

Sticky cost behavior of bank's executive compensation in four South East Asian countries

Slamet Sugiri¹, Rahmat Febrianto², Etik Kresnawati³

¹ University of Gadjah Mada, Sosio Humaniora Street No. 1, Bulaksumur, Yogyakarta, 55281, DIY, Indonesia

² University of Andalas, Universitas Andalas Street, Limaumanis, Pauh, Padang, 25163, West Sumatera, Indonesia

³ University of Muhammadiyah Yogyakarta, Lingkar Selatan Street, Kasihan, Bantul, 55183, DIY, Indonesia

ARTICLE INFO

Article history:

Received 25 June 2016

Revised 23 November 2016

Accepted 24 January 2017

JEL Classification:

G02

Key words:

Sticky Cost Behavior,
Corporate Governance,
Banks, and
Executive Compensation.

DOI:

10.14414/jebav.v19i3.771

ABSTRACT

Some studies indicate that selling, general, and administrative (SG&A) cost have sticky characteristics. A cost is sticky when it increases by the time the activity increases, but it does not decrease as the activity decreases, in the same proportion as it increases. On the contrary, the previous studies focused solely on SG&A costs in, mostly, manufacturing companies. This study specifically focuses on specific cost and specific industry. In this case, the researchers focus on compensation costs in banks from four South East Asian countries. This study chose the banks' executive compensations since the banks in South East Asia have been publicly reporting their compensation. Executive compensation itself is a component of SG&A, so it may have sticky characteristic with it. This study uses bootstrap method to tackle small sample problem in every country. Results show that executive compensations are not sticky, but, on the contrary, anti-sticky since the compensation decreases faster when the revenue decreases than its increases when the revenue increases. This finding gives a new perspective on the characteristics of executive compensation expenses as a part of SG&A cost.

ABSTRAK

Beberapa penelitian mengisyaratkan bahwa biaya penjualan, umum, dan administratif (PUA) memiliki karakteristik perilaku yang sticky. Suatu biaya dikatakan memiliki sifat sticky jika biaya meningkat ketika aktivitas meningkat, tetapi biaya tidak menurun ketika aktivitas menurun dalam proporsi yang sama dengan kenaikannya. Berbeda dengan studi-studi terdahulu yang hanya berfokus pada biaya PUA dan sebagian besar pada perusahaan manufaktur, kami memfokuskan pada biaya dan industri yang lebih spesifik. Dalam penelitian ini, kami memfokuskan pada biaya kompensasi eksekutif pada industri perbankan di empat negara di Asia Tenggara. Kami memilih kompensasi eksekutif bank di Asia Tenggara karena bank-bank di wilayah ini telah melaporkan kompensasi eksekutif mereka kepada publik. Oleh karena masalah sampel yang kecil, kami menggunakan metoda bootstrap untuk setiap negara. Hasil pengujian menunjukkan bahwa, kecuali di Pilipina, kompensasi yang diterima eksekutif adalah tidak bersifat sticky, tetapi sebaliknya, anti-sticky yaitu bahwa penurunan kompensasi lebih cepat ketika pendapatan menurun dibandingkan dengan kenaikannya ketika pendapatan meningkat. Temuan ini memberi perspektif baru tentang karakteristik kompensasi eksekutif sebagai bagian dari biaya PUA.

1. INTRODUCTION

Anderson, Banker & Janakiraman (2003) found evidence that SG&A costs are sticky, i.e., the costs increase when the activity rises but they fail to decrease in the same proportion when the activity decreases. In other words, they found evidence that the change in expenses due to the change in activity is

higher than the change in expenses when the activity decreases. Their study is limited to total SG&A costs figures and motivates others to investigate components of these costs. Anderson, Banker & Janakiraman (2003) suggest that further studies should investigate component of SG&A. Until now, there is not any study that investigates components of SG&A,

* Corresponding author, email address: ¹ ssugiri@feb.ugm.ac.id, ² febrianto.rahmat@gmail.com, ³ e_kresna@yahoo.com.

including the compensation costs. It is, therefore, expected that executives' compensation costs have sticky characteristic. This study aims to test whether executive compensations have stickiness characteristics as found in selling, general, and administration (SG&A)

Executive compensation is tied to performance. Previous studies show evidence on the relationship between executive compensation and firm performance. Harris & Raviv (1979) and Grossman & Hart (1983) document that an optimal executive compensation contract must align executives' (agents') interests with those of shareholders'. Other studies show a positive relationship between firm performance and executive compensation, e.g., Murphy (1985) and Mehran (1995). Mehran (1995) provide evidence that firm performance has a positive relationship with managerial ownership and with equity-based compensation. On the other hand, Jensen & Murphy (1990) fail to provide evidence of the relationship between change in firm value and executive compensation. There are some other studies that investigate the association between executive compensation and accounting-based performance, e.g., Lambert & Larcker (1987), Banker & Datar (1989), Defeo, Lambert & Larcker (1989), Natarajan (1996), and Leone, Wu & Zimmerman (2006). Earlier studies that investigate the relationship between compensation with accounting-based performance aggregate measure, e.g. net income (Defeo, Lambert & Larcker 1989), or ROE (Lambert & Larcker 1987).

The previous studies suggest that there is a positive relationship between firm performance and executive/manager compensation. A positive compensation implies that compensation increases as the firm performance increases. On the contrary, it decreases as the firm performance decreases. However, there is only a limited study on this issue. Leone, Wu & Zimmerman (2006) is one example. They show that an equity-based compensation is sensitive to either a positive or negative return. Some other researchers predict that the magnitude of change in expenses due to the change in activities will be higher when the activity increases than when it decreases (Cooper & Kaplan 1998, p. 247; Noreen & Soderstrom 1997). Anderson, Banker & Janakiraman (2003) call this behavior as sticky cost behavior.

Anderson, Banker & Janakiraman (2003) and other studies, for example Subramaniam & Weidenmier (2003), Calleja, Stelarios & Thomas (2006), and He, Teruya & Shimizu (2010) that test sticky cost behavior has focused only on manufacturing, non-bank industries. So far, there is one research that tests the sticky behavior of SG&A costs in bank in-

dustry (Porporato & Werbin 2010). Those studies, including the later mentioned study, find evidence on the sticky behavior of SG&A costs.

Until now, there is no study that has tested the stickiness of compensation cost in any industry, including in banking industry. Banking industry is a highly regulated business in many aspects, as compared to other non-financial industries. Recommendation No. 7 of OECD (2011: 28) directs that individual (or at least aggregate) director- and senior-executive-compensation arrangements be fully and accurately disclosed.

Focusing on the banking industry is important for several reasons. Firstly, banks are regulated to a higher degree than other industries. Secondly, the contractual environment for bank managers is different from that for other industries'. A study by KPMG (2011) revealed that many banks have significantly reduced the variable component of pay and increased the fixed aspect of compensation in some areas of their business. However, it seems that bonuses still account for the majority of total pay awarded to the US and UK banks' highest paid employees. This is in contrast to Asia where bonus pay accounts for between 30 to 60 percent of the total pay awarded to senior executives.

Studies on executive compensation have been focusing their attention on the questions on the relationship between firm or managerial performance and compensation. However, most of the studies are only interested on answering the question of what will happen to compensation if the performance goes up, but leave unanswered the question of what will happen to compensation if the performance goes down. If this type of positive relationship is true, that is, the higher the performance, the higher the compensation paid to executives; and the lower the performance, the lower the compensation paid to executives, will proportion of the decline in compensation due to the decline of performance be equal to that of the increase in compensation due to the increase in performance? Little is known of what will happen to executive compensation when the performance decreases.

The objectives of this study are twofold. First, it tests the stickiness of one of the components of the SG&A cost. Anderson, Banker & Janakiraman (2003) urge other researchers to study the detail components of this cost, to test its stickiness. Second, it focuses on finding an empirical evidence on the stickiness of cash compensations in banking industries in four countries in South East Asia: Indonesia, Malaysia, Philippines, and Thailand. The researchers chose these four South East Asia countries based on their

status as emerging countries. In its 2004 survey of corporate governance in Asia, OECD reported that some countries have started to enforce a better disclosure of board and executive compensation (OECD 2004). Later in 2007, based on the 2006 survey, OECD reported that authorities in Indonesia, Thailand, and Philippines have mandated public companies to disclose total individual remuneration paid to directors and key executives (OECD 2006, 2007).

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Compensation and Executive Performance

Logically, an employee, including a company executive, is paid based on his/her performance. The premise is that the higher the performance, the higher the compensation. Jensen & Murphy (1990), however, find that executive's compensation is not related to his/her performance. This study is based on the data of salary and bonus paid to CEOs of more than 250 major US firms for 15 years. They believe that CEO is overpaid, but, unfortunately, his/her compensation is far too unrelated to his/her performance which is measured by company's market value. Their opinion is somewhat different from Scott's (2006, p. 328). He argues that it is difficult to put downside risk on an executive since this would probably lead to excessive avoidance of risky projects. However, forcing managers to bear compensation risk is consistent with agency theory, which tells us that, in the presence of moral hazard, the manager must bear some compensation risk if effort is to be motivated (Scott 2006, p. 323).

The debate on the overpayment of CEO has been around for some time; both in favor or against (see for example Kaplan 2007 vs. Côté 2007). Côté (2007) provides data that US CEO average compensation is 400 times higher than that received by other lower workers in the country, while it is only 30 to 40 times in Europe in comparable companies. According to Côté, some 30 years before the ratio between the highest and the lowest pay for workers in the US is only 10 times. Therefore, he thinks that US CEOs are overpaid.

Kaplan (2007) disagrees with this idea. He uses US data from 1993 to 2005. Kaplan shows that higher CEO compensation is, firstly, related to the growth of the US economy. Secondly, he admits that CEO compensation rises from 1990 to 2000, but declines since 2000. The company's CEO is not the only one that earns higher pay due to the growth of the economy since 1990. Professional athletes like basketball, baseball, and football, and other groups like hedge

fund, private equity, and venture managers also earn higher pay since 1990. Surprisingly, top 25 hedge fund managers in 2004 earned more than all 500 CEOs in the S&P 500. Therefore, Kaplan does not concur with the idea of CEO's overpayment.

Relating to the relationship between cash compensation and stock return and accounting income, there are studies that have investigated this topic, for example, those of Bushman & Smith (2001), Lambert & Larcker (1987), Jensen & Murphy (1990), and Sloan (1993). Bonus contract usually is arranged based on accounting income and not specifically based on stock return (Murphy 1999, in Leone, Wu & Zimmerman 2006). Murphy (1999) finds that if a CEO reaches his/her performance target, measured in ROA or ROE, he/she will receive bonus, for example 80 percent of his/her salary. Therefore, total pay of a CEO tends to relate to firm performance. Murphy (1999) reports that 62 percent of performance measures used in bonus contract are accounting-based contracts, while other measures are either individual performance, stock price, or some other non-financial measures. Among non-financial measures is BOD discretion (Murphy & Oyer 2003 in Leone, Wu & Zimmerman 2006). This implies that CEO compensation is not always based on the relationship between accounting and stock performance alone. Some discretion from BOD also comes into play.

Executive Compensation and Firm Performance in Banking Industry

Different from other industries, bank is a unique industry since it is it must operate within constraints of regulators. More control and monitoring mechanisms are applied in banking (and other financial sectors) as compared to non-financial organizations (Baradwaj, Dubofsky & Fraser 1991, p. 270). Regulation becomes a significant factor in this industry because there are a lot of people who deposit their funds into banks. In special cases in which all depositors demanded their deposits back at the same time, any bank (even if perfectly solvent) would face serious problems in meeting its obligations. This condition may lead to banks rush, like during the Asian financial crisis which was begun in 1997. In general, it's highly demanded to regulate bank's operation in order to monitor the risks assumed by the bank's management, to assure stability in payment system, and to avoid negative economic consequences as a whole caused by widespread bank failures (Biggar & Heimler 2005).

Ciancanelli & Gonzales (2000) state that in banking sector, regulation represent external corporate governance mechanism. Together with market sys-

tem, the existence of regulation will be an additional force to discipline bank's market and management operation. Consequently, regulation mechanism will play an important role of banks corporate governance (see La Porta et al. 1998, Shleifer & Vishny 1997 for further discussion). In addition to this mechanism, banks are increasingly mandated by law to establish certain specialist committees as an audit committee, a risk management committee, a compensation committee and a nomination committee (OECD 2006, 2011).

Why compensation committee, and why compensation issue is one of the major concerns in creating good corporate governance in banking industry? As a part of the board, compensation committee plays an important role in enhancing the effectiveness of the board by setting executive compensation linked more to bank performance. As a whole, compensation can serve as a means of assuring that executive focus on satisfying shareholders, depositors and creditors interests. It then becomes a justification in many countries, especially in Asian countries, for central banks to mandate banks in their jurisdiction to disclose compensation paid to bank's senior executive, either individually or in aggregate (OECD 2011)

As in other industries, there has been increasing interest in the importance of executive in banking. Barro & Barro (1990), Houston & James (1995), Hubbard & Palia (1995), Akhigbe, Madura & Ryan (1997), and Crumley (2008) have filled the gap in the literature for executive compensation in U.S. commercial banking industry. Crumley (2008) examines CEO characteristics and firm data for 36 firms in the U. S. commercial banking industry from 2001-2003. The results indicate that there is a weak relationship between both percentage stock price return and percentage return on equity and the percentage change in CEO compensation. However, the result shows a strong relationship between sales, assets, number of employees, and dollar level of CEO compensation.

Houston & James (1995) study 147 banks in the period 1981-1990. They find that cash and bonus compensation are significantly less for bank CEOs as compared to nonbank CEOs. However, the effect of regulatory ratings and supervisory monitoring on banks' CEO pay is not straightforward. Hubbard & Palia (1995) examine 134 banks during 1980-1990. They find a stronger pay-performance relation in some deregulated interstate banking markets. Earlier, Barro & Barro (1990) investigate the relationship between changes in bank compensation and performance in the 1982-1987 periods. They find that changes in compensation are positively related to

changes in bank performance. All of these studies indicate that there is a relationship between CEO compensation and bank performance and it can be implied that the compensation and performance is positive. However, little is known whether this positive relationship also persists when the performance decreases. If the compensation will not follow the decreased performance, at least in the same proportion as it increases when the performance increases, then, this study suspects that the compensation cost may be sticky.

Sticky Cost Behavior

Traditional model of cost behavior relates cost with various level of activities without any consideration how a managerial intervention influences resources adjustment process. The manager makes some individual adjustments of assigned resources because some costs cannot change into other costs. It means that assigned resources cannot quickly be added or reduced as a response to any small changes in demand. Anderson, Banker & Janakiraman (2003) state that this cost behavior cannot be judged as a sticky behavior. A sticky cost behavior is, actually, caused by the process of asymmetric resources adjustment. In this case, the manager may allocate more resources as the response to increased activity, but do not do the same action in the same quality when the activity decreases.

Theoretically, when demand increases, a manager will locate appropriate resources to meet the demand. He/she will do anything necessary to fulfill the demand, even though it means that the company must augment more investment. Here, the researchers try to see a positive reaction of the manager. On the other hand, when the volume decreases, some resources that have been put in place previously may not be utilized. Because a demand may be stochastic, the manager has to evaluate whether the decrease in demand is temporary or not, before he/she decide to use some adjustments. Anderson, Banker & Janakiraman (2003) argue that SG&A cost stickiness is observed when a manager maintains idle capacity instead of bears costs due to the decrease of sales volume. They find evidence that SG&A costs is sticky since when sales increases as high as 1%, SG&A costs increase as much as 55%, but, on the contrary, they only decrease as much as 35.45% when sales increase 1%.

Executive Compensation and Its Stickiness

Technically, executive compensation is a component that comprises the SG&A costs. However, studies on cost stickiness only focus on the stickiness of SG&A

costs, starting from Anderson, Banker & Janakiraman (2003). Later, more evidences provided by Subramaniam & Weidenmier (2003). They explore how costs behave for different ranges of sales activity changes. They find that SG&A costs and cost of goods sold do not exhibit sticky cost behavior for small revenue changes. However, when revenue changes by more than ten percent, costs exhibit sticky behavior. Inter-industry stickiness is also found, both for SG&A-cost and cost of goods sold.

There are at least two studies that investigate sticky cost behavior in international context. The first one, Calleja, Stelios & Thomas (2006) provide evidence of sticky cost behavior of firms from four countries, i.e. US, UK, French, and Germany. They find that operating cost are sticky in response to changes in revenue; operating costs increase, on average, by around 0.97 percent per 1 percent increase in revenue, but decrease by only 0.91 percent per 1 percent decrease in revenues. Comparing French and Germany in one extreme law regime and UK and US on the other extreme, they find that costs of French and German firms are stickier than those of UK and US firms. They find that costs in Germany and France are more sticky than that of in US and UK. They believe that this result is attributable to differences of corporate governance and managerial oversight systems. Finally, they argue that costs tend to be less sticky over longer time horizons and when firms sustain larger drops in revenue.

The second study, He, Teruya & Shimizu's study (2010), replicates Anderson, Banker & Janakiraman (2003) and investigates the determinants of cost stickiness in Japan. They find, similar to US companies, Japanese firms also demonstrate sticky SG&A cost behavior. However, the stickiness of SG&A in Japan is less likely to be adjusted due to temporary changes in their performance.

All studies cited above investigate SG&A costs stickiness in manufacturing companies. So far, only one study that tests this cost stickiness in non-manufacturing industry, i.e. Porporato & Werbin (2010) that test cost stickiness in banking industry. Specifically, they compare banks from three countries: Argentina, Brazil, and Canada, from 2004-2009. They choose banks as sample because banks, in every country, share the same characteristic, i.e. highly regulated. Different from previous studies on cost stickiness that test SG&A cost stickiness, they test the stickiness of total costs. Total cost definition itself are different from a country sample to another. The results show that sticky costs are observed in banks of Argentina, Brazil, and Canada. They argue that total cost in banking industry follows a sticky

behavior because the magnitude of the increase associated with an increase in the volume of activity or revenues is larger than the magnitude of the fall associated with a decrease of the volume.

Even though it has some evidence on the stickiness of SG&A across industry (at least for two industries) and across nations, the researchers still do not have any evidence on the stickiness of specific components that comprise SG&A costs. Anderson, Banker & Janakiraman (2003), in fact, recommend further study to investigate those specific components. Here, it can be implied that one of the components is compensation paid to executives. Logically, Anderson, Banker & Janakiraman (2003) provided us, when SG&A costs are sticky, the components of SG&A costs must also be sticky. The researchers must note that, however, not all of cost that have sticky behavior. Costs which are not directly related to the production factor, for example overhead costs, should not change when the sales or activity change. The opposite is true when the activity decreases.

When activity decreases, the costs will not be instantly to decrease when observed. The company has to bear large cost if they have to discard or dispose their resource due to the decrease in activity. Later, when the activity or sales increase, it has to reacquire more resources again. Take employees as an example. If the company has to fire some of its employee during a crisis, it will find difficulty when the activity urges it to hire more men. It is clear to us that it will not be easy and cheap to re-hire employees or find new ones. Hiring some new people, when the company activity or sales increase again, means also to train them. Therefore, incentive to delay the trimming of resources due to the decrease in activity is larger than the incentive to acquire more resources when the activity increases. According to Anderson, Banker & Janakiraman (2003), manager maintains unutilized resources to protect him/her from budget cut, to preserve his/her status in job market, or to prevent company from losing competent employees. These motives drive manager to not hastily to lower costs when activity decreases. The same is true for executives' compensation cost.

Sticky cost behavior can be explained by agency theory. Academician agree that executives may put their interest before others' (Jensen & Meckling 1976). Due to moral hazard, executives may ask for higher compensation when they perceive their performance increase. On the contrary, they will be reluctant to bear consequences of a reduced performance. Even though there are some kind of arrangements in their contracts that state what happen to their contract when they fail to meet the agreed

targeted performance, that failure will not automatically bring down their compensation. In some degree, their compensations may fall, but the decrease may not as large as the increase in their compensation when the targeted performance achieved.

It means, there is a tendency of stickiness in executive compensation costs, which leads us to our hypotheses.

Ha: Percentage of the increase in cash compensation received by bank executives when bank income increases is higher than that of the decrease in cash compensation received when the bank income decreases.

3. RESEARCH METHOD

Sampling and Data Collection

Public banks in Indonesia, Malaysian, Philippine, Thailand and some other OECD member countries have released their compensation data in annual report since 2008 following a survey and recommendation from OECD in 2007. Even though those published data are not as detail as one in the US, since, for example, compensations data are only in aggregate numbers, not for each executives, at least those banks published their cash compensations. Cash compensations comprise of salary and bonus. Both numbers represent fixed and variable compensations costs and since they belong to SG&A, they can be expected to have sticky behavior.

The researchers collected banks' data from four countries. In many respects public companies in those countries have similarities, especially in terms of corporate governance practices due to ownership concentration in a small group of shareholders, most of them are the founding family who retain their control in the form of ownership and managerial positions (Claessens, Djankov & Lang 2000). Some variations, however, may exist among corporations in those countries. For example, based on the OECD survey in 2006 (OECD 2007), it is not mandatory for a Malaysian public company to disclose individual executive compensation although it is recommended to do so under Malaysian code of corporate governance. Other countries have the same requirements as Indonesia, which requires those disclosures. This study excludes Vietnam and Singapore since they both have different market size than the other four countries chosen.

In this study, compensations refer to total cash compensation, not split into fixed and variables. Every country has its own disclosure requirements. For example, firms in Thailand do not disclose separately fixed cash compensation (salary and allowance) with variable (bonus), but give detail pay-

ments to their executives; while in other countries, like Indonesia, the disclosures are based on types of cash compensation, not executives. The researchers collected all cash compensation data, i.e. salary and bonuses, paid to executives and directors during 2008-2012. Those data are retrieved from samples annual reports posted in their websites or in their respective stock markets websites. Banks' revenue data are retrieved from annual reports and classified using World scope definition. Revenues data consist of revenues from operations and other operations related revenues that comprise operating income. The researchers translated particular data to US Dollar for inter-country comparison using daily average rate of each currency to US Dollar based on currency rate data published by OANDA (2013).

Model

This study adopted and adapted the research model from Anderson, Banker & Janakiraman (2003) to test our hypothesis.

$$\log\left[\frac{C_t}{C_{t-1}}\right] = \beta_0 + \beta_1 \log\left[\frac{S_t}{S_{t-1}}\right] + \beta_2 * Dummy_decrease_{i,t} * \log\left[\frac{S_t}{S_{t-1}}\right] + e_{i,t} \quad (1)$$

Where C_t and C_{t-1} are compensation in year t and t-1, respectively; S_t and S_{t-1} are revenue in year t and t-1, respectively; $Dummy_decrease$ is dummy variable: 1 if revenue in year t is lower than previous year (t-1), 0 if otherwise.

The equation above is used to test the stickiness of compensation. The researchers chose total cash compensation, i.e., salary plus bonus. Changes in activity will be measured by changes in bank's revenue. Anderson, Banker & Janakiraman (2003) stated that the coefficient of β_1 measures the increase of percentage in compensation (C) or costs with a 1% increase in revenue. This is true since the value of $Dummy_Decrease$ is 0 when the revenue increases. On the contrary, since the value of $Dummy_Decrease$ is 1 when the revenue decreases, then the sum of the coefficients, $\beta_1 + \beta_2$ measures the percentage increase in compensation costs with a 1% decrease in revenue. They say that if the compensation costs are sticky, the variation of compensation costs with revenue increases should be greater than the variation for revenue decreases. Therefore, the researchers also propose that the empirical hypothesis for stickiness, conditional on $\beta_1 > 0$, is $\beta_2 < 0$.

4. DATA ANALYSIS AND DISCUSSION

Compensation Disclosure Practices

The application of good corporate governance

(GCG) requirements, including but not limited to compensation, by listed companies in Malaysia and Thailand is “comply and explain”. Public corporations in both countries are expected to disclose aspects that have not been disclosed and reasons for not disclosing them in their annual reports. Guidelines of applications are included in each exchange market listing rules, while the enforcement of those rules is under the authority of stock market regulator. Malaysia and Thailand do not impose any sanction to any company that is not comply to GCG requirement, while Philippine, where compensation disclosure is mandatory, fine a company P100,000 (around Rp 4.100.000) for noncompliance.

In Indonesia, the application of GCG guidelines are established by both exchange market and market regulator and the requirements is voluntary. Specifically, the GCG guidelines for banks are established by Bank Indonesia, i.e., Indonesian central bank, in Bank of Indonesia Regulation No. 8/4/PBI/2006. Noncompliance of this regulation will be given different level of punishment from written warning to severe penalty both to the bank management and to the bank operation itself.

In general, banks in those four countries have a compensation committee. They also disclose compensation paid to commissionaires (Indonesia) and to company executives. However, it was found that not all banks sampled disclose the amount of executive compensation as required or mandated by the respective reporting authorities in each country. In Indonesia, to begin with, there are seven banks (from 2010-2012) that disclose detail components of compensations paid to their member board of commissionaires and executives, while the rest of public banks either disclose the total amount of payments made together to commissionaires and executives or prepare separate disclosure of both commissionaires and executives. Since there is no requirement to disclose detail payments to each individual, there is no company doing so. Moreover, there is one company that only narratively stated the range of compensation paid to their executives, without specifying the amount, even though in previous years it discloses the exact number. In other words, there is inconsistency in disclosure practices in Indonesia, even in the single company.

In Malaysia, the reporting authority mandates public companies to disclose detail compensation paid to each board of director members and to, at least, five top member of executives. In our samples, four banks report detail compensations as required, but the others only report total payments based on the compensation components.

Stock exchange authority in Philippine only requires public banks to disclose their compensation policy. Except for CEOs, there is no other further explanation regarding this disclosure requirement. In terms of the CEOs in Philippine’s banks, on the other side, there must be detail and clear information regarding every compensation and non-compensation plans. In our sample, there are eight banks that disclose detail compensation components and four of them disclose the highest five payments made. In an extreme case, the researchers had one company that decline to disclose payment made to its executives since the company has net loss that year. It is not possible, in fact, that executives are not paid at all. Then, the executives may not receive their bonuses on that year, but must receive their monthly fixed payment. The researchers, however, cannot find any explanation on this particular company’s annual report.

Finally, Thailand explicitly mandates information transparency, especially relating to compensation. They mandate company to disclose directors and executive compensation policy based on each individual contribution and responsibility as well as the type and amount of payments. In practice, it was found that all samples disclose detail amount of compensation paid to each individuals, but the researchers cannot find any information of its components.

Descriptive Statistics

Table 1 presents number of publicly listed banks in the four countries and samples used. Indonesia has the largest banks listed in the stock market, followed by Philippines, and Malaysia and Thailand. The latter two have the same number of listed banks, i.e. nine banks. From those populations, only 29 out of 31 can be used as samples in Indonesia and eight out of nine from Malaysia. All banks from both Thailand and Philippines can be used as samples. These reductions in samples are due to the incomplete data of those samples. The real observation numbers, for the whole years, are 124, 40, 52, and 36 for Indonesia, Malaysia, Philippines, and Thailand, respectively. Some observations must be left out due to insufficient data of compensation and/or revenue. Indonesia has the highest number of public listed banks while Malaysia and Thailand are the lowest sampled.

Table 2 presents average value of sampled firms’ assets in each country. Assets are converted from local currencies to US Dollar. Philippines banks report the lowest assets, while Malaysian banks have the highest assets. On average, the asset value of

Table 1
Public Banks and Samples (2008-2012)

Country	Listed Banks	Usable samples	
		Bank Numbers	Observation Numbers
Indonesia	31	29	98
Malaysia	9	8	31
Philippine	13	13	35
Thailand	9	9	29

Table 2
Assets Value Comparisons (in Million USD)

Country	Assets				
	2012	2011	2010	2009	2008
Indonesia	14,343	9,221	7,635	6,456	5,664
Malaysia	73,098	67,160	51,310	43,256	40,581
Philippine	8,105	6,298	5,161	6,093	4,486
Thailand	45,147	39,607	33,235	19,854	27,234

those banks has increased every year. However, banks in Thailand experience significant decrease in 2009 before climbing again in 2010. The table data imply that Malaysian banks are, on average, five to eight times larger than Indonesian banks, even though the Indonesian banks population is more than three times of Malaysian banks.

Table 3 presents cash compensation paid to executives in four countries. Banks in Thailand pay the highest compensation, while Malaysia and Indonesia the lowest. The researchers, however, do not divide this compensation to number of executives (including BOD number), since the researchers cannot acquire number of executives paid for every country and company. Therefore, the dollar amount in Table 3 is the average of five year annual payment in each company. The interesting fact, relating to Table 2, is that, on average, Philippines executives are paid four times higher than that of Indonesian and Malaysian. Table 2 shows that Philippine's banks assets are only around 8-10% of Malaysian banks assets, but their executives are paid four times higher than that of Malaysian's.

Moreover, Thailand banks paid the highest compensation of the four countries studied. Compensation paid to Thailand executive is, on average, USD33 million, which is around eight times higher than Indonesian and Malaysian banks paid to their executives. These seem contrary to the fact that based on the assets, banks in Philippines have the lowest assets among the other three countries. The banks' assets are around eight to eleven times lower than Malaysian, but their executives are paid the highest.

Hypothesis Testing

Results of tests on equation (1) can be seen in Table

4. This study used OLS and bootstrapping model to analyze our data. As can be seen on Table 1, observations are small in countries other than Indonesia. Since basing our conclusions on small data may be bias if using the OLS, the researchers, then bootstrap our data. Bootstrapping allows the researchers to have larger data and for this purpose this study re-sample the data into 1,000 observations. The analysis on this finding is based on bootstrapping results (presented in parentheses after corresponding OLS results). Readers can consult both aforementioned tables for OLS regression results as well, since both give relatively the same conclusions.

In Table 4, Indonesian samples log revenue is statistically significant (alpha 1%). Generally, based on OLS and bootstrapped results, the researchers can conclude that changes in revenue correlate to changes in executive compensation. The positive sign of β_1 (bank's revenue) measure the percentage increase of executive compensation when the revenue increases. The statistically significant finding indicates that it confirms Anderson, Banker & Janakiraman's (2003) prediction that compensation increases as bank's revenue increases. In our case, for every 1% increase of a bank's revenue, the compensation increase as high as 71%.

The same positive sign of β_1 is found in Malaysian samples. The log revenue is also statistically significant (alpha 5%). OLS and bootstrap methods give us the same conclusions. The increase of 1% of revenue in Malaysian will be followed by 177% increase in executive compensations. However, it cannot be concluded in the same way for Thailand and Philippines samples. The β_1 for Thailand is not statistically significant (alpha >10%). The test on the Philippines samples also does not give a statistically significant result (alpha >10%). Therefore, for both

Table 3
Comparison of Executive Compensation (on Average, in USD)

Country	Compensation (Fixed and Variable)
Indonesia	4,971,596
Malaysia	4,166,764
Philippine	16,723,064
Thailand	33,486,581

Table 4
Results of Hypothesis Testing with Bootstrap Corresponding Value in Parentheses

$$\ln\left[\frac{C_t}{C_{t-1}}\right] = \beta_0 + \beta_1 \ln\left[\frac{S_t}{S_{t-1}}\right] + \beta_2 * Dummy_decrease_{i,t} * \ln\left[\frac{S_t}{S_{t-1}}\right] + e_{i,t}$$

Variables	Indonesia		Malaysia		Thailand		Philippine	
	Coeff.	t-statistic	Coeff.	t-statistic	Coeff.	t-statistic	Coeff.	t-statistic
Constant	0.012	0.700 (0.357)	0.042	0.458 (0.209)	-0.077	0.691 (0.368)	0.008	0.846 (0.437)
Ln Revenue	0.717	0.018 ** (0.004) ***	1.767	0.048 ** (0.021) **	3.532	0.153 (0.105)	0.107	0.485 (0.171)
Dummy * Ln Rev	-2.525	0.107 (0.020) **	-2.618	0.025 ** (0.013) **	-8.081	0.016 ** (0.010) ***	1.690	0.680 (0.334)
F		0.046**		0.057*		0.053		0.672
Adj-R2		4.3%		12.7%		14.1%		3.1%
N (observations)		98 (1000)		31 (1000)		29 (1000)		29 (1000)

*, **, ***: statistically significant at, consecutively, alpha 10%, 5%, and 1%; C: compensation paid to executives; S: bank revenue; Dummy-Decrease: 1 if year t revenue is lower than year t-1 revenue, 0 if otherwise.

countries, the researchers cannot conclude a positive relationship between pay and performance of their banks executives.

The interaction of dummy decrease of revenue with log revenue is statistically significant (alpha 5%) for Indonesian samples. However, the negative β_2 and positive β_1 do not indicate that Indonesian banks' executive compensation is sticky (Anderson, Banker & Janakiraman 2003, p. 53). Yet, it is anti-sticky because the absolute of negative β_2 is larger than β_1 . In order to confirm cost stickiness, Anderson, Banker & Janakiraman (2003) state that the sum of $\beta_1 + \beta_2$ should be greater than the variation of revenue decrease. The sum of $\beta_1 + \beta_2$ is $0.717 + (-2.525)$ or equals to -1.808 . It means that, for every 1% decreases in Indonesian bank's revenue, the compensation decreases as low 180%. Malaysian banks also indicate the same behavior of anti-stickiness. The decrease of executive compensation can be as low as 85% (or $1.767 - 2.618$) in Malaysia.

These findings are contrary to the expectation that compensation costs show stickiness characteristics, i.e. the magnitude of the decreases of compensation for each percentage of the decrease of revenue is lower than that of the magnitude of increase of compensation for each percentage of the increase of bank's revenue. The fact is, when the revenue decrease, the compensation decrease faster than the

revenue. Therefore, instead of being sticky, the compensation shows a behavior opposite to the stickiness. This behavior is not as expected and since the behavior is contrary to the sticky behavior, it can be called as anti-sticky behavior.

The researchers, moreover, have statistically significant interaction variable coefficient for Thailand. However, as seen in Table 4, the coefficient of log revenue variable is not statistically significant. Anderson, Banker & Janakiraman (2003, p. 53) suggest that β_2 should be negative, conditional on positive value of β_1 to conclude cost stickiness. Since β_1 is not statistically significant, the researchers cannot conclude the stickiness (or, as Indonesian and Malaysian show, anti-stickiness) of Thailand samples. Lastly, anything cannot be concluded from the results of Philippines because the model is not statistically significant. The coefficients of two variables are also not statistically significant.

Additional Analysis

Banker, Fang & Mehta (2013) posit that a company's manager may adjust current cost based on the condition of prior year's resource level and on the next year's expected performance level. If the manager believes that future performance can increase, then he/she may expect an increase of resources. For example, if the forecast shows that an increase in sales

Table 5
Results of Sticky/Anti-Sticky Cost Behavior Conditional on Prior Period Revenue and Bootstrap
Corresponding Value in Parentheses

$$\Delta \log C_{i,t} = \beta_0 + \beta_1^{P^{Incr}} INC_{i,t-1} \Delta \ln S_{i,t} + \beta_2^{P^{Incr}} INC_{i,t-1} DEC_{i,t} \Delta \ln S_{i,t} + \beta_1^{P^{Decr}} DEC_{i,t-1} \Delta \ln S_{i,t} + \beta_2^{P^{Decr}} DEC_{i,t-1} DEC_{i,t} \Delta \ln S_{i,t} + e_{i,t}$$

Variables	Indonesia		Malaysia		Thailand		Philippine	
	Coeff.	t-statistic	Coeff.	t-statistic	Coeff.	t-statistic	Coeff.	t-statistic
Constant	0.201	2.609 ** (3.049) ***	0.194	1.023 (0.955)	0.052	0.796 (0.931)	0.049	0.643 (0.559)
INC _{i,t-1} ΔlnS _{i,t}	0.460	6.170 *** (3.963) ***	0,065	0.062 (0.063)	0.361	1.215 (1.383)	0.324	0.807 (1.279)
INC _{i,t-1}	0.467	4.640 *** (2.938) ***	2.228	0.294 (0.272)	1.482	0.430 (0.100)	0.671	0.224 (0.141)
DECI _{i,t-1} ΔlnS _{i,t}	0.494	2.524 ** (2.155) ***	0.916	0.659 (0.412)	0.036	0.088 (0.054)	0.742	0.939 (0.789)
DECI _{i,t-1}	0.636	2.208 ** (0.736) **	2.293	0.435 (0.297)	-0.445	-0.451 (-0.300)	0.365	0.092 (0.198)
F		91.627***		0.344		0.711		0.497
Adj-R2		78.9%		9.3%		4.3%		6.5%
N (observations)		98 (1000)		31 (1000)		29 (1000)		33 (1000)

*, **, ***: statistically significant at, consecutively, alpha 10%, 5%, and 1%; C: compensation paid to executives; S: bank revenue; INC_{t,t-1}: 1 if revenue increased in year t-1, 0 if otherwise; DEC_{t,t-1}: 1 if revenue decreased in year t-1, 0 if otherwise; DECI_t: 1 if revenue decreased in year t, 0 if otherwise; ΔlnS_{i,t}: log-change in bank revenue in year t.

to be expected, the manager has to consider the increase in company's resources, like its plant, supplies, inventories, sales forces, and so on. If those anticipated increase in resources are already in the company, for example its plant or sales forces, then the manager will have to retain them to stay in the company. It is not a wise choice, for example, due to the decrease in the current year's sales if the company to reduce its sales forces or, else, to liquidate its warehouse. If the company let go of its sales forces or liquidate a warehouse in an area, more resources are needed if sales increase in the future. They have to recruit and train new sales forces. The cost to recruit and train new people can be higher than the cost to keep current and available sales forces in the company. The same is true if the company to has to keep current warehouse in the time of sales decrease or to buy (or rent) a new one when the sales increase. As Anderson, Banker & Janakiraman (2003) previously put, in a period where there is an increases of sales, a manager is more inclined to add resources. For example, if the demand increases, the manager may respond it by opening some new outlets. However, the manager is less inclined to reverse the commitment in the next periods even though the sales decrease. It implies that manager responses less to a sales decrease, but puts more response to a sales increase. This is what Anderson, Banker & Janakiraman (2003) call cost stickiness.

Contrary to the optimism that creates cost stickiness, pessimism can also cause an asymmetric cost

behavior. In the case of pessimism, manager will cut cost larger due to the decrease in sales, but will only cause smaller increase in cost due to increase in sales. For example, during a time of a crisis, a small decrease of sales, e.g. 5%, will cause the manager to fire sales forces more than the number of sales forces hired when the sales increase by 5%. This is because a highly pessimistic manager will anticipate much lower resources needed for the company's future operation. Cutting current resources, during time of a crisis, will reduce both costs related to company's current operation as well as future operation. On the contrary, when the current sales increase, a manager who is highly pessimistic will only put resources (e.g. hire new sales forces) that are really need to fullfil current requirements. For example, if the sales increase 5%, the company only hires some sales forces that can handle that sales increase. This managerial pessimism what Banker & Byzalov (2014) call a anti-stickiness cost behavior.

Previously, Banker, Fang & Mehta (2013) find evidence of anti-sticky cost behavior during 2008 crisis. Our firm-year observations starts from 2008, when the crisis erupted. Since our samples are banks whose business are highly related to this financial crisis, the compensation behavior may be explained by this phenomenon. Based on this argument, the researchers put an additional analysis on our hypothesis. The researchers put bank's previous performance as an indicator of this pessimistic/optimistic managerial decision using research model from

Banker, Fang & Mehta (2013).

The coefficients $\beta 1^{PIncr}$ and $\beta 2^{PIncr}$ (or $\beta 1^{PDegr}$ and $\beta 2^{PDegr}$) correspond to $\beta 1$ and $\beta 2$ in the Anderson, Banker & Janakiraman (2003) model for the subsample of observations that follow a prior sales increase (or decrease). Similar to Anderson, Banker & Janakiraman (2003), a negative $\beta 2$ indicates cost stickiness, i.e., costs falling less for sales decreases than they rise for equivalent sales increases. Conversely, a positive $\beta 2$ corresponds to cost anti-stickiness, i.e., costs falling to a greater extent for sales decreases than they rise for sales increases.

The test results in Table 5 show that for Indonesia, $\beta 1^{PIncr}$ and $\beta 2^{PIncr}$ are statistically significant (alpha 1%), either using original data or bootstrapping. The coefficient $\beta 1^{PIncr}$ can be interpreted when the bank's revenue increases in prior period, the executive compensation rises as high as 46% for every 1% of the increase of bank's revenue. However, the positive $\beta 2^{PIncr}$ does not support the prediction as in Banker & Byzalov (2014), and Banker et al. (2014) and the coefficient should have been negative to imply a sticky cost behavior.

This finding is interesting since for Indonesian samples, i.e. ones that experience revenue increase in the prior period, the decrease of their revenues in the current period of 1% is, surprisingly, followed by the decline of executives compensation as high as 92%, i.e. the sum of $\beta 1^{PIncr}$ and $\beta 2^{PIncr}$ (46%+46.7%). It means that the decline of current bank's revenue will be followed by the decline of total executive's compensation that is bigger than the increase of compensation caused by the equivalent increase in revenue. It is implied that this significant decrease of compensation act as a punishment mechanism to the executives. The prior period's increased of revenue cannot reduce the managerial pessimism. This pessimism is then reflected on the significant decrease of compensations paid to executives. External factors, like 2007-2009 financial crisis, may play a significant role pushing the compensation lower.

The test results when the prior period's revenue decreases ($\beta 1^{PDegr}$ and $\beta 2^{PDegr}$), support the anti-sticky behavior of executive compensation. This cost behavior can be concluded from statistically significant value of $\beta 1^{PDegr}$ and $\beta 2^{PDegr}$ (alpha 1%). The $\beta 1^{PDegr}$ coefficient indicates that, when prior period's revenue decreased, the executive's compensation decreases as much as 49.4% for every 1% of decreased revenue in the current period. This decrease in revenue is bigger than the decrease of compensation when prior period's revenue increased (see the coefficient of $\beta 1^{PIncr}$). To compare both current period decreases, the punishment is stronger to a company

that experiences a decrease in revenue in its prior year (49.4%), than to a company that experiences an increase in its prior year (46%).

If after a decrease in a prior year the company's revenue keeps on decreasing in the current year, the punishment is worse. The compensation decreases as much as 113% to every 1% of the decrease in company's current period revenue. Therefore, it can be concluded that, for Indonesia banking samples, executive compensation show an anti-sticky cost behavior, especially when they experience a revenue decrease in the previous year.

In sum, these results provide some additional evidences of the anti-sticky cost behavior in our Indonesian samples. Since our samples are from the 2007-2008 financial crisis periods, the managerial pessimism is reflected into the compensation paid to the banks' executives compensation.

However, unlike Indonesia, it cannot be concluded in the same way for the behavior experienced by banks in Malaysia, Thailand, and Philippines. The results indicate no statistically significant coefficients, so there is no indication which can be drawn of any cost behavior. The explanation may relate to the characteristics of banks in those countries in dealing with the same financial crisis. Further research may study the influence of specific country in dealing with crisis and its effect on the cost behavior.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

Claessens, Djankov & Lang's (2000) study suggest that most public companies in East Asia (including South East Asia) were founded and owned by a family. Most of those families are still the controlling owners of those companies. In this type of company, the owner may put their interest before others. This policy may be at the expense of minority shareholders' interests (Zhuang 1999). Many post-crises has been utilized in many Asian corporations. However, some think that those efforts are based on the Anglo-Saxon model. Applying this model in Asian culture may only touch the outer layer of the problem since the concentrated ownership structure and institutional, and socio cultural norms attached in local economy (Nam & Nam 2004).

Nam & Nam (2004) study the corporate governance in four Asian countries (South Korea, Indonesia, Malaysia, and Thailand). They find evidence that companies in these four countries give a good opportunity to their shareholders to participate in decision making and use their rights as shareholders. However, their study also find, among others, that board of directors are relatively weak in selecting,

monitoring, and replacing the CEO; in evaluating key executives and directors compensations. Implicit in this statement is that there are still many corporate governance problems experienced by companies in Asia. There are, of course, some adjustments made, like compensation disclosure. OECD (2004) reports that some Asia countries have strengthened their directors and executives compensation disclosure. Authority in Indonesia, Thailand, and Philippine have mandated individual compensation disclosure by public companies. This disclosure practice is a type of information openness appreciated much by the public. Public has the right to know where the investors' money goes since those executives and directors are paid using their money and the money should be invested in the right investment. Nam (2006) find that senior managers' compensation is one the main indicators used by market participants to value a bank.

Our main objective of this study is to test whether the compensation costs are sticky. Anderson, Banker & Janakiraman (2003) encourage future study to test the stickiness of the components of SG&A costs. Their study tests the stickiness of SG&A costs to activities as measured by revenue. This study replicated their study by investigating the stickiness of compensation costs paid to executive. It chose the banks' executives because their compensations data are already available to public. Four South East Asian countries are chosen.

The results confirm that executives' compensation increase as their banks' revenue increase. It is true for Indonesian and Malaysian banks. This study does not have the same conclusion for Thailand and Philippines banks since the related coefficients are not statistically significant. For the earlier two countries, the increase of their executives' compensation, for every 1% increase of revenue, is surprisingly high, i.e. 71% in Indonesia and 177% in Malaysia. No similar conclusion, unfortunately, can be drawn for samples taken from Thailand and Philippines banks.

The tests on the stickiness of compensation costs, unexpectedly, reveal the opposite conclusions. When both coefficients of β_1 and β_2 are summed up, the researchers found the additions of both coefficients result in negative values for both Indonesian and Malaysian data. This negative number may indicate a behavior contrary to the positive value, in this case indicating a behavior contrary to the stickiness. It is called an anti-sticky costs behavior of compensation. Additional analysis confirms that cost behavior is anti-sticky for Indonesian samples, but no conclusion can be made on the other three countries.

The question is, then, what this anti-sticky cost

may suggest. Intuitively, this phenomenon may indicate that the executives are punished because of the decrease of the revenue. The punishment, however, seems to be more severe than expected. If Anderson, Banker & Janakiraman (2003) hypothesize and find evidence that the absolute change in compensation when the performance increase is larger than when it decreases, this study found the contrary. The decrease of executives' compensation is surprising.

The next question is how the executive may have been punished? Do the punishment in the form of reduced compensations are from fixed or variable compensations, or both? These may be the future questions to ask since the disclosure practice is still in its immature state. Almost all samples in our study disclose compensation paid to board of commissioner (specific for Indonesia) and executives of each company. The researchers, actually, expect that every company disclose separately cash compensation into fixed (i.e. salary, allowance, and the like) and variable (i.e. bonus). Salary is paid based on contract while bonus is based on performance. Therefore, the analysis based on the division of compensation into fixed and variable components can shed more light than the analysis based on the total amount of both numbers.

The additional analysis also suggests that it is only for Indonesia. In this study, it was found the different compensations disclosure practices in each country. For example, only banks in Malaysia that disclose detail components of compensation and four companies in Malaysia disclose the payment made to each executive. In Indonesia, most of the banks compile the compensation into one number, each for commissioners and executives. Thailand's banks disclose the amount paid to every executive, but do not split it into fixed and variable. Lastly, some banks in Philippines only disclose cash compensation paid to some of its executives and disclose the rest into one number. Therefore, it is important to have a uniform disclosure to put all the country into analysis. A more detailed disclosure of compensation is important because fixed cash compensation, for example, cannot be changed easily into variable one. If the fixed cash compensation dominates, it can be predicted that total compensation cost might be sticky than when variable cash compensation dominates. Then, it can also be predicted that if the fixed one dominates, managers will be more likely to shirk since they will bear no risk when firm performance declines.

Another important point is the disclosure of compensation paid to each executive. In each com-

pany, there must be one or more executives that are responsible to the firm's revenue. For example, the relationship of chief of marketing executive to sales is stronger than the same relationship to chief of human resources or chief of information executive. The compensation paid to each of them is based on different, at least some if not all, indicators. Future study should consider the relationship between particular executive's compensation and firm performance and the stickiness of that executive compensation.

REFERENCES

- Anderson, MC, Banker, RD & Janakiraman, SN 2003, 'Are selling, general, and administrative costs "sticky"?', *Journal of Accounting Research*, vol. 41, no. 1, pp. 47-63.
- Akhigbe, A, Madura, J & Ryan, H 1997, 'CEO compensation and performance of commercial banks', *Managerial Finance*, vol. 23, no. 11, pp. 40-55.
- Banker, RD, Fang, S & Mehta, M 2013, 'Cost behavior during the world economic crisis', *Working paper, Temple University*, viewed 15 September 2016, <www.fox.temple.edu/cms/wp-content/uploads/2013/08/MihirMehta.docx>
- Banker, RD & Byzalov, D 2014, 'Asymmetric cost behavior', *Journal of Management Accounting Research*, vol. 26, no. 2, pp. 43-79.
- Banker, RD, Byzalov, D, Ciftci, M & Mashruwala, R 2014, 'The moderating effect of prior sales changes on asymmetric cost behavior', *Journal of Management Accounting Research*, vol. 26, no. 2, pp. 221-246.
- Banker, R D & Datar, S 1989, 'Sensitivity, precising, and linear aggregation of signals for performance evaluation', *Journal of Accounting Research*, vol. 27, no.1, pp. 21-39.
- Baradwaj, BG, Dubofsky, DA & Fraser, DR 1991, 'Bidder returns in interstate and intrastate bank acquisitions', *Journal of Financial Services Research*, vol. 5, no.3, pp. 261-273.
- Barro, JR & Barro, RJ 1990, 'Pay, performance, and turnover of bank CEOs', *Journal of Labor Economics*, vol. 8, no. 4, pp. 448-481.
- Biggar, D & Heimler, A 2005, 'An increasing role for competition in the regulation of banks', *E-paper*, <www.internationalcompetitionnetwork.org/uploads/library/doc382.pdf>, viewed 17 May 2014.
- Bushman, R & Smith, A 2001, 'Financial Accounting information and corporate governance', *Journal of Accounting and Economics*, vol. 32, issues 1-3, pp. 237-333.
- Calleja, K, Steliaros, M & Thomas, DC 2006, 'A note on cost stickiness: some international comparisons', *Management Accounting Research*, vol. 17, issue 2, pp. 127-140.
- Ciancanelli, P & Gonzalez, JAR 2000, 'Corporate governance in banking: a conceptual framework', *Electronic paper*, viewed 17 May 2014, <http://papers.ssrn.com/paper.taf?abstract_id=253714>.
- Claessens, S, Djankov, S & Lang, S 2000. The separation of ownership and control in East Asian corporations, *Journal of Financial Economics*, vol. 58, issues 1-2, pp. 81-112.
- Cooper, R & Kaplan, R 1998, 'The design of cost management systems: text, cases, and readings' Upper Saddle River, NJ: Prentice Hall.
- Côté, M 2007 'Are CEOs overpaid?', *CA Magazine*, November, 80, <<https://www.highbeam.com/doc/1P3-1386259811.html>>.
- Crumley, CR 2008, 'A Study of the relationship between firm performance and CEO compensation in the U.S. commercial banking industry', *The Journal of Applied Management and Entrepreneurship*, vol. 13, no. 2, pp. 26-45.
- Defeo, VJ, Lambert, RA & Larcker, DF 1989, 'Executive compensation effects of equity-for-debt swaps', *The Accounting Review*, vol. 64, no. 2, pp. 201-227.
- Grossman, SJ & Hart, OD 1983, 'An analysis of the principal agent problem', *Econometrica*, vol. 51, no.1, pp. 7-45.
- Harris, M & Raviv, A 1979, 'Optimal incentive contracts with imperfect information', *Journal of Economic Theory*, vol. 20, issue 2, pp. 231-259.
- He, DS, Teruya, J & Shimizu, T 2010, 'Sticky selling, general, and administrative cost behavior and its changes in Japan', *Global Journal of Business Research*, vol. 4, no.4, pp. 1-10.
- Houston, JF & James, J 1995, 'CEO compensation and bank risk: Is compensation in banking structured to promote risk taking?', *Journal of Monetary Economics*, vol.36, issue 2, pp. 405-431.
- Hubbard, RG & Palia, D 1995, 'Executive pay and performance: Evidence from the U. S. banking industry', *Journal of Financial Economics*, vol. 39, issue 1, pp. 105-130.
- Jensen, M & Meckling, W 1976, 'Theory of the firm: Managerial behavior, agency costs, and ownership structure', *Journal of Financial Economics*, vol. 3, no. 4, pp. 305-360.
- Jensen, MC & Murphy, K 1990, 'Performance pay and top management incentives', *Journal of Political Economy*, vol. 98, no. 2, pp. 225-264.
- Kaplan, SN 2007, 'Are CEOs really overpaid?' *The*

- Corporate Board*, Nov/Dec, p. 8-12, <<https://www.corporateboard.com>>, viewed 2 June 2012.
- KPMG 2011, 'Evolving banking regulation: a long journey ahead—the outlook for 2012', <<https://www.kpmg.com/LT/lt/IssuesAndInsights/ArticlesPublications/Documents/Evolving-banking-regulation-2011.pdf>>, viewed 12 June 2014.
- Lambert, R & Larcker, D 1987, 'An analysis of the use of accounting and market measures of performance in executive compensation contracts', *Journal of Accounting Research*, vol. 25 (Supplement), pp. 85-125.
- La Porta, R, Lopez-De-Silanes, F, Shleifer, A & Vishny, RW 1998, 'Law and Finance', *Journal of Political Economy*, vol. 106, no. 6, pp. 1113-1155.
- Leone, AJ, Wu, JS & Zimmerman, JL 2006, 'Asymmetric sensitivity of CEO cash compensation to stock returns', *Journal of Accounting and Economics*, vol. 42, issues 1-2, pp. 167-192.
- Mehran, H 1995, 'Executive compensation structure, ownership and firm performance', *Journal of Financial Economics*, vol. 38, issue 2, pp. 163-184.
- Murphy, KJ 1985, 'Corporate performance and managerial remuneration: An empirical analysis', *Journal of Accounting and Economics* vol. 7, issues 1-3, pp. 11-42.
- Murphy, K 1999, 'Executive compensation', in: Ashenfelter, O & Carl, D, *Handbook of labor economics*, North-Holland, Amsterdam, vol. 1, pp. 2485-2563.
- Murphy, K & Oyer, P 2003, 'Discretion in executive incentive contracts', *Working paper*, University of Southern California and Stanford University, viewed 6 May 2013, <<https://pdfs.semanticscholar.org/321f/4c88a1a178266dc947a4c77bdcfff23adbc6.pdf>>
- Nam, S-W 2006, 'Corporate governance of banks: Review of issues, in Nam, S-W & Lun, CS (ed.), *Corporate governance of banks in Asia: A study of Indonesia, Republic of Korea, Malaysia, and Thailand*, vol. 2, Asian Development Bank Institute.
- Nam, S-W & Nam, IC 2004, 'Corporate governance in Asia: Recent evidence from Indonesia, Republic of Korea, Malaysia, and Thailand', *Asian Development Bank Institute*.
- Natarajan, R 1996, 'Stewardship value of earnings components: Additional evidence on the determinants of executive compensation', *The Accounting Review*, vol. 71, no.1, pp. 1-22.
- Noreen, E & Soderstrom, N 1997, 'The accuracy of proportional cost models: Evidence from hospital service departments', *Review of Accounting Studies*, vol. 2, issue 1, pp. 89-114.
- OANDA 2013, *Historical rate currency*, viewed 6 June 2014, <<http://www.oanda.com/currency/historical-rates/>>.
- OECD 2004, *Corporate governance: A survey of OECD countries*, viewed 16 May 2016, <<http://www.oecd.org/daf/ca/corporategovernanceprinciples/21755678.pdf>>.
- OECD 2006, *Policy brief on corporate governance of banks in Asia. Asian roundtable on corporate governance*, viewed 16 May 2016, <<http://www.oecd.org/daf/corporateaffairs/corporategovernanceprinciples/37180641.pdf>>
- OECD 2007, *Asia: Overview of corporate governance frameworks in 2007*, viewed 16 May 2016, <<http://www.oecd.org/daf/corporateaffairs/corporategovernanceprinciples/40162910.pdf>>
- OECD 2011, *Corporate governance in Asia: Progress and challenges*, viewed 16 May 2016, <http://www.keepeek.com/Digital-Asset-Management/oecd/governance/corporate-governance-in-asia_9789264096790-en>.
- Porporato, M & Werbin 2010, 'Active cost management in banks: Evidence of sticky costs in argentina, brazil and canada, viewed 17 May 2014, <<http://ssrn.com/abstract=1659228>>.
- Scott, WR 2006, *Financial Accounting Theory*, 4th ed, Pearson Education, Canada.
- Shleifer, A & RW Vishny 1997, 'A survey of corporate governance', *Journal of Finance*, vol. 52, no. 2, pp. 737-784.
- Sloan, R 1993, 'Accounting earnings and top executive compensation', *Journal of Accounting and Economics*, vol. 16, issues 1-3, pp. 55-100.
- Subramaniam, C & Weidenmier, ML 2003, 'Additional evidence on the sticky behavior of cost', viewed 17 May 2014, <<http://ssrn.com/abstract=369941>>.
- Zhuang, J 1999, 'Corporate governance in East Asia and some policy implications, in Asia Development Bank, 'Economics and developments resource center briefing notes', no. 14.

ACKNOWLEDGEMENTS

The researchers would like to thank seminar participants at Faculty of Economics and Business, Universitas Gadjah Mada; 15th Annual Conference of Asian Academic Accounting Association, Bangalore; Symposium Nasional Akuntansi ke-17 for helpful comments. This paper was awarded as best paper on 3rd Economics and Research Business Festival, Universitas Kristen Satya Wacana. The researchers are also grateful to FEB UGM for its financial support.