# DECISION USEFULNESS AND INFLATION ACCOUNTING: THE CASE OF TURKEY[*]

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**ABSTRACT**

The purpose of this study is to examine the issue of inflation accounting and decision usefulness. As well as having political costs for a country, inflation has financial costs for companies and their stakeholders. To test the necessity of inflation accounting adoption, Ohlson's (1995) pricing model is used and earnings volatility is measured across years. It was concluded that earnings are more volatile and don't explain the changes in company market value when inflation adjustments are required. Furthermore, it has been suggested that stewardship theory can explain the reporting of inflation-adjusted values in conjunction with historical cost values.

**Keywords:** Inflation Accounting, Decision Usefulness, Stewardship Theory

**JEL Classification:** M41, N15, G30

## KARARA FAYDALILIK VE ENFLASYON MUHASEBESİ: TÜRKİYE ÖRNEĞİ

**ÖZ**

Bu çalışmanın temel amacı enflasyon muhasebesi ve karara faydalılık konusunu incelemektir. Enflasyonun ülkeye siyasi maliyeti olmasının yansıra, şirketlere ve paydaşlarına finansal maliyeti de bulunmaktadır. Enflasyon muhasebesinin uygulanması gerekliliğini kanıtlamak için Ohlson (1995) tarafından geliştirilen fiyat modeli kullanılmış ve kazançların yıllara göre oynaklığı ölçülmüştür. Sonuç olarak, enflasyon düzeltmesi gerektiği zamanlarda kazançların daha fazla oynaklık gösterdiği ve şirketin piyasa değerini açıklayamadığı görülmüştür. Ayrıca, enflasyon muhasebesi uygulaması sonucu oluşan değerlerin tarihi muhasebe değerleriyle birlikte sunumu temsil teorisi ile açıklanabileceği öne sürülmüştür.

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**Anahtar Kelimeler:** Enflasyon Muhasebesi, Karara Faydalılık, Temsil Teorisi

**JEL Sınıflandırması:** M41, N15, G30

## GENİŞLETİLMİŞ ÖZET

### AMAÇ VE MOTİVASYON

Son dönemlerde gündemi sıkça meşgul eden enflasyon sorunu sadece makroekonomik düzeyde sınırlı kalmayıp hayatın her alanına nüfuz ederek işletmeler açısından da büyük bir sorun teşkil etmektedir. Bu bağlamda işletmelerin paydaş gruplara ve yatırımcılara sundukları finansal raporlar enflasyon nedeniyle gerçeği tam olarak yansıtmamaktadır. Enflasyonun yüksek olduğu dönemlerde işletmeler tarafından sunulan finansal tabloların karar vericiler açısından faydalı bilgi sunup sunmadığının incelenmesi önem arz etmektedir. İşletme ilgililerinin doğru karar verebilmesi için daha önce uygulamada bulunan enflasyon muhasebesi enflasyonun yükselmesiyle son zamanlarda tekrar gündeme gelmiştir.

### ARAŞTIRMA YÖNTEMİ

Basında kendisinden sürekli söz ettiren enflasyon olgusu, şirketlerin finansal tablolarının görünümünün de etkileyici bir unsurudur. 1950'li yılların ortalarında ortaya koyulan karara faydalılık kavramı daha sonra Uluslararası Muhasebe Standartları Kurulu ve Muhasebe Standartları Komitesi'nin yayınları ile daha da ileri bir düzeye taşınmıştır. Muhasebe literatüründe sıklıkla dile getirilen gerçeğe uygun değer ile tarihi değer konusunun uzantısı olarak görülen enflasyon muhasebesi de yeniden gündemde yer almıştır. Çalışmada, son zamanlarda sıklıkla gündeme gelen enflasyon muhasebesinin, gerçeğe uygun değeri yansıtmada aracı olarak kullanılıp kullanılamayacağı incelenmiştir. Enflasyon muhasebesinin muhasebe literatüründe genişçe yer bulan karara faydalılık konusu ile nasıl bir etkileşimi olduğunu anlatmak üzere yapılan bu çalışmada geçmişten günümüze Türkiye'de enflasyonun gelişim seyri genişçe ele alınmıştır. Ayrıca Türkiye'de kendi düzeyindeki ülkelere kıyasla çok yüksek bir enflasyon görülmesine rağmen neden bu uygulamanın gerçekleştirilemediği ortaya koyulmuş olup, gerçekleştirilmesine yönelik taleplerin ve durumun önemi güncel basından örneklerle detaylandırılmıştır.

Şirketlerin yatırımcılar ve diğer paydaş grupları için sunduğu finansal tabloların şirketin piyasa değerini yansıtıp yansıtmadığı ve bu bilgilerin yüksek ve düşük enflasyonlu yıllarda nasıl şekillendiği, yıllık veriler kullanılarak Ohlson (1995) tarafından geliştirilen fiyat modeli ile incelenmiştir. Bunun dışında kazanç oynaklığı olarak bilinen şirketlerin 1.2.3. ve 4. çeyrekteki kârlılık oranlarının standart sapmaları yıllık düzeyde kârlılığın oynaklığının belirlenmesinde kullanılmıştır.

## BULGULAR VE TARTIŞMA

Gelişen ekonomiler arasında oldukça yüksek bir enflasyona sahip olan Türkiye 2004 yılından sonra uygulanması terkedilen enflasyon muhasebesinin uygulanması için gerekli görülen tüm şartların oluşmasına rağmen bu uygulamayı gerçekleştirmemiştir. Gerek Uluslararası Muhasebe Standartlarını uygulayan borsada işlem gören şirketler gerekse Maliye Bakanlığının koyduğu yasaları takip eden halka açık olmayan şirketler bu uygulamadan faydalanamamışlardır. 2021 yılı sonunda enflasyonun yükselişe geçmesi, herhangi bir düzeltme yapılmadan finansal tabloların anlaşılırlığını zorlaştırmıştır. Hazine ve Maliye Bakanlığının belirlediği şartlara göre, enflasyon muhasebesinin uygulamaya geçirilebilmesi için son üç yılın toplam enflasyonunun %100'ü aşması ve içinde bulunulan mevcut yılda enflasyonun %10 veya daha fazla olması gerekmektedir. Hazine ve Maliye Bakanlığı yayınladığı geçici madde ile kendisine tabi olan şirketlerin 2021 ve 2022 yılları için 2 yıl süre ile enflasyon muhasebesini uygulayamayacaklarına hükmetmiş ve 2023 yılı için şartların oluşup oluşmadığına bakılmaksızın uygulanacağını belirtmiştir. Sermaye piyasası araçları borsada işlem gören şirketler için IAS 29'da belirtilen gereklilikler yerine getirilmiş olmasına rağmen, Kamu Gözetimi Muhasebe ve Denetim Standartları Kurumu (KGK) tarafından yayınlanan bildiride, Türkiye İstatistik Kurumu tarafından açıklanan üretici fiyat endeksi yerine tüketici fiyat endeksinin esas alınması gerektiği vurgulanmıştır. Ancak, bu endeks oranının son üç yılın toplamında %100'ü aşmaması nedeniyle uygulamaya geçilmeyeceği belirtilmiştir. Yapılan analizler sonucunda, enflasyon muhasebesi uygulanması şartlarının gerçekleştiği halde uygulanmadığı yıllarda (2021 ile 2022 yıllarında) kazanç oynaklığının daha yüksek olduğu ve fiyat modelinin açıklama gücünün azaldığı görülmüştür. Ayrıca, yapılan gözlemler neticesinde, net kârın şirketlerin piyasa değerini açıklamada yetersiz kaldığı görülmüş, bu duruma karşılık net varlıkların piyasa değeri konusunda daha tutarlı bilgiler sunduğu ve enflasyondan daha az etkilendiği gözlemlenmiştir. Bu anlamda çalışma kendisinden önce yapılan diğer çalışmalarla benzer sonuçlar göstermektedir (Belesis ve diğerleri, 2022; Liu & Sun, 2022).

## SONUÇ VE ÖNERİLER

Muhasebede finansal tabloların gerçeğe uygun değer ve tarihi değer ile sunumu konusu, 1960'lı ve 1970'li yıllarda yaşanan yüksek enflasyon olgusu ile şekillenmiştir (Whittington, 2008). Literatürde her iki görüşün tarafları olmasına rağmen, gerçeğe uygun değer ile tarihi değerin birlikte sunulmasının faydalı bilgiler sunması açısından daha önemli olduğu vurgulanmıştır (Kirkulak & Balsari, 2009; Filip & Raffournier, 2010; Chamisa ve diğerleri, 2018). Buna bağlı olarak, gerçeğe uygun değerin tarihi değerler ile birlikte gösterilmesi, kurumsal yönetimin önemli teorilerinden biri olan temsil teorisi ile açıklanmaktadır. Vekâlet teorisine dayalı olarak, işletmelerde temsilciler ile paydaşlar arasındaki bilgi eşitsizliği, enflasyon muhasebesinin tarihsel ve güncel değerleri içeren raporlama özelliği ile azaltılabilir. Enflasyonun yüksek olduğu dönemlerde sunulan muhasebe bilgilerinin şirketin piyasa değerini yeterince

yansıtmadığı ve kâr oynaklığının yüksek olduğu gözlemlenmiştir. Yapılan analizler sonucunda, 2018 yılından sonra enflasyonun yükselmesiyle beraber finansal tablolarda bulunan bilgilerin, şirketin gerçek değerini belirlemede 2000 yılından beri hiç görülmediği kadar yetersiz kaldığı gözlemlenmiştir. Ayrıca, enflasyon muhasebesi, şartların oluşup oluşmadığına bakılmaksızın, 2023 yılı için tekrar uygulanacaktır. 2023 yılı için bu alanda yapılacak olan çalışmalarda, enflasyona göre düzeltilmiş muhasebe değerleri ile düzeltilmemiş muhasebe değerlerinin karşılaştırılması, literatüre önemli katkı sağlayacaktır.

## 1. INTRODUCTION

In the accounting discipline, the appropriate asset and liability measurement concept is still a contentious issue (Frank, 2019). The origin of this controversial discussion goes back to the 1960s and 1970s when there was a discussion about the implementation of inflation accounting (Whittington, 2008). Nonetheless, both FASB and IASB require to use of fair value accounting for monetary assets and liabilities to provide more reliable and useful information with regard to decision usefulness (Gassen & Schwedler, 2010; Kieso et al., 2019). In this manner, both FASB and IASB consider presentation of fair values be an objective of financial reporting (Hitz, 2007). According to the Conceptual Framework, the usefulness is enhanced if the provided information represents true and reliable information and if it can be compared with financial information of previous years (IASB, 2018). The high inflation rate, however, makes it difficult to compare financial information over time. In this way, IAS 29 requires the restatement of financial statements in accordance with the relevant price index to reflect companies' real financial situation when a firm's functional currency is that of a hyperinflationary economy (IASB, 1989). The IAS 29 defines five characteristics of hyperinflation and identifies countries with hyperinflation if they have those characteristics:

a) The general public chooses to hold their money in nonmonetary assets or in reasonably stable foreign currencies. Amounts retained in local currency are promptly invested to preserve purchasing power.

b) In the general public's eyes prices are not quoted in terms of local currency, but rather in terms of a foreign stable currency.

c) Short-term credit sales and purchases take place at prices which compensate for the loss of purchasing power.

d) Salary, wages, and prices change in relation to the price index.

e) Cumulative inflation rate over three years approaches, or exceeds, 100%.

Turkey, as an emerging economy, has the second highest inflation rate (% 57.7) following Argentina among G-20 countries as of January 2023 (OECD, 2023). Turkish economy has been plagued by high inflation rates for a considerable period. Although the governments attempted to reduce high inflation, they were not successful in maintaining a stable and low inflation rate for many years. Governments delayed stable economic policies to prevent low tax earnings for the State since low inflation would reduce tax expense reported by companies. Turkey has experienced high inflation from 1950 to the 2000s. In order to eliminate the devastating impact of high inflation on the financial statements, companies protect themselves by using LIFO (Last in first out) method for the cost of sales, diminishing balance method for amortization, and allocating higher reserves (Gençoğlu & Ertan, 2012). Companies following Capital Markets Law were allowed to adjust their financial statements based on the inflation rate at the end of 2003 (Karasioğlu & Erdemir, 2005). Other companies that don't follow the Capital Markets Law and are governed by the Ministry of Finance are also allowed to adjust their financial statements. Since this date, Turkish entities have been able to properly compare their financial statements with those of foreign entities. Ministry of Finance accepted adjusted income as taxable income in case the inflation rate of the three consecutive years exceeds or approaches %100 (Arsoy & Gücenme, 2009).

Although the inflation rate between 2004 and 2017 was more stable and lower than previous years, it started to rise again after 2018 and continues to rise today. Studies have argued for the negative impact of high inflation rates on financial reporting quality, and consequently on the investment decisions of investors (Durak & Gürel, 2014; Higson et al., 2007; Leuz et al., 2003; Scholtens & Kang, 2013). Inflation accounting mitigates the problem of over taxation and fictitious profits while providing fair value information (Arzova & Şahin, 2022).

As fair value measurements provide timely and relevant information to analysts, they may also impact their information environment positively. This allows analysts to relate earnings expectations to overall movements in other variables (e.g. macroeconomic variables) that affect asset performance and pricing. This enhances their ability to make accurate predictions, as well as increasing the consistency of forecasts (Ayres et al., 2017). In this respect fair-value information is believed to provide valuable information to analysts in terms of forecasting earnings (Magnan et al., 2015).

This study's main objective is to explain the interaction between decision usefulness and the phenomenon of inflation accounting and to explain how it influences earnings forecasts and stock prices. This paper aims to contribute to the growing body of literature by examining topics that are currently being discussed. It also illustrates the application of inflation accounting which has been suspended for many years.

The study is organized as follows: the second section is devoted to decision usefulness and the third section deals with the inflation dynamics and its history in Turkey. Following this, the fourth section explains the application and implementation of inflation accounting. Moving forward, the fifth section reviews relevant prior research and presents hypothesis development. The sixth section explains the research design and methodology and the last section discusses the findings and includes the closing remarks.

## 2. DECISION USEFULNESS

The decision usefulness theory was formulated in the mid-1950s in accounting. This theory is based on the usefulness of information obtained from financial statements. The theory took on a real meaning with the publications of the International Accounting Standards Board in 1973 and the Accounting Standards Committee in 1975 (Berry & Robertson, 2006). The conceptual framework defines information as useful when it meets the relevance and reliability criteria. Relevance refers to the influence the financial statement measure has on a user's decision, whereas reliability refers to the measure's ability to represent what it is designed to represent. In order to evaluate the usefulness of decisions, a measurement and information perspective is essential.

The measurement perspective embodies the traditional view of information. The basic information required by investors should be reported truthfully from this perspective (Hitz, 2007). Overall, this perspective measures its usefulness by evaluating how accurately a financial statement captures the true financial situation of an entity (Barth, 2000). According to this perspective, fair value measurement depicts an entity’s financial status and represents decision useful information properly only in a utopian world. The reality is that in the real world there are some deficiencies, and these deficiencies are also part of the financial reporting process. When the market is illiquid, fair value is viewed as a measurement of procyclicality and contagion. During the financial crisis, illiquid markets did not reflect future returns, but merely the cash available to the investor. From the perspective of measurement, fair value measurement does not seem to be very useful. Thus, the value in use is more appropriate from this perspective.

On the other hand, the information perspective has a broader view. In this perspective, useful information is regarded as a signal that converts a priori expectations into insights, thereby enhancing better judgment and revision. Using this perspective, the information provided to investors is critical for influencing the decisions of the investors. It is therefore relevant to consider how fair value information influences investors' decisions (Hitz, 2007). The literature survey conducted by Sapkauskiene & Orlovskij (2017) has revealed that in terms of providing useful information to investors, fair value accounting is considered a superior method, although it has some limitations. On the other hand,

historical costs can be easily verified and are less subjective, which is why they have been used in bookkeeping for centuries. Accounting conservatism prevents assets from being written up when the market value of the asset increases. In contrast, a decline in market value is not treated the same way and, instead, is written down. Therefore, historical cost accounting is more protective than fair value accounting (Wang, 2012). In addition, historical cost accounting allows for the determination of the carrying value of items in financial statements.

As stated before, fair value accounting reports assets and liabilities based on their current market value. As a result, it reflects the firm's true and relevant financial position. Whenever the market fluctuates, stakeholders are better informed about the financial statements of an entity. Creditors and stakeholders can use updated information to learn more about the firm's prevalent risks and can take more effective action. However, the use of fair value measurement results in increased subjectivity. In this manner, FASB has developed a hierarchy of fair value measurements. Fair value accounting consists of three different hierarchical tiers. Level 1 includes adjusted prices for identical assets and liabilities in the active market at the measurement date. Level 2 includes assets and liabilities that are not included in Level 1 and observed either directly or indirectly. Inputs of Level 3 are not observable and are used when observable data is unavailable. For instance, the mortgage assets of a subprime ledger are not easily evaluable because the market is no longer active (Kieso et al., 2019).

Fair value accounting advocates believe that it reflects the company's current status and provides more useful information (Laux, 2012; Adwan et al., 2020). Fair value is defined as "the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date" (IASB, 2018, par. 6.12). As per IASB, fair value should provide information on future cash flow, which can serve as a decision aid (Whittington, 2008). It is believed that investors make less favourable financial decisions when they are provided solely with historical cost information. Therefore, fair value information is believed to improve investors' asset allocation decisions as well as their stewardship judgments (Anderson et al., 2015).

As a result, fair value has been associated with decision usefulness by many scholars. However, fair value is insufficient to provide a comprehensive analysis of the company. As part of the stewardship oriented perspective, historical costs should be integrated with fair value (Whittington, 2008; Palea, 2014; Anderson et al., 2015; Andrejcik et al., 2021). The study conducted by Anderson et al.(2015) demonstrate that the fair values presented on the face of the financial statements and the historical costs in the footnote created better stewardship judgement than vice versa.

The stewardship theory relies on the statements of Donaldson (1990) and Donaldson & Davis (1991) in the academic literature. It provides a sociological and psychological explanation of the organization of corporate administration. Since stewardship is defined as accountability to investors it has an equal

ranking with decision usefulness (Whittington, 2008). Stewardship theory calls for getting timely information about the financial performance of a company.

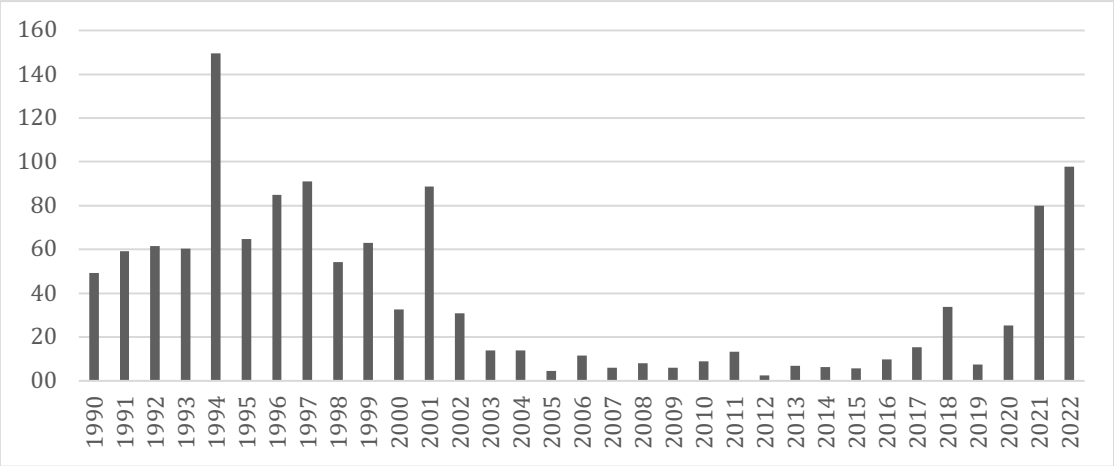
Moreover, it has been argued that the fair value method also reduces the agency costs that arise between shareholders and managers as a result of their asymmetric information possession (Barlev & Haddad, 2003). In agency theory, both fair value accounting and historical cost accounting are evaluated according to whether they isolate managers' benefits and support investors. As a result, the usefulness of the information should be assessed according to its informativeness about the manager's contribution or value-added to the firm (Anderson et al., 2015).

## 3. INFLATION DYNAMICS IN TURKEY

Inflation means swelling or expansion as a word derived from Latin (Karapınar & Eflatun, 2022). Inflation is defined as a general increase in prices of products and services in a market (Aydoğan, 2004; Ayvaz Güven & Ayvaz, 2018; Kibritçioğlu, 2002; Varol, 2022). The Turkish economy is seen as an exemplary laboratory for the study of inflation dynamics. In contrast to other developed countries, the inflation rate in Turkey is highly volatile (Kantur & Özcan, 2022). Due to frequent Turkish lira devaluations in the 1970s and two major oil crises in 1973 and 1978, Turkey experienced high inflation rates. However, there was a sharp acceleration of inflation in the 1980s, which has continued to this day (Kibritçioğlu, 2002). The reason for the high inflation during this period can be attributed to an increase in the money supply caused by wrong economic policies. In addition, the increase in public sector deficits, and the continuous increase in domestic and foreign interest debt led to high inflation. The government of the period signed an agreement with International Monetary Fund (IMF) to implement significant changes in the economy by securing the support of foreign capital. In 1994, Turkey experienced the highest inflation rate. The high inflation rate on this date can be attributed to Turkey's monetary growth and inefficient taxation policy. This means that taxes could not be raised to a level to cover government expenditures (Aydoğan, 2004). Turkish inflation was very high in the 1990s and was reduced by solid and successful economic policies in early 2000s. The implemented disinflation program was prepared under the supervision and consultancy of the IMF in 1999. In this program, the goal was to reduce inflation to a predetermined level, 10% for wholesale prices and 12% for consumer prices. Moreover, the primary balance of the public sector was supposed to increase from a deficit of 2.8 percent to +3.07 percent of Gross National Product (GNP). The sources used to generate this percentage increase are income taxes, indirect taxes and value added taxes. Apart from the privatization process, taxes in general constitute a major part of monetary sources (Yeldan, 2001). Following this, inflation soured again during the economic crisis in 2001. The Law of the Central Bank of the Republic of Turkey guaranteed its formal independence and prevented state owned enterprises from being directly

liable. Therefore, the Central Bank aimed to keep inflation low and maintain price stability. In 2004, the inflation rate fell to single digits. Following the global crisis in 2008, excessive volatility and capital flows in emerging markets were triggered by the expansionary monetary policies of the Federal Reserve (Fed). The reason for the increase in capital flows was the economic downturn in developed countries (Bilici & Çekin, 2020). In 2017 the inflation rate reached double digits again (Kantur & Özcan, 2022). Inflation in Turkey was negatively affected by the novel Corona virus that emerged in Wuhan province at the end of 2019 (TURMOB, 2020). After the military intervention launched by Russia against Ukraine at the beginning of 2022, the global economy, which is trying to recover from the effects of the pandemic, has again entered a difficult period (Bakan, 2022). Turkey had the second highest inflation rates as of 2022 and it had the second highest inflation rate among G-20 countries as of January 2023 (OECD, 2023). The Producer Price Index (PPI) in Turkey between 1990-2022 is presented in Table 1.

**Table 1. Annual Inflation Rates (PPI) in Turkey**




**Source:** Turkish Statistical Institute (TÜİK, 2022)

Developing countries are particularly affected by inflation, as are nations that are vulnerable to its negative effects (Yilmazkuday, 2022). Numerous research articles have documented the negative impact of inflation on economic growth and high tax rates (Faria & Carneiro, 2001; Sweidan, 2004; Erbaykal & Okuyan, 2008; Seleteng et al., 2013).

However, the impact of inflation is not limited solely to negative economic growth or high tax rates. The high rate of inflation also affects the financial statements of a company that inform stakeholders through accounting numbers. By the end of the fiscal year, data generated on the date of transaction will have no meaning, due to dramatic changes in the purchasing power of the currency. Therefore, the financial statements should be recalculated to reflect the changing purchasing power of the currency.

In terms of balance sheet items, the impact of inflation can be classified into two different groups of assets and liabilities, namely monetary and non-monetary items. As a result of inflation, monetary items

such as cash, marketable securities, accounts receivable and payable lose value. The nominal values of monetary items remain unchanged while their fair values change with inflation. In contrast, non-monetary items such as fixed assets, copyright, and goodwill will protect their real values and move in line with inflationary changes (Varol, 2022).

The income statement, which depicts the company's sales, costs of sales, other expenses and consequently profit or loss, is also vulnerable to inflation. Over time, the importance of the income statement increased, and it became an essential tool for communicating with stakeholders through numbers. Though all items listed in income statements are non-monetary items, they are also subject to high rates of inflation. Sales are recorded at current value while sales related costs are recorded at historical cost (Altınışık, 2019). The depreciation amount of an asset is recorded less than its actual value in the event of hyperinflation. This situation occurs due to the enormous difference between the purchasing price and the current value of assets. Further, this results in a higher level of income (known as fictitious profits) and, accordingly, a high rate of tax and dividend payments. Additionally, a fictitious profit is the result of the difference between the current value of the product or service and the prepaid expenses associated with it. The liability portion of bonds or notes payable may also differ from their real values in a hyperinflationary environment. Recording the historical costs of these liabilities and paying them at fair value could potentially result in cost savings for firms. Additionally, when these debts are settled at their recorded value, it has the potential to positively impact the company's equity. The company's equity which consists of retained earnings, common stocks and preferred shares, is also affected by inflation. Equity held in non-monetary items will increase in value during an inflationary period, whereas equity mostly invested in monetary items will diminish in value during an inflationary period (Öncel, 1995).

## 4. INFLATION ACCOUNTING

Inflation accounting became mandatory between 2001 and 2004 in Turkey (Yücel, 2023). Initially, it was adopted by the Banking Regulation and Supervision Agency for financial entities, followed by the Capital Markets Board, for BIST (Borsa İstanbul) firms in 2003 and 2004. Eventually, it was incorporated into the Tax Procedure Law regulations in 2004. Several studies have documented the significant impact of inflation on key financial ratios that are calculated to evaluate the companies' performance and facilitate comparisons with one another (see Özkan, 2005; Patjoshi, 2020; Kantar et al., 2021). Studies have shown that inflation has a significant impact on financial statements and the information provided. Inflation accounting is considered an efficient tool to decrease the impact of inflation on financial statements and to prevent over taxation. In light of the partial regulations (i.e., LIFO, renewal fund, accelerated depreciation methods, revaluation, and indexation in investment

allowance) not being sufficient to eliminate the impact of inflation, the Ministry of Finance enacted Law No. 5024. This law regulates the inflation adjustment to financial statements. Inflation adjustment is subject to certain conditions according to law No. 5024. According to this law, the cumulative inflation rates of the previous three years should be above 100% and at least 10% for the current year. In case neither of these conditions exist, inflation accounting cannot be applied (Altınışık, 2019). The application process begins with non-monetary items that are multiplied by the inflation adjustment rate. The adjustment rate is determined by the Turkish Statistical Institute as the Wholesale Price Index. The inflation differences account and inflation adjustment account are used to record the recalculated financial amounts of non-monetary items in the financial statements. While the first account is used to record the difference in the non-monetary items before and after the inflation adjustment the latter account is regarded as an adjustment account to correspond to the inflation differences account and it will be offset through transferring it to the income statement (Arsoy & Gucenme, 2009). A company cannot opt out of this method; rather, they must implement inflation adjustment when the predetermined conditions are met. As of December 2021, the three consecutive year inflation rate has reached 113%, and the current annual inflation rate has reached 80%. Though these predetermined conditions existed by the end of 2021, inflation accounting was not implemented. An interim article of the TPL prevented companies from adopting inflation accounting in 2021, 2022. Further it was stated that regardless of the conditions that are required to implement inflation accounting, it will be implemented at the end of the year 2023.

As a result, inflation accounting cannot be implemented for the years 2021 and 2022 but only for 2023 (https://www.resmigazete.gov.tr/eskiler/2022/01/20220129-9.htm, 2022). The companies not subject to TPL have also been deprived of the opportunity to implement inflation accounting. According to the announcement made by the KGK in January 2022, companies subject to International Financial Reporting Standards (IFRS), rather than TPL are obliged to follow the regulations and rules of the KGK. Furthermore, these companies are not allowed to use inflation accounting. Turkish Statistical Institute, however, considers the consumer price index as a general price level index that reflects changes in purchasing power. The cumulative consumer price index for three consecutive years, is 74,41%, as of 2021. In this respect, the businesses that apply IFRS do not need to make any adjustments in their financial statements for 2021 within the scope of IAS 29. However, the standard does not provide a precise ratio for determining whether hyperinflation exists.

The phenomenon of inflation accounting has brought heated debate in the press and media nowadays. The president of Bursa Commodity Exchange asked for urgent application of inflation accounting in the year 2022. The objective is to minimize the damaging effect of inflation on businesses in order to maintain production and investments (www.bursa.com/haber/bursa-is-dunyasindan-ekonomi-yonetimine-quot-enflasyon-muhasebesi-quot-cagrisi-530794.html, 2022). The president of Union of

Chambers and Commodity Exchanges of Turkey has also called for the implementation of inflation accounting. He mentioned that inflation accounting is now a mandatory requirement in Turkey. In this context, it is expected that the necessary steps will be taken. In previous months, the president of the Ankara Chamber of Industry also said that high inflation melts profits and capital, and thus it can cause serious damage to companies. The chairman of Ankara Chamber of Commerce, who visited the Treasury and Finance Minister in August, said, that inflation accounting has become a necessity for businesses. Moreover, the chief financial officer of Sabancı Holding, one of the biggest industrial and financial conglomerates in Turkey, said in an official speech that they are preparing their companies for the use of inflation accounting (https://www.bloomberght.com/sabanci-da-enflasyon-muhasebesine-gecis-hazirligi-2312812, 2022).

As a result, inflation accounting was implemented only for the financial statements of 2003 and 2004 and since then it hasn't been applied (Kargin, 2013). There are three different methods of inflation methods of adjusting the financial statement accounts for inflation; namely, General Price Level Accounting method, Current Cost Accounting method and General Price-Current Cost Accounting (Mixed Method). An illustration of an inflation adjustment example can be found in Appendix A. However, it should be noted that this study focuses on the implications and effects of inflation accounting in financial reporting and does not address the detailed calculation methodology of inflation accounting.

### 4.1. General Price Level Accounting Method

The purpose of this method is to ameliorate the impact of price changes on financial statements. This method is utilized to adjust the financial statements according to the purchasing power of the currency at the time of adjustment. The financial statements should be adjusted to accurately disclose financial information. So, the gain and loss arising from holding monetary items as well as liabilities should be included in the financial statements. This method uses either the Wholesale Price Index (WPI), the General Consumer Price Index (CPI), or the national income deflator to approximate historical values to current values. Profit or loss is determined after all costs and revenues are expressed with the same purchasing power. The benefit of this method is to be able to compare useful information over time. This is to protect the purchasing power of capital, and to ensure that inflation gains are reflected in the financial statements. The items on the balance sheet are classified as monetary and non-monetary items under this method. However, only non-monetary items are adjusted since monetary receivables and other monetary items already reflect the real purchasing power in an inflationary environment. Furthermore, the loss arises from holding monetary items and the gain arises from monetary liabilities during an inflationary period, recorded as income or loss on the income statement (Altınışık, 2019). This model has some limitations since it hinders the comparison of the company’s old financial statements

with the current period financial statements. Moreover, the financial statements are adjusted with price indices derived from the business and its activities. Despite the fact that it is not necessary to show the historical values of the items in the financial statements, it may be done in conjunction with their current values (Karapınar & Eflatun, 2022).

### 4.2. Current Cost Accounting Method

This method involves the evaluation of financial statements based on current cost instead of historical cost. As part of this method, the business should include capital costs incurred during the process of asset repurchases. Unlike the general price level accounting method this method considers the cost of each item depending on their specific price changes. This method assumes that each item in the balance sheet is affected differently by price changes, since each item is not affected by inflation at the same rate. These companies specialize in a particular type of product in general. Therefore, the price increase is different for each product and for each company. With this method, the real performance of the company is reflected without regard to any monetary losses or gains (Karapınar & Eflatun, 2022).

To apply the current cost accounting method properly it is essential to identify the adjustment rate correctly. In this manner, the special price indices announced by the official institutes, the indices developed based on the entity's own experience, or the valuation made by experts can all be utilized to calculate the correct rate. However, these rates are determined differently by each company and cannot offer a useful solution since a comparison is not possible between the entities. Although this method provides more realistic financial information compared to general price level accounting, it is more difficult to audit and apply it (Altınışık, 2019).

### 4.3. General Price-Current Cost Accounting Method

The main purpose of the mixed method is to utilize both the general price level accounting method and current cost accounting method together. This will enable the companies to benefit from both of these methods. In this sense, it is believed that the mixed method provides more useful and reliable information. However, the application of this method is difficult and it entails the disadvantages of both methods and thus, this method has not been put in practice and advocated by any institutions or organization (Karapınar & Eflatun, 2022).

## 5. PRIOR RESEARCH AND HYPOTHESES

To measure the informativeness of the financial statements various methods are available in the literature. In this way many studies used earnings management, earnings volatility, analysts' forecast errors, value relevance of earnings, etc. These methods are used to compare financial statements'

informativeness under diverse economic cycles or under different reporting standards (i.e., different reporting requirements).

A company's financial statements serve the purpose of providing a true and fair picture of its operations and financial position. In the absence of any relationship between firm value and numbers in the financial statements, such statements are not relevant. If financial statements lose their relevance no one will be interested in them. Therefore, the investigation of firms accounting information is a direct check of the reliability and validity of financial statements (Pathirawasam, 2013).

Inflation adjusted accounting information and historical cost amounts have been largely benchmarked in the literature in terms of providing value relevant information. In many studies, it has been documented that inflation diminishes the value of relevant accounting information and inflation accounting adjustment prevents this reduction of useful information. In this sense, Barviv (1999) investigates the usefulness of accounting information during high inflationary periods in Israel. The study concludes that the adjusted financial statements are more value relevant than non-adjusted ones. To build on this Bublitz et al. (1985) document incremental explanatory power of inflation adjusted accounting information. Further a study conducted by Hughes et al. (2004) shows that inflation adjusted book values are more value relevant than information based on historical cost. In a similar vein, Ashton et al. (2011) numerically explore the value relevance of accounting information under inflationary conditions. They find that inflation adjusted book values are more value relevant than historical cost ones. Davis-Friday & Rivera (2000) investigate the same relationship for Mexican firms. They find that both inflation accounting adjustments and accounting information based on U.S. GAAP are value relevant. Furthermore, Konchitchki (2013a) benchmark both inflation adjusted and non-adjusted accounting information to examine their association with U.S. stock values. The study shows that inflation adjusted book value is more value relevant. Another study conducted by Konchitchki (2013b) investigates the same relation and concluded that investors who don’t possess inflation adjusted information are more exposed to abnormal returns. Anandarajan et al. (2006) and Adwan et al., (2020) which used 3761 firm years observations between 1992 and 2001 for BIST-listed companies and a sample of European listed financial companies between 2005-2011 reach similar conclusions. They argue that value relevance of earnings has declined over time with rising inflation. In contrast, book value has remained relevant to reflect companies' value over time. In the context of recent events such as the COVID-19 pandemic that led to high inflation rates all over the world, similar patterns of declining earnings relevance can be observed. Similarly, Belesis et al (2022) uses a sample of European companies for the period 2010-2020 to explore the value relevance of accounting information. They reveal that during the COVID-19 period earnings lost its relevance to the market while book value remained relevant. To strengthen this standpoint Liu & Sun (2022) examine the value relevance of

accounting information for the US companies during and before the COVID-19 period. They show that earning lost its relevance during COVID-19 period.

Transitioning to the Turkish context, several studies reveal the negative impact of economic downturns on the value relevance of earning as noted by (Ertuğrul, 2020). For example, Türel (2009) examine the value relevance of earnings, considering 2001-2005 and 2005-2006 as two different time periods to be compared. From the first to the second period, value relevance of earnings turned from negative to positive, while value relevance of book values declined. In a parallel vein, Kargin (2013) investigates the value relevance of accounting information during 1998-2007. The study shows that the importance of book value declined over 2001-2004 and it started to improve after 2005 while the value relevance of earnings stayed non-significant through the 2001-2006 period. Similar results are obtained by Bilgic and İbis (2013). They report a decline in earnings' value relevance and an increase in book values' relevance after 2005. Considering the Global Financial Crisis experienced in 2008, Dinçergök (2013) explores the value relevance of earnings for BIST companies over 2003-2009 and concludes that the financial crisis has a detrimental impact on the value relevance of earnings. Another study conducted by Ozkan & Kaytmaz Balsari (2010) documents that the financial crisis experienced in 1994 in Turkey decreased the value relevance of earnings and improved the value relevance of book value of equity, whereas due to the different nature of the crisis, the one experienced in Turkey in 2001 decreased the value relevance of earnings and did not impact the book value of equity. Furthermore, a recent study conducted by Bilgic et al.(2018) shows that value relevance shifts from earnings to book values after the adoption of International Financial Reporting Standards (IFRS) in 2005. Additionally, the global financial crisis in 2008 and 2009 has diminished earnings and book value relevance.

Other studies have found that combining inflation adjusted accounting data with historical costs provides a more comprehensive insight during inflationary periods. Kirkulak & Balsari (2009) investigated the value relevance of inflation adjusted and non-adjusted financial statements of Turkish firms for 2003. They find that providing both inflation adjusted and historical cost amounts together is more value relevant. Similar results are obtained by Filip & Raffournier (2010). They examine the value relevance of financial statements of Romanian firms during the period 1998–2004. They document that inflation adjusted financial statements should be reported as supplementary information, instead of supplanting historical cost information. Consistent with these studies Chamisa et al. (2018) explore the same issue in Zimbabwe under hyperinflationary conditions. They compare inflation adjusted financial statements with historical costs for the period 2000-2005. As they noted, these two sets of amounts provide equivalent values and offer additional information beyond what is provided by the other. To test the relevance of accounting information to stock prices, the pricing model developed by Ohlson (1995) is utilized in this study. This model is used in the literature especially to compare financial statements under different reporting requirements or conditions (Wang et al., 2020; Busari & Bagudo, 2021;

McGregor, 2022). In line with this model, book value per share and earnings per share reported in financial statements are regressed against the stock prices of the companies.

It has been shown in most studies that financial statements lose value during periods of high inflation and need inflation adjusted statements. Thus, the first hypothesis can be expressed as follows;

***$H_1$**: High rates of inflation decrease the reliability of accounting information.*

Our second hypothesis involves the measurement of earnings volatility that can be defined as a measure of the level of uncertainty or variability in a company's profits, indicating the degree of business risk it faces (Fiechter, 2011). Additionally, higher earnings volatility associated with uncertainty, discourages investors from investing in such companies (Özcan, 2022). A study conducted by Basu et al. (2010) investigate how analysts consider inflation risk when forecasting earnings. They find that analysts don't take inflation risk into account which leads to incorrect earnings forecasts. Consequently, they argue that inflation exposure can affect earnings volatility and forecasts. According to the author's understanding, despite the fact that no study has examined the impact of inflation on earnings volatility or compared earnings volatility based on historical cost versus inflation adjusted values, many studies have indicated that inflation increases stock volatility (see Aggarwal et al., 1999; Yaya & Shittu, 2010; Aliyu, 2012; Hatipoğlu, 2016; Kılıç & Dilber, 2017). Further, several studies employed earnings volatility to compare financial statements under different reporting requirements or conditions or to assess earnings predictability (Jermakowicz et al., 2007; Dichev & Tang, 2009; Frankel & Litov, 2009; Ballas et al., 2010; Iatridis, 2010; Özcan, 2022). Following the literature, the standard deviation of return on assets (ROA) ) based on the accounting information is calculated to determine earnings volatility as an indicator of decision usefulness based on the accounting information. Earnings volatility for firm i in year t is computed as the standard deviation of ROA for the four quarters of a given year. Investors and analysts are believed to make less effective financial decisions when inflation rates are high. As a result, the following hypothesis was developed;

***$H_2$**: High rates of inflation increase earnings volatility.*

## 6. RESEARCH DESIGN

### 6.1. Data and Methodology

This study uses data consisting of 388 non-financial companies listed in BIST during the period 2000 and 2022. The data used in this study was obtained from the Refinitv-Eikon database. The initial sample of 388 non-financial companies is reduced to 155 due to missing data for some companies. Since inflation accounting was adopted only for a limited time period in Turkey both annually and the quarterly data are used. In order to investigate the impact of inflation accounting on financial statements properly

the longest possible period was chosen. When retrieving the data from the Refinitiv-Eikon database, the data for 2022 was incomplete for many firms and thus, the final year of the dataset has gaps. The number of observations in 2022 consist of 21 companies. All data used in this study consists of 13724 firm-quarter and 3431 firm-year observations.

In this study it is aimed to investigate the impact of inflation accounting on the decision usefulness of accounting numbers. First, to test the impact of inflation and the mitigating power of inflation accounting on decision usefulness, value relevance of earnings is measured and compared in periods when inflation accounting is used and when it is not used. Second, earnings volatility is used to evaluate the forecast accuracy of financial statements from investors' and analysts' perspectives. The variables utilized in this study are provided below in Table 2.

**Table 2. Variables Employed**

| Variable Name | Description | Abbreviation |
|---|---|---|
| Return on Assets | Profitability ratio (Net income divided by Total Assets) | $ROA_{it}$ |
| Return on Equity | Profitability ratio (Net income divided by Total Equity) | $ROE_{it}$ |
| Earnings Volatility | Standard deviation of return on assets. | - |
| Stock Price | Closing price of the stock on earnings announcement day | $SP_{it}$ |
| Book value per share | Shareholders' equity divided by total shares outstanding | $BVPS_{it}$ |
| Earnings per share | Net income divided by total shares outstanding | $EPS_{it}$ |

### 6.1.1. Value Relevance of Earnings

To test hypothesis $H_1$, the pricing model developed by Ohlson (1995) is utilized and the results are shown in Table 3 below. The model employed is $SP_{it}=\alpha_0+\beta_1 BVPS_{it}+ \beta_2 EPS_{it}+ \varepsilon_{it}$

Where, SP represents stock price of firm *i* in year *t*, BVPS is book value per share for firm *i* in year *t* EPS is earnings per share for firm *i* in year *t* and ε is the error term respectively.

**Table 3. Pricing Model Across Years (Dependent Variable: Stock Price)**

| | $SP_{it}=\alpha_0+\beta_1 BVPS_{it}+ \beta_2 EPS_{it}+ \varepsilon_{it}$ | | | | | | |
|---|---|---|---|---|---|---|---|
| **Years** | **$\beta_1$** | **p** | **$\beta_2$** | **p** | **$R^2$** | **F-stat** | **p** |
| **2000** | 4.211 | 0.023** | 3.1301 | 0.006*** | 0.5468 | 36.64 | 0.000*** |
| **2001** | 5.285 | 0.011** | .1492 | 0.013** | 0.5422 | 16.25 | 0.001*** |
| **2002** | 5.294 | 0.014** | -.494 | 0.567 | 0.1643 | 3.54 | 0.039** |
| **2003** | 1.667 | 0.037** | 1.120 | 0.011** | 0.4773 | 21.00 | 0.000*** |
| **2004** | .623 | 0.005*** | 3.332 | 0.083* | 0.5897 | 35.22 | 0.000*** |
| **2005** | .610 | 0.003*** | 3.693 | 0.058* | 0.5903 | 206.66 | 0.000*** |
| **2006** | .614 | 0.034** | .6818 | 0.559 | 0.8213 | 119.51 | 0.000*** |
| **2007** | .121 | 0.041** | .4623 | 0.063* | 0.3260 | 14.99 | 0.000*** |
| **2008** | .716 | 0.000*** | .5034 | 0.615 | 0.5412 | 27.13 | 0.000*** |
| **2009** | 1.377 | 0.000*** | 1.747 | 0.331 | 0.5107 | 29.23 | 0.000*** |
| **2010** | .7186 | 0.000*** | 1.842 | 0.005*** | 0.5361 | 47.38 | 0.000*** |
| **2011** | 1.061 | 0.002*** | 1.829 | 0.026** | 0.4818 | 30.48 | 0.000*** |
| **2012** | .4523 | 0.049** | 5.196 | 0.000*** | 0.3805 | 29.48 | 0.000*** |
| **2013** | 1.257 | 0.010** | 4.558 | 0.003*** | 0.6529 | 78.08 | 0.000*** |
| **2014** | 1.237 | 0.012** | 4.337 | 0.000*** | 0.4598 | 42.56 | 0.000*** |
| **2015** | .5806 | 0.001*** | 2.358 | 0.000*** | 0.7899 | 85.61 | 0.000*** |
| **2016** | .8338 | 0.000*** | 6.215 | 0.000*** | 0.7034 | 122.90 | 0.000*** |
| **2017** | .2229 | 0.024** | 3.604 | 0.000*** | 0.7940 | 221.63 | 0.000*** |
| **2018** | .9445 | 0.000** | 3.380 | 0.006*** | 0.9519 | 102.54 | 0.000*** |
| **2019** | .2638 | 0.855 | 14.270 | 0.000*** | 0.5762 | 101.97 | 0.000*** |
| **2020** | -1.102 | 0.728 | 11.511 | 0.123 | 0.0973 | 11.32 | 0.000*** |
| **2021** | 10.274 | 0.000*** | -2.5001 | 0.506 | 0.5460 | 25.87 | 0.000*** |
| **2022** | 5.6165 | 0.000*** | -.33548 | 0.547 | 0.1254 | 21.17 | 0.000*** |
| *Legend * p < 0.10; ** p < 0.05; *** p < 0.01* | | | | | | | |

As shown in Table 3, the value relevance of earnings started to decline following financial crisis experienced in 2001 in Turkey. During 2003, both the value relevance of earnings and book value improved as the inflation rate declined. In the years of 2004 and 2005, the continually decreasing

inflation rates and the voluntary and compulsory implementation of IFRS in these years contributed to improving the value relevance of earning. These results are consistent with the findings of other studies conducted in Turkey (Türel, 2009; Suadiye, 2012). In 2006 the inflation rate reached double digits again and this led to a decrease in the value relevance of earnings. In 2008 and 2009, the value relevance of earnings and book values deteriorated due to the global financial crisis. This observed pattern corroborates with the findings of (Bilgic et al., 2018). The global financial crisis slightly affected Turkish economy compared to developed economies. Therefore, Turkey received excessive liquidity, leading to a market boom especially after 2010 (Demir, 2019). Earnings and book value relevance remains high from 2010 to 2017 since these time periods include neither local nor global crises that deflate the informativeness of financial statements. In addition, there were no sharp increases in the inflation rate during that time. Even though the inflation rate in 2018 increased sharply the relevance of book and earnings values continues to be significant. With a sharp decline in inflation rate in 2019, the book value lost its informativeness, whereas earnings remained relevant.

A global pandemic was witnessed in 2020 called COVID-19, which devastated both commodity and equity markets (Özdemir, 2020). In 2020 the annual inflation rate increased and due to the uncertainty, BIST was negatively affected by the pandemic (Ilgın & Sarı, 2020). During 2020, the informativeness of both earnings and book value was decreased. In 2021 and 2022 annual inflation rates continued to increase and consequently the value relevance of earnings remains insignificant, while that of book value improved after 2020. As the inflation rate started to spike after 2018, accounting information lost its significance to explain stock prices. Further, it should be noted that explanatory power of the model represented by F statistics and R2 have begun to decrease after 2018. This is because earnings also lost its relevance and usefulness for making decisions. Indeed, earnings per share doesn't explain the changes in stock price of a company since 2018. Therefore, earnings should not be used by investors or analysts to predict a company's market value. In periods when inflation adjustment is used, equity explains a company's value better than income. Investors' behaviour during turbulent times is thought to be the cause of this. In comparison to future abnormal earnings, investors place more value on liquidations derived from equity information (Adwan et al., 2020).

### 6.1.2. Earnings Volatility

To test hypothesis $H_2$, the difference in means test (t-test) is applied to compare earnings volatility in different time periods (whether inflation accounting conditions are satisfied or not). Thus, the adoption of inflation accounting in 2003 and 2004 can be distinguished from the post-adoption and pre-adoption periods. For comparison purposes, three different time periods are chosen since inflation accounting was only adopted by non-financial firms in 2003 and 2004 in Turkey. The first group, the pre-adoption period, includes eight quarters from 2001 through 2002, the second group includes eight

quarters from 2003 through 2004, and the third group covers eight quarters from 2005 through 2006. Although, the conditions for inflation accounting were also satisfied in 2021 it was not adopted. Therefore, the value of four quarters of year 2021 can also be compared with one year ahead and before (i.e, 2020 and 2022). In Table 4 and 5, the mean value of earnings volatility for each year (standard deviation of ROA across the four quarters) has been calculated after categorizing the relevant values with the relevant timeline. The following tables demonstrate the differences in earnings volatility between the years 2003-2004 and 2021 with respect to their related periods.

**Table 4. Difference in Earnings Volatility between 2003-2004 and before and after 2003-2004 (measured by standard deviation of ROA)**

| | **pre-Inflation Accounting** | **Inflation Accounting** | **Inflation Accounting** | **post-Inflation Accounting** |
|---|---|---|---|---|
| ***Period*** | 2001- 2002 | 2003-2004 | 2003-2004 | 2005-2006 |
| ***Number of observations*** | 1860 | 1860 | 1860 | 1860 |
| ***Means*** | .0476057 | .036348 | .036348 | .0324655 |
| ***Difference*** | .0112577 | | .0038824 | |
| ***t-value*** | 5.0153 | | 2.2642 | |
| ***(p-value)*** | *0.0000*** | | *0.0000*** | |
| *Legend * p < 0.10; ** p < 0.05; *** p < 0.01* | | | | |

**Table 5. Difference in Earnings Volatility between 2021 and before and after 2021 (measured by standard deviation of ROA)**

| ***Period*** | 2020 | 2021 | 2021 | 2022 |
|---|---|---|---|---|
| ***Number of observations*** | 930 | 930 | 84 | 84 |
| ***Means*** | .0218386 | .0442861 | .0693302 | .1191881 |
| ***Difference*** | .0224475 | | .0498579 | |
| ***t-value*** | 10.3412 | | 2.8439 | |
| ***(p-value)*** | *0.0000*** | | *0.0025*** | |
| *Legend * p < 0.10; ** p < 0.05; *** p < 0.01* | | | | |

As can be seen there is a significant difference between the average earnings volatility in the 2003-2004 period and that of the next two years. Similarly, the years 2003-2004 is distinguishable from the previous two years before inflation accounting was adopted. The value of earnings dispersed more in those years on average when the inflation rate was higher. Accordingly, reported earnings in years before

2003 are not able to provide useful information in the same way that they did after 2004. It should be emphasized that inflation accounting started to be implemented in 2003. Before that, it was not implemented despite the fact that the requirements were satisfied in the years 2001 and 2002. Further it should be noted that both the cumulative inflation rate over three years and the inflation rate of the current year for the years 2001 and 2002 are higher than for the years 2003 and 2004.

Even if the inflation accounting requirements were met in the year 2021 with the declaration of the 2021 inflation rate, inflation accounting will not be implemented until two years later. The earnings volatility in year 2021 was compared to the volatility in year 2022 when the inflation rate was higher than in 2021. In addition, volatility in 2021 was compared to volatility in 2020, when inflation rate was lower than in 2021. According to the t test results, earnings volatility is higher in years when the inflation rate is higher. Inflation is a source of volatility by its nature as noted by (Anandarajan et al., 2006). In particular, the question of whether earnings based on cost-based accounting information are more or less volatile than inflation adjusted accounting information remains an open empirical question. According to FVA opponents, the recognition of fair value changes in income reduces the predictability of earnings and diminishes their decision usefulness (Biondi, 2011; Lee, 2014; DeFond et al., 2020). Further, it has been argued that FVA induces volatility (Ronen, 2012). On the other hand, Laux (2012) argue that fair value is more value relevant than historical cost though it can be manipulated. Also, Adwan et al. (2020) find that firms with fair value financial statements are less vulnerable to impact of the financial crises. Contrary to these views other studies show that providing historical cost and fair values shouldn't be supplanted by each other rather they should be provided as supplemental information since they complement each other (see Kirkulak & Balsari, 2009; Filip & Raffournier, 2010; Chamisa et al., 2018).

For the purpose of assessing the robustness of earnings volatility based on accounting information, the primary measure of profitability (i.e., ROA) is next replaced by an alternate measure, namely ROE. Table 6 and 7 below demostrate the fndings in detail.

**Table 6. Difference in Earnings Volatility between 2003-2004 and before and after 2003-2004 (measured by standard deviation of ROE)**

| | **pre-Inflation Accounting** | **Inflation Accounting** | **Inflation Accounting** | **post-Inflation Accounting** |
|---|---|---|---|---|
| ***Period*** | 2001- 2002 | 2003-2004 | 2003-2004 | 2005-2006 |
| ***Number of observations*** | 1860 | 1860 | 1860 | 1860 |
| ***Means*** | .1295226 | .0827793 | .0827793 | .068226 |
| ***Difference*** | .0467433 | | .0145533 | |
| ***t-value*** | 4.2674 | | 1.8717 | |
| ***(p-value)*** | *0.0000*** | | *0.0307*** | |
| *Legend * p < 0.10; ** p < 0.05; *** p < 0.01* | | | | |

**Table 7. Difference in Earnings Volatility between 2021 and before and after 2021 (measured by standard deviation of ROE)**

| ***Period*** | 2020 | 2021 | 2021 | 2022 |
|---|---|---|---|---|
| ***Number of observations*** | 930 | 930 | 84 | 84 |
| ***Means*** | .0624189 | .1521073 | .1825204 | .248006 |
| ***Difference*** | .0896885 | | .0654856 | |
| ***t-value*** | 3.6306 | | 1.5952 | |
| ***(p-value)*** | *0.0000*** | | *0.0576** | |
| *Legend * p < 0.10; ** p < 0.05; *** p < 0.01* | | | | |

After substitution, the sign and significiance level of the difference in earnings volatility between related periods yield similiar results. Based on the standard deviations of ROE, similar results are obtained to those in Table 4 and 5.

## 7. CONCLUSIONS

Accounting is a science that pertains to financial transactions and includes summarizing, analysing, and reporting those transactions. To communicate with stakeholders, entities use financial statements. For this reason, financial statements are expected to be meaningful, practical, reliable and truthful. Due to market fluctuations, financial statements do not represent an entity's real status during an inflationary period. If the impact of inflation is not mitigated, financial statements can mislead stakeholders and provide inaccurate information about a company's financial health. There are many partial adjustment

methods that can be implemented in order to minimize the impact of inflation on the financial statements; however, these partial correction methods cannot guarantee a permanent solution. Turkey implemented a complete solution for mitigating inflation impacts on financial statements through inflation accounting at the end of 2003. Inflation accounting is designed to provide reliable, useful information to taxpayers and to ensure that the tax is justified. Due to low inflation in the following years, inflation accounting was suspended after 2004. Currently, inflation is on the rise, and inflation accounting is at the top of the headlines. The phenomenon of inflation accounting is essential for Turkish companies due to the issue of over taxation. Businesses are taxed on fictitious profits due to sharp increases in costs. This has been well documented in the heated debate between politicians, businessmen and other interested parties. In the current economic environment, inflation accounting is essential to provide useful information to stakeholders and other interest groups. To provide useful information, a company should have reliable numbers and truthful information in its financial statements. Under the current conditions in Turkey, inflation accounting is believed to offer useful information and enhance the reliability and relevance of financial items.

Based on stewardship theory, an accurate picture of a company's relative financial position can be obtained by presenting both current and historical costs of financial items together. Consequently, inflation accounting is consistent with this theory since financial items are approximated to their current values, and historical values can be shown in the financial statements as incremental information. An alternative approach to interpret this association is signaling theory. Outsiders' investment decisions are influenced by the signals sent by the company, according to the signaling theory. It is possible that the insiders send this information consciously or unconsciously to an outsider who lacks the information but is seeking it (Connelly et al., 2011).

This study is subject to several limitations. First, the comparison between inflation-adjusted financial statements and non-adjusted ones is challenging, as inflation accounting has been implemented for a limited time period in Turkey. Although the conditions for inflation accounting adoption existed prior to 2003, it did not become effective until then. The conditions for inflation accounting were satisfied in 2000, 2001, 2002, as well as 2003. Therefore, the comparison of earnings volatility for the year 2003 and its previous related period cannot be argued to provide a strong basis to distinguish the period when inflation accounting was adopted and not adopted before 2003. As provided by the volatility test and pricing model tests, net income is more volatile and does not reflect a company’s actual value and misguide the interested groups in periods of high inflation. Therefore, the years when inflation adjustments are required should be scrutinized. Inflation accounting will be implemented for the year 2023 again regardless of the conditions. Further studies can compare the adjusted and non-adjusted usefulness of accounting information for the year 2023 as conducted using BIST listed companies for the year 2003 by (Kirkulak & Balsari, 2009). Further studies are also recommended to explore the

relationship between inflation accounting and decision usefulness based on other macroeconomic variables, such as interest rate, export to gross domestic product ratio, exchange rate, etc.

In addition, academic literature contains empirical analyses of the quality of financial reporting. Thus, some studies have shown that inflation accounting improves the quality of financial reporting (i.e., earnings quality) (see Higson et al., 2007; Scholtens & Kang, 2013; Kramarova, 2021). Despite this, there are only a few studies that examine the relationship between the quality of financial reporting and inflation accounting. As a result, further research could be conducted in order to analyze this relationship for Turkish entities.

Using a long series of annually and quarterly accounting data from 2000 to 2022, it is documented that financial information derived from financial statements deteriorates during high inflationary periods. A key finding of this study is that accounting value relevance is contextual and volatile as well as determined to some extent by exogenous economic factors. This study sheds light on the association between inflation and the usefulness of information reported in financial statements. It also suggests additional research areas to look into. These findings have implications for policymakers, practitioners, and scholars. For the latter, this study acknowledges the potential for further investigation in this area. While stewardship theory is used to explain these effects, new studies may also focus on signaling theory. Researchers may be encouraged to expand and test these findings in other contexts and with other data due to the limitations of the present study.

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This paper complies with Research and Publication Ethics, has no conflict of interest to declare, and has received no financial support.

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**KAYNAKÇA**

Adwan, S., Alhaj-Ismail, A., & Girardone, C. (2020). Fair value accounting and value relevance of equity book value and net income for European financial firms during the crisis. *Journal of International Accounting, Auditing and Taxation*, *39*, 100320. https://doi.org/10.1016/j.intaccaudtax.2020.100320

Aggarwal, R., Inclan, C., & Leal, R. (1999). Volatility in emerging stock markets. *Journal of Financial and Quantitative Analysis*, *34*(1), 33–55.

Aliyu, S. U. R. (2012). Does inflation have an impact on stock returns and volatility? Evidence from

Nigeria and Ghana. *Applied Financial Economics*, *22*(6), 427–435.

Altınışık, İ. (2019). *Enflasyonun İşletmeler Üzerindeki Etkisi Ve Bu Etkileri Gidermeye Yönelik Yöntemler*. İKSAD.

Anandarajan, A., Hasan, I., Isik, I., & McCarthy, C. (2006). The Role of Earnings and Book Values in Pricing Stocks: Evidence from Turkey. *Advances in International Accounting*, *19*(06), 59–89. https://doi.org/10.1016/S0897-3660(06)19003-0

Anderson, S. B., Brown, J. L., Hodder, L., & Hopkins, P. E. (2015). The effect of alternative accounting measurement bases on investors' assessments of managers' stewardship. *Accounting, Organizations and Society*, *46*, 100–114. https://doi.org/10.1016/j.aos.2015.03.007

Andrejcik, D., Singh, G., & Halari, A. (2021). Fair value accounting: Perspective on stewardship function. *Journal of Accounting and Taxation*, *13*(4), 226–242. https://doi.org/10.5897/jat2021.0483

Arsoy, A. P., & Gucenme, U. (2009). The development of inflation accounting in Turkey. *Critical Perspectives on Accounting*, *20*(5), 568–590. https://doi.org/10.1016/j.cpa.2008.01.006

Arzova, S. B., & Şahin, B. Ş. (2022). Financial reporting processes in high inflation economies and the effect of inflation accounting on financial statements. *Mali Çözüm Dergisi*, *32*(170), 13–31.

Ashton, D., Peasnell, K., & Wang, P. (2011). Residual Income Valuation Models and Inflation. *European Accounting Review*, *20*(3), 459–483. https://doi.org/10.1080/09638180.2010.493661

Aydoğan, E. (2004). 1980'den Günümüze Türkiye'de Enflasyon Serüveni. *Yönetim Ve Ekonomi Dergisi*, *11*(1), 92–111.

Ayres, D., Huang, X. (Sharon), & Myring, M. (2017). Fair value accounting and analyst forecast accuracy. *Advances in Accounting*, *37*, 58–70. https://doi.org/10.1016/j.adiac.2016.12.004

Ayvaz Güven, E. T., & Ayvaz, Y. Y. (2018). Enflasyon ve ekonomik büyüme arasındaki ilişki: 1990-2017 dönemi Türkiye örneği. *Journal of Human Sciences*, *15*(2), 766. https://doi.org/10.14687/jhs.v15i2.5303

Bakan, S. (2022). Savaş, Dünya Ekonomisi ve Finansal Piyasalar için de Felaket mi? *Politics, Humanities & Social Sciences*, *5*, 0–2.

Ballas, A. A., Skoutela, D., & Tzovas, C. A. (2010). The relevance of IFRS to an emerging market: evidence from Greece. *Managerial Finance*, *36*(11), 931–948.

Barlev, B., & Haddad, J. R. (2003). Fair value accounting and the management of the firm. *Critical Perspectives on Accounting*, *14*(4), 383–415. https://doi.org/10.1016/S1045-2354(02)00139-9

Barth, M. E. (2000). Valuation-based accounting research: Implications for financial reporting and opportunities for future research. *Accounting and Finance*, *40*(1), 7–32. https://doi.org/10.1111/1467-629X.00033

Barviv, R. (1999). The value relevance of inflation-adjusted and historical-cost earnings during hyperinflation. *Journal of International Accounting, Auditing and Taxation*, *8*(2), 269–287.

https://doi.org/10.1016/s1061-9518(99)00016-6

Basu, S., Markov, S., & Shivakumar, L. (2010). Inflation, earnings forecasts, and post-earnings announcement drift. *Review of Accounting Studies*, *15*, 403–440.

Belesis, N. D., Kampouris, C. G., & Karagiorgos, A. T. (2022). The Effect of COVID-19 on the Value Relevance of European Firms' Financial Statements. *International Journal of Applied Economics, Finance and Accounting*, *14*(1), 91–911. https://doi.org/10.33094/ijaefa.v14i1.661

Berry, A., & Robertson, J. (2006). Overseas bankers in the UK and their use of information for making lending decisions: Changes from 1985. *British Accounting Review*, *38*(2), 175–191. https://doi.org/10.1016/j.bar.2005.10.004

Bilgic, F. A., Ho, S., Hodgson, A., & Xiong, Z. (2018). Do macro-economic crises determine accounting value relevance? *Accounting in Europe*, *15*(3), 402–422.

Bilgic, F. A., & İbis, C. (2013). Effects of new financial reporting standards on value relevance–a study about Turkish stock markets. *International Journal of Economics and Finance*, *5*(10), 126–140.

Bilici, B., & Çekin, S. E. (2020). Inflation persistence in Turkey: A TVP-estimation approach. *Quarterly Review of Economics and Finance*, *78*, 64–69. https://doi.org/10.1016/j.qref.2020.04.002

Biondi, Y. (2011). The pure logic of accounting: A critique of the fair value revolution. *Accounting, Economics and Law*, *1*(1). https://doi.org/10.2202/2152-2820.1018

Bublitz, B., Frecka, T. J., & McKeown, J. C. (1985). Market Association Tests and FASB Statement No. 33 Disclosures: A Reexamination. *Journal of Accounting Research*, *23*(33), 1. https://doi.org/10.2307/2490685

Busari, K., & Bagudo, M. M. (2021). Comparing the Value Relevance of Selected Accounting Information in Consolidated and Separate Financial Statements: the Case of Nigerian Listed Financial Service Firms. *Journal of Economics and Sustainability*, *3*(Number 2), 16–32. https://doi.org/10.32890/jes2021.3.2.2

Chamisa, E., Mangena, M., Pamburai, H. H., & Tauringana, V. (2018). Financial reporting in hyperinflationary economies and the value relevance of accounting amounts: hard evidence from Zimbabwe. *Review of Accounting Studies*, *23*(4), 1241–1273. https://doi.org/10.1007/s11142-018-9460-4

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, *37*(1), 39–67. https://doi.org/10.1177/0149206310388419

Davis-Friday, P. Y., & Rivera, J. M. (2000). Inflation accounting and 20-F disclosures: Evidence from Mexico. *Accounting Horizons*, *14*(2), 113–135. https://doi.org/10.2308/acch.2000.14.2.113

DeFond, M., Hu, J., Hung, M., & Li, S. (2020). The effect of fair value accounting on the performance evaluation role of earnings. *Journal of Accounting and Economics*, *70*(2–3), 101341. https://doi.org/10.1016/j.jacceco.2020.101341

Demir, C. (2019). Macroeconomic determinants of stock market fluctuations: The case of BIST-100. *Economies*, *7*(1). https://doi.org/10.3390/economies7010008

Dichev, I. D., & Tang, V. W. (2009). Earnings volatility and earnings predictability. *Journal of Accounting and Economics*, *47*(1–2), 160–181. https://doi.org/10.1016/j.jacceco.2008.09.005

Dinçergök, B. (2013). Value relevance of earnings and book value of equity in Turkey: The 2003-2009 period. *Iktisat Isletme ve Finans*, *28*(332), 47–66.

Donaldson, L. (1990). *The Ethereal Hand : Organizational Economics and Management Theory*. *15*(3), 369–381.

Donaldson, L., & Davis, J. H. (1991). Stewardship Theory or Agency Theory: CEO Governance andShareholder Returns. *Australian Journal of Management*, *16*(June 1991), 49–66.

Durak, G., & Gürel, E. (2014). Finansal Raporların Kalitesine Etki Eden Ülkeye Özgü Faktörler. *Muhasebe ve Finansman Dergisi*, *64*, 95–110. https://doi.org/10.25095/mufad.396492

Erbaykal, E., & Okuyan, H. A. (2008). Does Inflation Depress Economic Growth ? Evidence from Turkey. *International Research Journal of Finance and Economics*, *17*(17). http://www.eurojournals.com/finance.htm

Ertuğrul, M. (2020). Direct and indirect value relevance of R&D capitalization. *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi*, *19*(37), 781–802.

Faria, J. R., & Carneiro, F. G. (2001). Does High Inflation Affect Growth in the Long and Short Run? *Journal of Applied Economics*, *4*(1), 89–105. https://doi.org/10.1080/15140326.2001.12040559

Fiechter, P. (2011). The Effects of the Fair Value Option under IAS 39 on the Volatility of Bank Earnings. *Journal of International Accounting Research*, *10*(1), 85–108. https://doi.org/10.2308/jiar.2011.10.1.85

Filip, A., & Raffournier, B. (2010). The value relevance of earnings in a transition economy: The case of Romania. *International Journal of Accounting*, *45*(1), 77–103. https://doi.org/10.1016/j.intacc.2010.01.004

Frank, E. O. (2019). A Comparative Analysis of Inflation-Adjusted and Historical Cost Accounting Information: Implications for the Value Relevance of Corporate Reports. *Trends Economics and Management*, *13*(33), 35. https://doi.org/10.13164/trends.2019.33.35

Gassen, J., & Schwedler, K. (2010). The decision usefulness of financial accounting measurement concepts: Evidence from an online survey of professional investors and their advisors. *European Accounting Review*, *19*(3), 495–509. https://doi.org/10.1080/09638180.2010.496548

Gençoğlu, Ü. G., & Ertan, Y. (2012). Muhasebe Kalitesini Etkileyen Faktörler ve Türkiye'deki Durum. *Muhasebe ve Finansman Dergisi*, *53*, 1–24. http://dergipark.gov.tr/mufad/issue/35632/396089

Hatipoğlu, M. (2016). Enflasyonun Finansal Piyasaların Volantilitesine Etkisi: Borsa İstanbul Üzerine Bir Uygulama. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *9*(2), 711–720.

Higson, A., Shinozawa, Y., & Tippett, M. (2007). IAS 29 and the cost of holding money under hyperinflationary conditions. *Accounting and Business Research*, *37*(2), 97–121. https://doi.org/10.1080/00014788.2007.9730064

Hitz, J. M. (2007). The decision usefulness of fair value accounting - A theoretical perspective. *European Accounting Review*, *16*(2), 323–362. https://doi.org/10.1080/09638180701390974

https://www.bloomberght.com/sabanci-da-enflasyon-muhasebesine-gecis-hazirligi-2312812. (2022). Sabancı'da enflasyon muhasebesine geçiş hazırlığı. *Bloomberght.Com*. https://www.bloomberght.com/sabanci-da-enflasyon-muhasebesine-gecis-hazirligi-2312812

https://www.bursa.com/haber/bursa-is-dunyasindan-ekonomi-yonetimine-quot-enflasyon-muhasebesi-quot-cagrisi-530794.html. (2022). Bursa İş dünyasından ekonomi yönetimine 'enflasyon muhasebesi' çağrısı. *Bursa.Com*. https://www.bursa.com/haber/bursa-is-dunyasindan-ekonomi-yonetimine-quot-enflasyon-muhasebesi-quot-cagrisi-530794.html

https://www.resmigazete.gov.tr/eskiler/2022/01/20220129-9.htm. (2022). *Vergi Usul Kanunu Ile Kurumlar Vergisi Kanununda Değişiklik Yapilmasina Dair Kanun*. Resmî Gazete,7532.

Hughes, J., Liu, J., & Zhang, M. (2004). Valuation and Accounting for Inflation and Foreign Exchange. *Journal of Accounting Research*, *42*(4), 731–754. https://doi.org/10.1111/j.1475-679X.2004.00155.x

IASB. (1989). Financial Reporting in Hyperinflationary Economies. In *IFRS*. https://doi.org/10.1002/9781119200772.ch17

IASB. (2018). Conceptual framework for financial reporting. In *IFRS* (Issue September 2010). https://doi.org/10.1007/978-1-137-00662-2_5

Iatridis, G. (2010). IFRS adoption and financial statement effects: The UK case. *International Research Journal of Finance and Economics*, *38*.

Ilgın, K. S., & Sarı, S. S. (2020). Covid-19 pandemisinin hisse senedi piyasalarına etkisi: Vaka ve ölümlerin yoğun olduğu ülkeler ile Türkiye incelemesi. *Karadeniz Sosyal Bilimler Dergisi*, *12*(23), 434–453.

Jermakowicz, E. K., Prather-Kinsey, J., & Wulf, I. (2007). The value relevance of accounting income reported by DAX-30 German companies. *Journal of International Financial Management & Accounting*, *18*(3), 151–191.

Kantar, M. A., Abar, H., & Önderş, T. (2021). EnflasyonuİşletmelerinFinansal OranlarinEtkisi: BistİmalatSektöründeBir Uygulama. *Muhasebe ve Finansman Dergisi*, *856384*(90), 1–18. https://doi.org/10.25095/mufad.856384

Kantur, Z., & Özcan, G. (2022). Dissecting Turkish inflation: theory, fact, and illusion. *Economic Change and Restructuring*, *55*(3), 1543–1553. https://doi.org/10.1007/s10644-021-09357-1

Karapınar, A., & Eflatun, A. O. (2022). *TMS-BOBİ FRS İlkelerine Göre Enflasyon Muhasebesi Gerçek Uygulama Örnekleriyle*. Gazi Kitabevi.

Karasioğlu, F., & Erdemir, N. K. (2005). Enflasyon muhasebesi uygulamalarinda temel işlemler üzerine bir çalışma. *Selçuk Üniversitesi Karaman İktisadi ve İdari Bilimler Dergisi*, *5*(Aralık), 145–167.

Kargin, S. (2013). The Impact of IFRS on the Value Relevance of Accounting Information: Evidence from Turkish Firms. *International Journal of Economics and Finance, 5(4), 71–80.* https://doi.org/10.5539/ijef.v5n4p71

Kibritçioğlu, A. (2002). Inflation and Disinflation in Turkey. In A. Kibritçioğlu, L. Rittenberg, & S. Faruk (Eds.), *Causes of Inflation in Turkey: A Literature Survey with Special Reference to Theories of Inflation* (pp. 43–76).

Kieso, D., Jerry, W., & Terry, W. (2019). *Intermediate Accounting* (17th ed.). Wiley.

Kirkulak, B., & Balsari, C. K. (2009). Value Relevance of Inflation-adjusted Equity and Income. *International Journal of Accounting*, *44*(4), 363–377. https://doi.org/10.1016/j.intacc.2009.09.007

Kılıç, R., & Dilber, C. (2017). Türkiye'deki enflasyon ve dolar kuru volatilitesinin bist-100 endeksi oynaklığı üzerindeki etkisi. *Çankırı Karatekin Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *8*(1), 164–174.

Konchitchki, Y. (2013a). Accounting and the macroeconomy: The case of aggregate price-level effects on individual stocks. *Financial Analysts Journal*, *69*(6), 40–54. https://doi.org/10.2469/faj.v69.n6.3

Konchitchki, Y. (2013b). Inflation and Nominal Financial Reporting: Implications for Performance and Stock Prices. *The Accounting Review*, *86*(3), 1159–1179.

Kramarova, K. (2021). The global problem of inflation and need for inflation adjusted-financial reporting. *SHS Web of Conferences*, *129*, 09010. https://doi.org/10.1051/shsconf/202112909010

Laux, C. (2012). Financial instruments, financial reporting, and financial stability. *Accounting and Business Research*, *42*(3), 239–260. https://doi.org/10.1080/00014788.2012.681857

Lee, C. M. C. (2014). Performance measurement: An investor's perspective. *Accounting and Business Research*, *44*(4), 383–406. https://doi.org/10.1080/00014788.2014.910376

Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, *69*(3), 505–527. https://doi.org/10.1016/S0304-405X(03)00121-1

Liu, G., & Sun, J. (2022). The impact of COVID-19 pandemic on earnings management and the value relevance of earnings: US evidence. *Managerial Auditing Journal*, *37*(7), 850–868. https://doi.org/10.1108/MAJ-05-2021-3149

Magnan, M., Menini, A., & Parbonetti, A. (2015). Fair value accounting: information or confusion for financial markets? *Review of Accounting Studies*, *20*(1), 559–591. https://doi.org/10.1007/s11142-014-9306-7

McGregor, S. (2022). Fair value accounting impact on decision-usefulness of accounting information: evidence from accounting standards update 2016–01 on the USinsurance industry. *Journal of*

*Financial Reporting and Accounting*, *20*(5), 926–952. https://doi.org/10.1108/JFRA-12-2020-0352

OECD. (2023). *G20 – CPI All items*. OECD.Stats. https://stats.oecd.org

Ohlson, J. A. (1995). Earnings, Book Values, and Dividends in Equity Valuation. *Contemporary Accounting Research*, *11*(2), 661–687. https://doi.org/10.1111/j.1911-3846.1995.tb00461.x

Öncel, M. (1995). Enflasyon ve vergilendirme. *Ankara Üniversitesi Hukuk Fakültesi Dergisi*, *44*(1).

Özcan, İ. (2022). Mevduat Bankalarinda Gerçeğe Uygun Değer Hiyerarşisinin İçerik Analizi Ve Kazanç Oynakliğina Etkisi. *Muhasebe Bilim Dünyası Dergisi*, *24*(1), 109–131.

Özdemir, L. (2020). Covid-19 pandemisinin BIST sektör endeksleri üzerine asimetrik etkisi. *Finans Ekonomi ve Sosyal Araştırmalar Dergisi*, *5*(3), 546–556.

Ozkan, S., & Kaytmaz Balsari, C. (2010). Impact of financial crises on the value relevance of earnings and book value: 1994 and 2001 crises in Turkey. *Iktisat Isletme ve Finans*, *25*(288).

Özkan, T. (2005). EnflasyonMuhasebesi Uygulamasının Firmalarin Finansal Yapıları Üzerine Etkileri. *Muhasebe ve Denetime Bakış*, *15*, 49–72. https://dergipark.org.tr/tr/pub/mdbakis/issue/63884/967105

Palea, V. (2014). Fair value accounting and its usefulness to financial statement users. *Journal of Financial Reporting and Accounting*, *12*(2), 102–116. https://doi.org/10.1108/jfra-04-2013-0021

Pathirawasam, C. (2013). The Value Relevance of Earnings and Book Value: The Importance of Ownership Concentration and Firm Size. *Journal of Competitiveness*, *5*(2), 98–107. https://doi.org/10.7441/joc.2013.02.07

Patjoshi, P. K. (2020). Impact of Inflation on Major Financial Ratios. *Indian Journal of Natural Sciences*, *10*(60). https://doi.org/10.37896/jxu14.4/377

Ronen, J. (2012). What Do FAS 157 'Fair Values' Really Measure: Value Or Risk? *Accounting Perspectives*, *11*(3), 149–164. https://doi.org/10.1111/j.1911-3838.2012.00037.x

Sapkauskiene, A., & Orlovskij, S. (2017). The usefulness of fair value estimates for financial decision making: a literature review. *Zeszyty Teoretyczne Rachunkowości*, *93*(0), 0–0. https://doi.org/10.5604/01.3001.0010.3195

Scholtens, B., & Kang, F. C. (2013). Corporate Social Responsibility and Earnings Management: Evidence from Asian Economies. *Corporate Social Responsibility and Environmental Management*, *20*(2), 95–112. https://doi.org/10.1002/csr.1286

Seleteng, M., Bittencourt, M., & van Eyden, R. (2013). Non-linearities in inflation-growth nexus in the SADC region: A panel smooth transition regression approach. *Economic Modelling*, *30*(1), 149–156. https://doi.org/10.1016/j.econmod.2012.09.028

Suadiye, G. (2012). Value relevance of book value & earnings under the local GAAP and IFRS: Evidence from Turkey. *Ege Academic Review*, *12*(3), 301–310.

Sweidan, O. D. (2004). Does Inflation Harm Economic Growth in Jordan? An Econometric Analysis

for the Period 1970-2000. *International Journal of Applied Econometrics and Quantitative Studies*, *1*(1), 41–66.

TÜİK. (2022). *Producer price index*. https://biruni.tuik.gov.tr/medas/?kn=84&locale=tr

Türel, A. (2009). The value relevance of IFRS: The case of Turkey. *Acta Universitatis Danubius. Œconomica*, *5*(1), 119–128.

TURMOB. (2020). *Korona Salgınının Türkiye Ekonomisine Etkisi*. https://www.turmob.org.tr/haberler/f599274f-c33d-48ff-bfb8-b3f29e5f575d/korona-salgininin-turkiye-ekonomisine-etkisi--degerlendirmeler-ve-oneri-raporu--basin-bulteni

Varol, N. (2022). Inflation Accounting in Terms of Tax Legislation and Accounting Standards in Turkey. *Muhasebe ve Finansman Dergisi*, *93*, 19–30. https://doi.org/10.25095/mufad.979514

Wang, H. (2012). *The Decision Usefulness of Fair Value Accounting in the Debt Market* (Issue October). The John Molson School of Business.

Wang, J. L., Hsiung, H. H., & Jhu, Y. W. (2020). The Study on Accounting Information Value Relevance in the Practice of IFRS 16 - An Empirical Study of Taiwan. *ACM International Conference Proceeding Series*, 146–152. https://doi.org/10.1145/3429551.3429560

Whittington, G. (2008). Fair value and the IASB/FASB conceptual framework project: An alternative view. *Abacus*, *44*(2), 139–168. https://doi.org/10.1111/j.1467-6281.2008.00255.x

Yaya, O. S., & Shittu, O. I. (2010). *On the impact of inflation and exchange rate on conditional stock market volatility: a re-assessment*.

Yeldan, E. (2001). On the Imf-Directed Disinflation Program in Turkey: A Program for Stabilization and Usterity or a Recipe for Impoverishment and Financial Chaos? *The Ravages of Neo-Liberalism: Economy, Society, and Gender in Turkey*, *1*, 1–26. https://ssrn.com/abstract=290539

Yilmazkuday, H. (2022). Drivers of Turkish inflation. *Quarterly Review of Economics and Finance*, *84*, 1–24.

Yücel, G. (2023). Parasal Kazanç ( Monetary Gain ) Kavramı Anlaşılmadan Enflasyona Göre Düzeltilmiş Finansal Tablolar Anlaşılamaz. *Denetim ve Güvence Hizmetleri Dergisi*, *3*(1), 1–10.

**Appendix A: An inflation adjustment example**

Company A was established with 200,000 cash on 01.01.2023. In January Company A bought 20 unit of property with 10,000-unit price and 16 of these goods sold at 20,000-unit price.

***Balance sheet before adjustment 31.12.2023: Company A Balance Sheet***

| | |
|---|---|
| Cash and cash equivalents | 320,000 |
| Inventory | 40,000 |
| Total Assets | 360,000 |
| Capital | 200,000 |
| Pre-tax profit | 160,000 |
| Total liabilities | 360,000 |

***Company A Profit and Loss Statement for the year 2023:***

| | |
|---|---|
| Gross Sales | 320,000 |
| Cost of Sales | (160,000) |
| Gross Sales Margin | 160,000 |

***The Wholesale Price Indexes:***

December 2023 index 7,5

January 2023 index 5

Average index (7,5+ 5)/2 = 6,25

***Adjustment coefficients:***

January index adjustment coefficient 7,5/5 = 1.5

Average index adjustment coefficient 7,5/6,25= 1.2

***Adjusted figures:***

Inventory 40,000 × 1.5= 60.000

Capital 200,000 × 1.5 = 300.000

Sales 120,000 × 1.038 = 124.560

Costs of Sales 160,000 × 1.5= 240.000

***The Statement of Net Monetary Position Gain or Loss:***

Adjusted figure of increase in net monetary items 320,000 × 1.2 = 384.000

| | |
|---|---|
| Net monetary item at December, 31st, 2023 | 320.000 |
| Net monetary position loss | 64.000 |

***Company A 2023 Adjusted Income Statement:***

| | |
|---|---|
| Gross Sales | 384.000 |
| Cost of Sales | (240.000) |
| Gross Sales Margin | 144.000 |
| Net monetary position loss | (64.000) |
| Pre-tax profit | 80.000 |