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THE EFFECTS OF HYPERINFLATION ON FINANCIAL REPORTING AND AUDIT PRACTICES: EVIDENCE FROM TÜRKİYE

HİPERENFLASYONUN FİNANSAL RAPORLAMA VE DENETİM UYGULAMALARI ÜZERİNDEKİ ETKİLERİ: TÜRKİYEDEN ÖRNEKLER

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Abstract

The purpose of this paper is to reveal the impact and reflections of a hyperinflationary economy, thus hyperinflationary accounting on annual financial reports and independent auditor's reports in Türkiye for the year 2023 regarding IAS 29 Financial Reporting in Hyperinflationary Economies, and International Standard on Auditing (ISA) 701-Communicating Key Audit Matters in the Independent Auditor's Report & (ISA) 706 – Emphasis of Matter Paragraphs in the Independent Auditor's Report. This study concerns a relatively emerging topic and an additional specific area for which there are a few studies peculiar to each country's economy. The empirical findings of this study are significant in that they provide a complete map from a broader research perspective. The study adds to the literature by providing valuable insights and content about the matter of hyperinflation which is an ongoing problem in the long term as regards financial reporting and independent auditing. Moreover, it raises awareness about the reporting challenges of hyperinflation for the prospective hyperinflationist periods that might occur in the foreseeable future.
Keywords: Hyperinflation, financial reporting, audit practices, ias 29, isa 701&706
JEL Classification: M41, M42, M48

Öz

Bu çalışmanın amacı, TMS 29 Yüksek Enflasyonlu Ekonomilerde Finansal Raporlama ve BDS 701-Bağımsız Denetçi Raporunda Kilit Denetim Konularının Bildirilmesi ve BDS 706 – Bağımsız Denetçi Raporunda Yer Alan Dikkat Çekilen Hususlar ve Diğer Hususlar Paragrafları Standartları uyarınca, Türkiye'de 2023 yılına ilişkin yıllık finansal raporlar ve bağımsız denetim raporları üzerinde hiperenflasyonist ekonominin,

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dolayısıyla hiperenflasyon muhasebenin etkisini ve yansımalarını ortaya koymaktır. Araştırma konusu, yakın bir zamanda ortaya çıkmış olan ve her ülke ekonomisinin kendine özgü birkaç çalışmanın bulunduğu spesifik bir çalışma alanını kapsamaktadır. Çalışmanın ampirik bulguları, araştırma konusu ile ilgili olarak oldukça geniş bir araştırma perspektifinden bir yol haritası sunması açısından önemlidir. Çalışma, finansal raporlama ve bağımsız denetim açısından devam eden bir sorun olan hiperenflasyon konusunda önemli bilgiler ve içerikler sunarak literatüre katkıda bulunmaktadır. Ayrıca, çalışma yakın gelecekte meydana gelebilecek olası hiperenflasyonist dönemler için hiperenflasyonist ekonomi ortamının finansal raporlamada yaratacağı zorluklar hakkında farkındalığı da arttırmaktadır.
Anahtar Kelimeler: Hiperenflasyon, finansal raporlama, denetim uygulamaları, tms-29, bds 701&706
JEL Sınıflandırılması: M41, M42, M48

1. Introduction

According to IMF World Economic Report released on October, 22 2024, several countries including Türkiye have been considered to be hyperinflationary economies. These countries are Argentina, Ethiopia, Ghana, Haiti, Iran, Lao PDR, Lebanon, Malawi, Sierra Leone, South Sudan, Sudan, Suriname, Zimbabwe, Venezuela, etc. All of these economies were hyperinflationary in 2023, thus entities of these countries should apply IAS-29 to their currencies (PwC, 2024). Similarly, Türkiye became hyperinflationary in the year 2023 regarding the characteristics of the economic environment of a country stated by IAS-29 Financial Reporting in Hyperinflationary Economies. The hyperinflationary economic environment has impacted all of the entities operating under the hyperinflationary economy in Türkiye, significantly. Particularly, their accounting and financial reporting systems have been affected negatively, because accounting and financial reporting systems might be very challenging in the presence of hyperinflation and hyperinflationary economic conditions. Operating under hyperinflationary economic conditions or applying hyperinflationary accounting requires some additional challenges and difficulties in the accounting information system and reporting process. For instance, identification of the certain price index and the movement in the index, making non-standard or specific calculations for inflation accounting, making specific adjustments on hyperinflationary accounting records, assessing monetary and non-monetary assets, restatements of financial statements, additional disclosures, etc. To battle with the negative impacts of hyperinflationary economic conditions, there are different kinds of ways or strategies to be applied by entities. According to PwC Switzerland's discloses about hyperinflation in Türkiye, these strategies are comprised of accounting by Swiss GAAP FER, applying IFRS which is mainly referred to the application of IAS-29, preparation of hard currency financial statements, transitional arrangements and effective date (PwC, 2022). In this meaning, applying IFRS, and adopting the requirements for financial reporting set out by IAS-29 which was the main research instrument in this study is one of these strategies.

The main purpose of the study is to reveal the impacts and reflections of hyperinflation on annual financial reports of the star market quoted manufacturing entities in Türkiye for the year 2023 as per IAS-29 Financial Reporting in Hyperinflationary Economies. Also, the consideration of the independent audit reports of the entities according to the International Standard on Auditing (ISA) 701 Communicating Key Audit Matters in the Independent Auditor's Report and (ISA) 706 Emphasis

of Matter Paragraphs in the Independent Auditor's Report is based on the matter of hyperinflation. In this context, the remainder of this study is organized as follows. A review of literature and the theoretical framework are developed in Section 2, and Section 3. describes the research methodology including with the scope and limitations of it. Finally, the findings and conclusions are explained in Section 4.

2. Literature Review

The International Accounting Standards Board (IASB) adopted IAS-29 Financial Reporting in Hyperinflationary Economies, and the first version of the Standard was published in 1989. Thus, a valuable guideline has been provided for the financial reporting system of countries that are going through or will go through hyperinflationary economic conditions in the future. The Standard has enabled to elimination of impacts or negative effects of hyperinflation on the financial reports of entities. This Standard is known as TAS-29 Financial Reporting in Hyperinflationary Economies which was applied for the reporting period ending 31 December 2005 for the first time in Türkiye. Since the Türkiye started going through hyperinflationary economic conditions from the beginning of 2021 until the end of 2023 after many years, it has stirred significant interest in Turkish academics, particularly in the year 2023 which might be referred to the highest hyperinflationist year in comparison to the previous years in Türkiye. In this respect, any Turkish specialty literature about financial reporting in a hyperinflationary economy regarding IAS-29 hasn't been found before 2023 except for one research made in 2015, and one research made in 2022. In other words, existing research has focused on the year 2023. However, the research made in 2023 is comprised of a few papers since this debate – applying IAS-29 to financial statements is a new phenomenon in Türkiye. Besides international specialty literature about financial reporting in the hyperinflationary economy in this approach is extremely limited, since hyperinflation is not a standing matter, and not every country is required to apply IAS-29. The study relates to four streams of literature on the link of a hyperinflationary economy, inflation accounting, financial reports, and independent audit reports based on the requirements of IAS-29 and (SA)-701 & (SA)-706. International specialty literature that similarly approaches the research matter is comprised of six different research. Three of these research are empirical studies while the other three research are theoretical studies. The most recent empirical study examines the complexity of inflation accounting and the challenging side of it regarding accurate preparation and presentation of financial reports by applying IAS-29 requirements to selected items in a case study (Umut, 2024). Another empirical research is designed on more than one research model. It contains a combination of descriptive analysis and robustness tests. The research majorly points out the value relevance of inflation-adjusted amounts and historical cost amounts on an empirical model. The results of the research shows that both inflation-adjusted amounts and historical cost amounts are more value-relevant in periods of relatively high inflation, but historical cost amounts are more value-relevant in periods of relatively low inflation (Chamisa *et al.*, 2018). The last empirical research which is the one most closely related to this study is designed on a mixed research methodology and considers the advantages and limitations of the application of IAS-29 to the quoted entities of the Istanbul Stock Exchange (Mihaela, 2014).

Other existing three research have a theoretical discussion of the matter of inflation accounting, and hyperinflationary economy with regards to financial reporting as per IAS-29. The first one is referred to the necessity of inflation accounting when there is a significant level of price inflation for an useful and more valuable financial statements based on a theoretical study; the second one emphasizes the interest in serious financial reporting and financial management problems caused by inflation occurred in Slovakia from a theoretical point of the view, the third one is based on the significance of identifying hyperinflationary economies for the financial reporting process of entities particularly regarding multinational dual reports. The research considers the reporting differences between IFRS and USGAAP accounting models in hyperinflationary economies. It states the necessity of making adequate adjustments to inflation in financial statements to reflect the financial position and performance of entities in a meaningful way (Stojanova *et al*., 2022; Kramarova, 2021; Trajkovska *et al*., 2018). Turkish specialty literature in this context contains five main research. This research mainly focused on the following fields; restatement of financial statements by IAS-29 in hyperinflationary economies (Keleş, 2015), implementation of IAS-29 to financial statements in hyperinflationary economies (Akçin, 2023; Peker, 2023), and inflation accounting (Varol, 2022; Gökten, *et al*., 2023).

3. Research Methods

The research reported upon in this paper was designed mixed-method approach containing a combination of quantitative, and qualitative analyses to provide a comprehensive understanding. As a quantitative method, firstly descriptive analysis was used for these manufacturing entities which were operating under a hyperinflationary economy in the year 2023. Then, the results from the descriptive analysis method were expanded through content analysis, TOPSIS analysis, and textual analysis of annual financial reports and independent audit reports of these entities.This research was conducted to exploit Türkiye's unique setting to provide substantial evidence about the effects of a hyperinflationary economy on both annual reports and independent audit reports for the year 2023. The analysis unit of the research consists of the star market quoted manufacturing entities (ISE Star) in the Istanbul Stock Exchange (https://www.kap.org.tr/en/Pazarlar). ISE Star in Türkiye is an exclusive segment where entities that have taken their distinguished place on the Istanbul Stock Exchange are traded. Sample entities in the scope of this research were chosen from the star market, and limited to manufacturing entities in this market deliberately. These entities would be probably one of the most aligned ones to IFRS & ISAs requirements regarding their certain prestige in the market, but therewithal the most affected and risky ones in any hyperinflationary economic conditions when it comes to their sector. The population of the research is the star market quoted entities (ISE Star) operating under hyperinflationary economic conditions, and reporting as of December 31, 2023. There have been 300 quoted entities in the star market. In line with the research context, the target population was comprised of the star market quoted entities (ISE Star) operating in the manufacturing sector in Türkiye. The decision to focus on the manufacturing entities in ISE Star was made to ensure with some certainty that these entities would be more likely under intensive pressure to adhere or align to the disclosure requirements by IAS-29 since the manufacturing sector is one of the riskiest and most affected sectors in hyperinflationary economic conditions. Accordingly, it might be assumed that uncertainty caused by hyperinflation

could negatively affect entities in the manufacturing sector through different channels (Hasanov, 2008). Thus, it would be expected that these entities would be more engaged with many of the disclosure requirements based on IAS-29. The population of the study was referred to 112 manufacturing entities since a number of the manufacturing entities listed on ISE Star was comprised of 112 entities as of the date of July 8, 2023. The vast majority of the sample entities were able to find annual reports referring to the fiscal year ending on December 31, 2023. However, the target population was first decreased to 106 manufacturing entities from 112 manufacturing entities, and only six entities *(EFORC, KAYSE, KOCMT, LILAK, SEGMN, YIGIT)* didn't have annual reports referring to the fiscal year ending on December 31, 2023, and their annual reports couldn't be reached on the system of Public Disclosure Platform (KAP) in Türkiye. Additionally, the other 7 entities *(BRSAN, ERCB, EREGL, ISDMR, KOPOL, KORDS, MEGMT)* were not required for applying IAS-29 since their functional currency is USD, not Turkish Lira. Therefore, the sample size of the study was limited to 99 manufacturing entities, ultimately. The starting point of the research was the creation of a disclosure index. This disclosure index referred to the disclosures required by IAS-29 to provide a measurable basis for how fully the sample entities' reporting disclosures coincide in terms of hyperinflation requirements and adjustments. The dataset was drawn from annual financial reports of the sample entities quoted in ISE Star.

3.1. Assessing the Degree of Meeting the Standard – IAS 29 Disclosure Requirements by Desriptive Analysis

This research focused on assessing the degree of meeting the Standard – IAS 29 disclosure requirements by descriptive statistics. As it is known, IAS-29 identifies three main disclosure items regarding its core content, These disclosures enable to make clear the basis of dealing with the effects of inflation in the financial statements. Also, they are intended to provide other information necessary to understand that basis and resulting amounts (IAS-29,40.). These disclosure requirements are stated below;

Disclosure requirement-1: the fact that the financial statements and the corresponding figures for previous periods have been restated for the changes in the general purchasing power of the functional currency and, as a result, are stated in terms of the measuring unit current at the end of the reporting period,

Disclosure requirement-2: whether the financial statements are based on a historical cost approach or a current cost approach, and

Disclosure requirement-3: the identity and level of the price index at the end of the reporting period and the movement in the index during the current and the previous reporting period.

Each one of the three main disclosure requirements explained above was rated as "1 point" in the research. In line with this, each disclosure item found in the annual financial reports of the sample entities was scored as "1", while each disclosure item found to be absent was scored as "0". By doing so, separate disclosure scores were calculated, and the degrees of the meeting the Standard were computed as the ratio of the number of items disclosed by the sample entities in their annual financial

reports to the number of required disclosure items based on the Standard – IAS 29. Table 1 presents the descriptive statistics along with the related scores and ratios per total required disclosure items prescribed by IAS-29.

Table 1: Disclosure Scores

Code	Disclosure requirement-1	Disclosure requirement-2	Disclosure requirement-3	Total scores	Total required items	Ratios
ADEL	1	1	1	3	3	100 %
AFYON	1	0	1	2	3	67 %
AKCNS	1	1	1	3	3	100 %
AKSA	1	1	1	3	3	100 %
ALCAR	1	0	1	2	3	67 %
ALKIM	1	1	1	3	3	100 %
ALVES	1	1	1	3	3	100 %
AEFES	1	1	1	3	3	100 %
ASUZU	1	1	1	3	3	100 %
ARCLK	1	1	1	3	3	100 %
ASTOR	1	1	1	3	3	100 %
ATAKP	1	1	1	3	3	100 %
AYGAZ	1	1	1	3	3	100 %
BAGFS	1	1	1	3	3	100 %
BTCIM	1	1	1	3	3	100 %
BSOKE	1	1	1	3	3	100 %
BIENY	1	1	1	3	3	100 %
BOBET	1	1	1	3	3	100 %
BORSK	0	1	0	1	3	33 %
BFREN	1	1	1	3	3	100 %
BRISA	1	1	1	3	3	100 %
BUCIM	1	1	1	3	3	100 %
CCOLA	1	0	1	2	3	67 %
CEMAS	1	1	1	3	3	100 %
CEMTS	1	0	1	2	3	67 %
CMBTN	1	0	1	2	3	67 %
CIMSA	1	0	1	2	3	67 %
DESA	1	1	1	3	3	100 %
DEVA	1	1	1	3	3	100 %
DGNMO	1	1	1	3	3	100 %
EGEEN	1	1	1	3	3	100 %
EGGUB	1	1	1	3	3	100 %
EGPRO	1	1	1	3	3	100 %
EKOS	1	1	1	3	3	100 %
EKSUN	1	0	1	2	3	67 %
ELITE	1	1	1	3	3	100 %
EMKEL	1	1	1	3	3	100 %

ERBOS	1	0	1	2	3	67 %
TEZOL	1	1	1	3	3	100 %
EUREN	1	1	1	3	3	100 %
EUPWR	1	0	1	2	3	67 %
FROTO	1	1	1	3	3	100 %
GIPTA	1	0	1	2	3	67 %
GOODY	1	1	1	3	3	100 %
GOKNR	1	1	1	3	3	100 %
GOLTS	1	0	1	2	3	67 %
GUBRF	1	0	1	2	3	67 %
HATSN	1	0	1	2	3	67 %
HEKTS	1	1	1	3	3	100 %
ISSEN	1	1	1	3	3	100 %
IZMDC	1	1	1	3	3	100 %
JANTS	1	1	1	3	3	100 %
KLKIM	1	1	1	3	3	100 %
KLSER	1	1	1	3	3	100 %
KRDMA	0	1	1	2	3	67 %
KARSN	1	1	1	3	3	100 %
KARTN	1	0	1	2	3	67 %
KATMR	1	1	1	3	3	100 %
KERVT	1	1	1	3	3	100 %
KRVGD	1	0	1	2	3	67 %
KMPUR	1	1	1	3	3	100 %
KCAER	1	1	1	3	3	100 %
KONYA	1	1	1	3	3	100 %
KONKA	1	1	1	3	3	100 %
KBORU	1	1	1	3	3	100 %
KTSKR	1	0	1	2	3	67 %
LMKDC	1	1	1	3	3	100 %
MEDTR	0	1	1	2	3	67 %
NUHCM	1	1	1	3	3	100 %
OBAMS	1	1	1	3	3	100 %
OTKAR	1	1	1	3	3	100 %
OYAKC	1	1	1	3	3	100 %
PNLSN	1	0	1	2	3	67 %
PARSN	1	1	0	2	3	67 %
PETKM	1	1	1	3	3	100 %
PETUN	1	1	1	3	3	100 %
PNSUT	1	1	1	3	3	100 %
POLTK	1	0	1	2	3	67 %
QUAGR	1	1	1	3	3	100 %
SNICA	1	1	1	3	3	100 %
SARKY	1	0	1	2	3	67 %
SASA	0	1	1	2	3	67 %

SAYAS	1	1	1	3	3	100 %
SOKE	1	0	1	2	3	67 %
SUNTK	1	1	1	3	3	100 %
TARKM	1	1	1	3	3	100 %
TATGD	1	1	1	3	3	100 %
TOASA	1	1	1	3	3	100 %
TMSN	1	1	1	3	3	100 %
TUPRS	1	1	1	3	3	100 %
TTRAK	1	0	1	2	3	67 %
ULUUN	1	0	1	2	3	67 %
USAK	1	1	1	3	3	100 %
ULKER	1	1	1	3	3	100 %
VESBE	1	1	1	3	3	100 %
VESTL	1	1	1	3	3	100 %
YATAS	1	1	1	3	3	100 %
YYLGD	0	1	1	2	3	67 %
YUNSA	1	1	1	3	3	100 %
TOTAL	93	77	97	-	-	-

*: Author's own work.

Disclosure requirement 3 was the most aligned one. According to disclosure requirement 3, entities that are operating in a hyperinflationary economy must present the level price index they used for inflation adjustments, and the movement in the index during the related period. In Türkiye, the related price index was the Customer Price Index (CPI) published by the Turkish Statistical Institute (TSI) according to directions given by POAASA as of the date of December 31, 2023. The CPI for current and previous year periods and cumulative inflation rates for three years published by TSI formally were as follows;

Date	**Index**	**Correction Factor**	**Cumulative inflation rates**
31.12.2023	1.859,38	1,00000	268 %
31.12.2022	1.128,45	1,64773	156 %
31.12.2021	686,95	2,70672	74 %

In the scope of the analysis, it was uncovered that 2 out of 99 entities were not by the cumulative inflation rates published by TSI and shown above. These entities were ALCAR and GOODY. Both two companies differed in the cumulative inflation rate for the year 2021. In the annual financial reports of ALCAR and GOODY, the cumulative inflation rate was declared surprisingly at the same incorrect rate – 55,9 % for the year 2021 although it was 74 %. That might be considered an unnoticeable point in the annual financial reports of these entities although the existence of independent audits for the period. Although that, 97 out of 99 entities (97 %), had met this requirement, statistically at final. Unlike disclosure requirement 3, disclosure requirement 2 was the most neglected one by the sample entities. 77 out of 99 entities (77 %) adhered to this requirement. The Standard – IAS 29 simply referred to the approach on which financial statements are presented regarding disclosure requirement 2. According to the results of the analysis, it was seen that all of the entities adhered

to disclosure requirement 2 and explained their accounting approach had preferred to apply the *historical cost approach* rather than the current cost approach. Disclosure requirement 1 was the second one following disclosure requirement 3. 93 out of 99 entities (93 %) had complied with this requirement. Except for 6 entities, all of the entities had made detailed explanations about the facts proving that their financial statements had been restated as a result of a hyperinflationary economy. According to one of the attractive results of the analysis, all of the sample entities except one entity complied with two requirements at least and had a degree of 67 percent. The entity that could only comply with the disclosure requirement 2 in its annual financial report was BORSK. Taking all three requirements together, 71 out of 99 entities (71 %) could comply with all of these three requirements.

3.2. Considering the Financial Performance of the Sample Entities with the TOPSIS method, and Analyzing the Relationship between TOPSIS Orders of Financial Ratios and Degrees of Meeting the Standard Described in Table 1

This research has two parts containing the computation of related financial ratios of the sample entities and analysis of these computed ratios by TOPSIS Software.

Computation of financial ratios of the sample entities

In the scope of this analysis, three financial ratios (inventory turnover, inventory days ratio, fixed assets to equity ratio) were computed primarily according to the related financial data drawn from the annual financial reports of the sample entities for the period of January, 1 – December 31, 2023. Table 2 provides basic descriptive statistics for the sample entities showing the financial indicators used in the computation of the related financial ratios within this analysis.

Table 2: Disclosure Scores

Code	Cost of goods sold	Beginning inventory	Ending inventory	Fixed assets	Equity
ADEL	1.205.803	493.060	615.600	802.864	1.110.832
AFYON	1.977.730.535	206.475.057	255.875.962	3.399.947.978	3.971.219.274
AKCNS	14.746.909.429	1.716.105.052	1.560.640.978	11.827.672.340	13.797.585.926
AKSA	19.979.732	14.063.214	3.448.222	15.228.338	16.734.520
ALCAR	4.550.658.863	932.796.933	1.134.252.755	882.270.309	1.491.107.496
ALKIM	3.229.702.348	996.193.121	800.297.252	1.569.499.243	2.746.594.963
ALVES	2.605.959.752	447.255.995	367.904.993	679.182.847	651.061.612
AEFES	100.877.033	23.545.932	24.877.917	175.097.552	129.877.895
ASUZU	12.499.506.711	2.665.408.912	3.672.642.194	7.969.104.615	8.254.126.098
ARCLK	181.725.746	50.870.483	47.448.681	86.815.970	59.563.339
ASTOR	10.437.034.178	2.129.119.803	1.512.236.478	5.719.483.892	12.238.814.122
ATAKP	1.905.907.982	868.441.286	1.048.426.689	1.839.647.899	3.067.164.324
AYGAZ	59.871.852	3.848.530	1.984.885	36.045.382	36.523.311
BAGFS	3.586.396.815	2.649.966.534	1.262.355.724	6.261.402.585	4.700.145.746
BTCIM	9.856.128	1.436.430	1.159.857	15.729.521	12.264.328
BSOKE	3.544.848	756.731	728.276	7.236.846	3.803.474

BIENY	7.185.909.006	2.042.516.700	2.949.073.174	5.049.811.035	9.199.293.503
BOBET	7.092.098.419	110.673.283	93.125.845	4.168.418.066	4.551.246.401
BORSK	2.795.941.482	1.576.086.722	1.324.627.095	746.951.815	1.592.701.575
BFREN	1.149.077.531	82.372.407	82.709.187	306.426.946	122.676.994
BRISA	19.999.236.481	4.045.055.057	3.287.820.389	15.030.531.870	13.446.157.370
BUCIM	7.476.093.988	1.712.067.755	1.225.050.932	7.260.535.252	10.352.463.680
CCOLA	68.002.645	11.192.910	12.982.517	61.903.552	44.954.779
CEMAS	1.508.495.522	276.859.167	243.175.731	2.254.650.432	2.940.276.158
CEMTS	4.100.419.737	1.351.983.613	934.079.544	1.461.614.567	3.660.317.782
CMBTN	2.911.586.264	19.472.706	38.926.232	515.849.103	371.628.515
CIMSA	16.475.179	2.855.498	2.861.185	26.299.983	23.434.254
DESA	1.232.347.159	332.500.927	322.082.224	905.658.655	1.623.885.872
DEVA	6.584.386.361	3.963.413.685	4.100.390.874	10.930.111.119	14.783.087.735
DGNMO	5.346.831.713	1.562.128.067	1.554.820.063	3.841.193.819	2.195.838.851
EGEEN	2.712.511.691	847.360.728	743.222.937	3.162.173.417	4.034.522.394
EGGUB	1.502.629.788	270.335.500	247.241.806	3.668.448.732	4.169.809.346
EGPRO	5.786.558.115	872.728.841	803.530.110	4.154.837.203	4.539.631.464
EKOS	824.702.900	417.805.291	582.201.111	840.766.920	1.909.187.631
EKSUN	6.147.361.080	930.826.298	986.454.784	462.191.321	1.857.020.768
ELITE	434.462.217	282.680.099	276.230.994	436.923.960	808.562.642
EMKEL	319.336.270	204.435.599	166.697.698	519.685.603	597.532.328
ERBOS	3.163.814.544	1.021.768.078	942.403.658	949.726.564	2.009.190.398
TEZOL	2.899.945.623	693.249.481	825.722.499	2.195.091.319	3.119.848.876
EUREN	3.301.460.396	700.451.236	610.778.087	4.189.295.659	4.287.925.443
EUPWR	4.796.582	337.550	1.477.743	2.293.754	5.304.418
FROTO	356.657.683	23.274.992	29.352.289	114.037.767	73.007.545
GIPTA	987.689.122	194.147.464	214.744.734	706.120.742	1.636.674.833
GOODY	17.847.898.004	4.137.338.977	2.350.760.392	3.161.354.496	2.977.020.131
GOKNR	5.870.921.860	2.178.774.362	1.721.161.439	2.730.265.075	4.230.029.531
GOLTS	3.513.974.700	563.791.148	439.624.720	5.486.227.598	5.313.637.459
GUBRF	31.658.806.129	13.215.279.520	5.945.039.993	17.324.048.777	16.637.379.098
HATSN	1.734.305.314	102.660.083	241.499.517	2.557.775.415	2.723.270.739
HEKTS	5.223.402.568	5.405.788.009	4.250.506.812	10.325.630.860	7.539.775.642
ISSEN	2.147.128.555	785.635.321	644.522.917	2.574.461.200	3.129.201.682
IZMDC	34.336.126.029	5.890.832.212	6.006.495.804	24.308.468.177	18.161.347.042
JANTS	5.810.705.419	932.682.453	581.327.821	3.151.438.747	3.587.133.167
KLKIM	2.863.932.548	394.693.714	329.073.243	1.577.366.596	2.525.168.764
KLSER	8.186.069.929	2.770.774.454	2.738.740.144	5.426.084.481	7.771.866.309
KRDMA	49.431.252.795	16.723.951.014	12.282.746.065	34.750.625.059	36.843.887.941
KARSN	6.255.622	1.480.397	1.255.500	6.963.608	5.277.676
KARTN	2.941.881.561	1.086.458.628	558.194.356	1.991.118.272	2.385.352.157
KATMR	1.308.380.796	3.270.253.077	3.189.735.386	921.559.118	3.336.409.766
KERVT	15.074.508.641	3.162.705.792	3.358.503.127	7.284.222.289	7.286.543.429
KRVGD	6.013.359	1.822.881	1.551.969	4.488.709	4.312.914
KMPUR	8.837.382.925	1.076.727.074	888.532.246	1.226.081.562	2.718.142.402

KCAER	12.126.252.301	2.219.087.293	2.861.204.532	6.041.930.404	7.081.355.247
KONYA	3.586.195.515	667.529.964	670.112.777	2.123.005.360	2.494.988.158
KONKA	2.229.071.907	807.668.232	536.488.283	3.819.037.551	4.731.553.029
KBORU	1.409.264.011	222.404.290	390.174.381	986.685.061	1.673.302.089
KTSKR	1.383.934.931	861.037.433	599.250.958	2.783.771.464	2.889.967.128
LMKDC	1.542.489.457	342.733.655	297.509.315	1.091.650.704	1.583.518.963
MEDTR	808.544.532	278.362.340	275.409.548	812.530.483	1.479.747.334
NUHCM	10.195.426.221	1.637.156.657	1.111.987.962	12.808.700.530	13.411.675.656
OBAMS	21.429.480.090	1.663.809.138	1.575.718.320	3.172.755.594	4.372.318.964
OTKAR	20.932.034	7.164.857	7.430.298	8.392.290	8.303.143
OYAKC	21.425.641.489	3.760.999.495	4.091.545.077	20.569.124.393	26.666.146.623
PNLSN	2.074.019.166	324.317.311	424.093.243	912.282.153	1.265.167.737
PARSN	2.982.075.023	682.048.403	974.234.077	11.348.370.971	8.051.210.552
PETKM	62.769.546	7.627.461	6.140.873	75.456.547	51.388.127
PETUN	4.360.326.926	450.244.586	446.340.401	5.112.436.743	4.669.169.234
PNSUT	10.327.975.168	1.250.634.925	1.284.899.292	7.252.381.289	6.702.143.432
POLTK	315.833.844	62.273.221	66.789.627	74.283.290	201.082.702
QUAGR	5.716.014.815	1.821.105.045	2.073.391.341	6.230.987.246	7.765.769.617
SNICA	1.471.199.711	780.026.506	1.420.117.914	1.018.843.197	2.384.666.694
SARKY	43.130.375.172	4.421.186.930	4.856.482.722	4.299.210.727	6.554.708.184
SASA	37.611.345	15.024.952	11.380.817	1.230.125.060	65.844.785
SAYAS	678.958.547	173.046.315	187.186.496	114.087.129	556.435.545
SOKE	4.506.662.682	290.344.254	290.493.663	1.873.286.787	2.373.923.124
SUNTK	6.088.366.787	1.025.186.468	1.007.678.602	2.558.068.231	3.297.003.517
TARKM	591.603.461	918.164.009	596.835.834	392.331.693	1.280.649.168
TATGD	5.387.864.332	4.263.771.716	3.076.844.314	1.682.177.481	2.356.962.913
TOASA	105.107.908	5.553.569	9.712.040	18.163.365	36.879.584
TMSN	5.958.404.661	1.678.782.600	2.124.826.996	3.581.733.260	4.906.767.254
TUPRS	576.796.119	59.452.710	44.464.007	165.644.252	202.940.767
TTRAK	42.884.383.885	6.332.693.829	8.695.894.638	7.449.403.127	15.397.990.316
ULUUN	37.412.443.888	2.116.516.673	2.050.369.077	7.409.571.292	7.071.338.568
USAK	2.140.899.604	1.040.430.352	830.314.461	2.343.911.506	2.402.134.662
ULKER	39.659.581	8.516.384	8.391.268	24.602.395	19.801.973
VESBE	51.094.963	7.603.835	7.235.371	24.418.676	21.589.779
VESTL	87.243.106	22.555.833	23.510.954	77.076.042	40.860.209
YATAS	9.747.461.253	2.176.312.808	2.083.789.791	5.291.403.584	4.675.072.693
YYLGD	14.220.685.058	4.953.153.046	4.556.726.069	5.073.764.009	5.669.593.638
YUNSA	1.552.746.170	529.801.784	511.355.426	2.107.298.338	2.540.088.317

*: Author's own work.

Average inventory, inventory turnover & inventory days ratio, and the ratio of fixed assets to equity used in TOPSIS analysis according to the financial indicators summarized in Table 2. The formulas for average inventory, inventory turnover & inventory days ratio, and the ratio of fixed assets to equity are expressed as follows:

Average inventory = [current inventory + previous inventory] / number of periods

Inventory turnover ratio = cost of goods sold / average inventory

Inventory days ratio = 360 / inventory turnover ratio

The ratio of fixed assets to equity = fixed assets/equity

Inventory turnover ratio, inventory days ratio, and the ratio of fixed assets to equity are three main financial ratios that are commonly used in assessing the impact of hyperinflation on the financial performance of entities as well as being the most affected ratios under the circumstances of hyperinflation. That was the motivating point of the computations of these ratios used in TOPSIS Analysis. The results are shown in Table 3 as follows.

Table 3: Financial Ratios of the Sample Entities

Code	Average inventory	Inventory turnover	Inventory days	The ratio of fixed assets to equity
ADEL	554.330	2,18	165	0,72
AFYON	231.175.510	8,56	42	0,86
AKCNS	1.638.373.015	9,00	40	0,86
AKSA	3.755.718	5,32	68	0,91
ALCAR	1.033.524.844	4,40	82	0,59
ALKIM	898.245.187	3,60	100	0,57
ALVES	407.580.494	6,39	56	1,04
AEFES	24.211.925	4,17	86	1,35
ASUZU	3.169.025.553	3,94	91	0,97
ARCLK	49.159.582	3,70	97	1,46
ASTOR	1.820.678.141	5,73	63	0,47
ATAKP	958.433.988	1,99	181	0,60
AYGAZ	2.916.708	20,53	18	0,99
BAGFS	1.956.161.129	1,83	196	1,33
BTCIM	1.298.144	7,59	47	1,28
BSOKE	742.504	4,77	75	1,90
BIENY	2.495.794.937	2,88	125	0,55
BOBET	101.899.564	69,60	5	0,92
BORSK	1.450.356.909	1,93	187	0,47
BFREN	82.540.797	13,92	26	2,50
BRISA	3.666.437.723	5,45	66	1,12
BUCIM	1.468.559.344	5,09	71	0,70
CCOLA	12.087.714	5,63	64	1,38
CEMAS	260.017.449	5,80	62	0,77
CEMTS	1.143.031.579	3,59	100	0,40
CMBTN	29.199.469	99,71	4	1,39
CIMSA	2.858.342	5,76	62	1,12
DESA	327.291.576	3,77	96	0,56

DEVA	4.031.902.280	1,63	220	0,74
DGNMO	1.558.474.065	3,43	105	1,75
EGEEN	795.291.833	3,41	106	0,78
EGGUB	258.788.653	5,81	62	0,88
EGPRO	838.129.476	6,90	52	0,92
EKOS	500.003.201	1,65	218	0,44
EKSUN	958.640.541	6,41	56	0,25
ELITE	279.455.547	1,55	232	0,54
EMKEL	185.566.649	1,72	209	0,87
ERBOS	982.085.868	3,22	112	0,47
TEZOL	759.485.990	3,82	94	0,70
EUREN	655.614.662	5,04	71	0,98
EUPWR	907.647	5,28	68	0,43
FROTO	26.313.641	13,55	27	1,56
GIPTA	204.446.099	4,83	75	0,43
GOODY	3.244.049.685	5,50	65	1,06
GOKNR	1.949.967.901	3,01	120	0,65
GOLTS	501.707.934	7,00	51	1,03
GUBRF	9.580.159.757	3,30	109	1,04
HATSN	172.079.800	10,08	36	0,94
HEKTS	4.828.147.411	1,08	333	1,37
ISSEN	715.079.119	3,00	120	0,82
IZMDC	5.948.664.008	5,77	62	1,34
JANTS	757.005.137	7,68	47	0,88
KLKIM	361.883.479	7,91	45	0,62
KLSER	2.754.757.299	2,97	121	0,70
KRDMA	14.503.348.540	3,41	106	0,94
KARSN	1.367.949	4,57	79	1,32
KARTN	822.326.492	3,58	101	0,83
KATMR	3.229.994.232	0,41	889	0,28
KERVT	3.260.604.460	4,62	78	1,00
KRVGD	1.687.425	3,56	101	1,04
KMPUR	982.629.660	8,99	40	0,45
KCAER	2.540.145.913	4,77	75	0,85
KONYA	668.821.371	5,36	67	0,85
KONKA	672.078.258	3,32	109	0,81
KBORU	306.289.336	4,60	78	0,59
KTSKR	730.144.196	1,90	190	0,96
LMKDC	320.121.485	4,82	75	0,69
MEDTR	276.885.944	2,92	123	0,55
NUHCM	1.374.572.310	7,42	49	0,96
OBAMS	1.619.763.729	13,23	27	0,73
OTKAR	7.297.578	2,87	126	1,01
OYAKC	3.926.272.286	5,46	66	0,77
PNLSN	374.205.277	5,54	65	0,72

PARSN	828.141.240	3,60	100	1,41
PETKM	6.884.167	9,12	39	1,47
PETUN	448.292.494	9,73	37	1,09
PNSUT	1.267.767.109	8,15	44	1,08
POLTK	64.531.424	4,89	74	0,37
QUAGR	1.947.248.193	2,94	123	0,80
SNICA	1.100.072.210	1,34	269	0,43
SARKY	4.638.834.826	9,30	39	0,66
SASA	13.202.885	2,85	126	0,19
SAYAS	180.116.406	3,77	96	0,21
SOKE	290.418.959	15,52	23	0,79
SUNTK	1.016.432.535	5,99	60	0,78
TARKM	757.499.922	0,78	461	0,31
TATGD	3.670.308.015	1,47	245	0,71
TOASA	7.632.805	13,77	26	0,49
TMSN	1.901.804.798	3,13	115	0,73
TUPRS	51.958.359	11,10	32	0,82
TTRAK	7.514.294.234	5,71	63	0,48
ULUUN	2.083.442.875	17,96	20	1,05
USAK	935.372.407	2,29	157	0,98
ULKER	8.453.826	4,69	77	1,24
VESBE	7.419.603	6,89	52	1,13
VESTL	23.033.394	3,79	95	1,89
YATAS	2.130.051.300	4,58	79	1,13
YYLGD	4.754.939.558	2,99	120	0,89
YUNSA	520.578.605	2,98	121	0,83

*: Author's own work.

TOPSIS analysis

The results shown in Table 3 were used in TOPSIS analysis for analyzing the relationship between the Topsis order of financial performance of the sample entities, and degrees of meeting of the Standard of the sample entities. The reason why the TOPSIS analysis was conducted in the study was to answer the question of whether the entities whose financial performance is good are good at complying with the disclosure requirements of IAS-29 in the meanwhile or not, statistically. In this study, there were 3 criteria and 99 alternatives that were ranked based on the TOPSIS method. The following table describes the criteria;

Characteristics of Criteria

	name	**type**	**weight**
1	Inventory turnover ratio	Positive (+)	0.333
2	Inventory days ratio	Negative (-)	0.333
3	Intangible assets to total equity ratio	Positive (+)	0.333

*: Created by TOPSIS Software.

The following table shows the decision matrix:

Decision Matrix

	Inventory\n turnover ratio	Inventory\n days ratio	Fixed assets to total equity ratio		Inventory\n turnover ratio	Inventory\n days ratio	Fixed assets to total equity ratio
ADEL	2.18	165	0.72	ASUZU	3.94	91	0.97
AFYON	8.56	42	0.86	ARCLK	3.7	97	1.46
AKCNS	9	40	0.86	ASTOR	5.73	63	0.47
AKSA	5.32	68	0.91	ATAKP	1.99	181	0.6
ALCAR	4.4	82	0.59	AYGAZ	20.53	18	0.99
ALKIM	3.6	100	0.57	BAGFS	1.83	196	1.33
ALVES	6.39	56	1.04	BTCIM	7.59	47	1.28
AEFES	4.17	86	1.35	BSOKE	4.77	75	1.9
BIENY	2.88	125	0.55	GOODY	5.5	65	1.06
BOBET	69.6	5	0.92	GOKNR	3.01	120	0.65
BORSK	1.93	187	0.47	GOLTS	7	51	1.03
BFREN	13.92	26	2.5	GUBRF	3.3	109	1.04
BRISA	5.45	66	1.12	HATSN	10.08	36	0.94
BUCIM	5.09	71	0.7	HEKTS	1.08	333	1.37
CCOLA	5.63	64	1.38	ISSEN	3	120	0.82
CEMAS	5.8	62	0.77	IZMDC	5.77	62	1.34
CEMTS	3.59	100	0.4	JANTS	7.68	47	0.88
CMBTN	99.71	4	1.39	KLKIM	7.91	45	0.62
CIMSA	5.76	62	1.12	KLSER	2.97	121	0.7
DESA	3.77	96	0.56	KRDMA	3.41	106	0.94
DEVA	1.63	220	0.74	KARSN	4.57	79	1.32
DGNMO	3.43	105	1.75	KARTN	3.58	101	0.83
EGEEN	3.41	106	0.78	KATMR	0.41	889	0.28
EGGUB	5.81	62	0.88	KERVT	4.62	78	1
EGPRO	6.9	52	0.92	KRVGD	3.56	101	1.04
EKOS	1.65	218	0.44	KMPUR	8.99	40	0.45
EKSUN	6.41	56	0.25	KCAER	4.77	75	0.85
ELITE	1.55	232	0.54	KONYA	5.36	67	0.85
EMKEL	1.72	209	0.87	KONKA	3.32	109	0.81
ERBOS	3.22	112	0.47	KBORU	4.6	78	0.59
TEZOL	3.82	94	0.7	KTSKR	1.9	190	0.96
EUREN	5.04	71	0.98	LMKDC	4.82	75	0.69
EUPWR	5.28	68	0.43	MEDTR	2.92	123	0.55
FROTO	13.55	27	1.56	NUHCM	7.42	49	0.96
GIPTA	4.83	75	0.43	OBAMS	13.23	27	0.73
OTKAR	2.87	126	1.01	TARKM	0.78	461	0.31
OYAKC	5.46	66	0.77	TATGD	1.47	245	0.71
PNLSN	5.54	65	0.72	TOASO	13.77	26	0.49
PARSN	3.6	100	1.41	TMSN	3.13	115	0.73
PETKM	9.12	39	1.47	TUPRS	11.1	32	0.82
PETUN	9.73	37	1.09	TTRAK	5.71	63	0.48

PNSUT	8.15	44	1.08	ULUUN	17.96	20	1.05
POLTK	4.89	74	0.37	USAK	2.29	157	0.98
QUAGR	2.94	123	0.8	ULKER	4.69	77	1.24
SNICA	1.34	269	0.43	VESBE	6.89	52	1.13
SARKY	9.3	39	0.66	VESTL	3.79	95	1.89
SASA	2.85	126	0.19	YATAS	4.58	79	1.13
SAYAS	3.77	96	0.21	YYLGD	2.99	120	0.89
SOKE	15.52	23	0.79	YUNSA	2.98	121	0.83
SUNTK	5.99	60	0.78				

*: Created by TOPSIS Software.

The Steps of the TOPSIS Method are explained below:

STEP 1: Normalize the decision matrix

This formula can be used to normalize; $r_{ij}(\mathrm{x}) = \frac{x_{ij}}{\sqrt{\sum_{i=1}^{m} x_{ij}^2}} \quad i = 1, \dots, m \;\; ; j = 1, \dots \;\; , n$

The following table shows the normalized matrix.

The Normalized Matrix

	Inventory\n turnover ratio	**Inventory\n days ratio**	**Intangible assets to total equity ratio**		**Inventory\n turnover ratio**	**Inventory\n days ratio**	**Intangible assets to total equity ratio**
ADEL	0.016	0.112	0.075	DEVA	0.012	0.15	0.077
AFYON	0.062	0.029	0.09	DGNMO	0.025	0.071	0.183
AKCNS	0.065	0.027	0.09	EGEEN	0.025	0.072	0.081
AKSA	0.039	0.046	0.095	EGGUB	0.042	0.042	0.092
ALCAR	0.032	0.056	0.062	EGPRO	0.05	0.035	0.096
ALKIM	0.026	0.068	0.059	EKOS	0.012	0.148	0.046
ALVES	0.046	0.038	0.109	EKSUN	0.047	0.038	0.026
AEFES	0.03	0.059	0.141	ELITE	0.011	0.158	0.056
ASUZU	0.029	0.062	0.101	EMKEL	0.013	0.142	0.091
ARCLK	0.027	0.066	0.152	ERBOS	0.023	0.076	0.049
ASTOR	0.042	0.043	0.049	TEZOL	0.028	0.064	0.073
ATAKP	0.014	0.123	0.063	EUREN	0.037	0.048	0.102
AYGAZ	0.149	0.012	0.103	EUPWR	0.038	0.046	0.045
BAGFS	0.013	0.133	0.139	FROTO	0.099	0.018	0.163
BTCIM	0.055	0.032	0.134	GIPTA	0.035	0.051	0.045
BSOKE	0.035	0.051	0.198	GOODY	0.04	0.044	0.111
BIENY	0.021	0.085	0.057	GOKNR	0.022	0.082	0.068
BOBET	0.506	0.003	0.096	GOLTS	0.051	0.035	0.107
BORSK	0.014	0.127	0.049	GUBRF	0.024	0.074	0.109
BFREN	0.101	0.018	0.261	HATSN	0.073	0.025	0.098
BRISA	0.04	0.045	0.117	HEKTS	0.008	0.227	0.143

BUCIM	0.037	0.048	0.073	ISSEN	0.022	0.082	0.086
CCOLA	0.041	0.044	0.144	IZMDC	0.042	0.042	0.14
CEMAS	0.042	0.042	0.08	JANTS	0.056	0.032	0.092
CEMTS	0.026	0.068	0.042	KLKIM	0.058	0.031	0.065
CMBTN	0.725	0.003	0.145	KLSER	0.022	0.082	0.073
CIMSA	0.042	0.042	0.117	KRDMA	0.025	0.072	0.098
DESA	0.027	0.065	0.058	KARSN	0.033	0.054	0.138
KARTN	0.026	0.069	0.087	SASA	0.021	0.086	0.02
KATMR	0.003	0.605	0.029	SAYAS	0.027	0.065	0.022
KERVT	0.034	0.053	0.104	PETUN	0.071	0.025	0.114
KRVGD	0.026	0.069	0.109	PNSUT	0.059	0.03	0.113
KMPUR	0.065	0.027	0.047	POLTK	0.036	0.05	0.039
KCAER	0.035	0.051	0.089	SOKE	0.113	0.016	0.082
KONYA	0.039	0.046	0.089	SUNTK	0.044	0.041	0.081
KONKA	0.024	0.074	0.085	TARKM	0.006	0.314	0.032
KBORU	0.033	0.053	0.062	TATGD	0.011	0.167	0.074
KTSKR	0.014	0.129	0.1	TOASO	0.1	0.018	0.051
LMKDC	0.035	0.051	0.072	TMSN	0.023	0.078	0.076
MEDTR	0.021	0.084	0.057	TUPRS	0.081	0.022	0.086
NUHCM	0.054	0.033	0.1	TTRAK	0.042	0.043	0.05
OBAMS	0.096	0.018	0.076	ULUUN	0.131	0.014	0.11
OTKAR	0.021	0.086	0.105	USAK	0.017	0.107	0.102
OYAKC	0.04	0.045	0.08	ULKER	0.034	0.052	0.129
PNLSN	0.04	0.044	0.075	VESBE	0.05	0.035	0.118
PARSN	0.026	0.068	0.147	VESTL	0.028	0.065	0.197
POLTK	0.036	0.05	0.039	YATAS	0.033	0.054	0.118
QUAGR	0.021	0.084	0.083	YYLGD	0.022	0.082	0.093
SNICA	0.01	0.183	0.045	YUNSA	0.022	0.082	0.087
SARKY	0.068	0.027	0.069				

*: Created by TOPSIS Software.

STEP 2: Calculate the weighted normalized decision matrix

According to the following formula, the normalized matrix is multiplied by the weight of the criteria.

$$v_{ij}(\mathrm{x}) = w_j r_{ij}(x) \qquad i = 1, \dots, m \;\; ; j = 1, \dots \;\; , n$$

The following table shows the weighted normalized decision matrix.

The Weighted Normalized Matrix

	Inventory\n turnover ratio	Inventory\n days ratio	Intangible assets to total equity ratio		Inventory\n turnover ratio	Inventory\n days ratio	Intangible assets to total equity ratio
ADEL	0.005	0.037	0.025	CEMAS	0.014	0.014	0.027
AFYON	0.021	0.01	0.03	CEMTS	0.009	0.023	0.014
AKCNS	0.022	0.009	0.03	CMBTN	0.242	0.001	0.048
AKSA	0.013	0.015	0.032	CIMSA	0.014	0.014	0.039

ALCAR	0.011	0.019	0.02	DESA	0.009	0.022	0.019
ALKIM	0.009	0.023	0.02	DEVA	0.004	0.05	0.026
ALVES	0.015	0.013	0.036	DGNMO	0.008	0.024	0.061
AEFES	0.01	0.02	0.047	EGEEN	0.008	0.024	0.027
ASUZU	0.01	0.021	0.034	EGGUB	0.014	0.014	0.031
ARCLK	0.009	0.022	0.051	EGPRO	0.017	0.012	0.032
ASTOR	0.014	0.014	0.016	EKOS	0.004	0.049	0.015
ATAKP	0.005	0.041	0.021	EKSUN	0.016	0.013	0.009
AYGAZ	0.05	0.004	0.034	ELITE	0.004	0.053	0.019
BAGFS	0.004	0.044	0.046	EMKEL	0.004	0.047	0.03
BTCIM	0.018	0.011	0.044	ERBOS	0.008	0.025	0.016
BSOKE	0.012	0.017	0.066	TEZOL	0.009	0.021	0.024
BIENY	0.007	0.028	0.019	EUREN	0.012	0.016	0.034
BOBET	0.169	0.001	0.032	EUPWR	0.013	0.015	0.015
BORSK	0.005	0.042	0.016	FROTO	0.033	0.006	0.054
BFREN	0.034	0.006	0.087	GIPTA	0.012	0.017	0.015
BRISA	0.013	0.015	0.039	GOODY	0.013	0.015	0.037
BUCIM	0.012	0.016	0.024	GOKNR	0.007	0.027	0.023
CCOLA	0.014	0.015	0.048	GOLTS	0.017	0.012	0.036
GUBRF	0.008	0.025	0.036	PARSN	0.009	0.023	0.049
HATSN	0.024	0.008	0.033	PETKM	0.022	0.009	0.051
HEKTS	0.003	0.076	0.048	PETUN	0.024	0.008	0.038
ISSEN	0.007	0.027	0.028	PNSUT	0.02	0.01	0.038
IZMDC	0.014	0.014	0.047	POLTK	0.012	0.017	0.013
JANTS	0.019	0.011	0.031	QUAGR	0.007	0.028	0.028
KLKIM	0.019	0.01	0.022	SNICA	0.003	0.061	0.015
KLSER	0.007	0.027	0.024	SARKY	0.023	0.009	0.023
KRDMA	0.008	0.024	0.033	SASA	0.007	0.029	0.007
KARSN	0.011	0.018	0.046	SAYAS	0.009	0.022	0.007
KARTN	0.009	0.023	0.029	SOKE	0.038	0.005	0.027
KATMR	0.001	0.202	0.01	SUNTK	0.015	0.014	0.027
KERVT	0.011	0.018	0.035	TARKM	0.002	0.105	0.011
KRVGD	0.009	0.023	0.036	TATGD	0.004	0.056	0.025
KMPUR	0.022	0.009	0.016	TOASO	0.033	0.006	0.017
KCAER	0.012	0.017	0.03	TMSN	0.008	0.026	0.025
KONYA	0.013	0.015	0.03	TUPRS	0.027	0.007	0.028
KONKA	0.008	0.025	0.028	TTRAK	0.014	0.014	0.017
KBORU	0.011	0.018	0.02	ULUUN	0.044	0.005	0.036
KTSKR	0.005	0.043	0.033	USAK	0.006	0.036	0.034
LMKDC	0.012	0.017	0.024	ULKER	0.011	0.017	0.043
MEDTR	0.007	0.028	0.019	VESBE	0.017	0.012	0.039
NUHCM	0.018	0.011	0.033	VESTL	0.009	0.022	0.066
OBAMS	0.032	0.006	0.025	YATAS	0.011	0.018	0.039
OTKAR	0.007	0.029	0.035	YYLGD	0.007	0.027	0.031
OYAKC	0.013	0.015	0.027	YUNSA	0.007	0.027	0.029
PNLSN	0.013	0.015	0.025				

*: Created by TOPSIS Software.

STEP 3: Determine the positive ideal and negative ideal solutions

In this step, the positive and negative ideal solutions are determined according to the following formulas.

$$A^+ = (v_1^+, v_2^+, \dots, v_n^+) \; ve \; A^- = (v_1^-, v_2^-, \dots, v_n^{-+})$$

So that $v_j^- = \{(min\, v_{ij}(x) \big| j \epsilon j_1) , (max\, v_{ij}(x) \big| j \epsilon j_2)\} \;\; i = 1, \dots, m$

Where j1 and j2 denote the negative and positive criteria, respectively. The following table shows both positive and negative ideal values.

The Positive and Negative Ideal Values

	Positive ideal	Negative ideal
Inventory\n turnover ratio	0.242	0.001
Inventory\n days ratio	0.001	0.202
Intangible assets to total equity ratio	0.087	0.007

*: Created by TOPSIS Software.

STEP 4: Distance from the positive and negative ideal solutions

In this step, the calculation of the distances between each alternative and the positive and negative ideal solutions is obtained by using the following formulas.

$$d_i^+ = \sqrt{\sum_{j=1}^{n}[v_{ij}(x) - v_j^+(x)]^2} \;\; , \;\; i = 1, \dots, m \quad d_i^- = \sqrt{\sum_{j=1}^{n}[v_{ij}(x) - v_j^-(x)]^2} \;\; , \;\; i = 1, \dots, m$$

The following table shows the distance to the positive and negative ideal solutions.

The Distance to Positive and Negative Ideal Points

	Distance to positive ideal	Distance to negative ideal		Distance to positive ideal	Distance to negative ideal
ADEL	0.247	0.165	BUCIM	0.238	0.187
AFYON	0.228	0.194	CCOLA	0.232	0.192
AKCNS	0.227	0.195	CEMAS	0.236	0.189
AKSA	0.236	0.188	CEMTS	0.245	0.179
ALCAR	0.241	0.184	CMBTN	0.039	0.316
ALKIM	0.243	0.18	CIMSA	0.233	0.191
ALVES	0.232	0.192	DESA	0.243	0.18
AEFES	0.236	0.187	DEVA	0.25	0.153
ASUZU	0.239	0.183	DGNMO	0.236	0.186
ARCLK	0.236	0.185	EGEEN	0.242	0.179
ASTOR	0.239	0.188	EGGUB	0.235	0.19
ATAKP	0.249	0.161	EGPRO	0.232	0.192
AYGAZ	0.199	0.205	EKOS	0.253	0.152

BAGFS	0.244	0.162	EKSUN	0.239	0.189
BTCIM	0.227	0.195	ELITE	0.253	0.149
BSOKE	0.231	0.194	EMKEL	0.248	0.156
BIENY	0.246	0.174	ERBOS	0.245	0.177
BOBET	0.091	0.262	TEZOL	0.241	0.181
BORSK	0.251	0.16	EUREN	0.236	0.188
BFREN	0.208	0.214	EUPWR	0.24	0.187
BRISA	0.234	0.19	FROTO	0.211	0.204
GIPTA	0.241	0.185	OBAMS	0.218	0.199
GOODY	0.234	0.19	OTKAR	0.242	0.175
GOKNR	0.244	0.175	OYAKC	0.236	0.188
GOLTS	0.231	0.193	PNLSN	0.237	0.188
GUBRF	0.24	0.179	PARSN	0.237	0.184
HATSN	0.224	0.197	PETKM	0.222	0.199
HEKTS	0.253	0.133	PETUN	0.223	0.197
ISSEN	0.243	0.176	PNSUT	0.227	0.195
IZMDC	0.231	0.192	POLTK	0.242	0.185
JANTS	0.23	0.193	QUAGR	0.243	0.175
KLKIM	0.232	0.193	SNICA	0.256	0.141
KLSER	0.244	0.175	SARKY	0.228	0.195
KRDMA	0.241	0.18	SASA	0.249	0.173
KARSN	0.235	0.188	SAYAS	0.246	0.18
KARTN	0.241	0.18	SOKE	0.212	0.201
KATMR	0.323	0.003	SUNTK	0.235	0.19
KERVT	0.237	0.186	TARKM	0.272	0.097
KRVGD	0.239	0.181	TATGD	0.252	0.147
KMPUR	0.231	0.194	TOASO	0.22	0.199
KCAER	0.238	0.186	TMSN	0.243	0.177
KONYA	0.236	0.188	TUPRS	0.223	0.197
KONKA	0.242	0.178	TTRAK	0.239	0.188
KBORU	0.24	0.185	ULUUN	0.204	0.204
KTSKR	0.247	0.161	USAK	0.244	0.168
LMKDC	0.239	0.186	ULKER	0.235	0.188
MEDTR	0.246	0.174	VESBE	0.23	0.193
NUHCM	0.23	0.193	VESTL	0.234	0.19
YATAS	0.236	0.187	YUNSA	0.243	0.176
YYLGD	0.242	0.176			

*: Created by TOPSIS Software

STEP 5: Calculate the relative closeness degree of alternatives to the ideal solution

In this step, the relative closeness degree of each alternative to the ideal solution is obtained by the following formula. If the relative closeness degree has value near 1, it means that the alternative has a shorter distance from the positive ideal solution and a longer distance from the negative ideal solution.

$$C_i = \frac{d_i^-}{(d_i^+ + d_i^-)} \quad , \quad i = 1, \dots, m$$

The following table shows the relative closeness degree of each alternative to the ideal solution and its ranking.

The Cia Value and Ranking

	Ci	rank		Ci	rank		Ci	rank
CMBTN	0,891	1	BRISA	0,448	19	ALCAR	0,433	32
BOBET	0,742	2	GOODY	0,448	19	KRVGD	0,431	33
AYGAZ	0,508	3	EGGUB	0,447	20	TEZOL	0,429	34
BFREN	0,507	4	VESTL	0,447	20	GUBRF	0,428	35
ULUUN	0,499	5	SUNTK	0,446	21	KARTN	0,428	35
FROTO	0,491	6	CEMAS	0,445	22	KRDMA	0,427	36
SOKE	0,486	7	KARSN	0,445	22	DESA	0,426	37
OBAMS	0,477	8	ULKER	0,445	22	ALKIM	0,425	38
TOASO	0,475	9	AKSA	0,444	23	EGEEN	0,425	38
PETKM	0,472	10	KONYA	0,444	23	KONKA	0,424	39
TUPRS	0,47	11	EUREN	0,443	24	CEMTS	0,423	40
HATSN	0,468	12	OYAKC	0,443	24	SAYAS	0,422	41
PETUN	0,468	12	PNLSN	0,443	24	TMSN	0,421	42
AKCNS	0,462	13	AEFES	0,442	25	YYLGD	0,421	42
BTCIM	0,462	13	EKSUN	0,442	25	ISSEN	0,42	43
PNSUT	0,462	13	YATAS	0,442	25	OTKAR	0,42	43
AFYON	0,46	14	ASTOR	0,441	26	YUNSA	0,42	43
SARKY	0,46	14	DGNMO	0,441	26	ERBOS	0,419	44
BSOKE	0,456	15	TTRAK	0,441	26	QUAGR	0,419	44
GOLTS	0,456	15	BUCIM	0,44	27	GOKNR	0,418	45
JANTS	0,456	15	KERVT	0,44	27	KLSER	0,418	45
KMPUR	0,456	15	KCAER	0,44	27	MEDTR	0,415	46
NUHCM	0,456	15	ARCLK	0,439	28	BIENY	0,414	47
VESBE	0,456	15	EUPWR	0,437	29	SASA	0,41	48
IZMDC	0,454	16	LMKDC	0,437	29	USAK	0,408	49
KLKIM	0,454	16	PARSN	0,437	29	ADEL	0,401	50
ALVES	0,453	17	KBORU	0,435	30	BAGFS	0,399	51
CCOLA	0,453	17	ASUZU	0,434	31	KTSKR	0,395	52
EGPRO	0,453	17	GIPTA	0,434	31	ATAKP	0,393	53
CIMSA	0,45	18	POLTK	0,434	31	BORSK	0,389	54
EMKEL	0,386	55	SNICA	0,355	60			
DEVA	0,379	56	HEKTS	0,344	61			
EKOS	0,376	57	TARKM	0,263	62			
ELITE	0,372	58	KATMR	0,01	63			
TATGD	0,369	59						

*: Created by TOPSIS Software

According to the final findings of the analysis obtained from TOPSIS Software, CMBTN had the best financial performance with the highest ci value of 0,891 while KATMR had the worst financial performance with the lowest ci value of 0,01. Nevertheless, CMBTN couldn't comply with all three disclosure requirements of IAS 29. As presented in Table 1, the degree of meeting the Standard was equal to 67 %, and disclosure requirement 2 was missing in the annual financial report of CMBTN. Ironically, the worst entity – KATMR regarding its financial performance had fully complied with all three disclosure requirements of IAS 29 in its annual financial report. That was a concrete indicator of a weak relationship between financial performance, and the reporting performance of the sample entities. Also, the financial performance of all of the top five entities which are comprised of BOBET, AYGAZ, BFREN, ULUUN including CMBTN couldn't match their reporting performance, completely. ULUUN couldn't comply with the disclosure requirement-2 like CMBTN. Only the three entities (BOBET, AYGAZ, BFREN) could comply with all of the disclosure requirements. But, surprisingly all of the last five entities (TATGD, SNICA, HEKTS, TARKM, KATMR) which had the lowest financial performance were in accordance with all of the disclosure requirements. As a result, no significant or reasonable relationship was able to be found between financial performance and reporting performance, statistically within the comparison of the findings of TOPSIS analysis and descriptive analysis explained in 3.1.

3.3. Considering the Effect of Hyperinflationary Economy on the Independent Auditor's Reports by Content Analysis

As a result of the hyperinflationary economy in Türkiye, hyperinflationary accounting came to the fore in the year 2023 based on the announcement of POAASA at the date of November 23, 2023, and that has changed the extent of independent auditors' reports. Hyperinflationary accounting has begun to be a subject in independent audit reports, and addressed by independent auditors as a challenging matter. Although it is really challenging, it is still a non-consensual matter regarding which section of independent audit reports it should be addressed. There is no strict or formal rule about how to determine and communicate hyperinflationary accounting in the context of independent audit reports. There are only International Standards on Auditing; ISA (701) and (706) issued by the International Auditing and Assurance Standards Board (IAASB) that are taken as a reference or guideline in practice. In the study, the effect of a hyperinflationary economy, thus hyperinflationary accounting on independent audit reports of the sample entities was considered by a content analysis containing analysis of dataset drawn from the independent auditor's reports of the sample entities based on consideration of the objectives of ISA (701) Communicating Key Audit Matters in the Independent Auditor's Report & ISA (706) Emphasis of Matter Paragraphs and Other Matter Paragraphs in the Independent Auditor's Report. The research explored which sections were preferably used more or less in practice to communicate matters of hyperinflationary accounting to financial statement users, and how this matter was addressed by independent auditors in general. The results of the research are summarized in the following Table 4.

Table 4: Distribution of the Sections of the Independent Auditor's Reports

	KAM (Key audit matters)	Emphasis of matter paragraphs	Other matter paragraphs	KAM & Emphasis of matter paragraphs	KAM & Other matter paragraphs	Null	Total
Quantity	76	6	1	6	4	6	99
Weight	77 %	6 %	1 %	6 %	4 %	6 %	100 %

*: Author's own work.

In Table 4, the distribution of the sections of the independent auditor's reports of the sample entities was shown based on the quantity and weight of the reports. According to the results, the vast majority of the independent auditors of the sample entities have addressed the matter of hyperinflationary accounting as "*key audit matters*" in their reports while the minority of them have stated it in "*other matters paragraphs*". According to the results of the analysis, KAM (Key Audit Matters) was the most frequently used section (77 %) while other matters paragraphs were the least used one (1%). It is seen that 76 out of 99 entities (77 %) have communicated the matter of inflation accounting to financial statement users in the section of key audit matters and aligned to (ISA) 701, 6 out of 99 entities (6 %) in the section of emphasis of matters paragraphs and 1 out of 99 (1 %) entities in the section of other matters paragraphs referring to (ISA) 706, but 6 out 99 entities (6 %) haven't addressed the matter of inflation accounting in any sections in the context of the independent audit reports. All in all, the section on key audit matters was prominent regarding the independent auditor's reports of the sample entities although the fact that addressing the matter of hyperinflationary accounting in different sections of the reports by the independent auditors of the sample entities resulted in a lack of uniformity. That way of reporting has shown that there were no standardizations or uniformity.

3.4. Textual Analysis of the Annual Financial Reports and Independent Auditor's Report of the Sample Entities

Textual analysis is the application of natural language processing (NLP) to textual data for automated information extraction or measurement It has been often used by accounting researchers to measure disclosure sentiment, readability, and disclosure quantity to compare disclosures to determine similarities or differences and detect themes (Bochkay et al., 20203). Textual analysis is an emerging area in accounting and finance. This analysis might be considered as a subset of what is sometimes labeled qualitative analysis (Loughran and McDonald, 2016). In this study, textual analysis was used to understand reporting trends based on the requirements of the Standard, IAS-29, and independent auditor's reports as an integral and supporting part of the research explained in 3.1. and 3.3. The analysis focused on three attributes (weight & frequency, boilerplate, and comparability) that are likely to be of interest to investors, regulators, managers, and other stakeholders, as well as affecting the content of the annual financial reports and independent auditors' reports. Textual analysis was mainly focused on a specific event, IAS-29 adoption in a hyperinflationary economy to understand and assess the effects of hyperinflationary accounting on disclosures for the first part of the research. It was excepted that, mandatory IAS adoption would be associated with increases in the quantity of textual disclosure. In line with the expectation, the analysis has

shown that nearly all of the sample entities had extended the scope of disclosures stated in footnote No. 2. in their annual financial reports as a result of hyperinflation in Türkiye for the reporting period. Table 5, summarizes the extended scope and characteristics of disclosures in footnote No. 2. as follows:

Table 5: Categorization of Characteristics of the Textual Disclosures of the Annual Financial Reports

Categories	Name of the textual disclosure related to hyperinflation & inflation accounting	Quantity	Weight
Main headline-1	**Basis of presentation of the financial statements**	**56**	**57 %**
Sub-headline 1	Basis for Presentation	28	50 %
Sub-headline 2	Amendments to financial statements in hyperinflation periods	18	32 %
Sub-headline 3	Financial reporting in hyperinflationary economies	5	9 %
Sub-headline 4	Restatements of financial statements in hyperinflation periods	1	2 %
Sub-headline 5	Principles of preparation of financial statements	1	2 %
Sub-headline 6	Applied financial reporting standards	1	2 %
Sub-headline 7	Basis for preparation and presentation of financial statements	1	2 %
Sub-headline 8	Summary of significant accounting policies	1	2 %
Main headline-2	**Basis of presentation of the financial statements and chosen accounting policies**	**1**	**1 %**
Main headline-3	**Basis of presentation of the consolidated financial statements**	**39**	**39 %**
Sub-headline 1	Basis for presentation	22	56 %
Sub-headline 2	Amendments to financial statements in hyperinflation periods	8	21 %
Sub-headline 3	Financial reporting in hyperinflationary economies	7	18 %
Sub-headline 4	Basis for preparation of financial statements	1	3 %
Sub-headline 5	Applied financial reporting standards	1	3 %
Main headline-4	**Basis of presentation of the consolidated financial statements and chosen accounting policies**	**2**	**2 %**
Null	**Null**	**1**	**1 %**

*: Author's own work.

Based on the measurement of weight and frequency, hyperinflationary accounting was associated with the presentation of the financial statements of the sample entities, mostly. Unlike this, it was rarely associated with the chosen accounting policies of the sample entities, rarely. 56 out of 99 entities gave disclosure associated with hyperinflationary accounting under "*the name of presentation of financial statements (57 %)*", and 39 out of 99 entities under *"the name of presentation of consolidated financial statements (39 %)"*. All in all 95 out of 99 entities (96 %) gave disclosure associated with hyperinflationary accounting in their annual financial reports. Also, one entity (BORSK) addressed hyperinflationary accounting nowhere in its annual financial report although its functional currency was the Turkish Lira for the related reporting period. That might be considered a huge discrepancy since the entity was required to give related disclosures about hyperinflationary accounting for a related period. In addition, it was a sign of reporting failure reflecting no information, and application of hyperinflationary accounting even though it was required by the Standard. The measurement of comparability was estimated by comparing how similar the headlines and sub-headlines an entity had

used in its annual financial report with the other sample entities. The keywords that were searched for in textual information were *"inflation"* and *"TAS-29 (Turkish version of IAS-29)"* to find out the main and sub-headlines related with hyperinflationary accounting. The main titles referred to the basis for the presentation of financial statements, intensively so the sub-titles were. The main titles were categorized into four different groups. These are "*basis for presentation of financial statements*", "*basis for presentation of consolidated financial statements*", "*basis for presentation of financial statements and chosen accounting policies*", and "*basis for presentation of consolidated financial statements and chosen accounting policies*". The sub-headlines were comprised of the *basis for presentation*, *amendments to financial statements*, *financial reporting, a restatement of financial statements*, *principles of preparation of financial statements*, *applied financial reporting standards*, the *basis for presentation and preparation of financial statements, and significant accounting policies in hyperinflationary economies*. The main and sub-titles were similar to each other, ferforthly although that wasn't enough to reflect an exact standardization. Surprisingly, all of the entities had given the information in the same footnote which was footnote 2, and provided a standardization in one way as regards the number of the footnotes in the contents of the annual financial reports. On the other hand, that might make it easier to search for information about hyperinflationary accounting for investors, regulators, and other stakeholders in annual financial reports. Nonetheless, footnote 2 has been already available in annual financial reports containing detailed information about various financial aspects, and has a broaden scope. It isn't a new part of annual financial reports. Therefore, giving the information in the scope of footnote 2, and compression of the information in it might cause significant points of the matter to be glossed over. That means the significance of the matter of hyperinflationary accounting for the year 2023 in Türkiye might be neglected. So, that would be likely better to give the information in a separate new footnote named the Standard – IAS 29 to stress the significance and specification of the matter including paying more attention to investors on this matter.In the second part of the research, the reflection of hyperinflation on the independent auditors' reports of the sample entities for the reporting period was analyzed. This analysis was particularly conducted by searching the related textual disclosures with hyperinflationary accounting in related sections of independent auditors' reports of the sample entities. Based on the results of the analysis, the related audit report sections and the sub-titles of the textual disclosures used by the independent auditors were presented in Table 6 presented below.

Table 6: Categorization of Characteristics of the Textual Disclosures of the Independent Auditor's Reports

Audit Report Sections	Sub-title of the textual disclosure related to hyperinflationary accounting in the section	Quantity	Weight
KAM	Application of the Standard – "IAS 29 Financial Reporting in Hyperinflationary Economies"	56	74 %
	Application of Hyperinflationary Accounting	20	26 %
		76	**77 %**
KAM & Emphasis of Matters Paragraphs	Application of the Standard – "IAS 29 Financial Reporting in Hyperinflationary Economies"	5	83 %
		1	17 %
	Application of Hyperinflationary Accounting	**6**	**6 %**
KAM & Other Matters Paragraphs	Application of Hyperinflationary Accounting	4	100 %
		4	**4 %**

Emphasis of Matters	No sub-titles	6	100 %
Paragraphs		**6**	**6 %**
Other Matters	No sub-titles	1	100 %
Paragraphs		**1**	**1 %**
Null	Null	6	100 %
		6	**6 %**

*: Author's own work.

According to the analysis, the related independent audit report sections preferred by the independent auditors to address the matter of hyperinflationary accounting were "KAM", "emphasis of matters" and "other matters" paragraphs. Also, 10 out of 99 independent auditors (10 %) had adopted two different combined approaches (KAM and other matters paragraphs). The keywords which were searched in textual information of the independent auditor's reports to find out the disclosures and explanations about hyperinflationary accounting were "inflation", "hyperinflationary accounting" and "IAS-29". The word of IAS 29 had been used 193 times, the word of inflation had been used 108 times and the word of hyperinflationary accounting had been used 26 times in the independent auditors' reports of the sample entities. Also in the scope of the analysis, the top three explanations used by the independent auditors in the completely same way were as follows;

1. *"Based on the consideration of the significant impact of IAS 29 on the Group's reported results and financial position, hyperinflationary accounting was assessed as a key audit matter."*

2. *"The application of IAS 29 has a common and consistently significant impact on financial statements. In addition to these reasons, considering the risk that the data used in the implementation of IAS 29 is not accurate and complete, and the additional audit effort expended, the implementation of IAS 29 has been identified by us as a key audit matter."*

3. *"Due to the existence of estimates used in the restatements, the high complexity of the calculation, and the risk that the data used in the restatement might be incomplete or inaccurate, the implementation of IAS 29 has been identified as a key audit matter."*

Usage of extremely similar words & phrases, completely the same explanations by the independent auditors in their reports, or choosing boilerplate reporting as illustrated above from the research sample pose an obstacle regarding useful financial information. That kind of information is unlikely client-specific information beyond being less informative. Also, it likely damages the individuality of professional judgments of independent auditors in their reports.

4. Conclusion and Discussion

This study has shown that the matter of hyperinflation has a significant impact on disclosures of both financial reports and independent auditor's reports. The significant points identified in the related analyses within the scope of this study might be synthesized into five major findings. First, the study assesses the degree of meeting the requirements of Standard – IAS 29 based on the three disclosure requirements and reveals that there are several entities whose financial reports are unable to fully

follow all of these three disclosure requirements. In other words, these entities have reporting failures in adapting all of the disclosure requirements stated by IAS 29. Furthermore, and related, the study marks the points of the mostly problematic disclosure requirement uncovering that disclosure requirement 2 is the most neglected one by the research sample compared to other disclosure requirements. This finding offers a valuable insight that future research might focus on searching the reasons for this neglection from client entity financial reporting choices. Second, the study uncovers that the financial performance of the sample entities is not reasonably related to their reporting performance. Empirical findings of TOPSIS analysis including the results of the descriptive analysis indicate that there is no significant or reasonable relationship between financial performance, and reporting performance of these entities, statistically. Third, this study establishes the way of reporting the matter of hyperinflation from independent auditor's choices. According to the results, the section on key audit matters (KAMs) is prominent in the independent auditor's reports of the sample entities. That means independent auditors preferably choose the section of KAMs more than other sections (emphasis on matters, other matters) to communicate the matter of hyperinflationary accounting to financial statement users. This finding demonstrates an essential sign of independent auditors' professional judgment about the matter of hyperinflation, and their reporting choices in practice besides ongoing uncertainty on this matter. To this extent, the study suggests the need to add new regulations and disclosures referring to the matter of hyperinflation to the existing related international auditing standards (ISA 701 & ISA 706) by Standard-Setters. Fourth, the adoption of the new Standard – IAS 29 in the mandatory adoption year increases report length and alters textual approaches. There is clear evidence of this increase in new textual disclosures of annual financial reports, and independent auditor's reports. It is seen that in footnote No. 2. of the annual reports all of the sample entities contain a more extended scope containing additional textual paragraphs related to the matter of hyperinflation. To the same extent, the content of independent auditor's reports shows an alteration in different sections based on the need to communicate the matter of hyperinflation to financial statement users. To this extent, an alternative of generating a new separate footnote unique to the matter of hyperinflation rather than an existing footnote would be likely better to indicate this matter in a more emphasized way beyond it making it easier to reach the related information about the matter. Fifth, this study reveals a lack of uniformity including some reporting failures such as boilerplate reporting, notable reporting mistakes, etc. That finding strongly suggests the need to pay particular attention to the reporting attitudes or choices by entities and independent auditors to incorporate new requirements made by new Standards to their annual financial reports, and independent auditor's reports in a more accurate, comparable, and simple concept. In doing so, they might be more adaptive.

The study is not without limitations. The limitation that should be noted is that this study only involves the ISE Star Market alone, and therefore it is peculiar to the Turkish economy, and financial markets. In addition to this limitation, only manufacturing entities that were quoted on ISE Star at a certain date are in the scope of the research sample. Since the number of these entities that are quoted on ISE Star might be variable (less or more) from day to day. Thus, the results of the study should be interpreted without overgeneralizing the impact of hyperinflation on disclosures of financial reports, and independent auditor's reports. Despite the limitations, these manufacturing entities chosen from

the ISE Star Market, are the entities that would be likely one of the most adhered ones to IFRSs & ISAs requirements regarding their certain prestige in the market, but above all the mostly affected and risky one in any hyperinflationary economic conditions in turn their sector. This ensures a reliable research instrument while also representing the most relevant sample group with financial reporting including independent auditor's reports in hyperinflationary periods. The empirical findings of the study are significant in that they provide a complete map from a broader research perspective while allowing a comprehensive understanding. Moreover, it raises awareness about the reporting challenges of hyperinflation for the prospective hyperinflationist periods that might occur in the foreseeable future.

It is obviously seen that the matter of hyperinflation has a challenging and altering impact on financial reporting and audit practices. Although hyperinflation is a rare event especially for developed countries, there is always a possibility of hyperinflation erosion. Hence, the matter of hyperinflation occured many times in developed countries such as Germany, Russia, China throughout history as well as other countries. Policymakers, standard-setters and practitiones have a great responsibility in this regard. Policy makers should adopt policies like contrationary monetary policy or smart fiscal policy including related stabilitision programmes to tackle with the challanges of hyperinflation. Also, the relevant standard-setters should generate more strict, formal rules and directive explanations, peculiarly about how to determine and communicate the matter of hyperinflation though IFRS & ISAs requirements because it is still relatively emerging topic and an additional specific area. Finally, the releavant practitioners should go above and beyond universal tasks and tendencies including due care to be fully competent to address the spesific matters in this area. Given the current situation, it would be recommended that collaboration among these three parts is needed.

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References

Akçin, O. (2023). Financial reporting in hyperinflationary economies under IFRS. *The Journal of Accounting and Finance*, *100*, 57-86, doi: 10.25095/mufad.1328760.

Bochkay, K., Brown, S.V., Leone, A.J., Tucker, J.W. (2023). Textual analysis in accounting: What is next? *Contemporary Accounting Research*, *40*(2), 765-805, doi: 10.1111/1911-3846.12825.

Chamisa, E., Mangena, M., Pamburai, H.H., & Tauringana, V. (2018). Financial reporting in hyperinflationary economies and the value relevance accounting amounts: hard evidence from Zimbabwe. *Review Accounting Studies*, *23*, 1241-1273, doi:10.1007/s11142.018.9460-4.

Gökten, S., Gökten, P.O., Mollaoğulları, B. (2023). Inventories and inflation accounting application: an evaluation on BIST30 manufacturing enterprises. *Journal of Business Research-Turk*, *15*(1), 718-731, doi: 10.20491/isarder.2023.1614.

Hasanov, M. (2008). Effects of inflation uncertainty on output: the case of Turkey. *Journal of Dogus University*, *9*(2), 191-206.

IAASB (2015). International standard on auditing (ISA) 701 (NEW), communicating key audit matters in the independent auditor's report. available at https://www.iaasb.org/publications/international-standard-auditing-isa-701-new-communicating-key-audit-matters-independent-auditor-s-3

IAASB (2015). International standard on auditing (ISA) 706 (REVISED). emphasis on matter paragraphs and other matter paragraphs in the independent auditor's report, available at https://www.iaasb.org/publications/international-standard-auditing-isa-706-revised-emphasis-matter-paragraphs-and-other-matter

IASB (2001). International accounting standard (IAS 29). financial reporting in hyperinflationary economies, available at https://www.ifrs.org/issued-standards/list-of-standards/ias-29-financial-reporting-in-hyperinflationary-economies/

Keleş, D. (2015). Correction of the financial Statements within the scope of TAS 29: financial reporting standard in hyperinflationary economies and its effects on financial analysis results. *Uşak University Journal of Social Sciences, 8*(3), 31-52

Kramarova, K. (2021). The global problem of inflation and need for inflation adjusted-financial reporting, paper presented at the 21st International Scientific Conference Globalization and its Socio-Economic Consequences 2021. October 13-14, 2021, Zilina, Slovak Republic, available at: https://www.shs-conferences.org/articles/shsconf/abs/2021/40/contents/contents.html; (accessed 20 July 2024).

Loughran, T., McDonald, B. (2016). Textual analysis in accounting and finance: A survey. Journal of Accounting Research, 54(4), 1187-1230, doi: 10.1111/1475-679X.12123.

Mihaela, D. (2014). IAS 29 Financial reporting in hyperinflationary economies – analysis and implications of accounting, tax and legal. Economic Sciences Series, 14(2), 483-488.

Peker, A.A. (2023). Inflation accounting within the framework of financial reporting standards in hyperinflatıonary economies: Borsa Istanbul an application. *Journal of Aksaray University Vocational School of Social Sciences*, *1*(1), 31-48.

PwC (2022). Discloses PwC's online magazine. hyperinflation in Turkey, PricewaterhouseCoopers, Switzerland, available at https://www.pwc.ch/en/insights/disclose/33/hyperinflation-in-turkey.html

PwC (2024). Hyperinflationary economies as at December 2024, PricewaterhouseCoopers, Global, available at https://viewpoint.pwc.com/dt/gx/en/pwc/in_briefs/in_briefs_INT/in_briefs_INT/hyperinflationary-economies-as-at-december-2024.html#pwc-topic.dita_dce1bdf5-5233-4596-b17e-40c4fc3aa333

Stajanova, P., Popovski, N., Petreska, L. (2022). Financial reporting in terms of inflation accounting. International Dialogue: East-West, *9*(1), 129-137.

Trajkovska, O.G., Koleva, B., Svrtinov, V.G. (2018). Financial reporting in hyperinflationary economies. *Journal of Economics*, 3(2), 50-57.

Umut, E. (2024). IAS 29 Financial reporting standard in high inflation economies: a hypothetical study. *Journal of Economics and Business Issues*, *4*(1), 86-112.

Varol, N. (2022). Inflation accounting in terms of tax legislation and accounting standards in Turkey. *The Journal of Accounting and Finance, 93*, 19-30, doi:10.25095/mufad.979514.

Resume

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