บทความวิจัย

The Value Relevance of Earnings and Cash Flows: Evidence from Thailand

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Introduction

Earnings are the important measure of firm performance and used by many users. For example, earnings are used by firms to assess management performance and set up executive compensation plans. They are also used by creditors to devirmine debt covenants, and by investors to make investing decisions. Earnings are the bottom line items, which are the results of revenue recognition and matching principles. International Accounting Standard (IAS) No. 18 Revenue, identifies the revenue recognition principle, which requires revenues to be recognized only when it is probable that the economic benefits associated with the transaction will flow to the entity (IASB 2009b). The teching principle requires expenses associated directly with revenues to be ecognized in the same period when revenue is recognized. The accrual basis plays an important role in reducing the timing and matching problems that may incur from using cash basis and enable earnings to closely reflect firm performance.

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However, the use of accruals allows for management discretion to signal their private information or to opportunistically manipulate their earnings. The signaling of information will improve the ability of earnings to reflect firm performance (Holthausen 1990; Healy and Palepu 1993). In contrast, the management discretion to opportunistically manage earnings will make earnings to become a less reliable measure of firm performance. Therefore, many users of financial statements turn to cash flows as an alternative measure of firm performance. Net cash flows have no accrual adjustment so they are not subject to management discretion from using different accounting practices. Information of cash flows is useful, in conjunction with other information, in forecasting future operating cash flows and valuing firms. Cash flows from operations reflect net cash flows generated by the firm's operating activities. IAS No. 7, Statement of Cash Flows, states that the amount of cash flows from operating activities is a key indicate of the extent to which the operations of the firm have generated sufficient cash flows to lepay loans, maintain the operating capability of the entity, pay dividends and make new the tments (IASB 2009a). Therefore, more cash fows indicate higher value and analysts recommend buying stocks of firms that have positive ash flows.

The purpose of this study is to asses ability of earnings and cash flows in providing greater information for equity valuation in Theilan in the period surrounding the 1997 anchoris The study of Thailand is important because it was the first of several Asian countries bat faced an economic crisis in 1997. The second of cash flows and earnings has been an issue for many years. The opportunistic are ovaccruals during the financial crisis may have earnings to be a less reliable measure Howel v cash flow information better provides useful oformation in assessing the firm's liquidity projtability, financial flexibility, and financial n. Therefore, it is of interest to examin sefulness of cash flows over time in receive the usefulness of earnings.

Thairand subsequently introduced the reform f accounting profession and accounting standards, are improvement in corporate governance after the crisis. Recently, Thai Accounting Standards (TASs) have complied in material respects with International Accounting Standards (IASs). Moreover, the Federation of Accounting Professions (FAP), a standard setting body, is in a process of issuing accounting standards for Non Publicly Accountable Entities (NPAEs) (FAP's Announcement No. 62/2010). Nonpublic companies have been allowed for an exemption to prepare the statement of cash flows for many years because their financial

statements are used by limited users¹. A demand for cash flow information has been increased from many users of financial statements, especially during the financial crisis period. However, some opponents argue that the preparation of cash flow statements will be too complicated and time consuming for NPAEs, leading to costs over benefits. Therefore, this study provides evidence whether the information of cash flows is useful to the FAP for further consideration of standard setting.

The results indicate that earnings can better explain stock returns in the pre-crisis period than in the crisis and post-crisis periods. In contrast, cash flows can better explain stock returns during the crisis and post-crisis periods than in the pre-crisis period. The results show that the value relevance of cash flows increase while the value relevance of earnings declines over the periods when the two measures are considered simultaneously. Overall, earning are more important than cash flows poining the variation in stock returns during the pre-crisis period. However, the superiority of earnings over cash flows declines during the financial crisis and post-crisis periods. Therefore the findings suggest an increase in the importance of cash flows in

explaining stock returns over time.

This study contributes to the resear (a) the value relevance of earnings and cash (Alford et al. 1993; Bartov et al. 2011) by providing evidence on the abilities of earnings and cash flows to explain the variations of stock returns in Thailand, one of the employed markets. In es the empirical particular, this study evidence on the value levance of earnings and cash flows over the le-crisis, crisis, and post-crisis periods. During the floor cial crisis, the usefulness of earnings and caso flows remains an important issue because anagers may opportunistically manage earlings leading to a decline in the value vance of earnings and an increase in the value relevance of cash flows. After the risis period, the value relevance of cash flows beyond an earnings-based performance measure Quggests that the users of financial statements should include the analysis of cash flows before making investing decisions.

The remainder of this paper is organized as follows. Section 2 reviews the relevant literature. Section 3 presents research design, including sample selection. Results are provided in Section 4, and sensitivity analysis is shown in Section 5. Section 6 concludes the paper.

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¹ Current accounting standard requires only public companies to prepare the statement of cash flows in compliance with Thai Accounts. Standard (TAS) No. 7, Cash Flow Statements. According to the FAP's Announcement No. 21/2007, nonpublic companies are exempted from preparing the statement of cash flows. Other exemptions under this Array cerement include Segment Reporting (TAS 14), Related Party Disclosures (TAS 24), Consolidated and Separate Financial Statements (TAS 27), Investment in Associates (TAS 28), Interest in Joint Ventures (TAS 31), Impairment of Associates (TAS 36), and Financial Instruments: Presentation and Disclosures (TAS 48).

Prior Research

1. The Usefulness of Earnings and Cash Flows

Prior research has examined the informativeness of earnings and cash flows. Ball and Brown (1968) find a positive association between stock returns and earnings, which is higher than that between stock returns and operating cash flows. Board and Day (1989) conclude that earnings contain incremental information beyond fund flows and cash flows from operations. However, they do not find the existence of incremental information content of fund flows or cash flows beyond earnings. Dechow (1994) concludes that accruals play an important role in improving the ability of earnings to reflect firm performance. Earnings are more associated with stock returns than cash flows over short measurement intervals and over long operating cycles of firms. The superiority of earnings remains existed when the volatility of a firm's working capital requirements and the volatility of investment and financing activity increase. This is because cash flows some from timing and matching problems caum them to be a noisy measure of a firm's performance. In sum, prior research supports at earnings is a superior measure of firm performance.

However, the value relevance literature provides the evidence of a decline in the value relevance of earning. Fractis and Schipper (1999) document a decrease in the relevance of earnings information, and increase in the relevance of balance set information over time. These results a sistent with other research on the valua on of financial information (Collins et al.

1997, Lev and Zarowin 1999). Collins et al. (2007) conclude that the increased reporting of los and special items and the increased important of unreported intangible assets to tributed to the results of a decline in the value relevance of earnings. This raises a question at the whether earnings remain more in the cash flows.

On the other hand, be ther stream of literature finds that both cash flows and earnings provide incremental minuration to each other. Rayburn (1986) and Ionat and Zarowin (1990) examine whether to unexpected component of earnings or cash flows can incrementally explain abnormal ack returns. Their results support the accordion of both operating cash flows are according with abnormal returns. Ali and cope (1995) conclude that earnings, fund flows and cash flows possess incremental information content beyond another. The results show that both cash flows and accruals have explanatory power for stock returns.

Prior research documents that the superiority of earnings over cash flows depends on the national reporting regime and institutional factors. Alford et al. (1993) show that the association between earnings and stock returns is stronger in Anglo-Saxon countries, where capital is raised in capital markets and financial reporting has a weaker link with tax reporting. Bartov et al. (2001) examine whether earnings or cash flows provides greater information for equity valuation in the United States, the United Kingdom, Canada, Germany, and Japan. They conclude that earnings have

greater explanatory power for stock returns than cash flows in Anglo-Saxon countries, consistent with Alford et al. (1993). However, their findings show that earnings are not superior to cash flows in non-Anglo-Saxon countries.

2. Thailand

Accounting developments in Thailand were influenced by the government sector rather than the accounting profession. Before the Asian financial crisis, TASs were criticized as not complying with international accounting standards. The lack of internationally accepted accounting practices led to poor disclosures and less transparent financial reporting, which were contributed to the 1997 crisis. In 1999, the Thai standard setter issued "Policy of Setting Thai Accounting Standards" requiring IASs to be the main guideline feeting TASs². Currently, the FAP regulates the

Thai accounting and auditing professions and is responsible for developing Thai accounting no auditing standards. The IASs have a significant influence on Thai Financial Reporting Taparris (TFRSs) and practices, especially after the financial crisis (Herrmann et al. 2008). Cheenty, The FAP has revised TASs and The Standards Board with IFRSs Bound Volume of which was issued by the International Accounting Standards Board (IASB). TASs comply in material respects with IASs and IFF 33, with lew exceptions. 4

In Thailand, the e are a few studies on the usefulness capings information. Srisawadi (1996) examines the extent to which the returns-earnings relations has changed over time and finds the instruition of earnings association coefficients the period of 1980–1985. However, the earnings association coefficients became significant in the period of 1986–1991. The findings support the

² The institute of Certified Accountants an Auditors of Thailand (ICAAT), a standard setting body before October 2004, issued the Announcement 10/1997–1999, "Policy of Setting Thai Accounting Standards" to provide a guideline for standard setting.

The FAP considers the next so in the adoption of International Financial Reporting Standards (IFRSs) in Thailand. The adoption plan of IASs and In Ss in 2011 includes Employee Benefits (IAS 19), Accounting and Reporting by Retirement Benefit Plans (IAS 29), Financial Reporting in Hyperinflationary Economies (IAS 29), Investment Property (IAS 40), Share-based for ment (IFRS 2), and Exploration for and Evaluation of Mineral Resources (IFRS 6). The further adoption plan addes Income Taxes (IAS 12), Financial Instruments: Recognition and Measurement (IAS 39), and Agriculture (IAS 11).

⁴ U.S. Generally Accounting Principles (U.S. GAAP) will be considered as a guideline for issuing TASs if international and advantage are unable to cover some issues. In 2010, TASs using the guideline from U.S. GAAP are, for example accounting for Troubled Debt Restructuring (TAS 104), Accounting for Investments in Debt and Equity Sources (TAS 105), and Accounting for Investment Companies (TAS 106). However, TAS that is not in compliance with a ternational guidelines, but highly influenced by local GAAP and tax regulation, is Accounting for Doubtful Accounting and Bad Debt (TAS 101).

continuing improvement in accounting standards and market regulations. Narktubtee (2000) also finds the consistent evidence that earnings provided information content to market during the period of 1994–1997. However, to my knowledge, there is little evidence on the usefulness of cash flows over time. To extend prior research, this study examines the usefulness of earnings and cash flows during the pre-crisis, crisis, and post-crisis periods. During the pre-crisis period, this study predicts that earnings can better explain stock returns and investors pay less attention to the information of cash flows, consistent with prior research.

The financial crisis revealed weak financial systems and a lack of financial reporting transparency in Thailand. Eng et al. (2005) examine the predictive value of earnings, operating cash flows and accruals in Asian countries, including Thailand. They find that investors may have undervalued the accounting measures in the pre- and post-crisis periods, and overy red he measures during the crisis period. Do Friday et al. (2006) conclude that the value relevance of accounting numbers declines duranthe crisis when the level of corporate governance and accounting systems are weak. Because nanagement has an incentive to opport his ically manage earnings during the financial crism the value relevance of earnings is likely to reduce and many users of financial state and the may switch to cash flows as an alternative measure.

The ceived the support programs from the Ingria onal Monetary Fund, the World Bank,

and the Asian Development Bank, which required institutional changes to strengthen financial sedon regulation and supervision, increase transparent and comply with international oction disclosures (Ficher 1998). Vichitsarzyong et al. (2010) find that conservatism and imeliness of earnings during the crisis per or re low, but improved in the post-crisis resoult is interesting to further examine when the usefulness of earnings and cash flows has been improved after the accoming an Corporate governance reforms. The value reevance of earnings and cash flows is red to improve in the postcrisis period. Nevertheless, it is unclear whether the value evance of earnings and cash flows will page n a similar pattern.

Research Design

1. Oodel Specification

• Similar to Bartov et al. (2001), this study examines the relative ability of earnings and cash flows in explaining stock returns using the following regressions:

$$R_i = \alpha_1 + \alpha_2 E_i + \alpha_3 Chg_E_i + \varepsilon_i \tag{1}$$

$$R_i = \beta_1 + \beta_2 C F_i + \beta_3 C h g C F_i + v_i \tag{2}$$

where:

R_i is the buy and hold stock returns for the fiscal year period;

 E_i is net income before extraordinary items, deflated by the number of shares outstanding and scaled by the beginning of period price;

CF_i is cash flows from operations, deflated by the number of shares outstanding and scaled by the beginning of period price;

 Chg_E_i is a change in net income before extraordinary items per share and scaled by the beginning of period price;

 Chg_CF_i is a change in cash flows from operations per share and scaled by the beginning of period price.

Prior research suggests the importance of including earnings levels and earnings changes in returns/earnings regressions to provide a better proxy of unexpected earnings and increase the explanatory power of the model (Easton and Harris 1991; Ali and Zarowin 1992; Strong and Walker 1993). Therefore, stock returns are regressed on each accounting performance measure, includin level and change variables. The regression models (1) and (2) are performed on the smale luring the pre-crisis (1995–1996), cris 1997–1998), and post-crisis (1999–2004) periods. Larnings are predicted to have greater e lanatory power in the pre-crisis period than in the crisis and postcrisis periods. On the other hand, the explanatory power of cash flow is predicted to become higher in the crisis and post-crisis periods than in the pre-crisis period.

In addition his study tests for the incremental ability of mings and cash flows in simultaneously extends the stock returns using the following recession model:

$$R_{i} = \gamma_{1} + \gamma_{2}E_{i} + \gamma_{3}Chg_E_{i} + \gamma_{4}CF_{i}$$
$$+ \gamma_{5}Chg_CF_{i} + \varphi_{i}$$

where variable definitions are as over models (1) and (2). Incremental value relevance is tested by examining whether the coefficient on each performance measure significant and positive during pre-crisis, crisis, and to t-crisis periods. The incremental value relevance concerns whether one variable has extranatory power beyond the other.

2. Sample selection

The san le consists of listed companies in Thailar from 1995 to 2004. Because earnings and cash flows enter the analysis in a change orm, the sample period is extended to 1994 for this purpose. Data are obtained from the Global antage database. Financial institutions (SIC 6000-6411) and insurance and real estate firms (SIC 6500–6999) are excluded because these industries are under specific regulatory considerations. Moreover, their financial performances were severely affected by the financial crisis. Non-December fiscal year-end firms are eliminated to ensure the comparable period of stock return for all firms. Observations with a missing value for any of the variables are also excluded. Then, the sample is divided into three periods – the pre-crisis (1995–1996), financial crisis (1997–1998), and post-crisis (1999–2004) periods. The Asian financial crisis originated in 1997 and most of the Asian countries started to recover by January 1999 (Johnson et al. 2000). Observations falling in

the top or bottom 1 percent of each variable (R, E, and CF) in each year are excluded to reduce the effect of outliers. The restrictions resulted in the final sample of 140 firm-year observations during the pre crisis, 195 observations during the crisis, and 1,058 observations during the post-crisis periods.

Empirical Results

1. Descriptive Statistics

Descriptive statistics for each of the sample periods are reported in Table 1. The observations are grouped by sub-periods: pre-crisis (1995–1996),

Panels A, B, and C, respectively. The variable exhibit patterns which are similar to prior research. In general, returns are more volatile of an exhibit patterns which are similar to prior research. In general, returns are more volatile of an exhibit patterns are more volatile of an exhibit patterns. The mean and median of stock returns are negative during the pre-visis of crisis periods, but become positive after the cisis. The results show a decline in earning from the pre-crisis to post-crisis periods. However, the mean of cash flows increase during the financial crisis, but slightly declines after the crisis.

 Table 1
 Descriptive statistics

Variables	Mean	Mediao	S.D.	N
Panel A: Pre-Crisis				
R	-0.170	0.207	0.314	140
Е	0.055	0.047	0.078	140
CF	0.101	0.086	0.151	140
Panel B: Crisis				
R	0.15	-0.219	0.541	195
E	2.014	0.062	0.787	195
CF	0.362	0.175	0.694	195
Panel C: Post-Crisis				
R	0.383	0.148	0.951	1,058
E	-0.017	0.094	0.573	1,058
CF	0.252	0.176	0.454	1,058

Variable definitions: R_i the buy and hold stock returns for the fiscal year period; E_i is net income before extraordinary items, denoted by the number of shares outstanding and scaled by the beginning of period price; CF_i is cash flows from perations, deflated by the number of shares outstanding and scaled by the beginning of period price.

2. Value Relevance of Earnings and Cash Flows

Table 2 presents the regression results of stock returns on earnings and change in earnings. Earnings better explains stock returns during the pre-crisis (adjusted \mathbf{R}^2 = 11.72%) than the post-crisis periods (adjusted \mathbf{R}^2 = 0.82%). Moreover, the magnitude of earnings coefficient in the pre-crisis period is statistically significant (α_2 = 1.33) and higher than that in the post-crisis

period. However, this study finds that armings are unable to explain stock returns during the financial crisis as can be seen by the negative explanatory power and insignificant efficient of earinings. Therefore, the ability of earnings to explain stock returns dramatically declines during the financial crisis, supporting the prediction.

Table 2 Value relevance of earnings

$$R_i = \alpha_1 + \alpha_2 E_i + \alpha_3 Chg E_i + C$$
 (1)

Variables	Estimates	t-sta	p-value	ADJ R2	N
Panel A: Pre-Crisis			7		
Intercept	-0.24***	-5.41	< .0001	11.72%	140
Е	1.33***	65	< .0001		
Chg_E	0.02	0.44	0.657		
Panel B: Crisis		0			
Intercept	-0.12***	-3.07	0.002	-0.42%	195
Е	0.1	1.08	0.281		
Chg_E	-0.12	-0.99	0.325		
Panel C: Post-Crisis					
Intercept	0.37***	13.99	< .0001	0.82%	1,058
E	0.15***	3.28	0.001		
Chg_E	-0.03	-0.86	0.389		

Statistical significance indicate by ***, **, * for 1 percent, 5 percent, and 10 percent level, respectively.

Variable definitions: E_i come before extraordinary items, deflated by the number of shares outstanding and scaled by the equivalent of period price; Chg_E_i is a change in net income before extraordinary items per share and scaled by the beginning of period price.

Table 3 presents the regression results of stock returns on cash flows and change in cash flows. During the pre-crisis period, the explanatory of cash flows on stock returns is very low as indicated by the low explanatory power (adjusted ${\bf R}^2=0.09\%$). However, cash flows can better explain stock returns during the crisis (adjusted ${\bf R}^2=9.95\%$) and post-crisis (adjusted ${\bf R}^2=5.36\%$)

periods. Moreover, the coefficient of cash form becomes statistically significant in the period after the financial crisis ($\beta_2 = 0.46$). The results suggest that financial statement the suggest that financial statement the statement use more cash flow information to colain stock returns, especially during the period of mancial crisis, supporting the prediction

Table 3 Value relevance of cash flows

$$R_i = \beta_1 + \beta_2 C F_i + \beta_3 C h g C F_i + v_i$$
 (2)

Variables	Estimates	t-stat	value	ADJ R2	N
Panel A: Pre-Crisis					
Intercept	-0.20***	-6.01	.0001	0.09%	140
CF	0.22	1.26	0.2254		
Chg_CF	-0.03	0.5	0.3675		
Panel B: Crisis					
Intercept	-0.16***	-3.29	0.0003	9.95%	195
CF	-0.01	0 -0.11	0.9156		
Chg_CF	0 3	1.96	0.0511		
Panel C: Post-Crisis					
Intercept	0.2 ***	8.11	< .0001	5.36%	1,058
CF	46***	7.71	< .0001		
Chg_CF	-0.04	-1.22	0.2234		

Statistical significance indicated by **, * for 1 percent, 5 percent, and 10 percent level, respectively.

Variable definitions: CF_i is case from operations, deflated by the number of shares outstanding and scaled by the beginning of period price; $Cg_{-}CF_i$ is a change in cash flows from operations per share and scaled by the beginning of period price.

Table 4 reports the results of the regression of returns on earnings and cash flows variables simultaneously. In the pre-crisis period, only the coefficient of earnings is statistically significant and is larger than that in the crisis and post-crisis periods. However, the coefficient of cash flows is not significant during the pre-crisis period, but becomes positively significant in the post-crisis

period (γ_4 = 0.44). The coefficient of charge in cash flows is also statistically significant the crisis period (γ_5 = 0.35). The finding include that the value relevance of cash flows increases over the periods when the two measures are considered simultaneomy.

Table 4 Value relevance of earnings and cash flows

$$R_i = \gamma_1 + \gamma_2 E_i + \gamma_3 Chg E_i + \gamma_4 CF_i + \gamma_5 \log C + \gamma_i$$
(3)

Variables	Estimates	t-stat	p-va.ue	ADJ R2	N
Panel A: Pre-Crisis		2			
Intercept	-0.25***	-7.7	< .0001	15.53%	140
Е	1.66***	401	< .0001		
Chg_E	0.06	1.15	0.2520		
CF	-0.08	-0.49	0.6282		
Chg_CF	-0.05	1.16	0.2491		
Panel B: Crisis					
Intercept	16***	-3.58	0.0004	11.88%	195
Е	0.24	2.4	0.0172		
Chg_E	0.24*	-1.94	0.0533		
CF	-0.13	-0.89	0.3747		
Chg_CF	0.35***	2.78	0.0060		
Panel C: Post-Crisis					
Intercept	0.25***	8.23	< .0001	5.69%	1,058
E	0.10**	2.09	0.0368		
Chg_E	0.01	0.24	0.8075		
CF	0.44***	7.26	< .0001		
Chg_CF	-0.04	-1.21	0.2249		

Statistical significance indicated by ***, **, * for 1 percent, 5 percent, and 10 percent level, respectively.

Variable de initions: E_i is net income before extraordinary items, deflated by the number of shares outstanding and scaled V the beginning of period price; Chg_E_i is a change in net income before extraordinary items per share—no scaled by the beginning of period price; CF_i is cash flows from operations, deflated by the number of stares of istanding and scaled by the beginning of period price; Chg_CF_i is a change in cash flows from operations per harr and scaled by the beginning of period price.

Sensitivity Analysis

This study partitions the sample in the post-crisis period into three sub-periods (1999–2000, 2001–2002, and 2003–2004) to examine whether

the importance of cash flow information is temporarily or continuously improved of time. Table 5 reports the results of the value relevance of earnings and cash flows for each

Table 5 Value relevance of earnings and cash flows (Three sub-periods of post-crisis)

$$R_i = \gamma_1 + \gamma_2 E_i + \gamma_3 Chg E_i + \gamma_4 CF_i + \gamma_5 Chg CF_i + \varphi_i$$
(3)

Variables	Estimates	t-stat	p-value 〈	AD R2	N
Panel A: Pre-Crisis (1999–2000)			<i>~</i> 6		
Intercept	0.103***	2.64	< 000 oT	7.71%	347
E	0.041***	0.97	< 3001		
Chg_E	-0.086***	-3.08	0.0020		
CF	0.229***	3.58	0.0004		
Chg_CF	-0.029	-1.03	0.3049		
Panel B: Crisis (2001–2002)			9		
Intercept	0.238***	1 02 0	< .0001	16.48%	353
E	0.173*	1.77	0.0769		
Chg_E	0.003	005	0.9622		
CF	0.626***	6.29	< .0001		
Chg_CF	-0.042	-0.50	0.6144		
Panel C: Post-Crisis (2003–2004)	(6)				
Intercept	0.288**	4.42	< .0001	12.11%	358
Е	0.623**	2.20	0.0288		
Chg_E	.664***	5.64	< .0001		
CF	0.969***	3.84	0.0001		
Chg_CF	-0.235**	-2.09	0.0373		

Statistical significance indicated by *, **, * for 1 percent, 5 percent, and 10 percent level, respectively.

Variable definitions: E_i is ret in come before extraordinary items, deflated by the number of shares outstanding and scaled by the begin in period price; Chg_E_i is a change in net income before extraordinary items per share and scaled by the beginning of period price; CF_i is cash flows from operations, deflated by the number of shares outstanding are scaled by the beginning of period price; Chg_CF_i is a change in cash flows from operations per share and scaled by the beginning of period price.

The til ning of the post-crisis sample into three sub-periods will also ensure that the changes in the value revance of cash flows and earnings after the financial crisis are not influenced by a large number of observations from the post-d sample of a post-crisis period.

sub-period. The coefficients of earnings and cash flows show an improvement and are statistically significant in all sub-periods. Both earnings and cash flows have incremental value relevance when the two variables are included simultaneously. Nevertheless, the magnitudes of coefficients of cash flows have substantially increased over the three sub-periods and are statistically higher than those of earnings. The results strongly support an increase in the importance of cash flows in explaining stock returns in the post-crisis period.

Conclusion

This study examines the value relevance of earnings and cash flows during the precrisis, crisis and post-crisis periods in Thailand. Earnings are the important measure of fire performance and used by investors to make investing decisions. The management discretion to opportunistically manage earnings and the accrual may make earnings become as a liable measure, especially during the mancial crisis. Users of financial statements are less Many financial statement users to to use cash flow information because cash flow are not subject to management discretion merefore, this study expects to find a increase in the importance of cash flows over the priods.

The results indicate that earnings better explain stock urns during the pre-crisis period. However, the ability of earnings to explain stock returns a lines, especially during the financial

crisis. In contrast, the ability of cash fow to explain stock returns is very low during the recrisis, but increases over the periods. Overall, the findings suggest that financial stem of uses tend to use more cash flow information making investing decisions rather than linited memselves to the earnings information. Overall, the value relevance of the results support the value relevance of the results should be of interest to regulator, be results should be of interest to regulator, such as standard setters in considering a require sort for NPAEs to prepare the statement of sight flows in the future.

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