

ARE IFRS FINANCIAL STATEMENTS USEFUL FOR ECONOMIC ANALYSIS? EVIDENCE FROM SLOVAKIA

AS DEMONSTRAÇÕES FINANCEIRAS IFRS SÃO ÚTEIS PARA ANÁLISE ECONÔMICA? EVIDÊNCIAS DA ESLOVÁQUIA

Article received on: 6/20/2025

Article accepted on: 8/25/2025

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The authors declare that there is no conflict of interest

Abstract

The global adoption of International Financial Reporting Standards (IFRS) was intended to enhance the comparability and usefulness of financial statements for capital market participants. This paper critically examines this assumption by evaluating whether IFRS-based financial data provides more useful information than data prepared under a rigid, rules-based national Generally Accepted Accounting Principles (GAAP). Using a sample of Slovak enterprises, we employ regression analysis to test the explanatory power of standard financial ratios on enterprise performance. Our findings reveal a significant paradox: the predictive power of models using IFRS data is substantially lower than for models using data from enterprises applying Slovak national GAAP, particularly micro-enterprises with the most rigid reporting rules. We argue that the principle-based nature of IFRS, which allows for significant subjective judgment in areas like revenue recognition, asset valuation, and state aid presentation, leads to a fundamental lack of comparability across enterprises. This heterogeneity makes IFRS-based data difficult to use for standardized financial analysis and unsuitable for aggregation in macroeconomic analysis without significant, case-by-case adjustments. The study concludes that the internationalization of accounting via IFRS may have inadvertently degraded the utility of financial data for broader economic analysis.

Resumo

A adoção global das Normas Internacionais de Relatório Financeiro (IFRS) teve como objetivo aprimorar a comparabilidade e a utilidade das demonstrações financeiras para os participantes do mercado de capitais. Este artigo examina criticamente essa premissa, avaliando se dados financeiros baseados em IFRS fornecem informações mais úteis do que dados preparados sob os rígidos Princípios Contábeis Geralmente Aceitos (GAAP) nacionais, baseados em regras. Utilizando uma amostra de empresas eslovacas, empregamos análise de regressão para testar o poder explicativo dos índices financeiros padrão sobre o desempenho empresarial. Nossos resultados revelam um paradoxo significativo: o poder preditivo dos modelos que utilizam dados IFRS é substancialmente menor do que o dos modelos que utilizam dados de empresas que aplicam os GAAP nacionais eslovacas, particularmente microempresas com as regras de divulgação mais rígidas. Argumentamos que a natureza baseada em princípios das IFRS, que permite julgamentos subjetivos significativos em áreas como reconhecimento de receita, avaliação de ativos e apresentação de auxílios estatais, leva a uma falta fundamental de comparabilidade entre as empresas. Essa heterogeneidade torna os dados baseados em IFRS difíceis de usar para análises financeiras padronizadas e inadequados para agregação em análises macroeconômicas sem ajustes significativos caso a caso. O estudo conclui que a internacionalização da contabilidade via IFRS



Keywords: IFRS. National GAAP. Financial Statement Analysis. Macroeconomic Aggregation. Comparability. Subjective Judgment. Slovak Republic.

pode ter inadvertidamente degradado a utilidade dos dados financeiros para análises econômicas mais amplas.

Palavras-chave: IFRS. GAAP Nacional. Análise de Demonstrações Financeiras. Agregação Macroeconômica. Comparabilidade. Julgamento Subjetivo. República Eslovaca.

1 INTRODUCTION

The internationalization of accounting, spearheaded by the widespread adoption of International Financial Reporting Standards (IFRS), represents one of the most significant shifts in modern corporate reporting. (De George, Li, & Shivakumar, 2016) The primary goal of this global trend is to create a single set of high-quality, understandable, and enforceable accounting standards to enhance transparency and comparability for users of financial statements (Tumpach, 2018), particularly investors in global capital markets (Kenny & Larson, 2009). The underlying premise is that a unified methodology will allow for more efficient capital allocation and better economic decision-making. (Barniv, Myring, & Westfall, 2021)

However, the philosophical foundation of IFRS, which prioritizes principles and managerial judgment over strict rules, may harbour unintended consequences. While allowing enterprises to reflect their unique economic circumstances – the principle of "substance over form" – the inherent flexibility may undermine the very comparability it seeks to achieve. (Vlcko & Meluchova, 2024) If each enterprise applies its "best subjective judgment" to key areas of reporting, the resulting financial data may become highly individualized. (Krajňák, 2024) This raises a critical question: Does the move towards a principle-based standard like IFRS truly improve the usefulness of financial information compared to a more rigid, rules-based national accounting framework?

This question is particularly relevant for macroeconomic analysis, which relies on the aggregation of enterprise-level data to model and understand broader economic trends. (Mankiw, 2010) If the underlying micro-data from individual enterprises is not methodologically consistent, its aggregation can lead to a "cumulation of errors caused by bias," (Perera, Chand, & Mala, 2019) rendering the resulting macroeconomic indicators unreliable.

This paper investigates the practical impact of IFRS on the usefulness of financial statement data in Slovakia, a jurisdiction where both IFRS and a rules-based national GAAP coexist. Using standard methods of financial and regression analysis, we test the following null hypothesis

(H0): *Financial statements prepared under IFRS provide greater usefulness for financial analysis than those prepared under Slovak national accounting legislation.*

Our research yields a counter-intuitive result: financial data from enterprises applying the rigid, uniform rules of Slovak GAAP (especially micro-enterprises) exhibit significantly higher predictive power than data from enterprises applying the flexible principles of IFRS. We argue this demonstrates that IFRS's allowance for variant reporting and subjective judgment reduces the comparability of financial statements to a degree that impairs their utility for both standardized financial analysis and macroeconomic aggregation. The findings contribute to the ongoing debate about the real-world effects of accounting internationalization and suggest that the quest for enterprise-specific relevance may have come at the cost of systemic data utility.

1. Theoretical Background: IFRS Philosophy vs. National Regulation

The Slovak accounting system, like many in continental Europe, evolved from a rules-based tradition with strong ties to legal and tax requirements. (Vlčko & Meluchová, 2021) It is characterized by a mandatory chart of accounts and prescriptive rules that ensure a high degree of uniformity in reporting across enterprises. (Šlosár, 2008) In contrast, IFRS does not concern itself with the technique of bookkeeping but focuses on the principles of presentation in the financial statements. (Mládek, 2017) This fundamental difference creates two distinct reporting philosophies. (Durguti & Arifi, 2021)

Slovak national legislation demands that all enterprises within a size category follow the same methodology, (National Council, 2002) ensuring that a given line item (e.g., "Revenue") is measured and presented consistently. This uniformity makes the data highly suitable for cross-enterprise comparison and aggregation.

IFRS, on the other hand, is built on a conceptual framework where the objective is to provide a "fair representation" of a enterprise's unique economic reality. (IASB, 2022) To achieve this, IFRS grants enterprises significant discretion. For example, management must use its judgment to determine what information is "material", how to recognize revenue based on a five-step model (IFRS 15), and how to value assets and

liabilities. This approach allows for variant reporting based on the enterprise's subjective assessment, (Khoo & Ahmad-Zaluki, 2015) which theoretically provides a more nuanced picture for a micro-level user analysing a single enterprise.

The conflict arises when this data is used for broader economic analysis. Macroeconomic models depend on aggregated data (e.g., total corporate revenues, investment, debt levels) to function. This aggregation is only statistically valid if the underlying data points are measured consistently. If each enterprise's reported "revenue" or "assets" is the result of a different combination of methodological choices and subjective judgments, their summation becomes statistically questionable. Our empirical study is designed to test which of these philosophies – rigid uniformity or subjective relevance – produces more useful data in practice.

2 METHODOLOGY AND DATA

To test our hypothesis, we sourced data from the official Slovak database of Financial Statements, which contains publicly available filings for all registered enterprises. We constructed four distinct, randomly selected samples of 50 enterprises each for the 2020 financial year:

1. IFRS Sample: Enterprises preparing statements according to IFRS.
2. Large-undertaking Sample: Enterprises preparing financial statements according to Slovak GAAP for large enterprises.
3. Small-undertaking Sample: Enterprises preparing financial statements according to Slovak GAAP for small enterprises.
4. Micro-undertaking Sample: Enterprises preparing financial statements according to the most simplified and rigid Slovak GAAP for micro-enterprises.

For each enterprise, we calculated a set of standard financial ratios to serve as independent variables, reflecting profitability, liquidity, and leverage. The chosen ratios are Return on Assets (ROA), Return on Equity (ROE), Quick Ratio (QR), Revenue Growth (RG), Debt-to-Equity Ratio (DER), and Current Ratio (CR). The dependent variable, representing enterprise performance, is the return on equity, calculated as the year-over-year change in total equity.

We employ ordinary least squares (OLS) regression to determine the extent to which these financial ratios can explain the variation in enterprise performance across the different samples. We use three model specifications to test the robustness of our findings:

- Model 1 (Performance): $\text{Return} = f(\text{ROE}, \text{ROA}, \text{RG})$
- Model 2 (Financial position): $\text{Return} = f(\text{QR}, \text{DER}, \text{CR})$
- Model 3 (Combined): $\text{Return} = f(\text{ROE}, \text{ROA}, \text{QR}, \text{RG}, \text{DER}, \text{CR})$

The primary metric for evaluating data usefulness is the coefficient of determination (R^2). A higher R^2 indicates that the standardized financial ratios provide a better explanation of enterprise performance, suggesting that the underlying accounting data is more consistent, comparable, and relevant for analytical purposes.

3 RESULTS

The results of the regression analysis are summarized in Table 1. The findings are stark and run directly contrary to the expectations of IFRS proponents.

Table 1

Results of linear regression analysis of the least squares method for individual models and size samples. Data from the financial statements of accounting periods ending in the calendar year 2020.

Sample	Model	R ²	Adjusted R ²	P-value
IFRS	1	0.028574	-0.034779	0.717792
	2	0.040307	-0.022282	0.590696
	3	0.050251	-0.082273	0.888244
Large undertakings	1	0,48937	0,456068	0,00000076
	2	0,654837	0,615614	0,0000000317
	3	0,689513	0,646189	0,0000000157
Small undertakings	1	0,383500	0,343293	0,000052
	2	0,253192	0,204487	0,003552
	3	0,491472	0,420515	0,000034
Micro-undertakings	1	0,987591	0,986782	7,83e-44
	2	0,992941	0,992481	1,82e-49
	3	0,998954	0,998808	2,21e-62

Source: Proceedings of the author.

Across all three models, the R^2 for the IFRS sample is exceedingly low, suggesting that the standard financial ratios have almost no explanatory power. In contrast, the

models for the national GAAP samples perform significantly better, with the micro-enterprise sample showing a near-perfect R^2 of over 0.98. This indicates that the highly standardized and simple data from micro-enterprises is far more predictable and analytically useful when using standard models. The usefulness of the data deteriorates as the size category increases and more judgment is permitted, with the IFRS sample being the least useful of all.

Table 2

Results of linear regression analysis of the least squares method for individual models and size samples. Data from the financial statements of accounting periods ending in the calendar year 2023.

Sample	Model	R^2	Adjusted R^2	P-value
IFRS	1	0,186556	0,133505	0,016878
	2	0,117161	0,059584	0,122113
	3	0,340920	0,248956	0,004664
Large undertakings	1	0,152656	0,097394	0,052618
	2	0,026761	-0,036711	0,738365
	3	0,409250	0,326820	0,000612
Small undertakings	1	0,906502	0,900127	1,17E-22
	2	0,944705	0,940935	1,14E-27
	3	0,951454	0,944349	2,56E-25
Micro undertakings	1	0,966823	0,96398	6,18E-26
	2	0,574364	0,537881	1,20E-06
	3	0,96824	0,962286	1,54E-22

Source: Proceedings of the author.

These results lead us to reject the null hypothesis (H_0). The data strongly suggests that financial statements prepared under IFRS in Slovakia provide less, not more, useful information for standardized financial analysis than those prepared under the national rules-based system. To validate these findings against potential macroeconomic shocks (i.e., the COVID-19 pandemic), the analysis was repeated using 2023 data. Table 2 disclose linear regression analysis results which contemporised the same ordinal ranking of usefulness across the samples as the analysis performed on 2020 data.

4 DISCUSSION: WHY IFRS DATA IS LESS COMPARABLE

The empirical results can be explained by examining the specific methodological differences between IFRS and Slovak GAAP that introduce subjectivity and reduce comparability. Our analysis of the reveals several key areas.

First, the presentation of core performance metrics differs. Under IFRS 15, revenues are presented net of subjectively estimated risks, such as non-payment or returns. Under Slovak law, revenues are reported at their gross value, while risks are transparently reported as separate expenses (e.g., provision for bad debts). The IFRS method internalizes a subjective management estimate into the top-line revenue figure, making it impossible to compare the gross performance of two enterprises directly from the face of the income statement.

Second, the measurement of assets is inconsistent. IFRS allows for variant reporting of state aid, which can either be treated as deferred income or used to reduce the carrying amount of an asset (IAS 20). This choice directly impacts the 'Total Assets' figure used in ratios like ROA. Furthermore, IFRS 16 requires the capitalization of right-of-use assets for leases, which are not capitalized under Slovak GAAP. While this provides more information, it makes the balance sheets of IFRS reporters fundamentally different from their national GAAP counterparts, complicating comparison.

Third, the application of judgment is pervasive. IFRS reporters make subjective choices regarding discount rates for provisions, the significance of impairments, and the classification of assets and liabilities. For instance, in our IFRS sample, in the same period, one IFRS enterprise used a discount rate of 2% for employee benefits while another used 4.7%, leading to vastly different reported expenses.

When each enterprise becomes its own standard-setter in practice, the resulting data points are no longer comparable units. Aggregating this heterogeneous data for macroeconomic analysis is akin to adding measurements taken with different, uncalibrated rulers. The final sum is statistically compromised and provides a distorted view of the economy. This is further exacerbated in Slovakia by the lack of mandatory structured electronic reporting for IFRS filers, many of whom publish scanned, non-machine-readable PDFs, hindering any large-scale data collection and analysis.

5 CONCLUSION

The internationalization of accounting through IFRS was predicated on the promise of creating a common language that would make financial statements more comparable and useful. Our empirical research, based on data from Slovak companies, challenges this core premise. We find that the principle-based flexibility embedded in IFRS leads to a significant loss of data comparability compared to a rigid, rules-based national system. Financial ratios calculated from IFRS statements exhibit substantially lower predictive power, rendering the data less useful for standardized financial analysis.

The key implication is that IFRS, in its current form, is poorly suited for macroeconomic analysis. The subjective judgments and variant reporting methods permitted by the standards create heterogeneous data that cannot be reliably aggregated to form a clear picture of economic trends. Each IFRS financial statement must be individually deconstructed and adjusted before its data can be used, a task that is impractical on a national scale.

5.1 Recommendations for policy & practice

Our findings support a call for reform. For financial statements to serve not only capital markets but also the broader public interest of sound economic analysis, a greater degree of methodological uniformity is required.

5.1.1 *For the international accounting standards board (IASB)*

The IASB should re-evaluate the extent of optionality and subjective judgment permitted within the core, structured financial statements (the statement of financial position and the statement of profit or loss). To enhance the aggregability and comparability of data for macroeconomic analysis, the IASB should consider implementing a more prescriptive, uniform approach for these primary statements. Discretionary disclosures and the exercise of professional judgment should be confined to the notes and supplementary reports, thereby preserving the integrity of core financial figures. By mandating a single, uniform methodology for key items, IFRS could achieve

genuine comparability, thereby enhancing the utility of accounting data for all users and fulfilling its potential as a true global standard.

5.1.2 For EU and Slovak Legislators

To overcome the technical barriers to data analysis, a mandatory, universal, and machine-readable format for all publicly filed financial statements should be enforced, such as XBRL (eXtensible Business Reporting Language) (Plumlee & Plumlee, 2008). This would immediately enable automated data extraction and aggregation, reducing costs for regulators, researchers, and financial analysts. Furthermore, legislators should re-evaluate the administrative burden of dual reporting for consolidated entities. The Czech model, which allows a single IFRS-based report for consolidated firms, could serve as a blueprint to reduce administrative costs without compromising transparency.

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