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**IAS 38 DISCLOSURE COMPLIANCE
BY CZECH LISTED COMPANIES**

Abstract: This paper tests empirically the compliance with IAS 38 disclosure requirements by Czech listed companies. Using a dataset of financial and non-financial firms from the period 2008–2017, we have documented a moderate increase in disclosure quality of the sample firms over the period. Consistently with recent research, the evidence of improvement can be attributed to reporting incentives of the firms, acknowledging the importance of the capital market to raise capital and, thus, to deliver useful information to the users of financial statements. However, the analysis reveals heterogeneity in the level of compliance across the firms, depending on a company's auditor and their ownership structure. Other investigated determinants, such as industry and country of origin of the issuer, are not found as being relevant.

Keywords: disclosure quality; IAS 38; Czech listed firms.

JEL codes: M41.

**MSR 38 ZGODNOŚĆ UJAWNIEŃ PRZEZ CZESKIE SPÓŁKI
NOTOWANE NA GIEŁDZIE**

Streszczenie: W artykule zaprezentowano wyniki badania empirycznego dotyczącego zgodności informacji ujawnianych przez czeskie spółki giełdowe z wymogami MSR 38. Na podstawie danych spółek finansowych i niefinansowych z okresu

2008–2017 zauważono umiarkowany wzrost jakości ujawniania badanych spółek w tym okresie. Badania wykazały, że poprawę w zakresie ujawniania informacji zgodnie z wymogami MSR 38 należy przypisać rosnącej roli rynku kapitałowego dla pozyskiwania kapitału, a tym samym dostarczania użytecznych informacji użytkownikom sprawozdań finansowych. Jednak przeprowadzona analiza ujawniła niejednorodność poziomu zgodności w spółkach, w zależności od audytora spółki i jej struktury własności. Inne badane determinanty, takie jak przemysł i kraj pochodzenia emitenta, zostały uznane za nieistotne.

Słowa kluczowe: jakość ujawnienia, MSR 38, czeskie spółki giełdowe.

Introduction

Intangible assets are the main drivers of value creation and the competitive advantage of many firms across all industries (Kaufmann & Schneider, 2004). Despite the importance of intangibles in economy increases (Basu & Waymire, 2008), their recognition in corporate balance sheets is restricted (Zéghal & Maaloul, 2011). Conventional accounting struggles with the reliability of their measurement as well as with the uncertainty of their future economic benefits (see e.g. IAS 38), despite the intangibles reporting provides users with value-relevant information (Wyatt, 2008). Inadequate reporting can be substituted by voluntary disclosures (Wyatt, 2005; Skinner, 2008), but it requires the vital reporting incentives of companies (Oliveira, Rodrigues, & Craig, 2006).

The literature on intangible assets is rich and it covers a wide range of items, from the “traditional” intangibles such as software, patents, R&D over goodwill arising in business combinations to current “hot” topics such as human capital, organisational or intellectual reporting. The studies have investigated the impact of recognition, measurement, or the disclosure of intangible assets on value-relevance, decision-effectiveness and allocation of resources, or productivity and growth (Zéghal & Maaloul, 2011). The differences in reporting and disclosures can be explained by firm-specific factors relating to their economic characteristics (age, size, industry, capital structure, technology cycle length), ownership structure and concentration, listing status as well as by external influences such as auditor quality or property-rights-related factors (Oliveira et al., 2006; Wyatt, 2005).

Since the seminal work of Aboody & Lev (1998) there is evidence of the value relevance of information about intangibles for investors, including information about amounts being expensed compared to amounts being capi-

talised. IFRS adoption is another important feature, generally increasing the usefulness of accounting information about intangibles (Chalmers, Clinch, & Godfrey, 2008; Oliveira, Rodrigues, & Craig, 2010). The reason for an improved value relevance of intangibles under IFRS can be twofold. Firstly, IAS 38 (and IFRS 3 in the case of goodwill) are relatively well-developed standards, compared to many national GAAP. The users of financial statements are then better capable of understanding what type of information is presented on the balance sheet, even though IAS 38 is somehow restrictive in the recognition of internally generated intangibles assets. However, IAS 38 requires extensive disclosures about accounting policies, amortisation as well as about expensed outlays on internally generated intangibles. The compliance (or non-compliance) with extensive disclosures can be the second factor of increase (or decrease) of value relevance after IFRS adoption, as evidenced by the general research of IFRS disclosure quality (Hodgdon, Tondkar, Harless, & Adhikari, 2008; Glaum, Schmidt, Street, & Vogel, 2013; Verriest, Gaeremynck, & Thornton, 2013; Cascino & Gassen, 2014).

The extent of compliance with IAS 38 disclosure requirements is examined by Devalle, Rizzato, & Busso (2016) in the case of the Italian capital market. A broader approach covering 23 countries (developed and some of the BRICS countries) is taken by Tsalavoutas, André, & Dionysiou (2014) who find significant cross-sectional differences at country- and industry-level. However, gathering evidence from transiting or emerging countries is undervalued (Al-Hamadeen, Alshairi, & Qaqish, 2017). This paper focuses therefore on the reporting of intangible assets by companies listed on the Prague Stock Exchange. The Czech Republic is classified as a developed country (as it is, e.g., an OECD member) yet suffering from certain institutional deficiencies because of incomplete transition from the command to a market economy. The Czech capital market is relatively small (Procházka & Pelák, 2015), but its importance from the issuers' perspective is steadily increasing (Tuzarová & Mejzlík, 2018) and is comparable to developed countries. A recently growing investors' pressure have had a positive impact on the quality of financial statements in terms of disclosure quality (Ašenbrenerová, 2016; Knorová, 2016; Dvořák, 2017; Hospodka, 2018). Furthermore, it may affect the figures being reported on financial statements to transmit the signals about the well-being of a company (Barron, Byard, Kile, & Riedl, 2002). The aim of the paper is therefore to investigate the level of compliance with the disclosure requirements of IAS 38 on the Czech capital market.

The paper is organised as follows. The introduction builds up the motivation for the paper and states its goal. The second part presents dataset

and derives the methodology used for the testing of the hypotheses. The next section reports and discusses the main results of an empirical analysis. The final section summarises the main findings and suggests the direction of future research.

1. Data and methodology

1.1. Hypothesis

Previous research indicates that IFRS adoption is not a smooth process resulting into desirable effects automatically. A successful shift requires both reporting the incentives of companies (Ball, Robin, & Wu, 2003; Christensen, Lee, & Walker, 2008; Daske, Hail, Leuz, & Verdi, 2013) and the appropriately functioning of the enforcement regime (Hitz, Ernstberger, & Stich, 2012; Christensen, Lee, Walker, & Zeng, 2015). Deficiencies are found especially in emerging or transiting countries (Hellström, 2006; Filip & Raffournier, 2010; Djatej, Gao, Sarikas, & Senteney, 2011), yet with certain advances in recent years, e.g., documented in the Czech Republic by (Honková, 2015; Dvořák, 2017; Tuzarová & Mejzlík, 2018). The transfer of knowledge and best practices from the multinational parent companies from developed countries can be one of the determinants of the improvement (N. Albu, Lupu, & Sandu, 2014; Procházka, 2017). However, local pressures may contribute to the increase in accounting quality as well (C. N. Albu, Albu, & Alexander, 2014; Grabinski, Kedzior, & Krasodomaska, 2014). Based on the literature review, we state the hypothesis as follows.

H: The level of disclosure compliance on the Czech capital market improves over time and is conditional on firm-specific factors (such as auditor, owners' type, owners' domicile, issuers' domicile, and issuers' industry).

1.2. Sample

The sample consists of companies with shares or bonds being traded on the Prague Stock Exchange. The sample covers companies in the period 2008–2017. The beginning of the period starts three years after mandatory IFRS adoption to eliminate any negative effect of lower preparation for and of insufficient knowledge of IFRS around the adoption deadline. A 10-year period is chosen to assess the development over the time appropriately. Because of the small size of the Czech capital market and relatively long-period of investigation, the sample is comprised of 21 firms (10 financial

Table 1. Descriptive statistics

N-financial	Intangibles	Assets	Share-INT	Equity	Revenue	EAT	ROE (%)
min	36	83.661	0.00	67.789	21.259	4.826	3.06
median	979	532.165	0.28	255.303	169.296	53.846	12.35
max	542.835	24.518.677	35.41	9.957.792	7.941.504	742.326	39.05
mean	109.813	3.172.802	4.19	1.394.553	1.541.865	156.993	15.78
sd	213.840	7.549.876	11.00	3.060.707	2.719.675	234.642	13.02
Financial	Intangibles	Assets	ShareINT	Equity	Revenue	EAT	ROE (%)
min	78	1.281.402	0.01	90.955	18.637	7.831	4.84
median	92.765	21.526.000	0.44	2.028.000	714.683	244.000	11.68
max	404.855	52.044.753	1.12	6.043.949	8.509.562	685.826	18.69
mean	126.318	25.574.039	0.46	2.502.401	1.548.816	292.168	11.05
sd	122.393	19.892.147	0.32	1.902.518	2.464.707	237.723	4.16

Note: Intangibles = all intangible assets other than goodwill; ShareINT = share of intangible assets on total assets; EAT = Earnings after Taxation; ROE = Return on Equity (EAT / Equity).

Source: Authors' calculation.

institutions and 11 non-financial companies) and, thus, 210 firm-year observations. The descriptive statistics are presented in Tab. 1.

1.3. Methodology

To assess the disclosure compliance, the financial statements of the sample companies are investigated to find out whether they contain information required by the following provisions of IAS 38 (plus a general description required by IAS 1). The disclosure requirements are presented in Tab. 2.

Table 2. Disclosure requirements of IAS 38

IAS1.117	General description of accounting policies for intangible assets
IAS38.118a	Whether the useful lives are indefinite or finite and, if finite, the useful lives or the amortisation rates used
IAS38.118b	The amortisation methods used for intangible assets with finite useful lives
IAS38.118c	The gross carrying amount and any accumulated amortisation (aggregated with accumulated impairment losses) at the beginning and end of the period

Table 2 – cont.

IAS38.118d	The line item(s) of the statement of comprehensive income in which any amortisation of intangible assets is included
IAS38.118e ^a	A reconciliation of the carrying amount at the beginning and end of the period showing:
i	additions, indicating separately those from internal development, those acquired separately, and those acquired through business combinations
ii	assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals
iii	increases or decreases during the period resulting from revaluations under paragraphs 75, 85 and 86 and from impairment losses recognised or reversed in other comprehensive income in accordance with IAS 36 (if any)
iv	impairment losses recognised in profit or loss during the period in accordance with IAS 36 (if any)
v	impairment losses reversed in profit or loss during the period in accordance with IAS 36 (if any)
vi	any amortisation recognised during the period
vii	net exchange differences arising on the translation of the financial statements into the presentation currency, and on the translation of a foreign operation into the presentation currency of the entity
IAS38.126	An entity shall disclose the aggregate amount of research and development expenditure recognised as an expense during the period

^a IAS38.118e contains also a requirement under (viii) “other changes in the carrying amount during the period”. As other changes are hardly identifiable, this requirement is not included in the disclosure index.

Source: IASB’s IAS 1 and IAS 38.

In total, the fulfilment of 13 disclosure requirements (further “DR”) is investigated in the notes to the financial statements. Each DR can be coded either as “D” (information required is Disclosed, or “NR” (information required is Not Relevant for the company), or “ND” (information required is relevant for the company, yet it is Not Disclosed). A typical example of “ND” is the requirement of IAS38.118e(iii) on the disclosure of changes in fair value under the revaluation model. If the cost model is solely applied by an entity, this disclosure is not relevant. On other hand, if the revaluation model is applied, but information about the increases and decreases is missing, then the DR is coded as “NA”.

For each year-firm observation, we calculate a disclosure index (further *DI*). Consistently with previous research, e.g., Street & Gray (2002), Hodgdon et al. (2008), Glaum et al. (2013), we use an unweighted disclosure in-

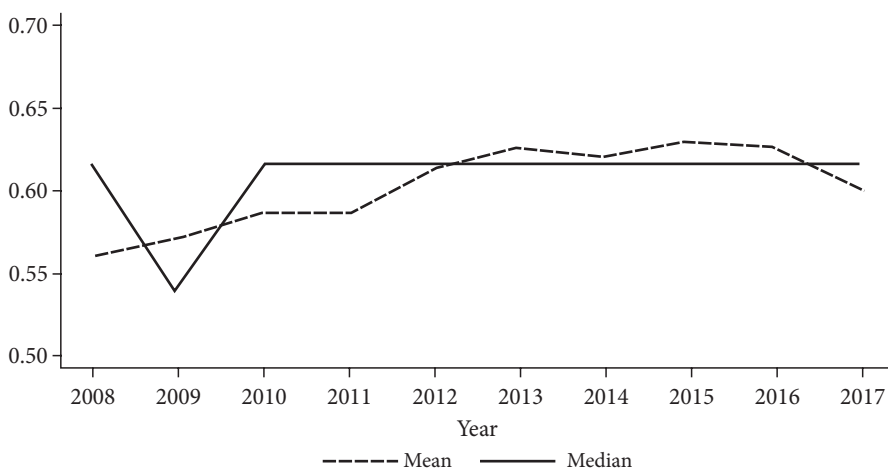
dex which is calculated by dividing the number of the provided disclosures by the number of all applicable disclosures (Eq. 1):

$$DI_{j,t} = \frac{\sum_{i=1}^{13} D_{i,j,t}}{\sum_{i=1}^{13} D_{i,j,t} + \sum_{i=1}^{13} NR_{i,j,t} + \sum_{i=1}^{13} D_{i,j,t}} = \frac{\sum_{i=1}^{13} D_{i,j,t}}{13}. \quad \text{Eq. 1}$$

2. Results and discussion

2.1. Intertemporal development

Figure presents the disclosure quality and its evolution during the examined period. The average value of *DI* measured by its mean (violet colour) is 0.560 in 2007 and it rises steadily up to 0.630 in 2013 and 2015, followed by a moderate reduction to 0.601 in 2017. The improvement can be identified approximately in the middle of the period investigated, confirming, thus, the findings of previous studies which document an increased level of disclosure in recent years (Ašenbrenerová, 2016; Knorová, 2016;



Source: Authors' calculation.

Dvořák, 2017; Hospodka, 2018). If the median (orange colour) is taken into account, it produces a comparable compliance level, however with more stable movements. The line reveals a tendency of “average firms” to disclose the required information persistently in the same format, i.e. to use the same template of the notes as in the previous year.

2.2. Cross-sectional variability

Statistical significance of the differences regarding explanatory variables of interest is tested by non-parametric tests. In particular, we run the one-way ANOVA tests (Welch- and White-correction to control for heteroscedasticity across respective groups). If statistically significant differences are found, the post-hoc Games-Howell test is performed for pairwise multiple comparisons to identify the main sources of within-the-groups differences. As the Games-Howell test is not conditioned by equal variances and sample sizes, it is used instead of the Tukey honest significant differences test. A similar breakdown procedure is also processed, when inspecting the heterogeneity in medians through the Mood’s median test and the Brown-Mood median test¹ along with their post-hoc pairwise comparison tests.

The results of the ANOVA tests and median tests for all relevant factors are shown in Tab. 3. The tests indicate that auditors have an impact on the level of compliance with DRs (measured both via mean and median). The same applies for owners’ domicile and type. On the other hand, the entity industry or its domicile are not relevant factors.

Table 3. shows that auditor firm matters regarding an entity’s compliance, which corresponds with the differences in medians and means presented in Tab. 4. As it can be seen, contracting a non-Big4 auditor results in superior disclosure quality. Such a surprising outcome may, however, be caused by the fact that this type of auditors assures the financial statements of relatively small firms, for which it is easier to comply with DRs. EY and KMPG perform comparably to non-Big4 firms; Deloitte and PwC are the worst.

However, the post-hoc pairwise tests are needed to confirm the existence of statistically significant differences. The posterior analysis of the ANOVA test, using the Games-Howell test, is presented in the Panel A of

¹ Two tests for means as well as two tests for medians are run to ensure the robustness of the results.

Table 3. Mean and median tests summary

Test	Auditor	Owners' domicile	Ownership type	Entity industry	Entity domicile
ANOVA Welch	F = 9.963	F = 10.324	F = 13.658	F = 0.298	F = 3.668
	p = 0.000	p = 0.000	p = 0.000	p = 0.585	p = 0.060
ANOVA White	F = 9.893	F = 10.331	F = 13.479	F = 0.295	F = 3.587
	p = 0.000	p = 0.000	p = 0.000	p = 0.587	p = 0.059
Mood's median	$\chi^2 = 33.076$	$\chi^2 = 23.159$	$\chi^2 = 14.468$	$\chi^2 = 0.276$	$\chi^2 = 0.624$
	p = 0.000	p = 0.000	p = 0.002	p = 0.599	p = 0.429
Brown-Mood	$\chi^2 = 32.918$	$\chi^2 = 23.049$	$\chi^2 = 14.399$	$\chi^2 = -0.667$	$\chi^2 = 0.970$
	p = 0.000	p = 0.000	p = 0.002	p = 0.565	p = 0.366

Source: Authors' calculation in R.

Table 4. Variability across Auditor

Auditor	Min	Median	Max	Mean	SD
Deloitte (n = 46)	0.000	0.538	0.846	0.532	0.173
EY (n = 63)	0.538	0.615	0.846	0.648	0.115
KPMG (n = 44)	0.385	0.692	0.923	0.654	0.121
PwC (n = 27)	0.231	0.538	0.692	0.464	0.188
Other (n = 30)	0.462	0.654	0.769	0.659	0.115

Source: Authors' calculation.

Table 5. The post-hoc tests reveal the existence of significant differences for six pairs. In particular, the compliance with the DRs of IAS 38 is lower when financial statements are audited by the Deloitte Company, compared to EY, KPMG and non-Big4 firms. There is no statistically significant variance in the Deloitte and PwC influence on disclosure quality. In a similar way, PwC is outperformed by EY, KPMG and non-Big4 firms as well. The post-hoc pairwise tests support the preliminary findings based on a simple outcome of intra-group differences in means.

Regarding the post-hoc tests for pairwise differences in medians, we use three types of corrections (Bonferonni, Holm, and FDR) of the p-value be-

cause of heterogeneity in variance across the subgroups.² The Panel B of Tab. 5 presents the conclusion from the analysis.³ All three methods arrive at comparable findings. In the case of eight pairs, the conclusions of all methods are the same; only for the pairs PwC-EY and Other-KPMG can inconsistency be found. The Holm corrected p-values of pairwise differences in medians have the same outcomes as the Games-Howell tests for means; the remaining two methods differ in one pair.

Table 5. Post-hoc Games-Howell test and Pairwise Mood's median test for Auditor

PANEL A	DIFF	t-test	p-value	PANEL B	Bonferri	Holm	FDR
EY-Deloitte	0.116	3.964	0.001	EY-De-loitte	yes	yes	yes
KPMG-De-loitte	0.122	3.890	0.001	KPMG-Deloitte	yes	yes	yes
Other-De-loitte	0.127	3.842	0.002	Other-Deloitte	yes	yes	yes
PwC-De-loitte	-0.067	1.527	0.549	PwC-Deloitte	no	no	no
KPMG-EY	0.006	0.242	0.999	KPMG-EY	no	no	no
Other-EY	0.011	0.419	0.993	Other-EY	no	no	no
PwC-EY	-0.184	4.723	0.000	PwC-EY	no	yes	yes
Other-KPMG	0.005	0.182	0.999	Other-KPMG	no	no	yes
PwC-KPMG	-0.189	4.684	0.000	PwC-KPMG	yes	yes	yes
PwC-Other	-0.195	4.655	0.000	PwC-Other	yes	yes	yes

Source: Authors' calculation.

² The Bonferroni correction calculates the p-values by multiplying them by the number of comparisons. The Holm correction also controls the family-wise error rate, but not as strictly as Bonferroni. The FDR method (of Benjamini & Hochberg) controls the false discovery rate (the expected proportion of false discoveries amongst the rejected hypotheses). This approach is less stringent than the family-wise error rate methods, and shall, thus, be more powerful (Mangiafico, 2016).

³ The exact values of basic p-values and adjusted p-values are not presented because of space restriction. Instead of these p-values, inferences about the non/existence of differences based on a compact letter display are made (Mangiafico, 2016).

The second explanatory variable in question is the country origin⁴ of the main (controlling) shareholder of the Czech listed companies. Based both on mean and median, the superior disclosure compliance is reached if the owners are domestic (i.e. with Czech origins). The lowest disclosure quality measured by *DI* is evidenced for the Czech issuers with owners from other countries (in the case of mean), respectively with German parent companies (in case of median). As the situation is not clear-cut, more insights can be obtained once again by performing the post-hoc tests.

Statistically significant differences in *DI* influenced by the owners' domicile are detected only for three pairs, namely the issuers with local domestic owners disclose the required information to a greater extent than firms with controlling owners from the German and Latin area or from other countries. The same observation of the differences for these three pairs is spotted for medians, when all three correction methods yield the same conclusion.

Table 6. Variability across Owners' country domicile

Owner	Min	Median	Max	Mean	SD
Domestic (n = 55)	0.462	0.692	0.846	0.688	0.108
Francophone (n = 40)	0.000	0.577	0.846	0.577	0.209
German (n = 44)	0.462	0.538	0.692	0.580	0.077
Latin (n = 36)	0.385	0.615	0.769	0.583	0.100
Other (n = 35)	0.231	0.615	0.923	0.541	0.221

Source: Authors' calculation.

Table 7. Post-hoc Games-Howell test and Pairwise Mood's median test for Owner's domicile

PANEL A	DIFF	t-test	p-value	PANEL B	Bonferri	Holm	FDR
FRA-Domestic	-0.111	3.077	0.026	FRA-Domestic	no	no	no
GER-Domestic	-0.108	5.787	0.000	GER-Domestic	yes	yes	yes
Latin-Domestic	-0.105	4.742	0.000	Latin-Domestic	yes	yes	yes

⁴ Domestic = Czechia; Francophone = France, Belgium; German area = Germany, Austria; Latin = Italy, Spain; Other = Poland, Russia + other non-EU countries.

Table 7 – cont.

PANEL A	DIFF	t-test	p-value	PANEL B	Bonferri	Holm	FDR
Other-Domestic	-0.147	3.676	0.006	Other-Domestic	yes	yes	yes
GER- FRA	0.003	0.096	1.000	GER-FRA	no	no	no
Latin- FRA	0.006	0.174	1.000	Latin-FRA	no	no	no
Other-FRA	-0.036	0.727	0.949	Other-FRA	no	no	no
Latin-GER	0.003	0.152	1.000	Latin-GER	no	no	no
Other-GER	-0.040	1.014	0.848	Other-GER	no	no	no
Other-Latin	-0.043	1.045	0.833	Other-Latin	no	no	no

Source: Authors' calculation.

The third explanatory variable is the ownership type.⁵ The highest *DI* (both mean and median) is recorded for the companies under state ownership which witnesses about the influence of political ties on a better disclosure policy. This finding contradicts the previous evidence by Chaney, Faccio, & Parsley (2011).

Table 8. Variability across Ownership type

Ownership	Min	Median	Max	Mean	SD
Industry (n = 136)	0.231	0.615	0.923	0.589	0.149
Managers (n = 31)	0.000	0.538	0.769	0.536	0.213
State (n = 20)	0.538	0.769	0.846	0.738	0.101
Other (n = 23)	0.538	0.615	0.769	0.649	0.056

Source: Authors' calculation.

For Ownership type, the post-hoc tests for the mean provide partly distinct outcomes than the post-hoc tests for the median (see Tab. 9). Five pairs (except for Managers-Industry) are found to have statistically signifi-

⁵ Industry = parent company from the same/related industry; Managers = company owned by its managers; State = government ownership; Other = dispersed ownership, institutional investors, etc.

cant differences in means. However, only three pairs (always with the superior disclosure quality of state-owned firms) are identified with statistically significant differences in medians. The more restrictive results for the medians are the consequence of lower frequency of observations for other ownership types than “Industry”.

Table 9. Post-hoc Games-Howell test and Pairwise Mood’s median test for Ownership type

PANEL A	DIFF	t-test	p-value	PANEL B	Bonferri	Holm	FDR
Managers-Industry	-0.053	1.304	0.566	Managers-Industry	no	no	no
Other-Industry	0.060	3.465	0.005	Other-Industry	no	no	no
State-Industry	0.150	5.763	0.000	State-Industry	yes	yes	yes
Other-Managers	0.113	2.811	0.038	Other-Managers	no	no	no
State-Managers	0.202	4.547	0.000	State-Managers	yes	yes	yes
State-Other	0.090	3.524	0.008	State-Other	yes	yes	yes

Source: Authors’ calculation.

Table 10. Variability across Entity industry and Entity domicile

Entity industry	Min	Median	Max	Mean	SD
Financial (n = 110)	0.385	0.615	0.846	0.608	0.108
Non-financial (n = 100)	0.000	0.615	0.923	0.595	0.199
Entity domicile	Min	Median	Max	Mean	SD
Czechia (n = 170)	0.231	0.615	0.923	0.613	0.152
Foreign (n = 40)	0.000	0.615	0.692	0.556	0.173

Source: Authors’ calculation.

As the sample is relatively small, we distinguish only two industries: financial and non-financial sector. Tab. 10 (upper panel) indicates that there is no substantial margin between disclosure quality of financial and non-

Table 11. Post-hoc Games-Howell test and Pairwise Mood's median test for the Entity industry and Entity domicile

PANEL A	DIFF	t-test	p-value	PANEL B	Bonferri	Holm	FDR
Fin-NonFin	-0.012	0.546	0.585	Fin-NonFin	no	no	no
PANEL C	DIFF	t-test	p-value	PANEL D	Bonferri	Holm	FDR
Czech-Foreign	0.057	1.915	0.060	Czech-Foreign	no	no	no

Source: Authors' calculation.

financial firms. This finding is confirmed by the post-hoc tests presented in Tab. 11 (Panel A&B).

Regarding the domicile of issuers, only four companies in the sample are not Czech firms. Disclosure level is the same, if it is measured by the *DI* median, and slightly better for Czech firms if the *DI* mean is preferred. However, the subsequent analysis (Tab. 11, Panel C&D) is unable to detect any statistical significance of this difference.

Conclusions

The paper extends current research focusing on the quality of published IFRS statements by investigating the disclosure compliance with IAS 38 requirements by firms listed on the Czech capital market. Our analysis over the period 2008-2017 shows that the disclosure quality is steadily increasing which corresponds with recent studies on the importance of the Prague Stock Exchange for existing issuers. Compared to previous studies of the Czech capital market, the level of disclosure compliance with IAS 38 is considerably better than in the case of, for example, revenue recognition (Knorová, 2016) or IFRS 11 disclosures (Ašenbrenerová, 2016) and comparable with other investigations (Dvořák, 2017) or (Hospodka, 2018). The explanation of variations in disclosure quality across various IASB's standards may be grounded on the distinct reporting incentives of companies, when considering (not) to provide certain information to users. Similarly, auditors may not pay equal attention to all areas of the disclosures.

To reveal the determinants of disclosure quality, we extend previous methodological approaches based on mere descriptive statistics by imple-

menting advanced statistical tests. In particular, we apply one-way ANOVA tests and the post-hoc Games-Howell test for pairwise multiple comparisons to identify the main sources of within-the-groups differences in means. Alternatively, we assess the differences in medians with the Mood's median test and the Brown-Mood median test, including their post-hoc pairwise comparison tests. These inferential tests reveals heterogeneity in disclosure quality, depending on the firm auditing the financial statements as well as on the ownership characteristics of the sample firms. On the other hand, the compliance with the IAS 38 disclosure requirements is not conditioned by the industry of the issuer or its jurisdiction.

Our findings of variance in disclosure quality, regarding an auditing firm performing assurance of financial statements, shall be a matter of importance for users as well as for the Czech Public Audit Oversight Board, when supervising the consistency of auditors' adherence to the auditing quality standards. The second contribution of our paper relates to the dataset investigated. As far as we know, our study is the first to monitor the disclosure quality of Czech listed firms during a relatively long period of ten years. Previous research covered datasets from one to three years which is insufficient to detect dynamics.

However, our research design has also several limitations. Firstly, it addresses only compliance with one IASB's standard. The disclosure requirements demanded by all IFRS combined are considerably larger and our results may, thus, be biased. Secondly, our analysis does not contemplate the compounding effects potentially influencing the compliance level (such as external changes in enforcement regime or internal factors such as changes in boards of directors, etc.). Thirdly, we omit voluntary disclosures about intangible assets, which may be rare, but extremely informative for market participants. These limitations are also our suggestions for future research.

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