

A Study of the Impact of Corporate Accounting Information Conservancy on Enterprise Value Depending on Reserve Ratio

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The objective of this article is to identify the impact of corporate accounting information conservancy on enterprise value depending on reserve ratio. Data investigation was conducted in 116 listed enterprises (except KOSDAQ and financial business) among Ts2000 data from 2015 to 2018 as sample for verification and with regression analysis. The stronger the corporate accounting information conservancy, the more positive the enterprise value towards agency cost and the more negative the balanced score card towards it, depending on reserve ratio; it thus it appeared that the soundness of financial structure would not be influenced. As the capital structure was positive, it appeared that it had an impact on enterprise value in various ways, depending on the enterprise's reserve ratio. Corporate accounting information conservancy prevents professional executives' opportunistic behaviour and improves corporate financial structure. It is expected to be helpful for empirical analysis of external data using enterprise value.

Key words: *Accounting information conservancy; balanced score card; agency cost; capital structure; reserve ratio; enterprise value (EV).*

Introduction

Enterprises pursue the soundness of financial accounting and the optimal capital structure through investors and major decision-making. Today, the asymmetry of corporate accounting information conservancy issues occurs between the investor and the interested parties, and with various environmental changes of enterprise value, enterprise value is evaluated by the accounting information conservancy (Watts, 2003). This research studied agency cost, capital structure and weighted average cost of capital between investors and managers among independent variables; to measure enterprise value, it proceeded in the direction of efficiently distributing the balanced score card. As previous studies conveyed many diverse opinions on measuring the enterprise value, the aim of this article is to review how corporate accounting conservancy has an impact on enterprise value depending on corporate reserve ratio; it intends to provide a rational definition and simultaneously reorganise the enterprise value to prove the homogeneous relationship with enterprises' pursuit of profits (Choi & Lee, 2011; Kang et al., 2017).

Materials and Methods

Measurement of Conservative Accounting Information

Conservatism indicates that if uncertainty intervenes in the economic events influencing the corporate financial position, cost or loss is immediately reflected, but profit is the delayed recognition in accounting. Earlier studies used enterprise value (EV) (Basu, 1997) and cash flow for operation to measure the accounting information conservancy (Ball et al., 2000), and measured conservatism with total and variance of secret reserve, depending on conservative accounting of inventory valuation method, research and development cost, and expense for public relations.

Research method

This article used enterprise value as an independent variable to measure the corporate accounting information conservancy because agency cost, capital structure and a balanced score card are determined by the asymmetry of information between shareholders, dominant stockholders, minority shareholders and creditors, and the interest rate of sales and current revenue enterprise value variables are determined by stages. Earlier studies used control variables such as net asset growth rate, debt ratio, beta, business scale, industry and year dummy, but this study used reserve ratio as moderating variable to identify the impact of corporate accounting information conservancy on enterprise value (EV) goal achievement.

Measurement method

Agency cost incurred by the asymmetry of information between an external interested party and a manager was measured with sales profit, operating profit and the dominant stockholder's comprehensive income.

Capital structure, which could be used to determine the corporate future investment ability, was measured with invested capital, net working capital, surplus cash and net debt, and the balanced score card, which could be used to determine corporate vision and financial performance, was measured with EPS and BPS, NOPLAT and non-operating net asset.

The impact on enterprise value is measured in various ways in earlier studies, but this article aims to use reserve ratio as a moderating variable to see how corporate accounting information conservancy serves for enterprise value (EV), depending on reserve ratio, which indicates the financial soundness as investment value for future enterprises, depending on the amount of funds held within the enterprise by dividing the enterprise's retained earnings by capital; it thus appears as a multiplier effect of enterprise value by purchasing the facility investment and treasury stock (Chen, 2010; Lin et al., 2014; Lin & Manowan, 2012).

Results and Discussion

Research Model

The research model (Figure 1) is composed of agency cost, capital structure and balanced scorecard as corporate accounting information conservancy variables. This article aimed to use reserve ratio as moderating variable and find the influencing relationship of such variables with enterprise value (EV).

Figure 1. Research model

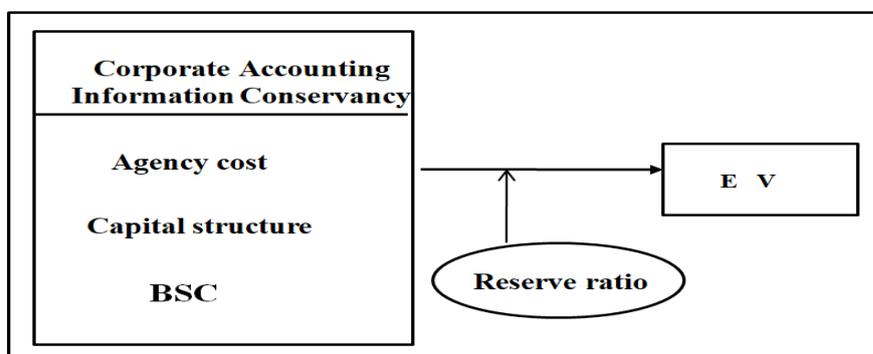


Table 1: Characteristics of analysis

		<i>AGC</i>	<i>CPA</i>	<i>BSC</i>	<i>Ca</i>
	A1-	.858			.605
<i>AGC</i>	A2-EBI	.970			
	A3-DI	.963			
<i>CPA</i>	C1-DEP		.934		.913
	C2-FCC		.975		
<i>BSC</i>	B1-EPS			.970	.190
	B2-BPS			.970	
	OV	6.196	1.974	1.881	
	V%	54.475	19.767	17.137	
	AV%	54.475	74.242	91.379	
KMO=.742 Bartlett's=2485.243 p.001					

In this article, some of the measurement variables were removed through the analytic process. For validity testing, we conducted an exploratory factor analysis, and as four items were not appropriate for the theoretical structure when using the Varimax rotation with 11 variables similarly to earlier studies, seven items were finally analysed (Ahmed & Duellman, 2007; Chi et al., 2009; Ramalingegowda & Yu, 2012).

As a result of analysis, it appeared that KMO = .742, Bartlett's = 2485.243, and $p < .001$; thus there was no problem with the questionnaire items, and the overall explanation power was 60.5 per cent. Thus all conditions were met.

Table 2: Correlation matrix

		A1-SAL	A2-EBI	A3-DI	C1-DEP	C2-NWC	C3-FCC	C4-DE	B1-EPS	B2-BPS	B3-NET	B4-NOPLA T
Correlation	A1-SAL	1.000	.871	.850	.890	.491	.607	.298	.022	-.003	.930	.696
	A2-EBI	.871	1.000	.995	.978	.240	.725	.011	.032	-.021	.887	.833
	A3-DI	.850	.995	1.000	.976	.223	.743	-.017	.039	-.016	.880	.844
	C1-DEP	.890	.978	.976	1.000	.345	.730	.136	.025	-.005	.941	.823
	C2-NWC	.491	.240	.223	.345	1.000	.139	.882	.011	.049	.532	.210
	C3-FCC	.607	.725	.743	.730	.139	1.000	-.133	.050	.000	.665	.970
	C4-DE	.298	.011	-.017	.136	.882	-.133	1.000	-.032	.028	.319	-.069
	B1-EPS	.022	.032	.039	.025	.011	.050	-.032	1.000	.883	.040	.055

	B2-BPS	-	-	-	-	.049	.000	.028	.883	1.000	.035	-.009
	B3-NET	.930	.887	.880	.941	.532	.665	.319	.040	.035	1.000	.741
	B4-NOPLA T	.696	.833	.844	.823	.210	.970	-.069	.055	-.009	.741	1.000

According to the correlation analysis, it appeared that the maximum correlation coefficient was 0.995 in agency cost, suggesting that dividend and operating profit showed a high correlation; 0.978 in capital cost, suggesting that net working capital and operating profit had a high correlation coefficient; and 0.930 in balanced score, suggesting that net asset value per share and sales profit appeared as a high correlation coefficient (Chen & Huang, 2007).

Research Hypotheses

Agency cost is the cost incurred by the asymmetry of information due to interests with shareholders, creditors and managers. Based on the findings of earlier studies, research hypothesis H1 was formulated:

- H1 Corporate accounting information conservancy will have a positive impact on enterprise value depending on agency cost reduction and reserve ratio.

The percentage of capital structure is recognised as a very important factor influencing the capital investment because the Capital Asset Pricing Model (CAPM) is influenced by the capital assets. Based on earlier studies, research hypothesis H2 was formulated.

- H2 Corporate accounting information conservancy will have a positive impact on weighted average cost of capital, the stronger the capital structure, and be moderated by the enterprise value (EV) depending on the reserve ratio.

Based on the findings of earlier studies that the balanced score card of management and the external interested party as one financial method appeared as the enterprise value (EV) effect depending on reserve ratio, research hypothesis H3 was formulated:

- H3 Corporate accounting information conservancy will have a negative impact on enterprise value, the stronger the assessment of the balanced scorecard, and will be moderated by enterprise value (EV) depending on the reserve ratio.

Enterprise value represents external interested parties' investment opportunity in future growth. It also represents important accounting information as a minimum unit of past

corporate operating profit. Based on such precedent studies, research hypothesis H4 was formulated:

- H4 Enterprise value will be positively influenced by the reflection degree of the reserve ratio.

Research Methods

As samples for verification, this paper used 116 listed enterprises (except KOSDAQ and financial business) among TS2000 data (listed enterprises as the ones who settle the sales account in December, financial data published in TS 2000 Data Guide) from 2015 until 2018. Financial businesses and KOSDAQ were excluded from the sample enterprises in this article because, to facilitate data comparison and maintain consistency of analysis, corporate financial statement components have a significant difference in opinions, depending on reserve ratio. They were excluded from the sample to secure the homogeneity of corporate accounting document.

Empirical Analysis

Validity and Reliability Analysis

Table 3: Coefficients

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.	Collinearity statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	-1926.730	8647.834		-.223	.824		
	AGC	.731	.026	.919	28.425	.000	.862	1.160
	CPA	.348	.158	.071	2.202	.030	.861	1.161
	BSC	.001	.044	.001	.031	.975	.998	1.002

$R^2 = .899$ Adj = .896 df = 112. Durbin Watson = 2.125 $P > .000$

As a result of multiple regression analysis, it appeared that independent variables agency cost ($t = 28.425$, $P > .000$), capital structure ($t = 2.202$, $P > .030$) and balanced score card ($t = .31$, $p < .975$) as corporate accounting information conservancy variables were influenced differently by enterprise value. Among such independent variables, agency cost has the biggest impact on enterprise value (EV) relatively; capital structure also had an impact, and balanced score card had relatively less of an impact.

Measurement Model Analysis

To identify the impact of reserve ratio on the relationship between enterprise value and corporate accounting information conservancy, we analysed there serve ratio as moderating effect by using the hierarchical regression analysis (Table 4).

Agency cost was less than 0.05 in significance level F variance depending on reserve ratio as a moderating variable and appeared statistically significant. It can be said that this cost moderates the influencing relationship between the dependent variable and the independent variable. Interaction was also .000 in significance probability, which was less than the significance level of 0.05, and it was statistically significant. Such increased explanation power suggested that the reserve ratio had a significant positive impact on enterprise value.

AGE-Measurement Model Analysis

Table 4: AGE-Measurement Model Analysis

	Model 1			Model 2			Model 3			VIF
	SE	β	t(sig)	SE	β	t(sig)	SE	β	t(sig)	
constant	8243.485	-	.012(.990)	8081.570	-	1.483(.141))	7510.782	-	1.235(.219)	
AGC	.024	.946	31.101(.000)	.024	.991	33.127(.000)	.031	1.191	30.7269(.000)	2.653
R2				.562	.134	4.471(.000)	.794	.049	1.334(.185)	2.408
MAG A							.000	-.352	6.800(.000)	4.747
	R ² =.895 df= 114 Adj =. 894 P>.000			R ² . 910 df= 113, Adj=.909 P>.000			R ² =.937 df= 112Adj=.935 P>.000 Durbin Watson =2.199			

CPA-Measurement Model Analysis

Table 5: CPA-Measurement Model Analysis

	Model 1			Model 2			Model 3			VIF
	SE	β	t(sig)	SE	β	t(sig)	SE	β	t(sig)	
Constant	22751.97	-	2.061(.042)	24275,537	-	1.157(.250)	23850.526	-	1.505(.135)	
CPA	.416	.412	4.828(.000)	.412	.399	4.731(.000)	.488	.250	2.501(.014)	1.485
R2				.172	2.172	2.035(.044)	1.767	.052	.557(.579)	1.312
MCPA							.000	.293	2.628(.010)	1.842
	R ² =.170 df= 114Adj=.162 P>.000			R ² =.199df= 113Adj=.185 P>.044			R ² =.246 df= 112Adj=.225 P>.010 Durbin Watson=.915			

In the robustness of capital structure, its significance level F variance was all less than 0.05, depending on reserve ratio as moderating variable, which was statistically significant. This suggests that the influencing relationship between the dependent variable and independent variable can be moderated by the reserve ratio. The significance probability was .000, which was less than the significance level of 0.05 and thus statistically significant. It was found that reserve ratio had a significant positive impact on enterprise value.

BSC-Measurement Model Analysis

Table 6: BSC-Measurement Model Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	69362.329	25962.482		2.672	.009		
	BSC	-.001	.137	-.001	-.010	.992	1.000	1.000
2	(Constant)	51329.921	26412.764		1.943	.054		
	BSC	-.176	.152	-.120	-1.159	.249	.785	1.273
	R2	4.824	1.943	.257	2.482	.015	.785	1.273
3	(Constant)	43829.880	29558.012		1.483	.141		
	BSC	.022	.378	.015	.059	.953	.127	7.880
	R2	5.034	1.984	.268	2.538	.013	.758	1.319

MBSC	-4.174E-06	.000	-.150	-.572	.568	.123	8.157
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In the relationship with the balanced scorecard, it appeared that reserve ratio as a moderating variable did not have an impact on enterprise value (EV). The moderating effect of the interaction variable did not have a significant impact at the 0.05 level.

R2-Measurement Model Analysis

Table 7: R² Measurement Model Analysis

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R ² Change	F Change	df1	df2	Sig. F Change	
1	.201 ^a	.040	.032	257914.6889	.040	4.803	1	114	.030	.779

In the relationship of enterprise value with reserve ratio, the moderating effect on dependent variable was .000 in model fitness and $p < .040$, which was statistically significant. In addition, the reserve ratio had a positive impact on enterprise value (EV) as the source for future investment and thus is applied as the judgement factor for enterprise value.

Results of Hypothesis

Table 8: Results of research hypotheses

	Hypothesis	Result
H	Corporate conservatism accounting information	
H1	Corporate accounting information conservancy will have a positive impact on enterprise value, depending on agency cost reduction and reserve ratio.	Accept
H2	Corporate accounting information conservancy will have a positive impact on weighted average cost of capital, the stronger the capital structure, and be moderated by enterprise value (EV) depending on reserve ratio.	Accept
H3	Corporate accounting information conservancy will have a negative impact on enterprise value, the stronger the assessment of the balanced scorecard, and will be moderated by the enterprise value (EV) depending on the reserve ratio.	Accept
H4	Enterprise value will be positively influenced by the reflection degree of the reserve ratio.	Accept

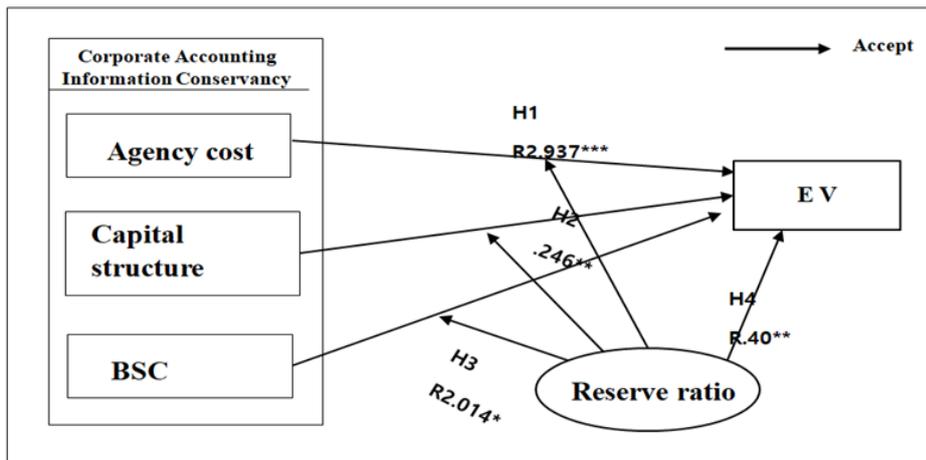


Figure 2. Research model

Conclusion

This article presented a multi-faceted review of how the enterprise value was different from the corporate accounting information conservancy depending on reserve ratio. Our verification was conducted through hierarchical regression analysis with enterprise value (EV) as the corporate outcome indicator and the reserve ratio future growth investment factor as the moderating variable (Gor et al., 2017; Kong et al., 2013; Park et al., 2006). The results show that agency cost had a high impact on enterprise value (EV) despite the reserve ratio and, in capital structure, weighted average cost of outside capital cost and cost of equity capital had an impact on enterprise value (EV) and financial soundness on enterprise value.

It was found that the reserve ratio had an impact –albeit slight – on enterprise value as future growth potential.

This article is characterised by the multifaceted review of corporate accounting information conservancy with three variables. Its limitations are that the samples for corporate analysis were restricted to 116 listed enterprises (except unlisted companies and financial businesses) and thus requires continuous discussion. Further research needs to discuss industrial characteristics in various ways.

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