CONSTRUCTING ACCOUNTING UNCERTAINITY ESTIMATES VARIABLE

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Abstract

This paper presents research results on the BIH firms' financial reporting quality, utilizing empirical relation between accounting conservatism, generated in created critical accounting policy choices, and management abilities in estimates and prediction power of domicile private sector accounting. Primary research is conducted based on firms' financial statements, constructing $CAPC_{BIH}$ (Critical Accounting Policy Choices relevant in B&H) variable that presents particular internal control system and risk assessment; and that influences financial reporting positions in accordance with specific business environment. I argue that firms' management possesses no relevant capacity to determine risks and true consumption of economic benefits, leading to creation of hidden reserves in inventories and accounts payable; and latent losses for bad debt and assets revaluations. I draw special attention to recent IFRS convergences to US GAAP, especially in harmonizing with FAS 130 Reporting comprehensive income (in revised IAS 1) and FAS 157 Fair value measurement. $CAPC_{BIH}$ variable, resulted in very poor performance, presents considerable lack of recognizing environment specifics. Furthermore, I underline the importance of revised ISAE and re-enforced role of auditors in assessing relevance of management estimates.

Introduction

This paper especially concentrates on business risk assessment and its implications on financial reporting, moreover international recommendations, revised MSFI (issued by IASB), revised IAS (issued by IFAC) as well as management abilities in Bosnia and Herzegovina to present financial reports in accordance with changing standards. In last decade, financial reporting has evolved significantly; throughout convergences between FASB and IASB (especially reporting FAS 130, fair value measurement FAS 157), enforcing prediction power and better alignment with business risks and impact on environment.

Established in global financial crises, subprime and big bath accounting, in period 2008 – 2010, Financial Stability Forum (initiated by G7) issued numerous recommendations for local standards setters on Enhancing Market and Institutional Resilience in leading-practice risk disclosures to the public and industry efforts to identify the principles for useful risk disclosures (FSF 2010). In 2007 The International Federation of Accountants (IFAC) conducted survey yielded to 341 responses, aiming in figuring out the results of changes in improving financial statements, in specific, their relevance, reliability and understanding, as well as in determining next steps. Study resulted in lightening major movements and areas of concern in term of financial reporting quality (IFAC 2008, p 28): Reduced usefulness due to complexity, Use of fair value, Focus by companies on compliance instead of reporting on the essence of the business, Regula-

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tory disclosure overload, Difficult and often changing financial reporting standards and Lack of forward looking information.

Following report (IFAC, 2009, p. 25) was conducted in compliance with the study among 74 IFAC members from 59 different countries results among Business Reporting Project Group, in specific, in term of usefulness of financial reports stating:

"[…] the usefulness of financial reports: insufficient reporting on non-financial indicators, risks, and sustainability performance; the unclear link between reporting and an organization's environment and strategy and its implementation; and the use of fair value measurements in current market circumstances. […]".

This conclusion was met in accordance with the progress analysis, conducted on country levels describing levels of jurisdiction alignments by country appealing to feedback on previously issued recommendations (Table 1).

Table 1: Indications of actions in accordance with IFAC recommendations on financial reporting quality improvement (modified by author)

Recommendation (%)	1	2	3	4	5	mean
1. Improve communication to determine what should be reported	15	40	42	2	2	3.67
2. Financial reports more informative including more business-driven information	15	46	34	3	2	3.69
3. Better align internal and external reporting	15	42	35	2	7	3.59
4. Promote use of technology for compilation of own information (i.e. XBRL)	15	38	38	2	8	3.53
5. Encourage short-form financial reporting	18	32	40	2	8	3.50

Legend: 1 - fully addressed, 2 - partially addressed, 3 - will be addressed, 4 – not addressed, 5 – irrelevant

Source: IFAC (2009), modified by author

In term of improving financial reporting, in Bosnia and Herzegovina, two Laws on accounting and auditing on entity levels entered into force as of January 01, 2010. Major supplements to temporary legislations related to financial reporting and financial audit refers to introduction of SME classification scales (e.g. employment, total assets and total revenue) and obligatory annual report conduction. FBIH Law on accounting and auditing (FBIH Official Gazette no. 83/09), Article 40, defines:

"Legal persons should prepare annual reports that present fair picture of its business performance and its financial position, including description of significant risks and uncertainties as well as measures undertaken in environment protection. Annual report should contain: […] (2) judgment on future expected development, (3) core activities in R&D, […] (7) goals and policies in risk assessment, including hedging […]".

Referring to risk assessment and its implications in financial reporting, in accordance with afore mentioned recommendations, while preparing financial reports management should take into account business-driven information and align with internal reporting, assess all relevant risks,

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estimate predictive indicators for future realization of net cash flows (that is also part of new fair value measurement system) and apply those on relevant balance positions. This paper investigates existing methods determining estimates that ensure reasonable assurance on fair and true presentation of business performance and enterprise's position, as well as management capabilities and financial audit requirements in conducting relevant estimates and valuing those.

Accounting Conservatism and Critical Accounting Policy Choices

In primary, accounting conservatism was understood as an effect of a caution (uncertainty) in presenting firms' earnings measured in earnings response coefficient (ERC) or distortion between earnings and returns on investment also called information timelines asymmetry. The higher level of conservatism, higher is implication in ERC asymmetry. Though, many authors argued that accounting conservatism should imply firms' prediction power on future business performance, and, that therefore it should present the interdependence between management acting and accounting theory. Referring to their research on accounting conservatism and management forecasts or amount of disclosures, Wan Hui et al. (2009) conclude:

> '[…] evidence suggests that conservatism reduces the frequency of management forecasts. Our results support the view that conservatism reduces information asymmetry in the market and thus the incentive to disclose additional information. Conservatism also reduces management's expected litigation cost by fully disclosing the impact of bad news in a timely fashion.'

Aligning earnings and implicitly balance sheet positions to business-driven information, directly improves thereby the reporting quality.

Accounting conservatism measures

Primary research in accounting conservatism measures theories resulted in detecting methods relying on assumptions, that the accounting conservatism is subject to accountant's reaction to 'bad news' on capital market against methods considering the accounting conservatism as an internally created mechanism, adjusting financial reporting positions according to subjective business risk assessment.

Methods relying on establishment of interference between capital market and financial reporting explain conservative approach to financial reporting presentation as a result of accounting systems, created to react much quicker on 'bad news' then on 'good news'. For instance, in case earnings per share are expected to decrease, accounting will adjust earnings much quicker as if it would be an opposite case. This assumption is explained in widely spread *asymmetric timeliness of earnings measure* or *differential timeliness theory* (Basu, 1997):

$$\frac{EPS_{it}}{P_{it}} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it} DR_{it} + \varepsilon_{it} \qquad (1)$$

Where: EPS_{it} Earnings per share for firm i year t

P_{it} Opening stock market price for firm i year t

R_{it} Stock markets return for firm i year t

DR_{it} Dummy variable equal to 1 if the stock market return for firm i in year t is negative, and equal to 0 if the stock market return for firm i in year t is non-negative.

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Opposite to *differential timeliness theory*, explaining accounting reactions to capital market fluctuations, *book-to-market ratio measure* (Beaver and Ryan, 2002) presumption is capital market reaction on presented earnings. Authors are comparing book-to-market firm values against regression of Return on Equity (ROE):

$$BTM_{t,i} = \alpha_t + \alpha_i + \sum_{j=0}^{6} \beta_j R_{t-j,k} + \varepsilon_{t,i} \tag{2}$$

Where: $BTM_{t,i}$ Book - to - Market (BTM) ratio of firm i, at the end of year t.
α_t Year-to-year variation in the BTM common to the sample firms
α_i Bias component of BTM for firm i
$R_{t-j,i}$ Return on Equity (ROE) over each of the 6 preceding years
β_j Regression coefficients on $R_{t-j,i}$

Other group of methods explains the accounting conservatism as firm's internally generated prediction of future net operating cash flows. These theories are *asymmetric accrual-to-cash flow measure* (Ball and Shivakumar, 2005), *hidden reserves measure* (Penman and Zhang, 2002), *negative accruals measure* (Gyvoli and Hayn, 2000) and *accounting policy choices based method* (Cotter and Donnely, 2006).

Asymmetric accrual-to-cash flow measure (AACF) presents bias between discounted cash flows and accruals on inventories, accounts receivable, other receivables, accounts payable and other payables (short-term) less amortization. Deviations are explained in term of future cash flows on operating activities predictions. Clearly, AACF might be subject to serious consideration in process of convergence between IFRS and FAS 157, second (return slope) and third level (historical data) of fair value measurement and thereby might be used as future valuation model of all assets and liabilities.

Hidden reserves measure (HR) introduces the 'C score', as a proportion of estimated hidden reserves and net operating assets. Estimated reserves are composite of inventories presented by LIFO, allowed by US GAAP (FAS), brand value intangible and investments into research and development, not capitalized. 'C score' complements to broader accounting considerations in term of R&D recognition and firm's valuation, whereby the firms, investing into R&D and lowering NOPAT, are subject to undervaluation. Implications in Bosnia and Herzegovina could be found in modified laws on accounting and auditing obliging presentation and disclosure of annual reports including R&D positions.

Negative accruals measure (NA) relates to *the residual income valuation model* (RIVM) or, in more concrete, on the fact that accounting tends to defer the recognition of economic gains and accelerate the recognition of economic losses.

Fourth method, relying on firm's internal accounting conservatism creation, *the accounting policy choices* (APC) method considers accounting policies in: capitalization of interest; goodwill written off to reserves; revaluation reserves; capitalization of development expenditures and valuation of quoted investments.

Measuring this way, the accounting conservatism appeals to discretion in choices and mandatory valuations, and as such is used in measuring convergence levels of different accounting standards, for instance FAS (US GAAP) and IFRS and its implications on relevant balance positions. Logic behind, could be found in 20F form for foreign investors listed on US stock exchanges, their accounting principles and financial deviations caused throughout differences in reporting standards.

Special attention should be paid in term of its direct impact of accounting considerations, especially in terms of risk assessment as recommended by IFAC (2009, p. 25). Authors imply the assumption that, by using critical account policy choices, management is enabling *'the cause-effect accounting'* that, in last instance, ensures relevance of internal control system, risk assessment and valuations in term of true and fair presentation of business performance and its position.

Constructing relevant accounting conservatism method in B&H

Analysis of prospective accounting conservatism index for B&H could be shaped from three different angles of accounting and auditing standards and specifics businesses are operating in, namely:

1. IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors .32: *'As a result of the uncertainties inherent in business activities, many items in financial statements cannot be measured with precision but can only be estimated.* […] *For example, estimates may be required of: (a) bad debts; (b) inventory obsolescence; (c) the fair value of financial assets or financial liabilities; (d) the useful lives of, or expected pattern of consumption of the future economic benefits embodied in, depreciable assets; and (e) warranty obligations.'*

2. ISA 540.15: *'For accounting estimates that give rise to significant risks, […] the auditor shall evaluate the following: (a) How management has considered alternative assumptions or outcomes […] or how management has otherwise addressed estimation uncertainty in making the accounting estimate. (b) Whether the significant assumptions used by management are reasonable. (c) Where relevant to the reasonableness of the significant assumptions used by management […], management's intent to carry out specific courses of action and its ability to do so.'*

3. *Low liquidity, slow courts cases, low level of cost management, underdeveloped capital market, and lack in mandatory annual valuations.*

Taking into account uncertainties that understand significant management estimates, CAPC variable (Critical Accounting Policy Choices Index – $CAPC_{B\&H}$) could be consolidated using following regression model:

$$Rev_{\text{accounts payable}} = a_0 + a_1\, \alpha RAP + \varepsilon_1$$
$$Rev_{\text{fixed assets}} = b_0 + b_1\, \beta RFA + \varepsilon_2$$
$$P_{\text{liabilities and losses}} = c_0 + c_1\, \gamma PLL + \varepsilon_3$$
$$Rev_{\text{inventories}} = d_0 + d_1\, \delta RI + \varepsilon_4$$
$$C_{\text{accounts payables \& receivables}} = e_0 + e_1\, \varepsilon C + \varepsilon_5$$
$$I_{\text{capacity utilization}} = f_0 + f_1\, \varepsilon C + \varepsilon_6$$
$$FA_{\text{amortization}} = g_0 + g_1\, \eta FA + \varepsilon_7$$
$$L_{\text{interest accrued}} = h_0 + h_1\, \theta LI + \varepsilon_8$$

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$$CAPC_{growth} = (Rev_{ap} + Rev_{fa} + P_{l\&g} + Rev_i + C_{ap\&c} + I_{cu} + I_{isv} + L_{ia})\, /n\, |CAPC| \qquad (3)$$

Where: $Rev_{\text{accounts payable}}$ Revaluation accounts payable and reserves for open court cases (IAS 18)
$Rev_{\text{fixed assets}}$ Revaluation of fixed assets (IAS 16, IAS 36, IAS 38, IAS 39, and IAS 40)
$P_{\text{liabilities and losses}}$ Reserves for contingent liabilities and future losses
$Rev_{\text{inventories}}$ Revaluation of inventories to direct costing method (IAS 2)
$C_{\text{accounts payables \& receivables}}$: Confirmations on accounts payable and receivable (cut off)

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$I_{\text{capacity utilization}}$ Capacity utilization – assets amortization recognized in inventories (IAS 2)
$FA_{\text{amortization}}$ Depreciation highest non-taxable vs. future economic benefits (IAS 2)
$L_{\text{interest accrued}}$ Capitalization of interest on long-term liabilities
Index range is $0 \leq CAPC_{\text{B\&H}} \geq 1$, whereby 1 implies total absence of management abilities to estimating uncertainties, and index nearing 0 indicates management awareness of business risks, estimates and satisfactory level of prediction power (no bias). Indirectly, it can be concluded that quality of financial reporting is increasing. Many authors argue that higher level of critical accounting policy choices directly proves management prediction power and that enables better 'cause-effect' accounting performance. Parallel to investigating critical accounting policy choices, survey aimed in measuring management accounting analysis intensity: inventories management, cost management, annual plan disclosures, receivables management, liquidity and working capital analysis, result to employee ratios. The result is indexed in MA variable (independent).

Audit Roles in Evaluating Management Estimates

Revised International Standards on Auditing pay special attention on auditor's assurance in judging management estimates - ISAE 3400.2[2]:

'In an engagement to examine prospective financial information, the auditor should obtain sufficient appropriate evidence as to whether: (a) Management's best-estimate assumptions on which the prospective financial information is based are not unreasonable and, in the case of hypothetical assumptions, such assumptions are consistent with the purpose of the information; (b) The prospective financial information is properly prepared on the basis of the assumptions;(c) The prospective financial information is properly presented and all material assumptions are adequately disclosed, including a clear indication as to whether they are best-estimate assumptions or hypothetical assumptions; [...].'

It could be concluded, that external audit will play important role not only in evidencing management estimates, but also in capacity building, concerning accounting policy choices and overall quality of financial statements. Benston (2006) argues that, limiting liabilities to auditor's role in preventing 'income smoothening', 'big bath accounting' and/or balance frauds in general, without risk assessment appropriately determined within accounting standards, leaves significant manipulation space for financial reports creators.
In that regard ISA 3400.6 determines:

'Prospective financial information can include financial statements or one or more elements of financial statements and may be prepared: [...] (b) for distribution to third parties in, for example: A prospectus to provide potential investors with information about future expectations. An annual report to provide information to shareholders, regulatory bodies and other interested parties. A document for the information of lenders which may include, for example, cash flow forecasts. [...]'

Taking into account recent changes in B&H accounting legislation and mandatory presentation of annual reports enclosing risk assessment analysis, external auditors will face new challenges in

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obtaining sufficient evidences confirming reasonable assurance for recognized risks and its implications on relevant balance positions. Some guidance might be found in ISA 315[3], A28.

> *'Examples of matters that the auditor may consider when obtaining an understanding of the entity's objectives, strategies and related business risks that may result in a risk of material misstatement of the financial statements include: Industry developments […], New products and services […], Expansion of the business […], New accounting requirements […], Regulatory requirements […], Current and prospective financing requirements […], Use of IT […], The effects of implementing a strategy, particularly any effects that will lead to new accounting requirements […]'*

Constructing research model on critical accounting policy choices should thereby take into account the assessment of temporary external audit influences on management estimates.

Research method

Hypotheses

It is argued that management in Bosnia and Herzegovina does not possess sufficient ability to create critical accounting policies and that reflect business relations and risks on the market. Correspondingly, financial statements are therefore of insufficient quality, especially in term of predicting future net operating cash flows. Recent changes in accounting relevant legislation propose risk assessment and estimates disclosures within annual reports.

Besides, revised standards on auditing introduce additional requirements for external auditors in obtaining sufficient evidences supporting assurance that management estimates are not misused and any fraud prevented.

The hypotheses that arise from the above arguments can be stated as:

H1 (-): *Firms' management in Bosnia and Herzegovina does not possess sufficient ability in creating relevant critical accounting policies.*

H2 (+): *External audit increases, to certain extent, financial reporting quality throughout accounting estimates, level of accounting conservatism and, in the end effect, prediction power of financial statements.*

Proposition, in case hypotheses are proven, composites necessity in issuance of national recommendations concerning creation of critical accounting policies and auditor's role in judging reasonability of management estimates.

Methodology

The central research focus is in investigating existing application of IFRS in concern to uncertainties and relevant critical policies creation. Furthermore, it is argued that

- Critical accounting policies are not resulting from consistent management accounting techniques application;
- Estimates disclosure is rather poor, taking into account the market specific risk exposure;
- Accounting policies disclosed are not consistently applied in financial reporting cycle (e.g. stating *impairment of assets* does not necessarily mean that the revaluation tests are conducted on annual basis).

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[3] International Standard on Auditing 315: "Identifying and assessing the risks of material misstatement through understanding the entity and its environment" issued by International Federation of Accountants (IFAC) effective for audits of financial statements for periods beginning on or after December 15, 2009.

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Both variables CAPC (critical accounting policy choices) and MA (management abilities in applying valuation techniques) present qualitative considerations within financial reporting. Variables are composited of indices of equal weight, disregarding particular balance position quantitative relevance within existing financial reports. Thereby, the research is limited to presentation to whether or not and to what extent are these two variables interdependent. Respected accurate financial reporting distortion could be drawn from quantitative weight of compared accounting policies discrepancies.

Descriptive statistics

Primary sample is drawn from survey of 178 questionnaires (215 delivered, response rate 83%) from firms across Bosnia and Herzegovina. Table 2 reports descriptive statistics by registration status of surveyed firms, presenting major sample on LLCs (61.2%).

Table 2: Frequency by registration status

		Frequency	Percent	Valid Percent	Cumulative Percent
	plc	29	16.3	16.3	16.3
	llc	109	61.2	61.2	77.5
Valid	craft	30	16.9	16.9	94.4
	other	10	5.6	5.6	100.0
	Total	178	100.0	100.0	

Source: Author's calculation

Additional frequency is presented within existence of external expertise, during conducted audits and/or introduced ISO 9001 or corporate governance code. Primary, it is investigated, whether and to what extent, external audit influenced the risk assessment disclosures and accounting policies improvement.

Table 3: Frequency by external expertise

		Frequency	Percent	Valid Percent	Cumulative Percent
	External audit	77	43.3	43.3	43.3
	ISO 9001	16	9.0	9.0	52.2
Valid	Corporate Governance	4	2.2	2.2	54.5
	None	81	45.5	45.5	100.0
	Total	178	100.0	100.0	

Source: Author's calculation

Revenue change dispersion was analyzed aiming in mapping changes on the market and delivering prospective risk appearance trends (Table 4).

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Table 4: Frequency by annual revenue change in three consequent years

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(50)% and more	2	1.1	1.1	1.1
	(25 – 50)%	4	2.2	2.2	3.4
	(10 – 25)%	7	3.9	3.9	7.3
	to (10)%	12	6.7	6.7	14.0
	Equal	31	17.4	17.4	31.5
	to +10%	51	28.7	28.7	60.1
	+10 - 25%	54	30.3	30.3	90.4
	+25 - 50%	13	7.3	7.3	97.8
	+50% and more	4	2.2	2.2	100.0
	Total	178	100.0	100.0	

Source: Author's calculation

Frequencies in term of registration status and revenue change present relatively real dispersion of market interdependences. Furthermore, 43.3% firms' financial statements were subject to external audit presenting relevant portion in total population in regard to evaluating hypothesis.

Results

Mean values of $CAPC_{BIH}$ sub-indices range between 1.1798 and 1.8427 or re-arranged on scale 0.0000 – 1.000, 0.5899 to 0.92135 (Table 5). Presenting firms capacities in recognizing critical accounting policies, it could be concluded that management is to great extent dealing with confirming accounts payable and accounts liable balances, inventories obsolesce and recognizing bad debts. On the other hand lacking ability is shown in consumption of economic benefits and depreciable assets revaluation.

Table 5: Skew ness of $CAPC_{BIH}$ mean values

Frequency $CAPC_{BIH}$ Mean Skew ness	Bad debts	Depreciable assets revaluation	Contingent liabilities and potential losses	Inventory obsolesce	Cut-off' confirmations	Consumption of economic benefits	Inventories net selling prices	Accrued interests
N Valid	178	178	178	178	178	178	178	178
Mean	1.4101	1.7584	1.6180	1.5449	1.1798	1.8427	1.4045	1.6629
Std. Deviation	.49324	.42924	.48725	.49938	.38508	.36511	.49218	.47405
Skew ness	.369	-1.218	-.490	-.182	1.682	-1.899	.393	-.695
Std. Error of Skew.	.182	.182	.182	.182	.182	.182	.182	.182
Range	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: Authors' calculations

$CAPC_{BIH}$ variable composite mean values 0.6176 (or in average three out of eight policy choices) that implies significantly low level (Table 6) of management accounting policy estimates.

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MA variable scoring at mean value 0.8007 or in average 1.4 out of seven management accounting techniques could be analyzed in way that management is mostly not using any of state-to-art techniques implying capacity consumption and risk assessment.

Table 6: Mean values CAPC and management accounting analysis

	Mean	Std. Deviation	N
CAPC	.6176	.11941	178
MA	.8007	.19977	178

Source: Authors' calculations

Pearson coefficient 0.443, 0.01 significance level (Table 7), implies relatively high interdependence of management accounting techniques used and critical policy choices. It could be argued that one of reasons for lower abilities of management to estimating and predicting future cash flows refers to limited conduction of analysis.

Table 7: CAPC and MA interdependences

		CAPC	MA
CAPC	Pearson Correlation	1	.443**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	2.524	1.870
	Covariance	.014	.011
	N	178	178
MA	Pearson Correlation	.443**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	1.870	7.064
	Covariance	.011	.040
	N	178	178

**. Correlation is significant at 0.01 level (2-tailed)

Source: Authors' calculations

Hypothesis H1 is therefore confirmed in the segment of management estimates inability, both in analyzing of and applying conclusions on financial reporting positions, as well as in creating substantial system of internal controls and that could signal risks and appeal to creation of critical accounting policy choices.

Hypothesis H2, introducing assumption that financial reporting quality increases throughout external auditing, relates to auditing consultancy and its resulting in risk recognition and internal control system enforcements.

Table 8 presents $CAPC_{BIH}$ values and increase from .5524 to .6765 (corresponding to 22.46%). It is evidenced that external audit influences risk recognition and management estimates abilities, mostly throughout reporting and counselling during audit conduction.

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Table 8: External expertise to CAPC$_{BIH}$

CAPC			
	Mean	N	Std. Deviation
External audit	.5524	77	.10869
ISO 9001	.7596	16	.10811
Corporate Governance	.6289	4	.06894
None	.6765	81	.09634
Total	.6176	178	.11941

Source: Authors' calculations

ANOVA linearity .586 and Pearson coefficient .482 (Table 9 and 10) implies average significant levels of CAPC$_{BIH}$ changes in interdependence with existing external expertise.

Table 9: ANOVA linearity of CAPC$_{BIH}$ to external expertise

		Sum of Squares	Df	Mean Square	F
Between Groups	(Combined)	.694	3	.231	21.999
	Linearity	.586	1	.586	55.683
	Deviation from Linearity	.108	2	.054	5.157
Within Groups		1.830	174	.011	
Total		2.524	177		

Source: Author's calculation

Table 10: Measures of association

	R	R Squared	Eta	Eta Squared
	.482	.232	.524	.275

Source: Author's calculation

Calculated significance levels can be accepted and hypothesis H2 proven to extent that financial audit is slightly improving financial reporting quality in segment of accounting conservatism. Furthermore, recent changes in ISA including revised ISAE, appeal to increased auditors' role in risk assessment process.

Conclusions

This paper argues firms' management inability to apply accounting standards setters' recommendations relating to uncertainties. Accounting conservatism is proposed to be key measure for financial reporting quality.

Among seven mapped conservatism measures, it is concluded that accounting policy choices could be taken for constructing dependent variable as it is a 'cause-effect accounting' method explaining firms' reaction to uncertainties and prediction of future cash flows. Recently revised IAS 1 introducing fair value of all assets and liabilities based on expected cash in- and outflows

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for same (level 1) or similar (level 2) positions adds on to my assumptions. Critical accounting policy choices determining process of estimates and their implications in financial reporting are taken as central navigating tool of internal control system. Assumptions based on relevant facts in Bosnia and Herzegovina, such as high illiquidity, slow and uncertain court cases, and weak consumption measurement, were used in proposing set of relevant accounting policies. It is evidenced that firms' management uses in average three out of eight proposed critical accounting policies. Supplementary, only 1.4 out of seven management accounting techniques are used in risk assessment process. It implied that management does not have sufficient capacity to obtain all business risks and that lowers quality of financial reporting.

It is argued that inherent risk in B&H is rather low and auditors' opinion is affected to great extent throughout assessment of management estimates. It is evidenced that audited firms in average posses 22% higher sensibility towards uncertainty estimates.

Based on empirical evidences and research conclusions, an issuance of guidance in term of creating critical accounting policies is considered necessary within an alignment to firm's annual report, i.e. list of declaratively recognized risks disclosed therein.

Presented considerations relate to firms' internally considered financial reporting quality. Supplementary research could be conducted among investors and lenders, investigating their point of view on how the potential accounting regulation changes and regulations implementation quality might influence the risk mitigation in decision making process.

The further research implications might be in developing, and correlating, two measures, i.e. disclosure quality measure (weighted by investors' and lenders' needs) and investors' and lenders' risk measure, embodied in average market price volatility.

References

Ahmed, A. S., Morton R. M., Schaefer, T. F. (2000). Accounting Conservatism and the Valuation of Accounting Numbers: Evidence of the Feltham-Ohlson (1996) model, *Journal of Accounting, Auditing & Finance,* 15 (3), 271.

Andreas, H. H., Andreas, W. (2006). Comparative Analysis of Strategic Management Accounting, *Schmalenbach Business Review, vol. 58,* July 2006, 234-258.

Ball, R., Shivakumar, L. (2005). Earnings Quality in UK Private Firms: Comparative Loss Recognition Timeliness, *Journal of Accounting and Economics* 39 (1), 83-128.

Ball, R., Kothari, S. P. (2007). Econometrics of the Basu Asymmetric Timeliness Coefficient and Accounting Conservatism, *Working paper, University of Chicago and Massachusetts Institute of Technology.*

Basu, S. (1997). The Conservatism Principle and the Asymmetric Timeliness of Earnings. *Journal of Accounting and Economics,* 24 (1), 3-37.

Benston, G. J. (2006). Fair-Value Accounting: A Cautionary Tale from Enron. *Journal of Accounting and Public Policy,* 25 (4), 465-484.

Bewley, K. et al (2009). Evidence on the Economic Consequences of Fraudulent Forecasts used in Accounting Estimates of Financial Reporting. *York University.*

Cristensen, H., Nikolaev, V. (2009). Who Uses Fair Value Accounting for Non-Financial Assets after IFRS Adaptation? *University of Chicago Booth School of Business, Working paper No. 09-12.*

Gietzmann, M. B., Trombetta, M. (2001). Disclosure Interactions: Accounting Policy Choice and Voluntary Disclosure Effects on the Cost of Capital, *University of Bristol & Carlos III University.*

73

Financial Internet Quarterly „e-Finanse" 2012, vol. 8, nr 3
www.e-finanse.com
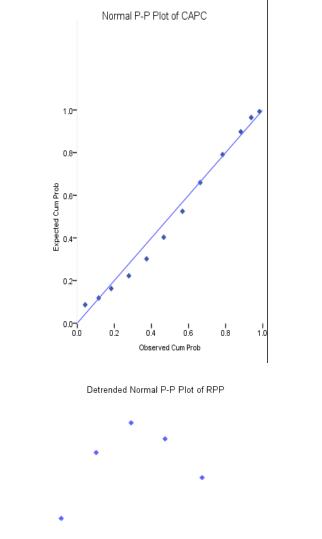University of Information Technology and Management
Sucharskiego 2,
35-225 Rzeszów

Givoly, Hayn (2000). The Changing Time Series Properties of Earnings, Cash Flows and Accruals: has Financial Reporting Become More Conservative. *Journal of Accounting and Economics, June 2000*, Vol. 29/3, 287-320.

Financial Stability Forum – FSF (2010). Thematic Review on Risk Disclosures by Market Participants, Obtained from: http://www.financialstabilityboard.org/press/pr_100721.pdf*, (accessed: August 04, 2010).*

FBIH Official Gazette 83/09 (2009). FBIH Law on Accounting and Auditing, ISSN 1512-7079, Obtained from: http://www.sllist.ba/secure/2009s/federacija/broj83/broj83.htm, *(accessed: March 26, 2010).*

IFAC (2008). Handbook of International Auditing, Assurance, and Ethics Pronouncements, 2008. Edition (Part I and Part II), ISBN: 978-1-934779-06-4. Obtained from: http://web. ifac.org/publications/international-auditing-and-assurance-standards-board, *(accessed: August 12, 2010).*

IFAC (2009). Financial Reporting Supply Chain, Current Perspectives and Directions, http:// web.ifac.org, *(accessed August 12, 2010).*

IFAC (2009). Developments in the Financial Reporting Supply Chain - Results from a Global Study among IFAC member Bodies, ISBN: 978-1-934779-89-7. Obtained from: http://web. ifac.org/publications, *(accessed: September 02, 2009).*

Kothari, S. P. (2000). The Role of Financial Reporting in Reducing Financial Risks in the Market, [In:] Eric Rosengren and John Jordan (editors). *Building an Infrastructure for Financial Stability (Federal Reserve Bank of Boston).*

Mrsa, J. (2010). Nova Rješenja u Međunarodnom Financijskom Izvještavanju, *Zbornik Rada Sa XI Međunarodnog Simpozija "Evropski put BIH u Funkciji Razvoja"*. ISBN 978-9958-757-25-9, COBISS.BH-ID 18074118.

Srivastava, A., Senyo, Y. Tse. (2009). A New Approach to Measuring Accounting Conservatism and the Contribution of Accelerated Loss Recognition vs. Delayed Gain Recognition to Trends in Conservatism. *Department of Accounting, Mays Business School, Texas A&M University, 4353 TAMU.*

Sterling, R. R. (1967). Conservatism: The Fundamental Principle of Valuation in Traditional Accounting. *Abacus*, 3 (2), 109-132.

Watts, R. L. (1993). A Proposal for Research on Conservatism. *Working paper, University of Rochester (presented on American Accounting Association national meeting in San Francisco, CA).*

Watts, R. L. (2003). Conservatism in Accounting, Part I: Explanations and Implications. *William E. Simon Graduate School of Business Administration The Bradley Policy Research Centre Financial Research and Policy Working Paper No. FR* 03-16.
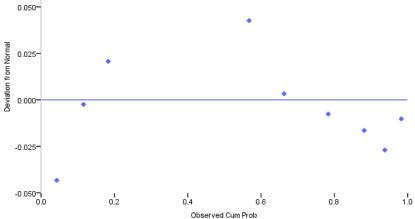
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Annex - Normal CAPC_{BIH} P – P plot distribution

Estimated Distribution Parameters		
		CAPC
Normal Distribution	Location	.6176
	Scale	.11941

Normal P-P Plot of CAPC

Detrended Normal P-P Plot of RPP