

**INVESTOR PROTECTION AFFECT THE CHOICE OF
EARNINGS MANAGEMENT METHOD (EARNINGS MANAGEMENT
WITH REAL ACTIVITY):
INDONESIA AND MALAYSIA
EMPIRICAL COMPARISON**

Ratna Candra Sari¹
Sony Warsono²
Sri Suryaningsum³

Abstrak

Makalah ini membahas pilihan dalam metode manajemen laba di Malaysia dan Indonesia dengan perbandingan empiris. Metode manajemen laba adalah kegiatan nyata dan akrual. Kecenderungan untuk perlindungan investor tinggi digunakan manajemen laba dengan metode kegiatan nyata. Malaysia adalah perlindungan investor tinggi dan Indonesia adalah perlindungan investor yang lebih rendah. Makalah ini membahas perbedaan sistematis dalam manajemen laba melalui aktivitas nyata di negara Malaysia dan Indonesia. Kami mengusulkan argumen diperiksa bahwa dalam ekonomi dengan perlindungan investor tinggi, manajer lebih memilih untuk mengelola laba melalui manipulasi aktivitas nyata daripada melalui manipulasi akrual karena manipulasi akrual lebih mungkin untuk menarik auditor atau pengawasan regulator daripada keputusan-keputusan tentang harga dan produksi. Temuan kami ini konsisten dengan prediksi kita. Meskipun dalam ekonomi dengan perlindungan investor tinggi, manajer masih memiliki keleluasaan lebih besar dalam mengelola pendapatan melalui kegiatan nyata daripada manipulasi akrual.

Kata kunci: manajemen laba, manipulasi aktivitas nyata, perlindungan investor

INTRODUCTION

This paper focuses on investor protection as a significant determinant of earnings management activity in Malaysia and Indonesia. Leuz (2003) argues that strong and well-enforced outsider rights limit insiders' acquisition of private control benefits, and consequently, mitigate insiders' incentives to manage accounting earnings because they have little to conceal from outsiders. This insight suggests that the pervasiveness of earnings management is increasing in private control benefits and decreasing in outside investor protection in Malaysia and Indonesia.

This study focuses in Malaysia and Indonesia countries to make contributing to the future of our society. So, in Malaysia and Indonesia by expanding its range of the responsibilities through legal enforcement too. Investor protection in order to enhance economic development, mutual understanding and cooperation in Malaysia and Indonesia. Malaysia and Indonesia provide a useful setting for testing the importance of investor protection. Malaysia have accounting standards that are generally viewed as high-quality, but not Indonesia. Indonesia have institutional structures that give preparers incentives to issue

¹ Dosen Universitas Negeri Yogyakarta

² Dosen Universitas Gadjah Mada Yogyakarta

³ Dosen Jurusan Akuntansi Fakultas Ekonomi Universitas Pembangunan Nasional "Veteran" Yogyakarta, email: suryaningsumsri@yahoo.com

low-quality financial reports. Reporting quality of earnings ultimately is determined by the underlying economic and political factors influencing managers' and auditors' incentives, and not by accounting standards per se. Shareholder litigation is an important mechanism to enforce high quality financial reporting—particularly timely loss recognition—in common-law countries.

While prior research has provided evidence on managers' incentives for earnings management and earnings management more aggressive in countries with low legal enforcement but there is relatively little evidence on what manager's methods to manage earnings in different legal environment. In addition, prior research used accrual manipulation to measure earnings management but actually managers have flexibility to manage earnings with accrual manipulation, real activities manipulation or classification shifting. This paper attempts to provide evidence that investor protection determines manager's choices between real activities manipulation versus accrual manipulation when they have the flexibility to engage both in Malaysia and Indonesia. To measure earnings management through real activity manipulation we use Roychowdhury's model in Malaysia and Indonesia.

Firstly, this study is useful to identify factors that affect method choice by manager to manage earnings in Malaysia and Indonesia. Secondly, this study gives our understanding to evaluate effectiveness of legal enforcement in protect outsider (minority) investor when manager have flexibility to choose earnings management method in Malaysia and Indonesia.

Prior research documents greater financial transparency in countries with stronger investor protection regimes (Bhattacharya et al. 2003; Bushman et al. 2004), and there is evidence that earnings are less managed and in these countries (e.g., Ball et al. 2000; Hung 2000; Leuz et al. 2003). Leuz finds that earnings management is more pervasive in countries where the legal protection of outside investors is weak, because in these countries insiders enjoy greater private control benefits and hence have stronger incentives to manipulate firm performance.

Roychowdhury (2006) finds evidence that managers in US firms manipulate earnings through real activity. Roychowdhury finds evidence suggesting price discounts to temporarily increase sales, overproduction to report lower cost of goods sold, and reduction of discretionary expenditures are used to improve reported margins. This is contrary to Leuz's finding that in countries with strong legal protection, managers are less aggressive to manage earnings. We argue that in strong legal enforcement economies, managers prefer to manage earnings through real activity manipulation rather than through accrual manipulation.

The manipulation of real activity potentially reduces firm value. Real activities manipulation can reduce firm value because actions taken in the current period to increase earnings can have a negative effect on cash flows in future periods. For example, aggressive price discounts to increase sales volumes and meet some short-term earnings target can lead customers to expect such discounts in future periods as well. This can imply lower margins on future sales. Overproduction generates excess inventories that have to be sold in subsequent periods and imposes greater inventory holding costs on the company. There is evidence that managers manipulate real activity in strong investor protection country (Roychowdhury 2006). So the purpose of this study is to examine whether legal systems affect the choice of earnings management methods.

According to surveys conducted by Bruns and Merchant (1990) and Graham et al. (2005), financial executives indicate a greater willingness to manipulate earnings through real activities rather than accruals. There are at least two possible reasons for this. Firstly, accrual manipulation is more likely to draw auditor or regulator scrutiny than real decisions about pricing and production. Secondly, relying on accrual manipulation alone entails a risk. The realized year-end shortfall between un-manipulated earnings and the desired threshold can exceed the amount by which it is possible to manipulate accruals. If that happens, and

reported income falls below the threshold, real activities cannot be manipulated at year-end. So, we argued that in countries with high investor protection, managers don't have discretionary to manage earnings through accrual manipulation because accrual manipulation is easily to detect. Managers will prefer to manage earnings through real activities.

The protection of investor rights, particularly outside investors, is important in creating economic incentives for the development of financial markets (Hart, 1995). More developed financial markets create greater external financing opportunities for firms because legal systems protect investors by conferring on them rights to discipline insiders (e.g., to replace managers), as well as by enforcing contracts designed to limit insiders' private control benefits (e.g., La Porta et al., 1998; Nenova, 2000; Claessens et al., 2002; Dyck and Zingales, 2002).² Thus, legal systems protecting outside investors reduce insiders' need to conceal their activities.

The protection of investor rights, particularly outside investors, is important in creating economic incentives for the development of financial markets (Hart, 1995). More developed financial markets create greater external financing opportunities for firms because legal systems protect investors by conferring on them rights to discipline insiders (e.g., to replace managers), as well as by enforcing contracts designed to limit insiders' private control benefits (e.g., La Porta et al., 1998; Nenova, 2000; Claessens et al., 2002; Dyck and Zingales, 2002).² Thus, legal systems protecting outside investors reduce insiders' need to conceal their activities.

Legal systems protect investors by conferring on them rights to discipline insiders (e.g., to replace managers), as well as by enforcing contracts designed to limit insiders' private control benefits (e.g., La Porta et al., 1998; Nenova, 2000; Claessens et al., 2002; Dyck and Zingales, 2002).² As a result, legal systems that effectively protect outside investors reduce insiders' need to conceal their activities. Earnings management can be defined as non-neutral financial reporting in which managers intervene intentionally in the financial reporting process to produce some private gain (Schipper 1989). Managers can intervene by modifying how they interpret financial accounting standards and accounting data, or by timing or structuring transactions (Healy and Wahlen 1999).

Prior accounting research has documented three main methods of earnings management. The most commonly studied method is accrual management (e.g., Healy 1985; Jones 1991; McNichols and Wilson 1988; Rangan 1998; Teoh et al. 1998; Phillips et al. 2003). A second type of earnings management can occur through the manipulation of real activities, such as providing price discounts to increase sales and cutting discretionary expenditures, to manage earnings (e.g., Baber et al. 1991; Dechow and Sloan 1991; Bushee 1998). Third type of earnings management tools is the misclassification of items within the income statement.

Bruns and Merchant (1990) and Graham et al. (2005), indicate that financial executives have greater willingness to manipulate earnings through real activities rather than accruals. There are at least two possible reasons for this. Firstly, accrual manipulation is more likely to draw auditor or regulator scrutiny than real decisions about pricing and production (Dechow, Sloan dan Sweeney 1996). Secondly, relying on accrual manipulation alone entails a risk. The realized year-end shortfall between un-manipulated earnings and the desired threshold can exceed the amount by which it is possible to manipulate accruals. If that happens, and reported income falls below the threshold, real activities cannot be manipulated at year-end.

A number of studies discuss the possibility that managerial intervention in the reporting of financial statement process can occur not only via accounting estimates and methods, but also through operational decisions. Manipulation by management through real activities is less likely to draw auditor or regulator scrutiny. In contrast accrual manipulation

is more easily to detect. We therefore propose that earnings management through accrual manipulation is less pervasive in countries where the legal protection of outside investors is strong, because in these countries legal system protect investor by conferring on them right to discipline insider.

There is evidence that manager in US firms manipulate earnings through real activity (Roychowdhury, 2006). US firms are characterized by large stock markets, low ownership concentration, extensive outsider rights, high disclosure, and strong legal enforcement. Leuz (2003) finds that in countries with strong legal protection, managers are less aggressive to manage earnings through accrual manipulation. So we argue that in strong legal enforcement economies, managers prefer to manage earnings through real activity manipulation rather than accrual manipulation. Accrual manipulation is more easily to detect, in other hand, real activities manipulation can be subjective, auditors might be limited in their ability to verify the appropriate classification. In countries with low legal enforcement, managers have great discretionary to manage earnings with both accrual manipulation and real activity manipulation. In hypothesis 2 we argue that when legal enforcement strong, managers prefer to manage earnings through sales manipulation, reduce discretionary expenses reduction and production increases rather than accrual manipulation.

To detect real activities manipulation we investigate patterns in CFO and production costs following Roychowdhury (2006). Sales manipulation is defined as managers' attempts to temporarily increase sales during the year by offering price discounts or more lenient credit terms. The cash inflow per sale, net of discounts, from these additional sales is lower as margins decline. The lower margin due to the price discounts causes production costs relative to sales to be abnormally high. These are essentially price discounts and lead to lower cash inflow over the life of the sales, as long as suppliers to the firm do not offer matching discounts on firm inputs. In general, sales management activities to lead to lower current-period CFO and higher production costs than what is normal given the sales level.

Ha: There is negative relationship between investor protection and abnormally cash flow from operation. After controlling for sales level, firms in countries with high investor protection exhibit lower abnormal cash flow from operation than in countries with weak investor protection.

RESEARCH METHOD

Real activities manipulation is departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations (Roychowdhury, 2006). Following Roychowdhury (2006), normal cash flow from operations is a linear function of sales and change in sales in the current period. To estimate the model, we run the following cross-sectional regression:

$$CFO_t / A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \alpha_2 (S_t / A_{t-1}) + \alpha_3 (\Delta S_t / A_{t-1}) + \varepsilon_t \dots\dots\dots (1)$$

where A_t is the total assets at the end of period t , S_t the sales during period t and $\Delta S_t = S_t - S_{t-1}$. For every firm-year, abnormal cash flow from operations is the actual CFO minus the "normal" CFO calculated using estimated coefficients from the corresponding industry year model and the firm-year's sales and lagged assets.

Abnormal level = Actual level – Normal Level.

The model for normal COGS is estimated as:

$$COGS_t / A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \alpha_2 (S_t / A_{t-1}) + \varepsilon_t$$

The model for 'normal' inventory growth using the following regression:

$$\Delta INV_t / A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \alpha_2 (\Delta S_t / A_{t-1}) + \alpha_3 (\Delta S_{t-1} / A_{t-1}) + \varepsilon_t$$

where ΔINV_t is the change in inventory in period t .

Production costs as:

$$PROD_t = COGS_t + \Delta INV_t$$

Using (2) and (3), normal production costs from the following industry-year regression:

$$PROD_t / A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \alpha_2 (\Delta S_t / A_{t-1}) + \alpha_3 (\Delta S_t / A_{t-1}) + \alpha_4 (\Delta S_{t-1} / A_{t-1}) + \varepsilon_t$$

Discretionary expenses be expressed as a linear function of contemporaneous sales, similar to COGS.

The relevant regression would then be:

$$DISEXP_t / A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \alpha_2 (S_{t-1} / A_{t-1}) + \varepsilon_t$$

where $DISEXP_t$ is discretionary expenses in period t . Discretionary expenses as $DisExp = R\&D + Advertising + SG\&A$ expenses

We begin with a descriptive country cluster analysis, which groups countries with similar legal and institutional characteristics. We use multiple investor protection measures are:

1. Outside Investor Right; is an aggregate measure of minority shareholder rights and ranges from zero to five.
2. Disclosure requirements.
3. Important of equity market; is measured by the mean rank across three variables used in La Porta et al. (1997). Each variable is ranked such that higher scores indicate a greater importance of the stock market.
4. Legal enforcement; is measured as the mean score across three legal variables used in La Porta et al (1998). Three variables range from 0 to 10.

Cluster analysis is based on four measurement of investor protection. Then we compare score earnings management between clusters. We use accrual manipulation and real activities to measure earnings management activities.

To test H_a , we use model:

$$\text{Model : } AB_CFO = \beta_0 + \beta_1 LAW + \beta_2 OUTSIDE_RIGHT + \beta_3 DIS_REQ + \beta_4 LEG_ENF + \beta_5 IM + \varepsilon_t \dots\dots\dots (2)$$

where:

AB_CFO = abnormal cash flow

$INVPRO$ = proxies of investor protection, measured six ways:

1. $OUTSIDE_Right$ = outside investor right
2. DIS_REQ = index of disclosure requirement
3. LEG_ENF = legal enforcement.
4. IM = Important of equity market.

Because abnormal cash flow, discretionary expenses and production cost are more aggressive in suspect firm (firm close to zero earnings), we conduct sensitivity analysis to regress model 1 and 2 in full sample (suspect & non suspect firm).

RESULTS

Our data obtained from OSIRIS database, which contains financial data from annual reports of publicly traded around the world. Only industrial companies are included in empirical analysis. Each firm must have income statement and balance sheet information for estimation period. The final sample consists of 5,931 firm-year observations, across Malaysia and Indonesia countries for fiscal years 2003-2007.

Table 1 panel A presents the number of firm-year observation per country as well as descriptive statistic for three individual earnings management measure. Panel B present institutional characteristics of each country

Table 1: Descriptive statistics for earnings management and institutional characteristics
Panel A. Country score for earnings management measures

| Countries | Firm-Years | Abn CFO | Abn Prod Cost |
|-----------|------------|---------|---------------|
| Malaysia | 792 | 0,0315 | -0,0002 |
| Indonesia | 129 | 0.0000 | 0.0000 |

Panel B. Institutional characteristics of the sample countries

| Countries | Outside Investor Right | Legal enforcement | Important Equity Market | disclosure Index | cluster (1:high, 3 low) |
|-----------|------------------------|-------------------|-------------------------|------------------|-------------------------|
| Malaysia | 4 | 7.7 | 25.3 | 76 | 1 |
| Indonesia | 2 | 2.9 | 4.7 | na | 3 |

Panel A of table 1 provides descriptive statistics for two individual earnings management measures. The two individual earnings management measures exhibit striking differences across countries. The statistics of the mean abnormal CFO and abnormal production cost show that earnings management with real activity manipulation aggressive in economies with high investor protection such as Malaysia compared to in economies with low investor protection such as Indonesia.

Result Earnings management with real activities manipulation

Table 2 presents descriptive statistics comparing suspect firm-year to the full sample. Firms that just meet the zero earnings (suspect firm) are probably try to meet the zero target earnings through real activities manipulation. Suspect firm-years have a lower mean of abnormal low CFO than non suspect firm (-0.0031 versus 0.0023). Mean of abnormal production cost is higher for suspect firm compared to non suspect firms (0.1388 versus -0.0074).

Table 2: Descriptive statistics comparing suspect firm-year to rest of the sample

| | Suspect firm year | Non suspect firm | Rest of the sample |
|---|-------------------|------------------|--------------------|
| Full sample 5,931 firm-years with 273 suspect firm-year | means | means | means |
| Net Income/ TA | 0,0029 | 0,0378 | 0,362 |
| Abn CFO | -0,0031 | 0,0023 | 0,0021 |
| Abn Prod | 0,1388 | -0,0074 | -0,0006 |

Estimation model

Table 3 reports the regression coefficients for some of the key regression used to estimate 'normal level'. We estimate using the entire sample of 5,931 firm-years. The coefficient generally as predicted by Roychowdhury (2006). The coefficient of CFO on sales change actually positive, for all country, and marginally significant, indicating that conditional on contemporaneous sales, a higher change in sales implies higher CFO.

Table 3 Model Parameters

| | Indonesia | | Malaysia | |
|--------------------|-----------|------------|-----------|------------|
| | CFOt/At-1 | Prodt/At-1 | CFOt/At-1 | Prodt/At-1 |
| intercept | 0.020 | -0.119 | 0.046 | -0.072 |
| 1/At-1 | -2.35 | -1.54 | -3.36 | -8.14 |
| St/At-1 | 0.030 | 0.870 | -0.003 | 0.874 |
| $\Delta St/At-1$ | 0.000 | 0.001 | 0.088 | 0.161 |
| $\Delta St-1/At-1$ | | -0.023 | | -0.079 |
| Adj R ² | 0.035 | 0.896 | 0.058 | 0.923 |

*signifikan at level 10%

This table reports the estimated parameters in following regression:

$$CFO_t/At_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \alpha_2 (S_t/A_{t-1}) + \alpha_3 (\Delta S_t / A_{t-1}) + \epsilon_t$$

$$PROD_t/At_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \alpha_2 (\Delta S_t/A_{t-1}) + \alpha_3 (\Delta S_t / A_{t-1}) + \alpha_4 (\Delta S_{t-1} / A_{t-1}) + \epsilon_t$$

Comparison of suspect firm years with non suspect firm-years and the rest of sample

If firm-year that report profit just above zero undertake activities that adversely affect their CFO, then abnormal CFO for these firm-years, should be negative compared to the rest of sample. To test this, we estimate the following regression:

$$Y = \alpha + \beta_1(\text{Net Income}) + \beta_2(\text{Suspect_NI}) + \epsilon \dots\dots\dots(4)$$

The dependent variable, Y, is abnormal CFO and abnormal production cost in period t. Suspect_NI is an indicator variable that is set equal to 1 if firm-years belong to the earnings category just right of zero, and zero otherwise.

Table 4: Comparison suspect firm years with non suspect sample.

| | Abnormal CFO | Abnormal Production Costs |
|------------|---------------------|---------------------------|
| Intercept | 0,022 (2.614) | -0.002 (-0.200) |
| Net Income | 0,008* (1.061) | -0.269* (-5.518) |
| Suspect_NI | -0,217* (-5.552) | 0.142* (3.246) |

The first column in table 4 provides evidence that abnormal CFO is unusually low for suspect firm years, consistent with Roychowdhury's model. When dependent variable is CFO in regression (4), the coefficient on SUSPECT_NI is negative (-0,217) and significant at level 10%. Suspect firm-years have abnormal CFO is lower than non suspect firm.

When Y is abnormal production cost, the coefficient on SUSPECT_NI is positive 0.142. The coefficient indicates that the mean abnormal production cost of suspects firm-years are larger 14.2% of assets than the mean across the rest of sample.

To provide descriptive evidence on systematic pattern in earnings management method across group of countries with similar institutional characteristics, we begin with cluster countries based on institutional characteristics (Leuz, 2003). The first cluster is characterized by large stock markets, low ownership concentration, extensive outsider right, high disclosure, and strong legal enforcement. The second and third cluster show markedly smaller stock markets, higher ownership concentration, weaker investor protection, lower disclosure level, and weaker enforcement, with the distinction that countries in the second cluster have significantly better legal enforcement than countries in the third cluster. Based on institutional characteristics, we refer countries in the first cluster as 'high investor protection economies'. The countries in the second and third cluster

To provide descriptive evidence on the systematic patters of earnings management method across cluster, we use ANOVA analysis to compare aggressiveness of real activity manipulation and accrual manipulation across group of countries. Table 5 shows the difference of aggressiveness earnings management method across cluster.

Table 5:Pervasiveness of earnings management by cluster

| Cluster 1 (high investor protection): | Cluster 2 as variable control: Japan & Taiwan | Cluster 3 (low investor |
|---|---|-------------------------------|
|---|---|-------------------------------|

| | include Malaysia | | protection): include Indonesia |
|---------------------------|------------------|-------------|--------------------------------------|
| Abnormal CFO | -0.0075 | 0.0005 | 0.0193 |
| Different between cluster | F: 8.753 | Sign: 0.000 | |
| Abnormal Production Cost | 0.0015 | -0.0003 | -0.0757 |
| Different between cluster | F: 69.443 | Sign: 0.000 | |

Table 5 shows that the differences between cluster's average earnings management are statistically significant. High investor countries (cluster1) exhibit lower level of earnings management with accrual manipulation than low investor protection countries. This finding consistent with leuz (2003) that earnings management is expected to decrease in investor protection because strong protection limits insider's ability to acquire private control benefit, which reduces incentives to mask firm performance. But earnings management with real activity management is higher in economies with strong investor protection. Real activity manipulation can be detected by investigate the pattern of CFO and production cost. Deviation from normal level of CFO and Production cost are termed abnormal CFO and abnormal production cost. The abnormal CFO is lower in economies with high investor protection rather than in low investor protection. Abnormal production cost is higher in economies with high investor protection than in low investor protection.

Suspect firm year more aggressive in real activity manipulation, we conduct sensitivity analysis to compare differences in earnings management activity between clusters for suspect firm year. Thus, our results are sensitive to sample selection.

Table 6 shows that suspect firm-years in cluster high investor protection exhibit abnormal low CFO and abnormal high production cost comparing to cluster low investor protection. This result is consistent with previous analysis.

In summary, the evidence earnings management with real activity manipulation is higher in economies with high investor protection rather than in economies with low investor protection. Earnings management with accrual manipulation is more aggressive in economies with low investor protection than in economies with high investor protection.

Table 6: Pervasiveness of real activity manipulation suspect year firm by cluster

| Cluster | Abnormal CFO | Abnormal Production Cost |
|---|------------------|--------------------------|
| 1 (high investor protection): include Malaysia | 0.0130 | 0.0189 |
| 2 As control variable (Japan and Taiwan) | -0.0255 | 0.0556 |
| 3 (low investor protection): include Indonesia | 0.0342 | -0.2067 |
| Differences between clusters | 2.369 (0.096) | 47.419 (0.000) |

The previous analysis shows that pervasiveness of earnings management with real activities manipulation or accrual manipulation is systematically related to a country's institutional characteristics. A key question is which institutional factors are primary determinant of earnings management's method choice. We posit that better investor protection result in less earnings management with accrual manipulation because accrual manipulation is easy to detect and hence lower incentives to conceal firm performance with accrual manipulation. Our multiple regression examines the relation between earnings management's method choice and investor protection.

Table 7: Earnings management's method choice and investor protection

| | Abnormal CFO | Abnormal Production Cost |
|-------------------------|---------------------|--------------------------|
| Constant | 0.392 (1.511) | -0.725 (-2.259) |
| Outside investor right | -0.006 (-0.874) | 0.059* (6.709) |
| Legal enforcement | -0.009* (-2.517) | 0.009* (2.191) |
| Important equity market | -0.006* (-2.309) | -0.006* (-1.879) |
| Disclosure index | -0.001* (-0.238) | 0.007* (0.044) |

Our multiple regression results presented at column 1 of Table 7 report regression analysis using abnormal accrual as the dependent variable. Results show that outside investor right, legal enforcement and disclosure index exhibit a significant negative association with abnormal accrual. The higher level of investor protection will reduce aggressiveness earnings management with accrual manipulation. All variables consistent with prediction, with the exception important of equity market variables.

We attempt to provide evidence on hypothesis that investor protection is positively related to earnings management with real activity manipulation. We use abnormal low cash flow from operation and abnormal high production cost as a measure earnings management with real activity manipulation. The results presented in column 2 of table 6 show that investor protection and abnormal low CFO exhibit negative association as predicted by our hypothesis. Results show that legal enforcement, important equity market and disclosure index exhibit a significant negative association with abnormal low CFO. The higher outside investor right, legal enforcement and disclosure index, the lower level abnormal CFO. The result also support that investor protection and abnormal high production cost are positively related. Column 3 of table 6 show that outside investor right, legal enforcement, and disclosure index exhibit a significant positive association with abnormal production cost.

In summary, the multiple regression results are consistent with the hypothesis that investor protection affects earnings management method choice. In economies with high investor protection, it is too costly to manage earnings with accrual manipulation. The cost of detection of accrual manipulation is high because essentially, a manager can borrow earnings from future periods, through the acceleration of revenues or deceleration of expenses, in order to improve current earnings. The cost of detection bears a one-to-one cost of earnings reduction in the future; future-period earnings will be mechanically lower by the net income that was accelerated to current earnings. The other type of earnings management can occur through the manipulation of real activities, such as providing price discounts to increase sales and cutting discretionary expenditures, such as R&D, to manage earnings. Such actions can increase revenues or net income, but they are also costly. For example, cutting R&D spending to manage earnings may result in the loss of future income related to the forgone R&D opportunities. On the other hand, because the manipulation of real activities is not a GAAP violation, this earnings management tool is expected to have a lower cost of detection than accrual management. So we argue that in economies with high investor protection, manager prefer to use real activity manipulation to mask firm performance. The result of our analysis consistent with our prediction.

LIMITATION AND CONCLUSION

This paper attempts to provide evidence does investor protection determine manager choice between real activities manipulation versus accrual manipulation when they have the flexibility to engage both in Malaysia and Indonesia. We expect that earnings management through accrual manipulation decreases in legal protection because when investor protection strong, accrual manipulation will decrease because it is easy to detect. But in strong investor protection's countries like this Malaysia, earnings management through real activities manipulation more aggressive because real activities manipulation can be subjective, auditor might be limited in their ability to verify the appropriate classification.

This paper documents systematic differences in the earnings management method in Malaysia and Indonesia countries with different level of investor protection. We perform ANOVA and multiple regression analysis to test differences earnings management's method across cluster countries based on institutional characteristics. The analysis suggest that in economies with high investor protection earnings management with accrual manipulation is lower than in economies with low investor protection in Malaysia and Indonesia.

Prior research has provided evidence on managers' incentives for earnings management and earnings management more aggressive in countries with low legal enforcement but there is relatively little evidence on what manager's method to manage earnings in different legal environment. In addition, prior research used accrual manipulation to measure earnings management but actually management have flexibility to manage earnings with accrual manipulation, real activities manipulation or classification shifting. Earnings management through accrual manipulation is more likely to draw auditor or regulator scrutiny than real decisions about pricing and production.

In countries with weak investor protection like this Indonesia, manager have great discretionary to manage earnings with both accrual manipulation and real activity manipulation. Real activities manipulation is positively association with outside investor right, legal enforcement and quality of disclosure in Malaysia and Indonesia. This finding highlight that level of investor protection determine management's choices on earnings management's method.

The limitation of this study in Malaysia and Indonesia: we are not include abnormal discretionary expenses to measure real activity manipulation because unavailable data. We only measure the pattern of abnormal CFO and abnormal production cost. We argue that pattern abnormal discretionary expenses have been captured at the pattern of abnormal CFO in Malaysia and Indonesia. Reducing discretionary expenses have a positive effect on abnormal CFO in the current period, possibly at risk of lower cash flow in the future.

REFERENCES

- Ball, R. A. Robin, J Wu, (2003). Incentives versus standards: properties of accounting income in four East Asian countries. *Journal of Accounting and Economics*.
- Bhattacharya, U., H. Daouk, M. Welker, (2002). the world price of earnings opacity.
- Bushman, R., J. Piotroski, and A. Smith. (2004). "What determines corporate transparency?" *Journal of Accounting Research* 42 (May 2004): 207-252.
- Claessens, S., S. Djankov, J. Fan, L. Lang, (2001). Disentangling the incentive and earnings management." Working Paper. Cornell University, 2006. Available on SSRN at entrenchment effects of large shareholdings. Forthcoming, *Journal of Finance*.

- Dechow, P.M., Skinner, D.J., (2000). Earnings management: reconciling the views of accounting academics, practitioners and regulators. *Accounting Horizons* 14, 235–250.
- DeFond, M.L., and C.Park. (2001).“The reversal of abnormal accruals and the market valuation of earnings surprises.” *The Accounting Review* 76 (July 2001): 375-404.
- Dyck, A., L. Zingales, (2002). Private benefits of control: An international comparison.
- Graham, J.R., Harvey, C.R., Rajgopal, S., (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics* 40, 3–73.
- Hribar, P., and D. Collins. (2002). Errors in estimating accruals: Implications for empirical research. *Journal of Accounting Review* 40 (1): 105–134.
- Hribar, P., and D.C. Nichols. (2006).“The use of unsigned earnings quality measures in tests of earnings management. Working paper. Cornell University.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny. (2000b), Investor protection and corporate governance. *Journal of Financial Economics* 58 (January), 3-27.
- Leuz, Christian. Nanda, Dhananjay. Wysocki., D. Peter. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics*.
- Meuwissen, R., F. Moers, E. Peek, AND A. Vanstraelen. (2005). “An evaluation of abnormal accruals measurement models in an international context.” Working Paper, 2005. University of Maastricht and University of Antwerp, available on the Social Science Research Network at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=442681.
- Nenova, T., (2000). The value of corporate votes and control benefits: A cross-country. Unpublished working paper. Havard University.
- Phillips, J., M. Pincus, and S. Rego. (2003). Earnings management: New evidence based on deferred tax expense. *The Accounting Review* 78 (2): 491–521.
- Roychowdhury, S., (2006). Earning management through real activities manipulation. *Journal of Accounting & Economic* 42 (335-370),
- Saudagaran, S.M., Diga, J.G., (2000). The institutional environment of financial reporting regulation in ASEAN. *The International Journal of Accounting* 35, 1–26.
- Wysocki, P. (2004). “Discussion of ultimate ownership, income management, and legal and extra-legal institutions.” *Journal of Accounting Research* 42 (May 2004): 463-474.

