that manufacturing industry is capital intensive and characterized by high leverage. Utami (2012) suggested that in order to keep growing, manufacturing companies should finance their financial deficit or even new projects. It is important for companies to choose their capital structure carefully to finance investment. Chadha and Sharma (2016) argue that there are large numbers of companies getting bankrupt because of their loan or inappropriate capital mix. As a result, optimum capital structure plays a pivotal role for manufacturing companies in developing countries.

Originality of this study is capital structure measurement used in the study. Until recently, two major theories, trade-off theory and pecking order theory, have been used to explain capital structure of companies. Previous studies evaluated both theories separately. This study is based on "dynamic trade-off theory" in which the trade-off theory and pecking order theory are evaluated simultaneously instead of partially. Based on the trade-off theory, companies have target leverage but they take various types of cost into account to change leverage, as the pecking order theory describes.

The entire research process will generate conclusions as answers to the problems under study. These conclusions will be used as evaluation materials for policy making. The sequence will create a dissertation concept. The dissertation concept provides new findings which can be used and contributes to the theory and development of science in research.

Literature Review

The objective of this study is to evaluate influence of growth potential, profitability, company size, ratio between capital structure and its target, short-term loan, asset maturity, growth of GDP and inflation rate towards capital structure SOA. Figure 1 describes relationship among the variables.

Influence of Growth Potential towards Capital Structure SOA

Based on the agency theory (Myers 1977), companies with high growth potential tend to avoid debt, shareholder conflicts with creditors and underinvestment issues associated with financial distress. However, the asymmetric information cost stated otherwise. Companies will increase leverage as response to high growth prospects. Whichever effect growth opportunity has towards target leverage, company with high growth opportunity can adjust its capital structure to meet its target more quickly.

Drobetz and Wanzenried (2006) stated that it is easier for growing companies to change their capital structure by selecting among several funding sources. Companies that do not grow can change their capital structure only by trading debt to equity; this may lead to negative signal due to asymmetric information and it is decreasing company value. Growing companies change their capital structure more easily by making more suitable composition. Even under asymmetric information, value of these companies does not change because of their positive growth in the future. Within the perspective of agency theory by Myers (1997) and information costs, a company will gain high growth and fast targets if it can adjust its capital structure with the note that it can choose several alternative funding sources.

Drobetz and Wanzenried (2006) who studies capital structure SOA in Switzerland stated that growth potential has positive, significant influence towards capital structure SOA. Other previous studies with similar finding are Elsas and Florysiak (2011) in the USA, Mukherjee and Mahakud (2010) in India, Aybar-Arias et al. (2012) in Spain and Naveed et al. (2015) in Pakistan. Based on the theory, the first hypothesis is:

H1 Growth potential has positive and significant influence towards capital structure SOA.

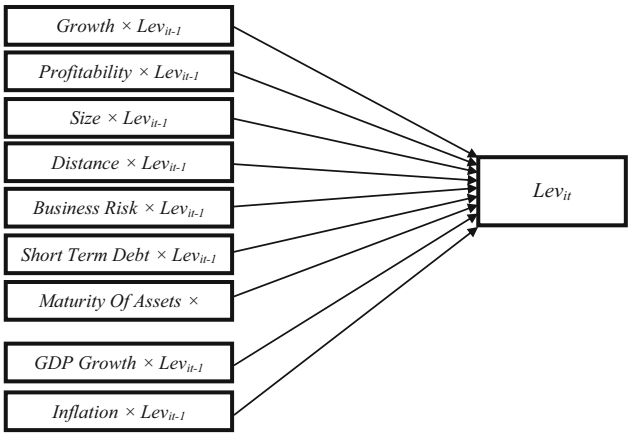

Fig. 1 Conceptual framework

Influence of Profitability Towards Capital Structure SOA

Based on the traditional trade-off theory, profitable companies have incentive to increase leverage for using debt interest tax shields, particularly during under levered. Based on the pecking order theory (Myers and Majluf 1984), companies prefer using their internal rather than external capital. Profitable companies can access this internal capital more easily. Companies with low profitability tend to have limited internal funding and have to deal with financial instability and issues (internal) preventing them to adjust leverage quickly.

Lemma and Negash (2014) stated that profitability affects cost and/or benefit from capital structure adjustment. Profitable companies have more flexibility in decision-making and publishing securities with better rate. Dang et al. (2012) described that profitable companies tend to have retained earnings which enable these companies to publish low-cost securities and avoid financial issues (internal). Large companies have incentive to take tax shield profit from loan interest and minimize asset substitution asset, particularly during under-leverage. Companies with low profitability tend to have limited internal fund and face financial instability and issues (internal) preventing them to adjust leverage quickly. Profitable companies make quicker capital structure adjustment than less profitable companies.

Lemma and Negash (2014), studying capital structure SOA in nine developing countries in Africa, revealed that profitability had positive significant influence towards capital structure SOA. Flannery and Hankins (2007) in the USA, and Haron et al. (2013) in Malaysia also found that profitability has positive influence towards capital structure SOA. Based on the theories, the second hypothesis is:

H2 Profitability has positive and significant influence towards capital structure SOA.

Influence of Company Size Towards Capital Structure SOA

Titman and Wessels (1988) stated that large companies have higher optimum debt capacity. Creditors assume that large companies have lower risk because they have large assets. As a result, large companies have better reputation in the financial funding. Drobetz and Wanzenried (2006) reported that large companies have lower asymmetric information costs making it relatively easy to access equity funding. Larger companies can take advantage of economic scale for securities issuance transaction costs. Therefore, external signing cost for large companies is relatively small allowing them to adjust leverage more quickly.

Heshmati (2001) argued that changing capital structure involves large fixed cost. This cost is proportionally low for large companies, and thus, it is easier for large companies to adjust their capital structure than smaller companies. Large companies can access capital more easily by issuing shares or debt because there are more publication about larger companies.

Heshmati (2001), studying capital structure dynamic in Sweden, reported that company size has positive, significant influence towards capital structure SOA. Banerjee et al. (2000) conducting studies in UK and USA, Lööf (2004) in Sweden, UK and USA, Haas and Peeters (2006) in Central and East Europe, Mukherjee and Mahakud (2010) in India, Aybar-Arias et al. (2012) in Spain and Haron et al. (2013) in Malaysia also found that company size had positive influence towards capital structure SOA. Based on the elaboration, the third hypothesis is:

H3 Company size has positive and significant influence towards capital structure SOA.

Influence of Ratio Between Capital Structure and the Target Towards Capital Structure SOA

The dynamic trade-off theory (Fischer et al. 1989) stated that adjustments to capital structure target occur when benefit outweighs adjustment cost. This trade-off is more likely to be positive when ratio between company leverage and optimum target leverage is high. Heshmati (2001) described that when fixed cost is a major part of capital structure adjustment cost, companies with sub-optimal leverage will change their capital structure only when there is high discrepancy between the capital structure and the optimal capital structure. In conclusion, the higher the discrepancy between capital structure and its target, the faster the capital structure adjustment will be. Companies will avoid the capital funding approach when fixed cost is very high and the companies change dividend policies to adjust leverage. Ratio between capital structure and its

target has negative influence towards capital structure SOA, particularly when company opted for internal adjustment rather than using external financing.

Drobetz and Wanzenried (2006), Mukherjee and Mahakud (2010) and Elsas and Florysiak (2011) revealed that capital structure target deviation has positive influence towards capital structure SOA. The researchers agree that fixed cost is the major part of adjustment cost and as a result, managers prefer to adjust capital structure when the ratio between capital structure and its target is high. Based on the elaboration, the fourth hypothesis is:

H4 Ratio between capital structure and its target has positive and significant influence towards capital structure SOA.

Influence of Business Risk Towards Capital Structure SOA

Based on the trade-off theory, companies with high earning volatility have difficulties to get loan due to their poor financial condition, low earning and inability to pay their debt (Antoniou et al. 2008). Companies with high earning volatility have limited access to the capital funding to make capital structure adjustment. It implied that earning volatility is inversely proportional to SOA.

Companies that have high profitability can afford to fund its business activities internally (Dewi and Widyarti 2014). The higher the company's profitability, the higher the company's efficiency in utilizing company facilities. Elsas and Florysiak (2011) and Rashid (2015) investigated different risks and came up with different findings. Elsas and Florysiak (2011) focused on influence of default risk towards capital structure SOA. The study showed that higher risk group has shorter capital structure SOA than lower risk group. Rashid (2015) analysed influence of company-specific risk and macroeconomic risk towards *capital structure adjustment.* The finding is that capital structure adjustment occurs more quickly when risk level is low because cost of adjustment is lower when company-specific and macroeconomic risks are low.

This research uses business risk measures such as Hayati (2014) which explains thatcompanies that have high volatility will cause low earnings persistence so as to make capital structureadjustments faster. Based on the elaboration, the fifth hypothesis is:

H5 Business risk has negative and significant influence towards capital structure SOA.

Influence of Short-Term Debt Towards Capital Structure SOA

Kim et al. (2006) and Aybar-Arias et al. (2012) used short-term debt level as an indicator of financial flexibility. Kim et al. (2006) stated that companies with relatively high short-term liabilities can adjust their leverage faster and more easily compared to companies with low short-term liabilities. It is relatively easier to increase or pay for short-term liability long-term liability.

Kim et al. (2006), investigating capital structure dynamic of manufacturing companies in South Korea, mentioned that ratio of current liabilities to total liabilities has positive influence towards capital structure SOA. Aybar-Arias et al. (2012) reported that groups of companies with high ratio between current debt and long-term as well as have shorter SOA. Based on the elaboration, the sixth hypothesis is:

H6 Short-term loan has positive and significant influence towards capital structure SOA.

Influence of Asset Maturity Towards Capital Structure SOA

Giovanni and Arfinto (2015) states that financial flexibility and credit rating are the most important factors in the decision of the company's capital structure. Jun and Jen (2003) and García-Teruel and Martínez-Solano (2007) used asset maturity to measure financial flexibility of a company. Asset maturity describes level of cash inflow generated by asset. Shorter asset maturity results in higher financial flexibility because cash inflow is faster. Companies with shorter asset maturity can pay their short-term liabilities if they do not get any update.

Faulkender et al. (2012) explained that cash flows are closely related to leverage SOA. Cash flow realization provides opportunity to adjust leverage with relatively low marginal cost. A positive free cash flow from profitable investments will reduce cost of external financing that may affect SOA. Faster cash inflows enable companies to have available fund, and thus, these companies have no financial constraints. Based on the elaboration, the seventh hypothesis is:

H7 Asset Maturity has negative and significant influence towards capital structure SOA.

Influence of GDP Growth Towards Capital Structure SOA

Cook and Tang (2010) stated that GDP growth is considered as an indicator of need for corporate tagging. GDP growth should be followed by an increase in company

growth or investment. Therefore, the relationship between GDP and capital structure SOA should be in line with that between growth of company and capital structure SOA. Drobetz and Wanzenried (2006), Cook and Tang (2010) and Drobetz et al. (2015) reported that SOA is higher when economic condition, measured using several indicators, shows positive tendency. Camara (2012), Chipeta and Mbululu (2013), Wang (2013), Lemma and Negash (2014) and De Jonghe and Öztekin (2015) found out that GDP growth has positive influence towards capital structure SOA.

Based on the elaboration, the eighth hypothesis is:

H8 GDP growth has positive and significant influence towards capital structure SOA.

Influence of Inflation Towards Capital Structure SOA

Mills (1996) postulated that high inflation rate causes high cost of capital and consequently, companies should be closer to optimal capital structure. Chipeta and Mbululu (2013) explained inflation will increase or decrease debt ratio of companies. Inflation can lower real cost of debt encouraging the use of debt that eventually increases debt ratio. Debt ratio is declining when inflation is high and stock return after tax is higher than the bond. Investors will buy stocks and at the same time sell bonds when inflation is high; this decreases debt ratio. Based on the opposite perspective, during inflation, both income volatility and business risk increase. As a result, companies prefer to issue equity than debt. Based on this dynamic, it can be implied that inflation causes change in capital structure of companies.

Chipeta and Mbululu (2013), Tzang et al. (2013), Lemma and Negash (2014) and De Jonghe and Öztekin (2015) stated that inflation rate has positive influence towards capital structure SOA. Based on the elaboration, the ninth hypothesis is:

H9 Inflation has positive and significant influence towards capital structure SOA.

Method and Design

The objectives of the study were published financial reports of manufacturing companies listed in Indonesian Stock Exchange. The study was conducted between 2012 and 2016. This period (2012–2016) was selected to provide the most current overview about the companies' financial decision. The study involved secondary data in the form of financial reports from manufacturing companies listed in www.idx.co.id and National Bureau of Statistics data about Indonesian economy published in www.bps.go.id, National Bureau of Statistics.

The population was manufacturing companies listed in ISE every year between 2008 and 2016 and published their financial reports in ISE website. Based on IDX Factbook 2017, per 31 December 2016, 142 manufacturing companies were listed in ISE. Based on the list, 31 companies were not listed in 2008 because they did their Initial Public Offering (IPO) after 2008. Two companies were listed until 2016 but they did not publish a complete financial report. Therefore, the number of samples is 109 companies.

The data analysis methods were descriptive statistics and generalized method of moment (GMM). Previous studies investigating capital structure adjustment such as Flannery and Rangan (2006), Drobetz and Wanzenried (2006), Mukherjee and Mahakud (2010), Lemma and Negash (2014) and Baum et al. (2016) used GMM because it provides more consistent estimation.

The researchers provided definition of the variables so that they could be measured. Operating definitions of the variables were as follows:

1. Capital structure.
   In this study, capital structure was measured using leverage ratio. Leverage referred to financial leverage showing to what extent companies use their loan/debt. The most frequent definition of leverage was debt ratio or total debt divided by total asset (Eriotis et al. 2007; Sheikh and Wang 2011; Ganguli 2013; Serghiescu and Vaidean 2014).
2. Growth potential.
   Funding-based proxy was used to identify growth potential. One of the general measures of growth potential was funding-to-book assets ratio (Andg et al. 2006).
3. Profitability.
   Profitability is ability of companies to use their assets to generate profit. Profitability was measured based on return on assets (ROA) or net profit divided by total asset (Lemma and Negash 2014; Heshmati 2001).
4. Company size.
   Company size was shown by how much asset it had. Size was measured using natural logarithm from total asset (Banerjee et al. 2000; Lööf 2004; Drobetz and Wanzenried 2006; Lemma and Negash 2014).
5. Capital structure to target distance.
   Capital structure target was unobservable, and therefore, researchers should decide estimation. Capital structure to target leverage distance was defined as absolute discrepancy between estimated target leverage and observed leverage (Banerjee et al. 2000; Lööf

2004; Drobetz and Wanzenried 2006; Lemma and Negash 2014).

6. Business risks.
   Risk was measured using EBIT/TA standard deviation for the last five years. In this study, Earning Before Interest and Tax/EBIT and total asset stated in the financial reports of the manufacturing companies between 2008 and 2016 were the information used to calculate risk.
7. Short-term Debt.
   Short-term debt was measured based on its proportion within total debt companies used. Short-term debt was defined as total short-term debt divided by total debt (Kim et al. 2006).
8. Asset Maturity,
   Asset maturity (AM) was defined as average fixed asset, account receivable, inventories and other current asset maturity (Jun and Jen 2003). In this study, total asset, fixed asset, depreciation, account receivable, net sales, inventories and cost of goods stated in financial reports of the manufacturing companies from 2012 to 2016 were information used to calculate asset maturity.
9. GDP Growth.
   GDP was defined as its annual growth (Öztekin and Flannery 2012; Lemma and Negash 2014). GDP on the basis of Indonesian constant price between 2011 and 2016 was information used to measure GDP growth in this study.
10. Inflation.
    Inflation referred to annual inflation rate (Öztekin and Flannery 2012; Lemma and Negash 2014). This study used the national inflation rates between 2012 and 2016 retrieved from www.bps.go.id, National Bureau of Statistics website.

The generalized method of moments (GMM) is a generic method for estimating parameters as an extension of the method of moments. The method of moments cannot be used if the number of instrumental variables is greater than the number of parameters to estimate. GMM equates the moment conditions of data with violations of assumptions in regression analysis. GMM has the advantage of overcoming correlation problem in the residuals.

Finding and Discussion

Table 1 shows coefficient of regression obtained from Panel Least Squares (PLS) with Eviews 9 program. Based on Hausman test, null hypothesis was rejected and there is no significant difference between FEM and ECM estimators. When the null hypothesis was rejected, it was concluded that ECM was not suitable since there may be correlation between random effect and one or more independent variable. In this case, FEM was more suitable than ECM (Gujarati and Porter 2015: 253).

Profitability had significant influence towards leverage. It is in line with the pecking order theory that companies use their profit for investment, and as a result, they use less amount of debt. This finding is also in accordance to Chang et al. (2014c), Thippayana (2014), Chen et al. (2014), Getzmann et al. (2014), Öztekin (2015), Serghiescu and Vaidean (2014), Serrasqueiro and Caetano (2015), Köksal and Orman (2015), Matias and Serrasqueiro (2017).

Company size did not have influence towards leverage. Coefficient of the company size was negative. These support pecking order theory that large companies tend to use their equity; they have less asymmetric information and therefore are able to publish equity with low cost. This finding is in line with Ganguli (2013). Other previous studies of which finding is company size has negative, significant influence towards leverage are Chen (2004) and Handoo and Sharma (2014).

Asset tangibility had positive significant influence towards leverage. It is in accordance with the static trade-off theory that companies with invaluable tangible assets tend to use their debt because these assets can be used as collateral. This finding supports Chang et al. (2014c), Handoo and Sharma (2014), Öztekin (2015) and Köksal and Orman (2015).

Risk had positive, significant influence towards leverage. The result is at the opposite of the trade-off theory as well as most of the previous related studies. The finding is in line with Michaelass et al. (1999) and Ramjee and Gwatidzo (2012) that risk had positive and significant influence towards leverage. Michaelass et al. (1999) argued that positive influence risk has towards capital structure indicates that bankruptcy fee is not significant to cause negative risk towards capital structure. Ramjee and Gwatidzo (2012) explained that this positive influence takes place in the developing countries where companies rely on banks as their source of funding. Darminto and Manurung (2008) reported that bank is a dominant institution in Indonesian companies funding. Lemmon and Zender (2010) postulated that companies with high cash flow volatility borrow money from banks or intermediating institutions due to their inability to access public debt. Risk may increase financing cost; either debt holder or equity holder will use risk premium. Low transaction cost is another factor that encourages companies to use their debt.

Non-debt tax shield (NDTS) did not have significant influence towards leverage. Coefficient of NDTS was negative. It is in line with the traditional trade-off theory that companies use debt as tax shield. High depreciation cost as NDTS reduces incentive to use debt. The finding

Table 1 Capital structure target estimation

Variables	Coefficient	SE	*t* Statistic	Prob.
Constant	0.223386	0.413111	0.540740	0.5890
ROA	− 0.727619	0.110633	− 6.576874	0.0000
GROWTH	0.041791	0.007492	5.577720	0.0000
SIZE	− 0.026389	0.026244	− 1.005534	0.3152
TANG	0.479707	0.193039	2.485020	0.0133
RISK	0.356434	0.161271	2.210155	0.0276
NDTS	− 0.074779	0.062139	− 1.203419	0.2295
MED	0.957867	0.122258	7.834811	0.0000
Dependent variable	LEV			
F statistic	89.62614			
Prob (*F* statistic)	0.000000			
Hausman test	43.146777 (Prob = 0.0000)			

supports Chen et al. (2014) and Serrasqueiro and Caetano (2015) mentioned NDTS had negative and not significant influence towards leverage.

Median leverage of the industry had significant influence towards leverage. Getzmann et al. (2014) stated that the trade-off theory predicted positive correlation between leverage and median leverage of the industry. The finding of this study is in accordance to the trade-off theory.

Table 2 summarizes estimation of partial capital structure adjustment model which consisted of coefficient of capital structure SOA.

In Arellano and Bover (1995) and Blundell–Bond (1998), Dynamic Panel GMM Estimator and Eviews 9 program were used to analyse partial adjustment of the model. Sargan statistics (J-statistics) was 0.288 or higher than $\alpha = 5\%$, and thus, the instrument was valid (Gujarati and Porter 2015: 335).

Table 2 shows that based on the statistics, coefficient of leverage lag was significant. It shows that Indonesian companies use their capital structure to reach target leverage. The average SOA was 64.73% (= 1–0.442255) per year. Table 3 shows the result of analysis towards capital structure SOA.

Arellano and Bover (1995) and Blundell–Bond (1998)'s Dynamic Panel GMM Estimator with Eviews 9 was the analysis method for the capital structure SOA Sargan statistics (J-statistics) was 0.558 or higher than $\alpha = 5\%$, and therefore, the instrument was valid (Gujarati and Porter 2015: 335)..

Coefficient of interaction between growth and leverage lag was positive and not significant; based on the statistics,

Table 2 Partial capital structure adjustment model estimation

Variables	Coefficient	SE	*t* Statistic	Prob.
LEV(− 1)	0.442255	0.073765	5.995432	0.0000
ROA	− 1.520277	0.728589	− 2.086606	0.0377
GROWTH	0.166206	0.047742	3.481306	0.0006
SIZE	0.137054	0.082542	1.660417	0.0978
TANG	0.796876	0.444409	1.793114	0.0739
RISK	1.812656	0.729911	2.483392	0.0135
NDTS	− 0.035548	0.104630	− 0.339749	0.7343
MED	1.655269	0.627440	2.638131	0.0087
Dependent variables	LEV			
J statistic	6.187217			
Prob (*J* statistic)	0.288426			
Wald test (*F* statistic)	0.00			

Table 3 Capital structure SOA

Variables	Coefficient	SE	*t* Statistic	Prob.
GROWTH*LEV(− 1)	0.034386	0.036661	0.937958	0.3490
ROA*LEV(− 1)	− 0.712298	0.232370	− 3.065355	0.0024
SIZE*LEV(− 1)	− 0.099262	0.034396	− 2.885877	0.0042
DIST*LEV(− 1)	0.421437	0.108543	3.882678	0.0001
RISK*LEV(− 1)	0.256405	0.484179	0.529566	0.5968
STD*LEV(− 1)	− 0.316076	0.206036	− 1.534083	0.1260
AM*LEV(− 1)	0.080100	0.035409	2.262158	0.0244
GDPG*LEV(− 1)	− 23.71785	10.69659	− 2.217328	0.0273
INFLASI*LEV(− 1)	0.013686	0.008533	1.603936	0.1097
J statistic	2.068718			
Prob (*J* statistic)	0.558267			
Wald test (*F* statistic)	0.0000			

negative influence of the growth was not significant. The first hypothesis was rejected. Growth of manufacturing companies in Indonesia did not have influence towards capital structure SOA. The finding is at the opposite of Aybar-Ariass et al. (2012), Haron et al. (2013) and Naveed et al. (2015) that growth has positive and significant influence towards capital structure SOA. On the other hand, Haron et al. (2013) and Lemma and Negash (2014) argued that growth does not have significant influence towards capital structure SOA.

Coefficient of interaction between ROA and leverage lag was negative and significant, meaning that profitability had positive influence towards capital structure SOA. The second hypothesis was accepted. The finding is in line with Haron et al. (2013) and Lemma and Negash (2014). Profitable companies have internal source of funding and, as a result, have better financial flexibility and access to external funding source. As an effect, these companies have faster capital structure SOA than less profitable companies.

Coefficient of interaction between size and leverage lag was negative and significant which showed that company size had positive influence towards capital structure SOA. The third hypothesis was accepted. This finding supports Aybar-Ariass et al. (2012) and Haron et al. (2013). For companies with large economic scale, cost of capital structure adjustment is relatively small, and thus, they can make faster capital structure adjustment compared to smaller companies. Drobetz and Wanzenried (2006) stated that a significant part of adjustment cost is fixed cost and this is relatively smaller for large companies. Asymmetric information in large companies is lower. Large companies have easier access to capital by publishing equity or debt. As a result, investors and creditors have more information about larger companies than smaller ones.

Coefficient of interaction between DIST and leverage lag was positive and significant. It shows that distance between capital structure and its target had negative influence towards capital structure SOA. The fourth hypothesis was rejected/not accepted. This finding is at the opposite of Drobetz and Wanzenried (2006) that fixed cost is the largest part of total adjustment cost and companies with sub-optimal leverage will adjust their capital structure only when it is deviated far away from its target. This finding confirms in Haron et al. (2013) and Chipeta and Mbululu (2013) that distance gad negative influence towards capital structure SOA. Aybar-Ariass et al. (2012) stated that when fixed costs of adjustments are very high, companies will avoid the capital funding and prefer internal funding than external one. This finding also validates positive influence of profitability towards leverage SOA.

Coefficient of interaction between risk and leverage lag was positive but not significant. It means based on the statistics, the negative influence of risk towards capital structure SOA is not significant. The fifth hypothesis was not accepted/rejected. This finding confirms in Andg et al. (2012) that risk has negative influence towards capital structure SOA.

Coefficient of interaction between STD and leverage lag was negative and not significant. It means based on the statistics, positive influence of short-term debt towards capital structure SOA is not significant. The sixth hypothesis was not accepted/rejected. This finding does not support Kim et al. (2006) and Aybar-Ariass et al. (2012) that companies which use their short-term debt are able to make faster capital structure adjustment. Conducting a study in South Korea, Kim et al. (2006) showed that it is easier to

adjust short-term debt than long-term debt; similar phenomenon seems to happen in Indonesia.

Coefficient of interaction between AM and leverage lag was positive and significant, which indicated that asset maturity had negative influence towards capital structure SOA. The seventh hypothesis was accepted. Companies with shorter asset maturity make faster capital structure adjustment than those with longer asset maturity. This finding is the same as done by Almilia and Devi (2007) which states that bondholders will get repayment of principal or face value of bonds held.

Coefficient of interaction between GDP and leverage lag was negative and significant which showed that GDP growth had positive influence towards capital structure SOA. The eighth hypothesis was accepted. Manufacturing companies make faster capital structure adjustment when GDP growth is high. This finding is in line with Camara (2012), Chipeta and Mbululu (2013), Wang (2013), Lemma and Negash (2014) and DeJonghe and Öztekin (2015).

Coefficient of interaction between inflation and leverage lag is positive and not significant which showed that based on the statistics negative influence of inflation towards capital structure SOA was not significant. The ninth hypothesis was rejected or not accepted. This finding is at the opposite of Chipeta and Mbululu (2013), Tzang et al. (2013), Lemma and Negash (2014) and DeJonghe and Öztekin (2015) that inflation rate had positive influence towards capital structure SOA.

The finding of this study stated that simultaneously the static trade-off theory and pecking order theory can explain capital structure target of manufacturing industries in Indonesia. The static trade-off theory explains positive influence of asset tangibility median leverage of the industry towards company leverage. The pecking order theory explains profitability has negative influence towards leverage and growth has positive influence towards leverage. Banks as most dominant funding source for the manufacturing companies in Indonesia causes positive influence between risk and leverage, the opposite of the trade-off theory.

Based on the result of partial adjustment model estimation, significant leverage lag shows that Indonesian manufacturing companies adjust their capital structure towards target leverage with SOA of 64.73% per year. This finding confirms in Darminto and Manurung (2008) that capital structure SOA of Indonesian companies is relatively faster than that in the developed countries like USA (30%) (Flannery and Rangan 2006). Capital structure SOA of manufacturing companies in Indonesia is similar to Ramjee and Gwatidzo (2012)'s study on capital structure SOA of manufacturing companies in South Africa (between 62.3 and 65.5% per year).

The result of capital structure SOA testing is in line with the dynamic trade-off theory that factors influence leverage SOA of companies are adjustment cost and financial flexibility of the companies; these are represented by profitability, company size and distance between capital structure and the target. Asset maturity, an indicator of financial flexibility, has significant influence towards capital structure SOA. GDP growth is one of the macroeconomic factors that has significant influence towards capital structure SOA.

Practical implications: (1) ISE investors should invest in a company with the following characteristics, namely high profitability, large-sized, fast asset maturity and short distance between leverage and target since such companies have faster capital structure SOA. Optimum capital structure will maximize value of company; and (2) managers should increase investment in order to maintain growth and size of their companies. Not only does high asset turnover increase profitability, but it also accelerates asset maturity. In addition, management should pay attention to high growth of GDP because this macroeconomic condition helps facilitating capital structure adjustment to its target.

Limitation: (1) the study is limited to manufacturing companies listed in Indonesian Stock Exchange (SEI) between 2012 and 2016; and (2) this study used only one measurement for capital structure, growth opportunity, profitability, company size and business risks. This study only described the generalized method of moment in solving problems and did not focus on the correlation matrix. Multicollinearity as the violation of classical regression assumptions was not found in this study.

Conclusion and Recommendation

Based on the finding and discussion, it can be concluded that:

1. Growth potential does not have any influence towards capital structure SOA; it shows that growth potential of a company does not have influence towards adjustment cost of capital structure;
2. Profitability has positive and significant influence towards capital structure SOA; it shows that increasing profitability enables companies to adjust leverage more quickly and easily;
3. Company size has positive and significant influence towards capital structure SOA; in other words, larger companies have faster capital structure SOA;
4. Distance between actual leverage and target leverage has negative, significant influence towards capital structure SOA; it means companies of which capital structure deviates quite far from its target have high

adjustment cost and needs longer time to adjust their capital structure;

5. Risk does not have significant influence towards capital structure SOA; in other words, risk does not influence adjustment cost;
6. Short-term debt does not have significant influence towards capital structure SOA; it shows that short-term debt is as flexible as long-term debt and therefore does not have influence towards capital structure SOA.
7. Asset maturity has positive significant influence towards capital structure SOA; it means that companies with a lot of assets can generate cash more quickly and, as a result, have faster capital structure SOA;
8. GDP growth has positive, significant influence towards capital structure SOA; it means positive economic environment characterized by an increase in GDP allows companies to adjust their capital structure more quickly;
9. Inflation rate does not have significant influence towards capital structure SOA; it shows that inflation rate does not have significant influence towards adjustment cost of companies.

Based on the conclusion, researchers propose some recommendations for investor and managers of company. The suggestions are as follows:

1. Prior to making investment, investors should seek for information about characteristics of a company, for instance profitability, size, asset maturity and optimum leverage. These aspects enable company to increase leverage and maximize corporate value;
2. Managers should maintain growth and increase size of company. High asset turnover increases profitability as well as accelerates asset maturity. In addition, managers should pay close attention to growth of GDP because this macroeconomic condition helps facilitating capital structure adjustment to its target.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

References

Almilia, L. S., & Devi, V. (2007). Factors that influence the prediction of bond ratings on manufacturing companies listed on the jakarta stock exchange. In *Proceeding national seminar on smart management*, vol. 3.

Ang, J. S., Fatemi, A., & Rad, A. T. (1997). Capital structure and dividend policies of Indonesian firms. *Pacific-Basin Finance Journal, 5,* 87–103. https://doi.org/10.1016/S0927-538X(96)00025-X.

Antoniou, A., Guney, Y., & Paudyal, K. (2008). The determinants of capital structure: Capital market-oriented versus bank-oriented institutions. *Journal of Financial and Quantitative Analysis, 43*(1), 59–92. https://doi.org/10.1017/S0022109000002751.

Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of econometrics*, *68*(1), 29–51.

Aybar-Arias, C., Casino-Martínez, A., & López-Gracia, J. (2012). On the adjustment speed of SMEs to their optimal capital structure. *Small Business Economics, 39*(4), 977–996. https://doi.org/10.1007/s11187-011-9327-6.

Baker, M., & Wurgler, R. (2002). Market timing and capital structure. *Journal of Finance, 57,* 1–32. https://doi.org/10.1111/1540-6261.00414.

Bancel, F., & Mittoo, U. R. (2004). Cross-country determinants of capital structure choice: A survey of European firms. *Financial Management, 33*(4), 103–132. https://doi.org/10.2307/3666330.

Banerjee, S., Heshmati, A., & Wihlborg, C. (2000) The dynamics of capital structure. *SSE/EFI Working Paper Series in Economics and Finance,* No. 333.

Barclay, M. J., & Smith, C. W. (1995). The maturity structure of corporate debt. *Journal of Finance, 50,* 609–631. https://doi.org/10.1111/j.1540-6261.1995.tb04797.x.

Baum, R. P., Kulkarni, H. R., Schuchardt, C., Singh, A., Wirtz, M., Wiessalla, S. Schottelius, et al. (2016). 177Lu-labeled prostate-specific membrane antigen radioligand therapy of metastatic castration-resistant prostate cancer: safety and efficacy. *Journal of Nuclear Medicine*, *57*(7), 1006–1013.

Black, F. (1976). The dividend puzzle. *The Journal of Portfolio Management, 2*(2), 5–8. https://doi.org/10.3905/jpm.1976.408558.

Booth, L., Aivazian, V., Kunt, A. D., & Maksimovic, V. (2001). Capital structures in developing countries. *The Journal of Finance, 56*(1), 87–130. https://doi.org/10.1111/0022-1082.00320.

Brounen, D., Jong, A. D., & Koedijk, K. (2004). Corporate finance in Europe: Confronting theory with practice. *Financial Management, 33*(4), 71–101. https://doi.org/10.2139/ssrn.559415.

Camara, O. (2012). Capital structure adjustment speed and macroeconomic conditions: US MNCs and DCs. *International Research journal of finance and economics*, *84*(1), 106–120.

Chadha, S., & Sharma, A. K. (2016). An empirical study on capital structure in Indian manufacturing sector. *Global Business Review, 17*(2), 1–14. https://doi.org/10.1177/0972150915619817.

Chang, C., Chen, X., & Liao, G. (2014a). What are the reliably important determinants of capital structure in China? *Pacific-Basin Finance Journal, 30,* 87–113. https://doi.org/10.1016/j.pacfin.2014.06.001.

Chang, Y. K., Chen, Y. L., Chou, R. K., & Huang, T. H. (2014b). Corporate governance, product market competition and dynamic capital structure. *International Review of Economics & Finance, 38,* 44–55. https://doi.org/10.1016/j.iref.2014.12.013.

Chang, Y. K., Chi, L., Etnier, J. L., Wang, C. C., Chu, C. H., & Zhou, C. (2014C). Effect of acute aerobic exercise on cognitive performance: Role of cardiovascular fitness. *Psychology of Sport and Exercise*, *15*(5), 464–470.

Chen, X. (2004). A microRNA as a translational repressor of APETALA2 in Arabidopsis flower development. *Science*, *303*(5666), 2022–2025.

Chen, J., Jiang, C., & Lin, Y. (2014). What determine firms' capital structure in China? *Managerial Finance, 40*(10), 1024–1039. https://doi.org/10.1108/MF-06-2013-0163.

Cheng, S. R., & Shiu, C. Y. (2007). Investor protection and capital structure: International evidence. *Journal of Multinational*

Financial Management, 17, 30–44. https://doi.org/10.1016/j.mulfin.2006.03.002.

Chipeta, C., & Mbululu, D. (2013). Firm heterogeneity, macroeconomic conditions and capital structure adjustment speeds: Evidence from the JSE. *Investment Analysts Journal, 42*(77), 69–80. https://doi.org/10.1080/10293523.2013.11082557.

Clark, B. J., Francis, B. B., & Hasan, I. (2009). *Do firms adjust toward target capital structures? Some international evidence.* Available at http://ssrn.com/abstract1364095.

Cook, D. O., & Tang, T. (2010). Macroeconomic conditions and capital structure adjustment speed. *Journal of Corporate Finance, 16*(1), 73–87. https://doi.org/10.2139/ssrn.1101664.

Dang, Z. M., Yuan, J. K., Zha, J. W., Zhou, T., Li, S. T., & Hu, G. H. (2012). Fundamentals, processes and applications of high-permittivity polymer–matrix composites. *Progress in Materials Science*, *57*(4), 660–723.

Dewi, S., & Ramli, I. (2017). Capital dynamic approach structure of automotive companies and components when the global CRISIS 2008. *Journal of Economics, 21*(3), 360–374.

Dewi, D. A. K., & Widyarti, E. T. (2014). Analysis of factors affecting capital structure (Case Study of Mining Companies Listed on the Indonesia Stock Exchange for the 2009-2012 Period) (Doctoral dissertation, Faculty of Economics and Business).

Darminto, & Manurung, A. H. (2008). Testing of trade-off theory and pecking order theory with a dynamic model of public companies in Indonesia. *Journal of Business Management, 1*(1), 35–52.

Denis, D. J., & McKeon, S. B. (2012). Debt financing and financial flexibility evidence from proactive leverage increases. *The Review of Financial Studies*, *25*(6), 1897–1929.

De Jonghe, O., & Öztekin, O. (2015). Bank capital management: International evidence. *Journal of Financial Intermediation, 24*(2), 154–177. https://doi.org/10.1016/j.jfi.2014.11.005.

De Miguel, A., & Pindado, J. (2001). Determinants of capital structure: New evidence from Spanish panel data. *Journal of Corporate Finance, 7,* 77–99. https://doi.org/10.1016/S0929-1199(00)00020-1.

Dollar, D., & Hallward-Driemeier, M. (2000). Crisis, adjustment, and reform in Thai industrial firms. *The World Bank Research Observer, 15,* 1–22.

Drobetz, W., Schilling, D. D., & Schröder, H. (2015). Heterogeneity in the speed of capital structure adjustment across countries and over the business cycle. *European Financial Management, 21*(5), 936–973. https://doi.org/10.1111/eufm.12048.

Drobetz, W., & Wanzenried, G. (2006). What determines the speed of adjustment to the target capital structure? *Applied Financial Economics, 16,* 941–958. https://doi.org/10.1080/09603100500426358.

Elsas, R., & Florysiak, D. (2011). Heterogeneity in the speed of adjustment toward target leverage. *International Review of Finance, 11*(2), 181–211. https://doi.org/10.1111/j.1468-2443.2011.01130.x.

Eriotis, N., Vasiliou, D., & Zisis, V. (2007). A birds eye view of the dividend policy of the banking industry in Greece. *International Research Journal of Finance and Economics*, *11*(11), 21–29.

Faccio, M., Lang, H. P. L., & Young, L. (2001). *Debt and corporate governance*. Paper meetings of the Association of Financial Economics in New Orleans.

Faulkender, M., Flannery, M. J., Hankins, K. W., & Smith, J. M. (2012). Cash flows and leverage adjustments. *Journal of Financial economics*, *103*(3), 632–646.

Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *Review of Financial Studies, 15,* 1–33. https://doi.org/10.1093/rfs/15.1.1.

Fama, E. F., & French, K. R. (2005). Financing decisions: Who issues stock? *Journal of Financial Economics, 76,* 549–582. https://doi.org/10.2139/ssrn.429640.

Fischer, E. O., Heinkel, R., & Zechner, J. (1989). Dynamic capital structure choice: Theory and tests. *The Journal of Finance, 44*(1), 19–40. https://doi.org/10.1111/j.1540-6261.1989.tb02402.x.

Flannery, M. J., & Hankins, K. W. (2007). *A theory of capital structure adjustment speed*. Unpublished Manuscript, University of Florida.

Flannery, M., & Rangan, K. (2006). Partial adjustment toward target capital structures. *Journal of Financial Economics, 79*(3), 469–506. https://doi.org/10.1016/j.jfineco.2005.03.004.

Frank, M. Z., & Goyal, V. K. (2004). The effect of market conditions on capital structure adjustment. *Finance Research Letters, 1,* 47–55. https://doi.org/10.1016/S1544-6123(03)00005-9.

Frank, M. Z., & Goyal, V. K. (2009). Capital structure decisions: which factors are reliably important? *Financial management*, *38*(1), 1–37.

Frank, M., & Goyal, V. K. (2008). Tradeoff and pecking order theories of debt. In B. E. Eckbo (Ed.), *Handbook of empirical corporate finance* (Vol. 2, pp. 135–197). Amsterdam: Elsevier.

Ganguli, S. K. (2013). Capital structure—Does ownership structure matter? Theory and Indian evidence. *Studies in Economics and Finance, 30*(1), 56–72. https://doi.org/10.1108/10867371311300982.

García-Teruel, P. J., & Martínez-Solano, P. (2007). Effects of working capital management on SME profitability. *International Journal of managerial finance, 3*(2), 164–177.

Getzmann, A., Lang, S., & Spremann, K. (2014). Target capital structure and adjustment speed in Asia. *Asia-Pacific Journal of Financial Studies, 43,* 1–30. https://doi.org/10.1111/ajfs.12038.

Giovanni, A., & Arfinto, E. D. (2015). The effect of credit rating, asset tangibility, profitability, long-term investment, short-term investment on capital structural decisions (Empirical Studies in Non-Financial Companies that are Listed on the Indonesia Stock Exchange and Listed on PEFINDO Year 2010-2014) (Doctoral dissertation, Faculty of Faculty Economics and Business).

Graham, J. R., & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. *Journal of Financial Economics, 60,* 187–243.

Guedes, J., & Opler, T. (1996). The determinants of the maturity of corporate debt issues. *The Journal of Finance, 51*(5), 1809–1833. https://doi.org/10.1111/j.1540-6261.1996.tb05227.x.

Gujarati, D. N., & Porter, D. C. (2015). *Dasar-dasar Ekonometrika, Buku 2, Edisi 5, (Raden Carlos Mangunsong)*. Jakarta: Salemba Empat.

Haas, R., & Peeters, M. (2006). The dynamic adjustment towards target capital structures of firms in transition economies. *Economics of Transition, 14*(1), 133–169. https://doi.org/10.1111/j.1468-0351.2006.00237.x.

Hackbart, M. M., & Ramsey, J. R. (2006). Kentucky: The Executive/Legislative Budget Role Transition Continues. Budgeting in the States: Institutions, Processes, and Politics (pp. 155–172).

Handoo, A., & Sharma, K. (2014). A study on determinants of capital structure in India. *IIMB Management review*, *26*(3), 170–182.

Harjito, D. A. (2011). Pecking order theory and trade-off in capital structure analysis on the Indonesia stock exchange. *Journal of Business Strategy, 15*(2).

Haron, R. (2016). Do Indonesian firms practice target capital structure? A dynamic approach. *Journal of Asia Business Studies*. https://doi.org/10.1108/qrfm-07-2015-0027.

Haron, R., Ibrahim, K., Nor, F. M., & Ibrahim, I. (2013). Factors affecting speed of adjustment to target leverage: Malaysia evidence. *Global Business Review, 14*(2), 243–262.

Harris, J. R., Schiantarelli, F., & Siregar, M. G. (1994). The effect of financial liberalization on the capital structure and investment

decisions of Indonesian manufacturing establishments. *The World Bank Economic Review, 8*(1), 17–47.
Hayati, O. S. (2014). Effect of cash flow volatility and debt levels on profit persistence (Case Study of Manufacturing Companies Registered on the Indonesia Stock Exchange in 2009-2011). *Journal of Accounting, 2*(1).
Heshmati, A. (2001). The dynamics of capital structure: Evidence from Swedish micro and small firms. *Research in Banking and Finance, 2,* 199–241.
Hovakimian, A., Hovakimian, G., & Tehranian, H. (2004). Determinants of target capital structure: The case of dual debt and equity issues. *Journal of Financial Economics, 71,* 517–540. https://doi.org/10.1016/S0304-405X(03)00181-8.
Hovakimian, A., Opler, T., & Titman, S. (2002). The capital structure choice: New evidence for a dynamic tradeoff model. *Journal of Applied Corporate Finance, 15,* 24–30. https://doi.org/10.1111/j.1745-6622.2002.tb00338.x.
Huang, R., & Ritter, J. R. (2004). *Testing the market timing of capital structure*, Working Paper from University of Florida.
Huang, R., & Ritter, J. R. (2009). Testing theories of capital structure and estimating the speed of adjustment. *Journal of Financial and Quantitative Analysis, 44*(2), 237–271. https://doi.org/10.1017/S0022109009090152.
Jalilvand, A., & Harris, R. S. (1984). Corporate behavior in adjusting to capital structure and dividend targets: An econometric study. *The Journal of Finance, 39*(1), 127–145.
Ju, T., Schaefer, S., & Warren, J. (2005). Mean value coordinates for closed triangular meshes. In *ACM Siggraph 2005 Papers* (pp. 561–566).
Jun, S. G., & Jen, F. C. (2003). Trade-off model of debt maturity structure. *Review of Quantitative Finance and Accounting, 20*(1), 5–34. https://doi.org/10.1023/A:1022190205033.
Kim, H., Heshmati, A., & Aoun, D. (2006). Dynamics of capital structure: The case of Korean listed manufacturing companies. *Asian Economic Journal, 20*(3), 275–302. https://doi.org/10.1111/j.1467-8381.2006.00236.x.
Köksal, B., & Orman, C. (2015). Determinants of capital structure: Evidence from a major developing economy. *Small Business Economics, 44*(2), 255–282.
Korajczyk, R. A., & Levy, A. (2003). Capital structure choice: Macroeconomic conditions and financial constraints. *Journal of Financial Economics, 68*(1), 75–109.
Leary, M. T., & Roberts, M. R. (2005). Do firms rebalance their capital structures? *The Journal of Finance, 55*(6), 2575–2619.
Leary, M. T., & Roberts, M. R. (2014). Do peer firms affect corporate financial policy? *The Journal of Finance, 69*(1), 139–178.
Lemma, T. T., & Negash, M. (2014). Determinants of the adjustment speed of capital structure. *Journal of Applied Accounting Research, 15,* 64–99. https://doi.org/10.1108/JAAR-03-2012-0023.
Lemmon, M. L., Roberts, M. R., & Zender, J. F. (2008). Back to the beginning: Persistence and the cross-section of corporate capital structure. *The Journal of Finance, 63*(4), 1575–1608.
Lemmon, M. L., & Zender, J. F. (2010). Debt capacity and tests of capital structure theories. *Journal of Financial and Quantitative Analysis, 45*(5), 1161–1187.
Lööf, H. (2004). Dynamic optimal capital structure and technical change. *Structural Change and Economic Dynamics, 15,* 449–468.
MacKay, P., & Gordon, M. P. (2005). How does industry affect firm financial structure? *Review of Financial Studies, 18,* 1433–1466. https://doi.org/10.1093/rfs/hhi032.
Mahadwartha, P. A., & Ismiyanti, F. (2008). Debt policy, free cash flow hypothesis, and balancing of agency theory through ownership: Evidence from Indonesia. *Corporate Ownership & Control, 5*(2), 256–263. https://doi.org/10.22495/cocv5i2c2p2.
Mao, C. X. (2003). Interaction of debt agency problems and optimal capital structure. *The Journal of Financial and Quantitative Analysis, 38*(2), 399–423. https://doi.org/10.2307/4126757.
Matias, F., & Serrasqueiro, Z. (2017). Are there reliable determinant factors of capital structure decisions? Empirical study of SMEs in different regions of Portugal. *Research in International Business and Finance, 40,* 19–33. https://doi.org/10.1016/j.ribaf.2016.09.014.
Michaelas, N., Chittenden, F., & Poutziouris, P. (1999). Financial policy and capital structure choice in UK SMEs: Empirical evidence from company panel data. *Small business economics, 12*(2), 113–130.
Mills, D. (1996). Simple network time protocol (SNTP) version 4 for IPv4, IPv6 and OSI. RFC 2030, October.
Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investmient. *The American Economic Review, 48*(3), 261–297.
Mukherjee, S., & Mahakud, J. (2010). Dynamic adjustment towards target capital structure: Evidence from Indian companies. *Journal of Advances in Management Research, 7*(2), 250–266. https://doi.org/10.1108/09727981011085020.
Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics, 5,* 145–175. https://doi.org/10.1016/0304-405X(77)90015-0.
Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance, 39*(3), 575–592.
Myers, S. C. (1997). *Duelling languages: Grammatical structure in codeswitching*. Oxford University Press.
Myers, S. C., & Majluf, Nicholas S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economic, 13,* 187–221. https://doi.org/10.1016/0304-405X(84)90023-0.
Naveed, M., Kamara, S., & Wright, C. V. (2015). Inference attacks on property-preserving encrypted databases. In *Proceedings of the 22nd ACM SIGSAC Conference on Computer and Communications Security* (pp. 644–655).
Naveed, M., Ramakrishnan, S., Ahmad Anuar, M., & Mirzaei, M. (2015). Factors affecting speed of adjustment under different economic conditions: Dynamic capital structure sensitivity analysis. *Journal of Chinese Economic and Foreign Trade Studies, 8*(3), 165–182. https://doi.org/10.1108/JCEFTS-08-2014-0015.
Ozkan, A. (2001). Determinants of capital structure and adjustment to long run target: Evidence from UK company panel data. *Journal of Business Finance & Accounting, 28*(1–2), 175–198. https://doi.org/10.1111/1468-5957.00370.
Öztekin, Ö. (2015). Capital structure decisions around the world: Which factors are reliably important? *Journal of Financial and Quantitative Analysis, 3,* 301–323. https://doi.org/10.1017/S0022109014000660.
Öztekin, Ö., & Flannery, M. J. (2012). Institutional determinants of capital structure adjustment speeds. *Journal of Financial Economics, 103,* 88–112. https://doi.org/10.1016/j.jfineco.2011.08.014.
Rahmawati, A. D., & Harto, P. (2014). Analysis of the effect of quality of financial reporting and debt maturity on investment efficiency. *Diponegoro Journal of Accounting, 3*(3), 1–12.
Ramjee, A., & Gwatidzo, T. (2012). Dynamics in capital structure determinants in South Africa. *Meditari Accountancy Research, 20*(1), 52–67.
Rashid, A. (2015). Does risk affect capital structure adjustments? *The Journal of Risk Finance, 17*(1), 80–92.
Ria, Y., & Lestari, P. V. (2015). The effect of business risk, company size and sales growth on capital structure. *E-Journal of Management, 4*(5).

Serghiescu, L., & Vaidean, V. L. (2014). Determinant factors of the capital structure of a firm-an empirical analysis. *Procedia Economics and Finance*, *15*(14), 1447–1457.

Serrasqueiro, Z., & Caetano, A. (2015). Trade-off theory versus pecking order theory: Capital structure decisions in a peripheral region of Portugal. *Journal of Business Economics and Management, 16*(2), 445–466. https://doi.org/10.3846/16111699.2012.744344.

Sheikh, N. A., & Wang, Z. (2011). Determinants of capital structure an empirical study of firms in manufacturing industry of Pakistan. *Managerial Finance, 37*(2), 117–133.

Thippayana, P. (2014). Determinants of capital structure in Thailand. *Procedia Social and Behavioral Sciences, 143,* 1074–1077. https://doi.org/10.1016/j.sbspro.2014.07.558.

Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *Journal of Finance, 43,* 1–19.

Tzang, S. W., Wang, K. Y., & Rahim, R. L. (2013) Macroeconomic condition and capital structure adjustment speed—Evidence from the Indonesian Stock Market. In *Seventh international conference on innovative mobile and internet services in ubiquitous computing.*

Utami, S. R. (2012) *Determinants of capital structure of firms in the manufacturing sector of firms in Indonesia*. Disertasi, Netherlands, Maastricht School of Management.

Wang, W. (2013). *Market imperfections, macroeconomic conditions, and capital structure adjustments. Macroeconomic conditions, and capital structure adjustments.* Available at SSRN: http://ssrn.com/abstract=2254386.

Welch, I. (2004). Capital structure and stock returns. *Journal of Political Economy, 112,* 106–131.

Wetty, F. N. (2013) *Determinan Kecepatan Perubahan Struktur Modal Pada Perusahaan Manufaktur Di Bursa Efek Indonesia*. Tesis, Yogyakarta, Program Magister Sains Universitas Gadjah Mada.

Wilson, E. B. (1901). *Vector analysis: A text-book for the use of students of mathematics and physics, founded upon the lectures of J. Willard Gibbs*, vol. 125.

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