MOTIVES FOR ASSET REVALUATION POLICY CHOICE IN CROATIA

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Abstract

The aim of this paper is to research managers' motives of accounting policy choice for long-term non-financial assets. International Financial Reporting Standards (IFRS) allow managers to choose between cost and revaluation model for measurement after recognition. The assumption is that manager's decision is opportunistic so they use the revaluation model as a device to improve perceptive borrowing capacity of a company, and consequently, to reduce debt cost. Prior studies were mainly conducted in developed, market-oriented economies, unlike Croatia. The contribution of this paper is the research of motives and determinants of asset revaluation policy choice in bank-oriented economies with inactive markets. Furthermore, multivariate logistic regression was not used as a research method in this field of accounting in transition and emerging economies till now. Empirical evidence is provided through the sample of Croatian listed companies and the results show that large, profitable companies with low liquidity ratio, low cash flow ratio and increasing debt are more likely to perform upward revaluation.

Key words: *Revaluation policy choice; Fair value accounting; Financial leverage; Financial reporting.*

1. INTRODUCTION

Although accounting standards are still mainly based on historical cost valuation paradigm, in recent time they have been more and more often replaced by other measurement models, such as current cost, net realizable value, fair value or recoverable amount. Historical cost approach evaluates asset based on its purchase price and on all other costs directly attributable to bringing asset to the condition capable of operating. Value of asset after recognition is equal to its cost less accumulated depreciation. The advantages of this concept are its simplicity and certainty, although many critics argue that information based on historical cost accounting are not relevant to financial statements users, because market value of asset can significantly differ from the historical purchase price of asset. On the other hand, fair value[1] of asset is mainly determined as current market value of asset. This information can be more relevant for financial statements' users. However, its reliability can be questionable, especially when asset's market is inactive, volatile or does not exist at all. Lack of active market primarily concerns long-term non-financial asset items,

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[1] Fair value is the amount for which an asset could be exchanged between knowledgable, willing parties in an arm's length transaction. (IAS 16:6)

when fair value determination depends more or less on manager's assessment and enables "creative" accounting practices. This paper deals with accounting treatment for long-term non-financial tangible asset group of property, plant and equipment. The aim is to investigate what manager's motives for choosing revaluation model as company's accounting policy in Croatia are. The research question is "Do managers in Croatia use upward asset revaluation to improve credit rating, borrowing capacity and financial position of the company in the eyes of creditors?" If so, upward revaluation is used as a tool for "window dressing", a practice of making a company look financially better than it really is. In that way, managers reduce company's perceived risk to the creditors and improve company's financial position and consequently reduce debt cost. The reminder of the paper is organized as follows. In section 2, accounting treatment for property, plant and equipment in compliance with International Financial Reporting Standards is described. Also, previous studies on upward revaluation are summarized. Section 3 describes the sample, variables and the research design. Empirical results of the research are analyzed in Section 4 and the conclusions appear in the last section.

2. BACKGROUND AND LITERATURE REVIEW

2.1. Accounting treatment of property, plant and equipment

In the balance sheet fixed assets appear in two types: financial and non-financial assets. Also, non-financial assets can be divided into three major groups: property, plant and equipment and investment property as tangible assets and intangible assets. Accounting treatment for each specified group of asset is regulated by a particular accounting standard, e.g. financial assets – IAS 39 *Financial Instruments: Recognition and Measurement* and *IFRS 9 Financial Instruments;* intangible assets – IAS 38 *Intangible assets;* property, plant and equipment recognized as an asset – IAS 16 *Property, Plant and Equipment;* property, plant and equipment classified as held for sale - IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*; leased property, plant and equipment - IAS 17 *Leases;* etc. As this paper deals with accounting treatment for long-term non-financial tangible asset group of property, plant and equipment (PPE), International Accounting Standard 16 will be described in the context of our research hypothesis in more detail. The principal issues in accounting for PPE are the recognition of the assets, the determination of their carrying amounts and the depreciation charges and impairment losses to be recognized in relation to them. IAS 16:23 requires that an item of PPE that qualifies for recognition as an asset shall be measured at its cost of the cash price equivalent at the recognition date. After initial recognition, IAS 16 permits managers to choose between two valuation models for measurement. A company shall choose either the cost model or the revaluation model as its accounting policy and shall apply that policy to an entire class of PPE. Cost model assumes that an item shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses, while revaluation model requires that asset shall be carried at revalued amount, that is fair

value at the date of revaluation less any subsequent accumulated depreciation[2] (IAS 16:30). If an asset's carrying amount is decreased as a result of a revaluation, the decrease shall be recognized in profit or loss. However, the decrease shall be debited directly to equity under the heading of revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that asset. On the contrary, upward revaluations of assets increase the carrying values of fixed assets and revaluation reserves in shareholders' equity. However, the increase shall be recognized in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognized in profit or loss. Thus, upward asset revaluation is widely believed to be the subject of managerial discretion because market values of fixed asset are normally unavailable and estimates are unverifiable. Namely, using the upward revaluation and increasing the amount of shareholder equity, managers can lower company's debt-to-equity ratio, improve its capital structure and reduce debt costs. Furthermore, upward assets revaluations with increased amount of assets and equity can reduce profitability ratios such as return on equity or return on total asset.

2.2. Literature review

Generally, prior revaluation studies can be divided into two types of research: (1) investigation of motives for revaluation decision studies and (2) value relevance of revaluations studies. Furthermore, in researches of managers' motives for revaluation choice multivariate logistic regression is dominantly applied as a research method. Most of them are performed in developed, market oriented countries such as the United States of America, the United Kingdom or Australia. They mainly assume manager's opportunistic behavior and have found a number of factors that affect manager's decision for upward asset revalorization. Whittred and Chan (1992) analyzed revaluations of Australian companies during the period of 1980 – 1984, and found that a company's growth opportunities, borrowing constraints and amount of cash reserves were related to the revaluation decision. Brown, Izan and Loh (1992) also examined the motives for revaluation choice in Australia during the high and low inflationary periods and found that revaluers normally have higher debt-to-asset ratios, higher fixed asset intensity and lower tax-free reserves than non-revaluers. Easton, Eddey and Harris (1993) found that the primary objective of 40% of Australian companies was to reduce debt-to-asset ratio while the objective of 45% of companies was to present true and fair financial statements. They concluded that upward revalorization was positively associated with share return, but only when companies had a relatively high change in debt. Another Australian study, conducted by Cotter and Zimmer (1995), claimed that revaluers tended to experience a declining operating cash flow and increasing level of secured debt. Gearemynck and Veugelers (1999) studied revaluation as a signaling device. Based on a sample of Belgium companies, they constructed a model that indicated such a condition in which it was more likely that successful

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[2] The fair value of land and buildings is usually determined from market-based evidence by appraisal that is normally undertaken by professionally qualified valuers. If there is no market –based evidence of fair value because of specialised nature of the property, plant and equipment andthe item is rarely sold, except as part of a continuing business, an entitiy may need to estimate fair value using an income or depreciated replacement cost approach. (IAS 16, 32,33)

companies would choose not to revalue assets as a credible signal to potential investors. Contrary to them, Aboody et al. (1999) found that the UK firms used upward revaluation to signal their superior future operating performance. Findings from Lin and Peasnell (2000) proved that reserve depletion was an important factor in the revaluation decision in Britain and they confirmed a previous research into a positive association between revaluation and size, gearing and fixed asset intensity and negative association with liquidity. Barlev et al. (2007) investigated the revaluation decision on a large sample of companies from 35 countries and found that variables explaining revaluation decision in a single country could be extrapolated to countries within "similar" accounting zone, but they did not hold for countries in other accounting zones. Missonier-Piera (2007) investigated the economic factors that affect asset revaluation of Swiss listed companies. The results showed that high export sales were associated with the use of upward asset revaluation. While existing studies on upward asset revaluation are focused on management underlying objectives, Cheng and Lin (2009) investigated timing issue. They found that revaluers were dominated among companies characterized by high share return and industry leverage two years before the revaluation. These findings indicate that the UK companies delay the recognition of increased asset values until this information has been confirmed by their superior market performance. In summary, previous researches identified the following factors and circumstances that affect the revaluation decision (Lin and Peasnell; 2000)[3]: issuance of bonus shares, strike frequency, takeover threats, tight lending agreement, increasing new debt, declining cash flow, growth prospects, existence of assets which can be revalued, prior revaluation pattern, depletion of equity reserves, industry sector, indebtedness, liquidity, size and foreign sales. A number of these factors will be included as variables in our research to identify factors and circumstances that affect the most the revaluation decision of companies in transition economies like the Croatian one.

3. RESEARCH DESIGN

The working hypothesis is that upward revaluation decision is strongly associated with company's poor liquidity, declining cash flow from operation, high indebtedness, low operating income to interest cost ratio, high fixed asset intensity, high profitability ratios, increasing debt financing and company's size. Logistic pooled regression analysis was used to test the stated hypothesis on the sample of Croatian listed companies.

3.1. Sample selection

This research includes all Croatian companies listed on the Zagreb Stock Exchange (ZSE) during the period of 2000-2008 as listed companies have to comply their financial reporting with the IASB standards. Banks, investment funds and other financial institutions are excluded from the sample because of asset structure differences. In addition, 24 companies with missing or incomplete financial statements data are also excluded. Data set necessary for analysis is extracted from annual financial reports collected from ZSE and the Register

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[3] More in Lin and Peasnell (2000) who identified twelve specific factors or circumstances that have been found by other researchers.

of Annual Financial Reports (FINA RGFI), available on www.zse.hr and www.fina.hr. Formulas with nested functions are defined and nine financial ratios are calculated for each of the companies. The sample consists of the total of 2,463 company-year observations. The companies are classified into two categories: revaluers and non-revaluers. A revaluer is defined as a company that revalued its assets upwards in the review year (upward revaluation occurs if the amount of revaluation reserve in the current year exceeds the amount of revaluation reserve from the previous year). A company that did not perform revaluation or revalued its assets downward in the review year is classified as a non-revaluer. A detail sample structure is presented in table 1:

Table 1. Sample size and structure

Year	Revaluers		Non-revaluers		Total	
	Number	**Percentage**	**Number**	**Percentage**	**Number**	**Percentage**
2000	18	4%	465	96%	483	100%
2001	24	5%	430	95%	454	100%
2002	21	7%	297	93%	318	100%
2003	20	10%	190	90%	210	100%
2004	28	13%	193	87%	221	100%
2005	22	11%	175	89%	197	100%
2006	34	17%	166	83%	200	100%
2007	34	17%	166	83%	200	100%
2008	23	13%	157	87%	180	100%
Total	**224**	**9%**	**2239**	**91%**	**2463**	**100%**

Source: estimated according to data from authors' data base (2010)

As it can be seen from the above table, the proportion of revaluers in the total sample size is 9%, although it varies from 4% to 17% in the company-year observation. Similar proportions of revaluers and non-revaluers can be found in most previous relevant studies on revaluation, e.g. Cheng and Lin (2009) research on the UK companies shows that revaluers make only about 8% of the total sample size and in Barlev et al. (2007) study on the sample of 35 countries the percentage of revaluers is also approximately 8%.

3.2. Variables description

Consistent with prior researches and with respect to specificities of Croatian companies, several factors that could affect manager's accounting policy decision for revaluation are considered: level and growth of indebtedness; cost of debt; cash flow ratios; liquidity; fixed asset intensity; size and return on equity. Numbers of these variables are in the form of financial ratios so their values should be interpreted with regard to the economic plausibility, experiential values and relations to other financial statements items. Also, according to O'Regan (2006:213) there are some conceptual problems in the ratios calculations with regard to statistical issues: (1) small numbers – the potential for distortion where small numbers are involved, particularly when dividing by small number; (2) relationship between numerator and denominator - for ease of comparison it is assumed that the relationship is linear which may not sometimes be the case.

3.2.1. Level of indebtedness and debt growth

Debt-to-asset ratio (DR) is used as a measure for level of indebtedness. It is calculated as total liabilities divided by total asset. High debt-to-asset ratio indicates company's potential problem with the solvency, but low debt-to-asset ratio is not necessary good attribute as it may be a sign of inefficient capital structure

management and it may indicate non-utilization of positive effects of financial leverage. Thus, we assume that relationship between DR and REV will be non-linear, so level of indebtedness (DR) is transformed into categorical variable according to the experiential values of DR ratio. The first category refers to DR less than 0.5, the second group includes value of DR between 0.5 and 0.7 and the third group refers to DR higher than 0.7. In accordance with previous studies, we expect that companies with high DR ratio and with increasing debt are more likely to revalue their assets because revaluation can lower the value of debt ratios. In such a way they can improve their perceived borrowing capacity and reduce new debt cost. However, most creditors exclude the amount of revaluation reserves in debt ratios calculations. Therefore, another reason for this kind of behavior could be that revaluation provides relevant exit values of fixed assets useful to creditors. Such a disclosure is likely to be in demand by creditors, who are interested in knowing a company's liquidation value (Christensen and Nikolaev, 2009). In addition, the relative debt growth (TDD) index is calculated as the rate of change of long-term liabilities and short-term financial liabilities.

3.2.2. Operating income to interest cost ratio

Operating income to interest cost ratio (OPII) is a measure of company's successful use of debt financing and an indicator for credit rating of company. It is calculated as profit or loss before tax corrected with financial and extraordinary gain or loss divided by financial costs. A company with lower OPII ratio can face financial difficulties and might perform upward revaluation to improve its credit rating. According to a previous research, we assume that this ratio will show a negative correlation with the revaluation decision.

3.2.3. Cash flow ratios

A company's borrowing capacity depends not only on the existing leverage but also on the company's ability to repay debt. Declining cash flow from operation may cause debt holder to be concerned about the company's liquidity. Upward revaluation would signal a higher value of company's collateral assets, which may help to convince debt holders of company's ability to repay debt through the potential to realize the company's assets at a higher market value (Seng and Su, 2010). Two variables based on cash flow are defined: cash flow return on equity (CROE) and change of operating cash flow (CFOD) and both of them are expected to be negatively associated with the revaluation choice. CROE is calculated as net operating cash flow divided by owner's equity. The association between CROE and revaluation is assumed not to be linear, so CROE is transformed into a categorical variable. Because CROE experiential values are not identified, four category groups based on quartiles are defined: the first category refers to CROE less than -0.024, the second one includes CROE between -0.024 and 0.054, the third one if CROE is between 0.054 and 0.15 and the fourth category refers to CROE higher than 0.15. CFOD is calculated as the difference between net operating cash flow from the current year and the previous year, divided by total assets.

3.2.4. Liquidity

With regard to accounting postulates, it is expected that the revaluation decision is a negative function of liquidity. Liquidity is measured by current ratio (CR), which is calculated as current assets divided by current liabilities. Low liquidity ratio indicates company's potential problem with the ability to meet its current obligations with current assets. High liquidity ratio indicates company's good liquidity which is not necessary good characteristic as it may be a sign of inefficient cash flow management. For these reasons, this variable is also transformed into a category variable with four groups based on quartile values: the first group if CR value is less than 0.75, the second one if CR is between 0.75 and 1.3, the third one is between 1.3 and 2.1 and the last one, the fourth one if CR values are higher than 2.1.

3.2.5. Fixed asset intensity

The fixed asset intensity (FAI) is calculated as long term assets divided by total assets. It can affect company's revaluation decision in both ways. On the one hand, fixed assets represent the company's collateral, thus low ratio of fixed to total assets may motivate the manager to reveal the market value of fixed assets and improve borrowing capacity. In that case, the relation is expected to be negative. On the other hand, the more fixed asset company has, i.e. the higher the value of fixed asset intensity ratio is, the greater the effect of the revaluation. In this case the relation could be positive. (Barlev et al, 2007)

3.2.6. Size and return on equity (political factors)

Due to the "political cost" factor, it is expected that the probability of revaluation will increase with regard to company's size (LSIZ) and its return on equity (ROE). Size is measured as natural logarithm of difference between total assets and revaluation reserves. Return on equity is calculated as net income divided by owner's equity. Namely, the political cost hypothesis predicts that large companies are more likely to use accounting policy choices that reduce reported profits rather than small companies. Thus, size is a proxy variable for political attention (Watts and Zimmerman, 1990). More precisely, large companies and companies with abnormal return on assets may attract the attention of regulators. Therefore, these companies are more likely to adopt that accounting policy that gives a conservative picture of profitability. Upward revaluation lowers the return on equity because the amount of equity (and asset) is increasing. Also, profits are lower because of the increased future depreciation cost caused by boosted (revalued) amount of fixed asset.

4. EMPIRICAL RESULTS

4.1. Univariate analysis

In the first part of the empirical research, univariate analysis was conducted. The parametric t-test was used to test the significance of mean differences between revaluers and non-revaluers for all variables that were assumed to have an effect on manager's revaluation decision and non-parametric Mann-Whitney U – test

was used to test the differences between these two groups. The use of non-parametric test is justified given that *a priori* there is no reason to consider a particular form for the independent variable distribution curve (Missonier-Piera; 2007).

For the sample as a whole, parametric t-tests are significant for current ratio (CR), return on equity (ROE), debt growth (TDD) and size (LSIZ), indicating statistically significant differences in mean values of enumerated ratios between companies performing upward revaluation and those not performing it. Non-parametric test finds significant differences in values of the following ratios: operating income to interest cost (OPII), cash return on asset (CROE), return on equity (ROE) and size (LSIZ) between revaluers and non-revaluers companies. The results are presented in Table 2:

Table 2. Descriptive statistics

Mean	CFOD	FAI	OPII	DR	CROE	CR	ROE	TDD	LSIZ
Revaluers	0.38	0.61	14.97	0.53	-0.09	9.50	1.05	0.85	12.75
Non-revaluers	1.39	0.64	0.28	0.51	0.81	2.93	0.48	0.35	12.09
Difference	1.01	0.03	-14.69	-0.02	0.91	-6.57	-1.52	-0.50	-0.66
t-statistics	0.22	1.74	-0.70	-0.28	0.44	-2.02*	-2.25*	-2.12*	-7.42*
Observations	217/2220	224/2239	221/2237	224/2239	224/2163	223/2239	224/2163	203/2144	224/2239
Mean rank									
Revaluers	1250.95	1181.13	1357.99	1270.58	1338.53	1233.78	1393.75	1246.84	1581.19
Non-revaluers	1215.88	1237.64	1216.81	1228.69	1179.03	1231.82	1173.31	1167.10	1197.07
Z-statistics	-0.70	-1.13	-2.82**	-0.84	-3.30**	-0.39	-4.56**	-1.60	-7.71**
SD									
Revaluers	4.83	0.26	312.72	0.92	3.13	48.34	8.07	5.95	1.29
Non-revaluers	68.61	0.25	48.19	1.01	30.94	15.98	18.34	2.86	1.27

Notes:*t-test statistically significant; **Man-Whitney U-test statistically significant
Source: estimated according to data from authors' data base (2010)

Based on the univariate statistics results, the difference in significance between parametric and non-parametric tests is detected which confirms a requisite for transformations of some numerical variables into categorical. After that, correlation coefficients are calculated and the correlation matrix is presented in Table 3.

Table 3. Correlation coefficients

	REV	CFOD	FAI	OPII	DR	CROE	CR	ROE	TDD	LSIZ
REV	1	0.00	-0.04	0.04	0.01	-0.01	0.09	0.03	0.04	0.15
CFOD	0.01	1	-0.06	0.00	-0.01	-0.01	0.01	0.00	0.00	0.01
FAI	-0.02	0.01	1	-0.08	-0.14	0.02	-0.20	-0.02	0.00	0.02
OPII	0.06	0.04	-0.18	1	-0.01	0.00	0.19	0.00	0.00	0.02
DR	0.02	-0.02	-0.18	-0.18	1	0.07	-0.06	-0.06	-0.01	0.07
CROE	0.07	**0.53**	-0.07	0.29	-0.01	1	0.00	**-0.98**	-0.01	-0.01
CR	0.00	0.03	-0.46	0.31	-0.43	0.11	1	0.00	-0.01	-0.03
ROE	0.09	0.13	-0.29	**0.67**	-0.08	0.43	0.29	1	0.00	0.02
TDD	0.03	-0.17	0.00	-0.08	0.22	-0.26	-0.15	-0.11	1	0.01
LSIZ	0.16	0.00	0.03	0.24	0.14	0.11	-0.07	0.23	0.07	1

Notes: Pearson coefficients are above the diagonal, and Spearman coefficients are below the diagonal.
Source: estimated according to data from authors' data base (2010)

Pearson's coefficients of linear correlation are shown above the diagonal and Spearman's coefficients as a measure of rank correlation are shown below the diagonal. As it can be seen from the presented results, Pearson's coefficient values indicate a very strong negative association between cash return on equity (CROE) and return on equity (ROE), probably caused by accruals. Spearman coefficients show modest

correlation between cash return on equity (CROE) and change of operating cash flow (CFOD), and between return on equity (ROE) and operating income to income costs ratio (OPII). Both correlation coefficients are positive, indicating that values of CFOD and OPII ratios tend to increase when CROE and ROE increase. Considering balance sheet and profit and loss account items used in those ratios calculations, this direction of relation is expected.

4.2. Multivariate analysis

Pooled logistic regression data analysis as multivariate analysis method is used because the dependent variable (revaluation decision) is bivariate and companies are analyzed over several years. Estimated model uses robust standard error clustered by company. The general form of empirical model is:

$$REV_{it} = ß_0 + ß_1*CFOD_{it} + ß_2*FAI_{it} + ß_3*OPII_{it} + ß_4*DR_{it} + ß_5*CROE_{it} + ß_6*CR_{it} + ß_7*ROE_{it} + ß_8*TDD_{it} + ß_9*LSIZ_{it} + e_{it} \quad (1)$$

Revaluation decision (REV_{it} – revaluation decision of the company i in year t) obtains one if the company chooses to revalue upward its assets in the current year and 0 otherwise. Table 4 shows the results for pooled logistic regression analysis on 2,256 company-year observations. As level of indebtedness (DR of the company i in year t), cash return on equity (CROE of the company i in year t) and liquidity are defined as category variables, logit coefficients presented in the table are calculated for each category group.

Table 4: Pooled logistic regression of revaluation decision from 2000 do 2008 in Croatia

Variable	Expected sign	Coefficient	Robust Std.Err.	z	P>|z|
CFOD	-	0.082	0.025	3.22	0.001***
FAI	+/-	-0.561	0.490	-1.15	0.252
OPII	-	-0.001	0.001	-1.57	0.116
DR = 2 (cat.)	-	-0.289	0.242	-1.19	0.233
DR = 3 (cat.)	-	-0.094	0.265	-0.35	0.725
CROE =2 (cat.)	-	-0.445	0.257	-1.73	0.083*
CROE = 3 (cat.)	-	-0.099	0.258	-0.38	0.700
CROE = 4 (cat.)	-	0.210	0.223	0.94	0.347
CR = 2 (cat.)	-	-0.835	0.240	-3.47	0.001***
CR = 3 (cat.)	-	-0.684	0.290	-2.36	0.018**
CR = 4 (cat.)	-	-0.924	0.333	-2.77	0.006***
ROE	+	0.215	0.095	2.27	0.023**
TDD	+	0.028	0.013	2.20	0.028**
LSIZE	+	0.337	0.062	5.46	0.000***
CONSTANT		-6.01	0.881	-6.83	0.000***
Wald χ^2 / Log-pseudolikelihood / Pseudo R^2				96.18*** /	-631.62*** / 0.07
Sample size and % correctly classified					2256 (91.05%)

Notes: *statistically significant at the 0,1 level; ** at 0,05 level; ***at 0,01 level respectively
Source: estimated according to data from authors' data base (2010)

Results presented in the table indicate that the overall model is statistically significant (Wald χ^2 of 96.18 and log-pseudolikelihood of -631.62), with the 91.1% of correct classification. Hosmer and Lemeshow test (χ^2 of 10.07 with p-value of 0.26) also suggests that the model fits the data well, as well as the area under the ROC curve of 0.71 which indicates a good model classification. Calculated multicollinearity tests suggest that collinearity is not serious issue (variance inflation factors are lower than 1.7, and tolerance factors are higher than 0.58). Liquidity (CR of the company i in year t), return on equity (ROE of the company i in year t), debt

growth (TDD of the company *i* in year *t*) and size (LSIZ of the company *i* in year *t*) are statistically significant at 5% level and have predicted signs. It means that large, non-liquid companies with growing debt are more likely to perform upward revaluation. At the same time, these companies have high return on equity what indicates low quality of earnings and great proportion of accruals.

Fixed assets intensity (FAI), operating income to income costs (OPII) and level of indebtedness (DR) and cash return on equity are not found statistically significant at the level of 5%. A change of operating cash flow (CFOD) is statically significant but it does not have a predicted sign. It shows that companies with growing operating cash flow are more likely to revalue their assets, which is in contrary with the remaining results of our research and of previous researches. It can be explained with the fact that the growing operating cash flow does not indicate company's good liquidity. Namely, net cash flow could be negative because a company can have great negative cash flows from financing and investing activities at the same time.

5. CONCLUSION

Many empirical studies in this field have been conducted, but only a few have concentrated on bank-oriented economies with inactive assets' market like Croatia. Therefore, this paper can play an important role in recognizing motives and determinants of asset revaluation policy choice and providing certain contribution in the aforementioned areas. Furthermore, multivariate logistic regression has not been used as a research method in this field of accounting in transition and emerging economies till now. This study examines the motives for asset revaluation decision in Croatian listed companies. It is expected that managers act opportunistically and use upward revaluation to increase perceived borrowing capacity of company as well as to decrease profitability ratio due to political costs. Our findings prove that companies with growing debt, low liquidity ratio and low cash flow ratio are more likely to perform upward revaluations. This revaluation decision can be interpreted as manager's intention to reduce debt cost by improving debt ratios and providing current exit values of fixed assets to creditors. Political factor also have a significant influence on the upward revaluation decision. Large companies with high return on equity will more probably revalue their assets to reduce reported profits and lower political attention of regulators. Summarizing the theoretical and empirical results, the following recommendations can be derived. First, standard setters and accounting regulatory bodies should aim to define fair value accounting of long-term non-financial assets as well as preconditions for revaluation policy choice more precisely to avoid its abuse and creative accounting reporting practices. Second, future researches should aim to explore the impacts of revaluation policy choice on company's financial performance in more detail. In addition, future researches should in particular focus on the use of fair value accounting for assets with underdeveloped or inactive markets to determine the so-called *shadow standards areas*.

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