

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Zahradnícek, Tomáš

Article

Non-IFRS earnings measures in annual reports of European companies

European Financial and Accounting Journal

Provided in Cooperation with:

Faculty of Finance and Accounting, Prague University of Economics and Business

Suggested Citation: Zahradnícek, Tomáš (2024): Non-IFRS earnings measures in annual reports of European companies, European Financial and Accounting Journal, ISSN 1805-4846, Prague University of Economics and Business, Faculty of Finance and Accounting, Prague, Vol. 19, Iss. 2, pp. 21-43.

https://doi.org/10.18267/j.efaj.287

This Version is available at: https://hdl.handle.net/10419/319724

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Non-IFRS Earnings Measures in Annual Reports of European Companies

Tomáš Zahradníček*

Abstract:

The article examines disclosure of non-IFRS earnings measures (also called alternative performance measures). The data sample consists of 600 companies that constitute index EUROSTOXX 600 for the years 2021 and 2022. We prove that non-IFRS earnings measures hold a very prominent role in financial reporting. We provide evidence that the reporting of solely IFRS earnings measures in annual reporting is very rare, with only 3% of companies use only IFRS measures. On the contrary, a substantial number of companies (74%) include adjusted non-IFRS measures into unaudited parts of annual reports. Moreover, 25% of companies put adjusted non-IFRS measures into their audited income statements. Our findings enlighten how widespread non-IFRS measures are among European companies and how the European institutions approach this practice of financial reporting.

Keywords: Alternative Performance Measures; IFRS Regulation; Non-IFRS Earnings; Voluntary Disclosure.

JEL classification: M21; M41; M48.

1 Introduction

Our article reviews non-IFRS measures reporting practice within audited annual reports based on International Financial Reporting Standards (IFRS). The IFRS standards are issued by International Accounting Standards Board (IASB) to enhance international comparability of financial statements. Financial information for external users contained in the financial statements is accompanied by other sources of corporate reports, *e.g.*, annual reports or sustainability reports. But most companies reckon that regulated information produced by using IFRS standards is too uniform, and the measures defined by IFRS standards are not able to provide precise information on their performance. Therefore, some non-IFRS measures are being disclosed in annual reports so that the company performance is described in an alternative and, from the company management perspective, more informative manner. Non-IFRS measures, also labelled as Alternative Performance Measures (APM), can be derived from profit and loss statement items, balance sheets items, or cash flow statement items. APMs do not have to be only financial, they can also be derived from operational indicators. And APMs do not have to be only measures,

^{*} Tomáš Zahradníček; Prague University of Economics and Business, Faculty of Finance and Accounting, Department of Management Accounting, Winston Churchill Square 1938/4, 130 67 Prague, Czech Republic, <xzaht04@vse.cz>.

they can also be some ratios. APMs are not measures that should replace IFRS measures, they should serve as additional information that provide other beneficial insight on company performance.

Our article makes several contributions to the existing literature. First, most papers about management-adjusted earnings are focused on the US. The objective of this article is to provide an actual overview of how non-IFRS earning measures are used in European settings in the current regulatory environment.

Second, this article contributes to academic literature by providing a comprehensive view of using discretionary measures such as non-IFRS earnings across industries and European countries.

Finally, our findings extend the work of Isidro and Marques (2008) who conclude that the disclosure of earnings before interest and taxes (EBIT) and earnings before interest, taxes, depreciation, and amortisation (EBITDA) is much more common in Europe than in the US and find evidence for opportunistic usage of APMs by managers (Isidro and Marques, 2013; Guillamon-Saorin *et al.*, 2017). They also provide evidence that not only the capital market incentives are determinants of managers' non-GAAP disclosure decisions (Isidro and Marques, 2021). Alongside achieving this objective, we are partially responding to a call from Marques (2017) for new research to assess what impact European Financial and Market Authority's (ESMA) set of recommendations has had on the disclosure of non-GAAP performance measures by listed European firms. This new research should not focus exclusively on non-GAAP measures that are comparable to net income, as most papers have done so far, but also consider earnings measures that are closer to operating income. This article provides a comprehensive overview of prevalence of alternative earnings measures across industries and countries in European settings.

The remainder of the article is organised as follows. Literature review in Section 2 provides information about the institutional and regulatory background and prior academic research. This is followed by research design in Section 3 and leads to Section 4 where we present the analysis and the key results. Our findings are summarised in Section 5.

2 Literature Review

ESMA (2015) issued guidelines on Alternative Performance Measures and defines APM as financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework. These guidelines apply to measures disclosed outside of financial statements (*e.g.*, in management reports or director's reports). ESMA (2023) examined 640 issuers of financial statements drawn up

under IFRS in 2022 and 521 issuers used APM in management reports, that stands for 81% of annual reports. These management reports were assessed for compliance with ESMA's APM guidelines. Examined management reports represent 13% of all IFRS listed issuers in Europe. Based on these examinations, enforcement actions were taken in relation to 89 issuers, constituting an action rate of 17%. Deficiencies were found in areas of APM definition (23%), reconciliation (22%) and explanation of the use (22%).

The IASB, which cooperates with academics, received a comment letter from them which stated that requiring operating profit as subtotal is likely to enhance comparability to the extent entities included similar items in the computation of this subtotal and provided academic literature that has shown that increased comparability benefits various types of financial statement users, auditors, and the reporting entities (IASB, 2020).

The IASB has not specifically defined the APMs but had in place the standard IAS 1 – Presentation of Financial Statements that sets overall requirements. IAS 1 did not provide clear guidance on how to disclose information in financial statements. The IASB acknowledged that the use of the term APM was confusing and began focusing on describing how performance measures can be more generally fairly presented in financial statements (IASB, 2015). Therefore, the IASB launched a project called Primary financial statements to remedy this deficiency in 2015. The outcome of this project is the new IFRS Standard, IFRS 18 – Presentation and Disclosure in Financial Statements, that should improve information in the statement of profit or loss. IFRS 18 was issued in April 2024 and applies to an annual reporting period beginning on or after 1 January 2027.

IFRS 18 does not operate with the term APM but defines management-defined performance measures as a subtotal of income and expenses and requires disclosure about management-defined performance measure, including a reconciliation to the most directly comparable total or subtotal specified by IFRS Standards and its calculation. IFRS 18 newly defines EBIT, but does not define EBITDA. The Board considered, but rejected, describing operating profit or loss before depreciation and amortisation as EBITDA (IFRS Foundation, 2019).

Not only academic researchers but also external users of financials information have contradictory perception of APMs. The relevant literature has examined two major motives that explain why APMs are used. One is opportunistic motive, in other words, impression management. The goal is to mislead stakeholders and present the company's performance in a more positive light than it is. The second is to provide more informative reporting.

On one hand, there are users of financial information that have endorsed APMs because they are more informative measures. Bradshaw *et al.* (2018) conclude that

investors view non-GAAP earnings as a more informative summary metric of firm performance. This supports the findings of Black *et al.* (2020) that firms use the discretion afforded in non-GAAP reporting to modify their non-GAAP calculations across time and relative to peer firms for informative reasons. Charitou *et al.* (2018) further conclude that firms use non-GAAP disclosures to reduce information asymmetry and better inform the market about their future earnings. Rainsbury *et al.* (2015) add that earnings APMs are better predictors of future earnings and the value relevance of adjusted IFRS earnings is greater than IFRS earnings. Brown and Sivakumar (2003) find that earnings APMs have a higher association with stock prices. Aubert and Grudnitski (2014) add that reconciliation of APMs is important in reducing market mispricing.

On the other hand, Bhattacharya *et al.* (2003) supports the criticism that the usage of APMs is often motivated by managers' desires to meet or beat analysts' expectations or to avoid earnings decreases. This confirm Guillamon-Saorin *et al.* (2017) with the evidence that managers use impression management to mask the recurring nature of some non-GAAP adjustments. Christensen *et al.* (2014) find that sophisticated market participants view APM earnings disclosures negatively. Findings of Barth *et al.* (2012) suggest that managers opportunistically exclude stock compensation expenses to increase earnings, smooth earnings and meet earnings benchmarks. This conclusion is confirmed by Isidro and Marques (2013).

Extant research supports both the informative and opportunistic motive for non-IFRS disclosures. Attempts to generalise reporting behaviour or identify a single dominant explanation for non-IFRS earnings are likely to flounder because informative reporting and opportunistic disclosure do not represent mutually exclusive explanations. Both motives co-exist with the drivers varying across firms and time conditional on prevailing reporting incentives (Young, 2014).

The basic idea behind earnings APM is to separate permanent and transitory components. This separation shall provide better insight into company's performance. However, earnings measurement and disclosure are constrained by IFRS standards and subject to monitor. This fact lures managers toward the voluntary disclosure of non-IFRS performance measures in annual reports to be able to provide such non-IFRS performance measures to external users (Guillamon-Saorin *et al.*, 2017). The issue related to transitory components arises because of the multiple purpose nature of the income statement. Specifically, the income statement is intended to provide information useful in (a) evaluating what happened during the period and (b) providing a basis for predicting future performance. These objectives often conflict if an item is unusual or non-recurring. Such an item should be included if the earnings number is intended to be a predictor of future cash flows and earnings (Lambert, 2004).

Curtis *et al.* (2014) examine how managers disclose transitory gains to disentangle these two competing explanations for the disclosure of non-IFRS earnings. They find that the most pervasive motivation for non-IFRS reporting is to inform. Nearly half of the examined companies allow investors to assess operating performance excluding the gains quickly and easily. The remaining companies issue opaque disclosure and half of these companies that issue opaque disclosure appear to be opportunistic. They found 5,3% of the sample to be egregious opportunistic. These companies excluded transitory expenses but included transitory gains. These findings were inferred from the sample of US companies and their 10-K filings (equivalent of annual report) published in the years 2004–2009.

Companies operate in different settings given by country specifics and their institutional and economics factors and these circumstances can influence the manager's decision for voluntary disclosure of non-IFRS earnings. Isidro and Marques (2014) found that in countries with efficient legal systems, strong investor protection, developed capital market, and good communication channels managers are more likely to use non-IFRS earnings to meet important earnings benchmarks that would be missed by reported earnings. Managers experience more pressure to beat earnings target in institutionally strong and economically developed jurisdiction, where rigorous implementation of regulation and high scrutiny over financial reporting lessen the use of earnings management to meet the targets.

The practice of reporting non-GAAP measures is not new, as the U.S. Securities and Exchange Commission (SEC) issued guidance on non-GAAP reporting decades ago, for example Accounting Series Release No. 142 in 1973 (Bhattacharya *et al.*, 2004). These days APMs dominate external reporting. In May 2016, Hans Hoogervorst, chairman of IASB, reported that than 88% of the S&P 500 disclose non-GAAP metrics in their earnings release. Of those releases, 82% show increased net income and are clearly designed to present results in a more favourable light. One study showed that the popular metric called "core earnings" was on average 30% higher than GAAP earnings (Hoogervorst, 2016).

Before the issuance of IFRS 18 the term "non-IFRS" might have been used for two different groups of performance measures. The first group contained subtotals such as EBIT or EBITDA which were not defined by IFRS Standards but could be provided in accordance with IAS 1. These subtotals are summary measures in accordance with IFRS Standards, but their composition is not defined by IFRS Standards. Thus, measures in this first group were permitted under IFRS Standards but might not be comparable between entities despite having the same label. The second group contained performance measures based on removing (adjusting or excluding) all or part of line items included in the IFRS accounts from the IFRS-defined totals (net income or earning per share) or the IFRS-undefined subtotals (operating profit, EBIT, EBITDA). These performance measures are constructed by

adding back items of expense or removing revenue items that the company considers to be unusual, infrequent, non-recurring or non-core business. This second group of measures captures "underlying earnings", which have been referred to as street earnings, pro forma earnings, non-GAAP, non-IFRS or alternative performance measures (Clinch *et al.*, 2019).

An interesting finding related to the type of non-IFRS measure provides Bouwens et al. (2019), suggesting that EBITDA, and its adjusted measures, are well-suited financial metrics to window-dress performance and provide a rosier picture of the company. Conversely, he finds weak evidence that earnings before interest, taxes, and amortisation (EBITA) and EBIT are disclosed for opportunistic reasons and adds evidence that EBITDA reporters are generally smaller, more leveraged, more capital intensive and less profitable than other companies that did not report EBITDA and interprets their results as being consistent with opportunistic disclosure because more leveraged, more capital-intensive companies were more likely to disclose EBITDA. This is because EBITDA will inherently improve the perceived profitability of those companies by excluding interest, taxes, depreciation, and amortisation. Another interesting finding provided Isidro and Marques (2008), who explored the first non-GAAP financial measures disclosed by managers in their annual earnings announcement press releases. The four main measures are: EBIT (22.4%), EBITDA (21%), non-GAAP net income (16.2%) and non-GAAP income from operations (10.6%). The prominence of EBIT and EBITDA may be caused by European managers not being aware that these are non-GAAP financial measures.

Academics research has also examined which measure of performance is the most informative for value assessment. Barton *et al.* (2010) found that optimal performance measures useful in equity valuation vary across different economics circumstances and accounting regimes as a function of the underlying attributes of the performance measures. Therefore, stakeholders should not focus on what performance measure is "the best", but rather should focus on the underlying attributes. However, they found that subtotals measures are more value relevant than totals measures, specifically those ones which move toward the middle of income statement. Brown and Sivakumar (2003) conclude that non-IFRS operating profit that backs out non-recurring items is more value relevant than operating earnings derived from firms' financial statements. This indicates that operating earnings reported by managers contain valuable information beyond that provided by operating earnings obtained from firms' financial statements.

It has been proven that earnings APMs provide complementary information about company's performance that increases and enhances informativeness of annual reports. However, the variety of non-IFRS earning measures is immensely large and their usage among companies is nor uniform neither standardised. It could seem that this heterogeneity reduces comparability of financial statements. Black *et al.* (2020)

found evidence indicating that non-IFRS earnings improve comparability across firms, relative to IFRS earnings. Even if some firms report non-IFRS earnings calculations that deviate from their industry normal calculation, they use their discretion in deviating from the industry norm for informative reasons.

Our unique hand-collected data set allows us to explore the prevalence and use of non-IFRS measure among European companies and we state our research questions:

RQ1: How prevalent are non-IFRS measures among European companies currently?

RQ2: Which type of non-IFRS measures is more prevalent and how do they differ from the closest IFRS measure?

3 Research Design

In terms of methodology, the article follows an approach that attracts a lower attention of accounting research. While most studies examine the disclosures made in earnings announcement press releases, only some papers analyse the text of annual reports. Another source of data is from providers such as I/B/E/S, Compustat or CRSP. This allows them to analyse a large amount of data. But APM's earnings from these databases can be biased. Easton (2003), Bhattacharya *et al.* (2003), and Bentley *et al.* (2018) point out that I/B/E/S earnings (reflecting exclusions made by I/B/E/S) cannot be used as a proxy for APM's earnings because they significantly differ from APM's earnings reported by management (reflecting exclusions made by managers). Given these findings, we conclude that annual reports, which are also audited, are the highest quality data source for exploring how companies (managers) use alternative performance measures.

This article builds on hand-collected data from 600 annual reports of European companies for years 2021 and 2022 and identifies in each annual report what kind of APMs are used in each company and then scrutinise the most reported earnings APM. The area under examination was the annual report as a whole and its IFRS disclosures, specifically income statement as a part of disclosures.

Regarding the measures that we observe it is important to note that a lot of companies consider EBITDA and EBIT to be standard earnings measures and therefore do not consider them as APMs. Even though in the academic community was no consensus on whether EBITDA and EBIT are APMs, some research papers about APMs exclude the observations for which are disclosed EBITDA and EBIT from data sample. The explanation for it is that EBITDA and EBIT are not non-IFRS earnings measures because they were commonly used long before non-IFRS reporting began (Chen *et al.*, 2021). We not only include EBITDA and EBIT in our observations but also approach EBIT as an equivalent of operating income. And

conversely to Isidro and Marques (2008) we consider operating earnings (EBIT) as a standard APM because there is a widespread understanding that operating profit is simply EBIT (CFA Society UK, 2015).

This article strictly adheres to interpretation of IAS 1. Neither EBITDA nor EBIT were defined and specified in IAS 1 and therefore we regard these performance measures as non-IFRS measures. We divided earnings measures into three groups. The earnings measures that are defined by IFRS belong to the first group called IFRS measures. The second group is composed of non-IFRS earnings measures that are generally accepted and are not considered by some researchers as APMs. These measures are operating income (result, profit), EBIT, EBITA, EBITDA. We classify into this group also industry specific measures. Financial and Real Estate industry use peculiar measures that stem from their industry given specifics. Such an industry specific measure is EPRA earnings that is used only in Real Estate industry. We called this second group as non-IFRS measures. The third group is composed of the adjusted earnings measures of the first or second group, e.g., adjusted, underlying, recurring etc. We call this third group APMs. We narrowed down the definition of an APM not to include simple non-IFRS measures but only adjusted non-IFRS measures and adjusted IFRS measures. The basic goal of this research is exploring the third group, i.e., adjusted measures and the differences between adjusted measurers and their unadjusted variants.

Our data set comprises EUROSTOXX 600 companies. We did not exclude any specific sector, even though the financial industry has different regulations from other sectors. The reason for any exclusions is that we want to provide a complex description of using APMs among all industries. The EUROSTOXX 600 is a stock index of European stocks and is made up of 600 small, mid and large-cap European companies from 17 countries. The companies are divided into 20 super sectors. The classification is according to Industry Classification Benchmark (ICB). The dataset derived from annual reports of these companies can be considered as ideal representant of European market due its variety of composition. Furthermore, for the analysis purposes we aggregate and classify all companies into 11 industries as per industry according to ICB. Industry Classification Benchmark is an industry classification system that allows investors and other market participants to segment and evaluate the global economy in a systematic and holistic way. It provides a standardised framework to research individual areas of the economy, conduct peer group analysis and classify companies on both a top-down and bottom-up basis. An industry classification system allows users to assign individual companies to aggregate industry groupings (Industry Classification Benchmark, 2023).

This article is based on the hand collected data from annual reports. We searched for APMs in unaudited parts of annual reports, in the parts called management report, director's reports *etc.*, and in audited part, *i.e.*, financial statements, we

focused solely on the income statement. The disadvantage of hand collection is time consumption which causes the amount of data to be less. The sample data for the year 2022 are used for the initial analytical part of this article that provides a snapshot of the APM prevalence for industry and countries. The subsequent analytical part analyses the most used APM earnings measure, specifically describes the differences between adjusted value and unadjusted value and consequently provides descriptive statistics on the amounts of calculated differences for this analysis, data for the year 2021 and 2022 are examined.

4 Results and Discussion

Tab. 1 and Tab. 2 provide descriptive data about the prevalence of IFRS earnings measures, non-IFRS earnings measures and APM earnings measures (defined as adjusted non-IFRS measures) in industry and sectors respectively in geographic areas (countries). The following results enrich academics research as no prior papers have provided such a comprehensive overview of prevalence of APM across industries and countries.

Industries and supersectors are classified based on ICB. The dominance of APMs is in each sector. There is no sector in which there would be more used IFRS measures or non-IFRS measures than APMs. Only 3% of companies use IFRS measures, earnings APMs use 75% companies in their annual reports and 25% companies report earnings APMs in their income statements. Our results from European settings can be compared to the findings of Curtis et al. (2014) from U.S. area who provide the findings that 16% of earnings for performance evaluation are unadjusted, whereas the remaining 84% are adjusted. We can infer that reporting of adjusted measures is more common in the U.S. than in Europe. European companies in Real Estate sector and Media sector are found to be the ones which most report earnings APMs in their annual reports, the prevalence of APMs amongst companies in these industries is 91%. Followed by Food, Beverage & Tobacco with 87% and Telecommunication and Travel & Leisure with 86%. In contrast, Banks are found to be the least reporting earnings APMs in their annual reports, the prevalence is 50%. There is a need to highlight that this article is focused on earnings measures. If we were focused on all measures, banks would be ranked among the most reporting APMs. The main measures in Bank sector are ratio based and the most of these ratios would be classified as APMs. The same low prevalence of 50% is found in Technology sector. These two sectors are followed by Financial Services with a prevalence of 65%.

Tab. 1 Industry and supersector prevalence

Industry	Supersector	No of obs.	IFRS measures in annual report	non-IFRS measures in annual report	APMs in annual report	APMs in income statement	
ъ.	Basic Resources	18	0%	17%	83%	11%	
Basic materials	Chemicals	22	0%	18%	82%	23%	
materials	Total for industry	40	0%	18%	83%	18%	
	Automobiles & Parts	15	0%	33%	67%	27%	
Consumer	Consumer Products & Services	33	0%	27%	73%	48%	
Discretionary	Media	11	0%	9%	91%	18%	
	Retail	11	0%	27%	73%	36%	
	Travel & Leisure	14	0%	14%	86%	50%	
	Total for industry	84	0%	24%	76%	39%	
Consumer Staples	Food, Beverage & Tobacco	30	0%	13%	87%	37%	
	Personal Care, Drug & Grocery Stores	16	0%	19%	81%	19%	
	Total for industry	46	0%	15%	85%	30%	
Energy	Energy	22	0%	18%	82%	9%	
	Banks	44	25%	25%	50%	9%	
Fig 1 .	Financial Services	31	6%	29%	65%	3%	
Financials	Insurance	31	0%	32%	68%	13%	
	Total for industry	106	12%	28%	59%	8%	
Health Care	Health Care	56	0%	18%	82%	21%	
	Construction & Materials	25	0%	32%	68%	44%	
Industrials	Industrial Goods & Services	103	1%	22%	77%	27%	
	Total for industry	128	1%	24%	75%	30%	
Real Estate	Real Estate	34	0%	9%	91%	53%	
Technology	Technology	34	3%	47%	50%	15%	
Telecomm.	Telecomm.	21	0%	14%	86%	5%	
Utilities	Utilities	29	0%	31%	69%	28%	
Ctilities							

When examining the prevalence of earnings APMs in income statements, the prevalence decreases substantially. Real Estate sector stays the sector with the highest prevalence APMs in income statement with 53%, followed by Travel & Leisure with 50% and Consumer Products & Services with 48%. In contrast, Financial Services are the least reporting earnings APMs with the prevalence of 3%, followed by Telecommunication with 5% and Banks with 8%. The interesting finding is that Telecommunication sector is a sector with the highest prevalence of earnings APMs in annual reports, but the lowest prevalence in income statements.

Further examination was made based on the geographic origin of the companies. British companies use the most earnings APMs in their annual reports, the prevalence is 92%, followed by Irish companies with 89%, and Finnish companies with 88%. In contrast, the companies form Portugal use earnings APMs in their annual report at least with the prevalence of 25%, followed by companies from Poland with 28% and Spain with 44%.

When examining the prevalence of earnings APMs in income statements, the result from the geographic point of view is almost the same. The most earnings APMs in income statements use the companies from Ireland with the prevalence of 56%, followed by companies from Great Britain with 49%, and France with 44% In contrast, there are companies from three countries that have zero prevalence of earnings APMs in their income statements. These countries are Portugal, Luxemburg, and Austria. The interesting finding is that companies from Finland use earnings APMs in annual reports with prevalence of 88%, but the prevalence in income statements is only 6%. The above findings can be influenced by the fact that even though IFRS allow companies to include non-IFRS measures on the face of the income statement, some local regulators do not allow such disclosures.

Tab. 3 and Tab. 4 describe the differences in detail between adjusted operating profit and operating profit. We chose adjusted operating profit because this measure is the most used earnings APM among EUROSTOXX 600 companies. We identified that 274 companies (46%) report adjusted operating income or some term mutation of adjusted operating income, such as operating profit, operating result, adjusted profit from operation, organic operating profit *etc*. We recognised 57 variations of the term adjusted operating income – the complete list can be found in Appendix A. The findings that the most prevalent APM used by managers is adjusted operating profit is congruent with prior research that has shown adjusted operating earnings as more value relevant than operating earnings or net income derived from firm's financial statements (Brown and Siyakumar, 2003).

Tab. 2 Country prevalence

Country	No of obs.	IFRS measures in annual report	non-IFRS measures in annual report	APMs in annual report	APMs in income statement
Austria	7	0%	43%	57%	0%
Belgium	16	6%	13%	81%	38%
Denmark	26	0%	27%	73%	35%
Finland	17	0%	12%	88%	6%
France	78	1%	13%	86%	44%
Germany	71	1%	32%	66%	7%
Great Britain	140	0%	8%	92%	49%
Ireland	9	0%	11%	89%	56%
Italy	34	12%	29%	59%	6%
Luxembourg	2	0%	50%	50%	0%
Netherlands	29	10%	24%	66%	7%
Norway	18	0%	28%	72%	11%
Poland	7	29%	43%	29%	14%
Portugal	4	0%	75%	25%	0%
Spain	25	8%	48%	44%	12%
Sweden	65	0%	32%	68%	17%
Switzerland	52	2%	37%	62%	6%
Total	600	3%	23%	74%	25%

Tab. 3 describes the differences in 2021. The adjusted operating income was higher than operating income in 70% of all observations. We assume that for commenting on the value of the difference is the best representant median. Regarding all observations, the value of adjusted operating income is higher by 4.4% compared to unadjusted operating income. Most companies in each industry (more than 50% of companies) report higher adjusted operating income except in Utilities sector and Real Estate sector. Real Estate sector is also the only sector with negative median difference, specifically –42.7%. The industry where it is the most common that companies report higher adjusted operating profit than unadjusted operating income is Health Care industry with 84% companies, followed by Telecommunication with 80% (caveat to the findings for Telecommunication industry is very low subset of observations), and Financials with 79%. The highest difference in value of adjusted operating income and unadjusted operating income is in Telecommunication and it is 28.6% (caveat to the finding for this industry is very low subset of observations), followed by Health Care with 11.9% and Consumer Discretionary with 10.5%.

Tab. 3 Comparison of adjusted operating income versus operating income in 2021

Industry	No of obs.	Higher	Lower	No change	Change Mean	Change Median	Min	Max
Basic Materials	21	57%	38%	5%	-2.2%	1.6%	-86.7%	53.1%
Consumer Discretionary	48	73%	23%	4%	35.1%	10.5%	-32.6%	810.5%
Consumer Staples	39	77%	21%	3%	15.6%	5.4%	-31.8%	355.1%
Energy	6	67%	33%	0%	9.3%	8.4%	-21.7%	48.1%
Financials	14	79%	7%	14%	17.8%	3.5%	-1.6%	114.3%
Health Care	32	84%	9%	6%	57.4%	11.9%	-12.2%	840.2%
Industrials	68	75%	21%	4%	9.2%	4.8%	-74.4%	119.6%
Real Estate	14	36%	64%	0%	-36.3%	-42.7%	-87.3%	18.1%
Technology	12	67%	25%	8%	76.4%	7.0%	-6.1%	634.8%
Telecomm.	5	80%	20%	0%	247.0%	28.6%	-34.1%	786.4%
Utilities	15	33%	47%	20%	-1.5%	0.0%	-67.0%	62.0%
Total	274	70%	24%	5%	22.8%	4.4%	-87.3%	840.2%

Tab. 4 describes the difference in 2022. The number of companies that report in their annual reports higher adjusted operating income increased by 8% to 78% in 2022 compared to 2021. Similarly, the difference between adjusted operating income and unadjusted operating income increased from 4.4% to 8.3% across all companies. In 2022, every industry was already dominated by companies reporting higher adjusted operating income. The industries with the highest portion of the companies that report higher adjusted operating income stayed the same as in 2021, Telecommunication (caveat to the finding for Telecommunication industry is very low subset of observations), Financials and Health Care, the portion even increased. Likewise, the findings of the highest difference in value of adjusted operating income and unadjusted operating income is in 2022 the same as in 2021, the highest differences are in Telecommunication, it is 125.5% (caveat to the finding for Telecommunication industry is very low subset of observations), followed by Health Care with 23.7% and Consumer Discretionary with 10.5%.

Tab. 4 Comparison of adjusted operating income versus operating income in 2022

Industry	No of obs.	Higher	Lower	No change	Change Mean	Change Median	Min	Max
Basic Materials	21	71%	24%	5%	13.0%	7.2%	-42.5%	116.9%
Consumer Discretionary	48	81%	15%	4%	103.5%	14.6%	-44.4%	3,181.4%
Consumer Staples	39	72%	23%	5%	13.3%	6.0%	-10.1%	153.7%
Energy	6	67%	33%	0%	19.9%	9.6%	-8.7%	81.7%
Financials	14	93%	7%	0%	407.7%	6.2%	-0.4%	5,000.0%
Health Care	32	91%	6%	3%	47.3%	23.7%	-17.3%	255.3%
Industrials	68	76%	19%	4%	17.2%	6.3%	-39.3%	256.4%
Real Estate	14	57%	43%	0%	-4.6%	1.7%	-84.9%	123.5%
Technology	12	83%	8%	8%	12.3%	4.7%	-29.2%	72.0%
Telecomm.	5	100%	0%	0%	302.3%	125.5%	0.4%	957.9%
Utilities	15	67%	20%	13%	21.3%	2.7%	-67.8%	221.2%
Total	274	78%	18%	4%	58.0%	8.3%	-84.9%	5,000.0%

Tab. 5 and Tab. 6 provide descriptive statistics on the amounts of calculated differences of the adjusted operating profit and operating profit for the years 2021 and 2022. Most subsamples (based on industry) are not normally distributed. This can be inferred from the value of skewness and kurtosis and further from the results of Shapiro-Wilk test of normality. These tables together with Tab. 3 and Tab. 4 provide a descriptive encapsulation of difference between non-IFRS adjusted operating profit measure and IFRS operating profit measure among all industries in European area. Paired samples *t*-test has the *p*-value of 0.0124, which is lower than the significance level of 0.05. We can then reject null hypothesis and conclude that the average difference between the adjusted operating profit and operating profit in 2021 is significantly different than the average difference between the adjusted operating profit and operating profit in 2022.

Tab. 5 Descriptive statistics of the difference (year 2021; in CZK mil.)

	No of				Trimmed								Shapiro-Wilk normality test			
Industry	obs.	Mean	SD	Median	nean mean	MAD	Min	Max	Range	Skew	Kurtosis	SE	W	p-value	Normal distr.	
Basic Mat.	21	168	5,395	428	624	3,598	-13,636	10,184	23,820	-0.75	0.68	1,177	0.9268	0.1187	Yes	
Consumer Discretionary	48	6,294	12,351	2,446	4,183	4,379	-6,979	71,658	78,637	3.32	13.94	1,783	0.6434	0.0000	No	
Consumer Staples	39	7,781	21,160	1,029	3,924	2,046	-26,552	92,093	119,645	2.85	8.65	3,388	0.5696	0.0000	No	
Energy	6	-18,319	45,391	1,813	-18,319	25,133	-87,477	22,255	106,832	-0.50	-1.86	18,531	0.8204	0.0890	Yes	
Financials	14	10,815	20,577	1,635	6,524	2,921	-671	73,794	74,464	2.10	3.47	5,499	0.6033	0.0000	No	
Health Care	32	23,192	51,201	1,938	9,553	2,917	-769	194,382	195,151	2.48	5.10	9,051	0.5088	0.0000	No	
Industrials	68	-402	10,543	1,181	980	1,703	-69,348	23,943	93,290	-4.27	25.22	1,279	0.5099	0.0000	No	
Real Estate	14	-2,519	16,753	-2,722	-4,936	5,194	-24,546	48,506	73,052	1.74	3.47	4,477	0.7386	0.0010	No	
Technology	12	9,710	25,246	507	2,877	1,949	-1,025	88,771	89,796	2.52	5.03	7,288	0.4580	0.0000	No	
Telecomm.	5	52,932	90,423	15,325	52,932	41,351	-12,566	208,564	221,131	0.89	-1.16	40,439	0.7803	0.0554	Yes	
Utilities	15	265	38,405	0	-3,110	744	-71,931	116,341	188,272	1.33	3.46	9,916	0.6930	0.0002	No	
Total	274	6,260	28,576	849	2,406	2,388	-84,577	208,565	293,142	3.87	23.46	1,726	0.5027	0.0000	No	

Zahradníček, T.: Non-IFRS Earnings Measures in Annual Reports of European Companies.

Tab. 6 Descriptive statistics of the difference (year 2022; in CZK mil.)

	No of				Trimmed						Kurtosis		Shapiro-Wilk normality test			
Industry	obs.	Mean	SD	Median	nean mean	MAD	Min	Max	Range	Skew		SE	W	p-value	Normal distr.	
Basic Mat.	21	6,113	16,071	2,475	3,180	3,765	-9,510	72,894	82,404	3.35	11.25	3,507	0.5113	0.0000	No	
Consumer Discretionary	48	5,894	12,476	2,478	3,870	3,692	-9,628	79,918	89,546	4.44	23.16	1,801	0.5220	0.0000	No	
Consumer Staples	39	5,964	17,561	1,410	2,948	2,180	-25,848	91,165	117,040	3.16	12.30	2,812	0.5542	0.0000	No	
Energy	6	27,788	53,557	5,793	27,788	30,711	-25,851	115,568	141,419	0.58	-1.54	21,864	0.8810	0.2736	No	
Financials	14	14,307	22,328	2,119	10,768	4,093	-1,421	72,508	74,464	2.10	3.47	5,499	0.7265	0.0007	No	
Health Care	32	25,834	55,601	3,714	11,944	5,457	-24,598	216,361	240,959	2.25	3.87	9,829	0.5660	0.0000	No	
Industrials	68	1,691	12,266	1,299	2,326	2,096	-80,087	37,353	117,440	-3.98	27.41	1,487	0.5379	0.0000	No	
Real Estate	14	-490	8,643	105	-943	4,285	-16,310	20,768	37,078	0.36	0.88	2,310	0.8737	0.0473	No	
Technology	12	10,494	23,069	1,355	4,897	4,135	-4,182	81,149	85,331	2.33	4.36	6,659	0.5570	0.0000	No	
Telecomm.	5	66,381	84,422	44,963	66,381	38,356	48	212,309	212,261	0.90	-1.12	37,755	0.7878	0.0642	Yes	
Utilities	15	11,715	43,062	1,192	10,174	2,433	-69,495	112,961	182,456	0.91	0.91	11,118	0.7673	0.0014	No	
Total	274	9,414	30,034	2,003	3,773	3,493	-80,087	216,361	296,447	3.96	20.90	1,814	0.4977	0.0000	No	

5 Conclusion

The voluntary reporting of earnings APMs is common and the debate about the motive will probably never end. Although APMs are not defined in IAS 1, the new standard IFRS 18 that replaces IAS 1 brings some changes. IFRS 18 introduces management-defined performance measures and defines new subtotal profit or loss before financing and income tax (EBIT). EBITDA, however, remains not defined. Management-defined performance measures need to be reconciled to the most directly comparable IFRS defined subtotal.

This article explored a unique dataset that was hand-collected from 600 annual reports of EUROSTOXX companies and found that 97% of companies use non-IFRS earnings measures and 74% of companies use adjusted non-IFRS measures. The highest prevalence of adjusted non-IFRS measures is in Real estate and Media sector with 91% of companies that use this kind of APMs. In this article, we also examined the country factor. We find that Great Britain is a country with the highest prevalence of using adjusted non-IFRS measures.

The most common adjusted performance measure is adjusted operating income that uses 46% of companies – this represents 276 companies in our data set. The term variability of adjusted operating income is enormous, we recognised 57 variations. Most companies, 78% in 2022, report higher adjusted operating income than unadjusted operating income in annual reports. The median difference is 8.3% across all companies in 2022. Compared to 2021, the number of companies reported higher adjusted operating income increased from 70% to 78% and the median difference almost doubled.

In this article, we provide a comprehensive framework on how non-IFRS earnings measures are widespread among European countries and describe how European regulators approach this company practice. But there is still a lot of space for further scrutiny. Deeper analysis of the excluded items can be the subject of future research. Future research may focus on what cost items are excluded from IFRS earning measures and how excluded items varied among industries in European settings. Another area for research can be how European companies follow principles of reconciliation of non-IFRS measures or explore the prominence and authority given to APMs in annual reports. It is clear that further research is necessary to understand the practice of reporting APMs.

References

Aubert, F., Grudnitski, G., 2014. The role of reconciliation quality in limiting mispricing of non-GAAP earnings announcements by EURO STOXX firms. Advances in Accounting, 30(1), 154–167. DOI: 10.1016/j.adiac.2014.03.008.

- Barth, M. E., Gow, I. D., Taylor, D. J., 2012. Why do pro forma and Street earnings not reflect changes in GAAP? Evidence from SFAS 123R. Review of Accounting Studies, 17(3), 526–562. DOI: 10.1007/s11142-012-9192-9.
- Barton, J., Hansen, T. B., Pownall, G., 2010. Which Performance Measures Do Investors Around the World Value the Most—and Why? The Accounting Review, 85(3), 753–789. DOI: 10.2308/accr.2010.85.3.753.
- Bentley, J. W., Christensen, T. E., Gee, K. H., Whipple, B. C., 2018. Disentangling Managers' and Analysts' Non-GAAP Reporting. Journal of Accounting Research, 56(4), 1039–1081. DOI: 10.1111/1475-679x.12206.
- Bhattacharya, N., Black, E. L., Christensen, T. E., Larson, C. R., 2003. Assessing the relative informativeness and permanence of pro forma earnings and GAAP operating earnings. Journal of Accounting and Economics, 36(1–3), 285–319. DOI: 10.1016/j.jacceco.2003.06.001.
- Bhattacharya, N., Black, E. L., Christensen, T. E., Mergenthaler, R. D., 2004. Empirical Evidence on Recent Trends in Pro Forma Reporting. Accounting Horizons, 18(1), 27–43. DOI: 10.2308/acch.2004.18.1.27.
- Black, D. E., Christensen, T. E., Ciesielski, J. T., Whipple, B. C., 2020. Non-GAAP Earnings: A Consistency and Comparability Crisis? Contemporary Accounting Research, 38(3), 1712–1747. DOI: 10.1111/1911-3846.12671.
- Bouwens, J., De Kok, T., Verriest, A., 2019. The Prevalence and Validity of EBITDA as a Performance Measure. ACCRA, Association francophone de comptabilité, 25(1), 55–105.
- Bradshaw, M. T., Christensen, T. E., Gee, K. H., Whipple, B. C., 2018. Analysts' GAAP earnings forecasts and their implications for accounting research. Journal of Accounting and Economics, 66(1), 46–66. DOI: 10.1016/j.jacceco.2018.01.003.
- Brown, L. D., Sivakumar, K., 2003. Comparing the Value Relevance of Two Operating Income Measures. Review of Accounting Studies, 8(4), 561–572. DOI: 10.1023/a:1027328418571.
- CFA Society UK, 2015. Non-IFRS Earnings and Alternative Performance Measures: Ensuring a level playing field. Available from: https://www.cfauk.org/media/files/pdf/pdf/5-professionalism/3-research-and-position-papers/non-ifrs-earnings-and-alternative-performance-measures.pdf. [15 February 2024].
- Charitou, A., Floropoulos, N., Karamanou, I., Loizides, G., 2018. Non-GAAP Earnings Disclosures on the Face of the Income Statement by UK Firms: The Effect on Market Liquidity. International Journal of Accounting, 53(3), 183–202. DOI: 10.1016/j.intacc.2018.07.003.

Chen, H.-C., Lee, Y.-J., Lo, S.-Y., Yu, Y., 2021. Qualitative characteristics of non-GAAP disclosures and non-GAAP earnings quality. Journal of Accounting and Economics, 72(1), 101402. DOI: 10.1016/j.jacceco.2021.101402.

Christensen, T. E., Drake, M. S., Thornock, J. R., 2014. Optimistic Reporting and Pessimistic Investing: Do Pro Forma Earnings Disclosures Attract Short Sellers? Contemporary Accounting Research, 31(1), 67–102. DOI: 10.1111/1911-3846.12009.

Clinch, G., Tarca, A., Wee, M., 2019. Exploring Comparability in Disclosure of Non-IFRS Performance Measures. SSRN Electronic Journal. DOI: 10.2139/ssrn.3343965.

Curtis, A. B., McVay, S. E., Whipple, B. C., 2014. The Disclosure of Non-GAAP Earnings Information in the Presence of Transitory Gains. Accounting Review, 89(3), 933–958. DOI: 10.2308/accr-50683.

Easton, P., 2003. Discussion of "The Predictive Value of Expenses Excluded from Pro Forma Earnings". Review of Accounting Studies, 8(2–3), 175–183. DOI: 10.1023/a:1024457227197.

European Securities and Markets Authority (ESMA), 2015. ESMA Guidelines on Alternative Performance Measures. Guidelines. Available from: https://www.esma.europa.eu/press-news/esma-news/esma-publishes-final-guidelines-alternative-performance-measures. [15 February 2024].

European Securities and Markets Authority (ESMA), 2023. 2022 Corporate reporting enforcement and regulatory activities. Report. Available from: https://www.esma.europa.eu/sites/default/files/2023-03/ESMA32-63-

1385_2022_Corporate_Reporting_Enforcement_and_Regulatory_Activities_Report.pdf>. [15 February 2024].

Guillamon-Saorin, E., Isidro, H., Marques, A., 2017. Impression Management and Non-GAAP Disclosure in Earnings Announcements. Journal of Business Finance & Accounting, 44(3–4), 448–479. DOI: 10.1111/jbfa.12238.

Hoogervorst, H., 2016. Performance reporting and the pitfalls of non-GAAP metrics. IASB Speech, Annual Conference of the European Accounting Association, Maastricht. Available from: https://www.ifrs.org/content/dam/ifrs/news/speeches/2016/hans-hoogervorst-eaa-annual-conference-may-2016.pdf. [15 February 2024].

International Accounting Standards Board (IASB), 2015. IASB® Update. Available from: https://www.ifrs.org/content/dam/ifrs/news/updates/iasb/2015/iasb-update-june-2015.pdf. [15 February 2024].

International Accounting Standards Board (IASB), 2020. Staff Paper. Project: Primary Financial Statements. Available from: https://www.ifrs.org/content/dam/ifrs/meetings/2020/december/iasb/ap211-pfs.pdf>. [15 February 2024].

IFRS Foundation, 2019. IFRS® Standards Exposure Draft ED/2019/7. Available from: https://www.ifrs.org/content/dam/ifrs/project/primary-financial-statements/exposure-draft/ed-general-presentation-disclosures.pdf. [15 February 2024].

Industry Classification Benchmark, 2023. Industry Classification Benchmark (Equity) v4.4. Ground Rules. FTSE Russell. Available from: https://www.lseg.com/content/dam/ftse-russell/en_us/documents/ground-rules/icb-ground-rules.pdf. [15 February 2024].

Isidro, H., Marques, A. C., 2008. Non-GAAP Financial Disclosures: Evidence from European Firms' Press Releases. SSRN Electronic Journal. DOI: 10.2139/ssrn.1266667.

Isidro, H., Marques, A., 2013. The Effects of Compensation and Board Quality on Non-GAAP Disclosures in Europe. International Journal of Accounting, 48(3), 289–317. DOI: 10.1016/j.intacc.2013.07.004.

Isidro, H., Marques, A., 2014. The Role of Institutional and Economic Factors in the Strategic Use of Non-GAAP Disclosures to Beat Earnings Benchmarks. European Accounting Review, 24(1), 95–128. DOI: 10.1080/09638180.2014.894928.

Isidro, H., Marques, A., 2021. Industry competition and non-GAAP disclosures. Accounting and Business Research, 51(2), 156–184. DOI: 10.1080/00014788.2020.1798209.

Lambert, R.A., 2004. Discussion of analysts' treatment of non-recurring items in street earnings and loss function assumptions in rational expectations tests on financial analysts' earnings forecasts. Journal of Accounting and Economics, 38, 205–222. DOI: 10.1016/j.jacceco.2004.11.001.

Marques, A., 2017. Non-GAAP earnings: international overview and suggestions for future research. Meditari Accountancy Research, 25(3), 318–335. DOI: 10.1108/medar-04-2017-0140.

Rainsbury, L., Hart, C., Buranavityawut, N., 2015. GAAP-adjusted earnings disclosures by New Zealand companies. Pacific Accounting Review, 27(3), 329–352. DOI: 10.1108/par-12-2013-0108.

Young, S., 2014. The drivers, consequences and policy implications of non-GAAP earnings reporting. Accounting and Business Research, 44(4), 444–465. DOI: 10.1080/00014788.2014.900952.

Appendix A: Variation of the term adjusted operating income

Adjusted income from operation

Adjusted operating income

Adjusted operating profit

Adjusted operating profit (at CER)

Adjusted operating profit from continuing operation

Adjusted profit from operations

Clean CCS operating result

Comparable operating profit

Contributive operating income before non-recurring items

Core net income

Core operating income

Core operating profit

Current operating profit

Current operating profit from activities (COPA)

Current operating result

EPRA operating profit

Group adjusted operating profit

Group adjusted operating profit before tax attributable to shareholders' profits

Headline operating profit

Income from current operations

Industrial operating profit

Net income from operations

Net operating income (recurring)

Net operating income in accordance with earnings capacity

Non-IFRS operating income

Normalized operating result

Operating income excluding special items

Operating income from ordinary activities

Operating income recurring

Operating income, excl. items affecting comparability

Operating margin

Operating profit (before non-trading items)

Operating profit (EBIT)

Operating profit (non-IFRS)

Operating profit (underlying)

Operating profit before exceptional items

Operating profit before items affecting comparability

Operating profit before other items. Excl. IAS 29

Operating profit before specials items

Operating profit excl. items affecting comparability

Operating profit excl. revaluation of process inventory

Operating profit in constant exchange rates

Operating profit on activity

Operating profit on ordinary activities
Operating profit/loss excl. items affecting comparability
Operating result from activity (ORFA)
Ordinary operating profit
Organic operating profit
Profit from operations (adjusted)
Profit from recurring operations
Recurring operating income
Recurring operating profit
Result from current operations
Underlying operating income
Underlying operating profit
Underlying profit from operation
Underlying trading operating profit