



Polish
Agency
for Audit
Oversight

SUMMARY OF THE RESULTS OF PANA'S INSPECTIONS UNTIL THE END OF JUNE 2022. SELECTED ISSUES IN THE AREA OF FAIR VALUE ESTIMATES

Authors:

Agnieszka Baklarz, Ph.D.

Bogusław Bławat, Ph.D.

Marcin Pęksyk, Ph.D.

Karol Śledzik, Ph.D.

**INSPECTION DEPARTMENT
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List of abbreviations

Abbreviation	Description
Agency, PANA	Polish Audit Oversight Agency
Beta	A systematic risk factor expressing the degree of correlation between the returns on an investment in a particular stock and the returns on a market index
SA	Statutory Auditor
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization - a company's operating profit before interest, taxes, amortization of intangible assets and depreciation of property, plant and equipment.
AF	Audit firm within the meaning of Article 46 of the ASA
FCFF	Free Cash Flow to Firm Free Cash Flow to Firm - Free cash flow to equity holders and creditors
PIE	Public interest entities
KSB/ISA	National Testing Standards/International Standards on Auditing
KSUA/ISAE	National Standards for Assurance Services/International Standard on Assurance Engagement
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
PAS	Polish accounting standards
FS	Financial statements
SSF	Consolidated group financial statements
Estimates	Financial statement items that cannot be precisely measured but only estimated (par. 2 of KSB/ISA 540)
Accounting Act (AoA)	Act of 29 September 1994 on accounting (Journal of Laws 2021, item 217)
Act on Statutory Auditors (ASA)	Act of 11 May 2017 on statutory auditors, audit firms and public supervision (Journal of Laws 2022, item 1302)

WACC

Weighted Average Cost of Capital

1 Introduction

This publication is intended to inform, in accordance with Article 90(1)(15a)(d) of the ASA, of the main issues concerning the examination of estimates observed during the audits carried out by the Polish Audit Oversight Agency and completed with audit protocols in the period from July 2021 to the end of June 2022.

This publication is the result of an analysis of 139 audit protocols resulting from the Agency's implementation of audits (of which 27 protocols related to AFs examining PIEs and 108 to other AFs).

As part of these audits, nearly 279 dossiers of services performed by AFs were analysed (of which 80 dossiers related to PIEs and the remaining 199 related to entities other than PIEs). These 279 dossiers included 39 consolidated audit dossiers.

The method of analysis contained in the publication was based on the requirements formulated in Article 112(1) of the ASA and on the "[Policies and Procedures for the Management of the Audit System and the Conduct of PANA Audits](#)". (Polish Audit Oversight Agency, 2022). During the audit period, the AF used the standard KSB/ISA 540 for estimates in the audit engagements. The standard KSB/ISA 540(Z) was only used in the audits that will be audited by PANA in the next period.

This analysis is an extension of the publication "[Summary of audits initiated by PANA by the end of June 2021 in relation to fair value estimates. Selected issues](#)" (Polish Audit Oversight Agency, 2021).

In view of the purpose of the publication, reference is made to the most common anomalies identified in relation to the audit of estimates, leaving aside the fact that it is correct in principle to give an opinion on the financial statements.

2 Summary

The analysis of the 139 inspection protocols carried out showed that the main problems during the examination of the estimates concern:

- analysis of the impact of events after the balance sheet date on the accuracy of the estimate,
- analysis of the sources of the data used by management to determine the value of the estimates,
- inconsistencies in the fair value models used and the assumptions associated with the valuation models,
- incorrect assessment of the reasonableness of estimates and their distortions,
- inadequate documentation of the basis for the conclusions reached by SA,
- inadequacies in documenting indications of possible management bias in relation to estimates.

The analysis of the most frequent deficiencies should allow the AF and SA examination procedures to be better aligned with current standards.

In this publication, the Agency indicated that AFs should take preventive actions to mitigate the risk of the above-mentioned problems in audits. In view of the importance of the issue, the Agency will pay attention in its audits of subsequent periods to the procedures designed by the AFs in relation to the risks indicated and the actual actions during the performance of the audits.

The Agency points out that, given the particular importance of estimates for financial statements and the numerous problems in verifying them during the course of their audits, audit firms should

identify in their quality management systems additional risks related to this and develop appropriate responses to these risks.

With regard to the quality management system element '**Firm's risk estimation process**', audit firms should consider adding provisions on the risks associated with the scope of engagements undertaken in relation to the topic of accounting estimates.

With regard to the quality management system element '**Acceptance and continuation of client relationships and specific engagements**', audit firms should consider adding in the evaluation sheets for acceptance and continuation of an audit engagement, verifying at least the following aspects:

- a) whether there are significant estimates in the financial statements (with particular reference to financial assets, research and development or provisions for liabilities),
- b) whether the topic of estimates was identified during the bidding process as an important and difficult topic for the entity,
- c) whether it was indicated during the bidding process that there were any external valuations,
- d) whether adequate quality resources (including experts, quality reviewer, qualified and permanent assistants) are provided for such an assignment,
- e) whether adequate time was foreseen and estimated for the execution of the order.

With regard to the quality management system element '**Execution of the engagement**', audit firms should consider adding in execution procedures:

- a) detailed provisions for consultation on difficult and contentious issues,
- b) with regard to significant estimated values, provision for collaboration or consultation with an expert in the audit procedures,
- c) placing points in the audit procedures, reinforcing professional skepticism, on the audit programme in relation to the relevant estimates indicated in this study (with particular reference to the consistency of the models and the verification of data sources and model assumptions, as well as the experience and independence of any client experts).

With regard to the '**Resources**' element of the quality management system, audit firms should consider adding procedures related to the necessary maintenance of up-to-date knowledge of valuation principles by team members. It may also be worth considering purchasing relevant access to publications in this area, as well as access to databases.

3 Main anomalies in the audit file concerning the documentation of the estimation audit process

Table 1 presents the percentage distribution with respect to the standard KSB/ISA 540 (Auditing of accounting estimates, including accounting estimates of fair value and related disclosures) of the main violations of ACCOUNTING ESTIMATES, INCLUDING ACCOUNTING ESTIMATES OF FAIR VALUE AND RELATED DISCLOSURES in audit files. As can be seen from the table below, most misstatements were identified at the stage of responding to the estimated risk of material misstatement. The most common misstatements identified in relation to KSB/ISA 540 were:

- failures to achieve the objectives of the standard,

- problems in understanding and estimation of the factors of significant risk associated with the estimates,
- problems in identifying the sources of estimates made by the entity (appropriate measurement method, reasonable assumptions made by the entity's management),
- problems in assessing the reasonableness of estimates and assessing their distortion,
- lack of proper documentation of procedures for examining estimates.

Table 1. Distribution of irregularities in relation to the KSB/ISA 540 standard, in the audited audit files conducted by PANA during the audit periods

Paragraph groups within KSB/ISA 540	Percentage of irregularities under KSB/ISA 540 (July 2021 to end June 2022).	Percentage of irregularities under KSB/ISA 540 (until the end of June 2021)
Objectives of the standard	18,03%	9,35%
par. 6	18,03%	9,35%
Risk assessment procedures and related activities	8,27%	11,21%
par. 8	5,26%	8,41%
par. 9	3,01%	2,80%
Identification and assessment of risks of material misstatement	4,51%	8,41%
par. 10	2,26%	4,67%
par. 11	2,26%	3,74%
Responses to assessed risks of material misstatement	25,56%	28,04%
par. 12	5,26%	5,61%
par. 13	18,80%	19,63%
par. 14	1,50%	2,80%
Further assurance procedures in response to significant risks	10,53%	3,74%
par. 15	6,77%	2,80%
par. 17	3,76%	0,93%
Assessing the reasonableness of estimates and identifying distortions	16,54%	13,08%
par. 18	16,54%	13,08%
Documentation	10,53%	21,50%
par. 23	10,53%	21,50%

PANA's own elaboration

3.1 Main elements in the study of valuation of estimates performed incorrectly

The ASA in Article 69 in paragraphs 1 and 2 prescribes that SAs should exercise particular caution (professional scepticism) during the examination. In paragraph 3 of Article 69 ASA, this special caution (professional scepticism) is further emphasised with regard to the examination of estimates. As is clear from the provision indicated, the SA should be as impartial and professional as possible during the examination, attempting to behave in accordance with the procedures described in the professional

standards. Below, reference is made to the paragraphs of the standard KSB/ISA 540, most frequently indicated as not being followed in the results of the audits carried out.

It should be noted that, in some cases, the SAs did not state at all that the subject of the audit of estimates was necessary to be recognised and verified during the audit of the financial statements. Thus, they did not fulfil the objective indicated in par. 6 of KSB/ISA 540, which is to obtain sufficient and appropriate audit evidence as to whether the estimates recognised or disclosed in the financial statements are reasonable and the disclosures are appropriate.

When significant items related to estimates are identified, the audit process begins with an understanding of the entity and the identification of factors that may affect the subsequent material misstatement of the statements. Accordingly, in accordance with par. 8 KSB/ISA 540, SA:

- a) establishes what the reporting framework is,
- b) determines what are the transactions / events or conditions (new or changed) that may affect the need to disclose accounting estimates in the financial statements,
- c) obtains an understanding of how management determines the estimates and obtains an understanding of the data on which they were calculated, i.e., for example, obtains knowledge of how the model was constructed, methodologies, controls, use of experts, assumptions for calculations, whether there have been changes in the estimates and what the uncertainty of the estimates made is.

Once risks of material misstatement have been identified, SA determines what procedures it will perform in the verification process to ensure that the estimate disclosed in the report will be presented correctly. In accordance with par. 13 of KSB/ISA 540, SA may perform one or more (depending on the estimate(s) being verified) actions:

- a) check events after the date of the report - whether there have been any significant events that change these estimates,
- b) evaluate the sources of the estimates, i.e.: assess the quality of the data used to preparation the estimate, assess whether the measurement method is appropriate and whether the assumptions made by management are reasonable,
- c) verify the correctness of internal controls over estimates and perform the relevant assurance procedures,
- d) determine the estimated value (value or range of values) yourself.

One of the more frequent anomalies that can be pointed out in this context, with actuarial valuations frequently appearing in audit documentation, is the failure of SA to check the accuracy of the data on which the actuary bases the calculation of the provision. Another anomaly, concerning provisions related to employee matters (provisions for pensions and similar benefits), is the failure to create them, without establishing the estimated value of these provisions, indicating the irrelevance of this issue. Another anomaly is the failure to assess the need for provisions for legal cases, despite the fact that there are indications of the creation of such provisions.

It is also worth mentioning at this point that, with regard to the conduct of assurance procedures, SA should pay particular attention to the provisions of the NSB 500, and in particular the provisions of par. 7 - 9 of the KSB/ISA 500, the SA:

- a) considers the relevance and reliability of the information received,

- b) (if a management expert was used) assesses the expert's competence, skills and objectivity (and independence), obtains an understanding of the work performed by the expert and assesses its appropriateness,
- c) assesses the evidence obtained - whether it is sufficiently reliable (accurate, complete, precise and detailed).

It should also be borne in mind that the SA may use its own expert in understanding and carrying out the procedures involved in examining the estimates. In his work, he should then rely on the provisions of KSB/ISA 620 while bearing in mind that the SA, in accordance with par. 3 of KSB/ISA 620 is solely responsible for the audit opinion expressed and this responsibility is not limited by the fact of using the work of the auditor's expert.

In the section below *Examples of misstatements in fair value measurements*, misstatements in relation to reliability tests are discussed at length.

After performing the relevant assurance procedures, in accordance with par. 18 KSB/ISA 540, SA should assess the reasonableness of the estimates and determine whether they are not distorted and how much. This is the final stage summarising SA's work on this topic and it would be advisable here to produce an appropriate document summarising SA's conclusions on the work performed.

One of the most common irregularities identified during the audit is the failure to properly document the above process. Par. 23 KSB/ISA 540 clearly indicates that SA should document:

- a) the basis for the auditor's conclusions on the reasonableness of accounting estimates that give rise to significant risks and their disclosure; and
- b) the indications of possible management bias (i.e., e.g., a subjective statement that circumstances have changed and the way in which the reserve is referred to may be altered, assumptions for calculating fair value inconsistent and inconsistent with market behaviour, biased pattern selection - optimistic or pessimistic).

3.2 Making use of expert work

The standards indicate how to approach the work of two types of experts:

- a) experts of the head of the unit (par. 5 d KSB/ISA 500)
- b) expert auditors (par. 6 a KSB/ISA 620).

In general, it should be noted that in the case of an expert who is also the head of the entity, the assumptions made by such an expert, which are accepted by the head of the entity, are treated as assumptions of the head of the entity (par. A31 KSB/ISA 540). At the same time, as indicated by par. A42 KSB/ISA 500, "an expert employed by the entity cannot generally be seen as more objective than other employees of the entity". This indicates that evidence that has resulted from the work, whether of the entity itself or of the entity manager's expert, will be assessed in the same way as if it had been presented by the audited entity. Where a unit manager's expert (whether an employee or external expert) is used, a number of factors will need to be considered. A number of guidelines for working on evidence prepared by the entity manager's expert are provided by the explanatory paragraphs of KSB/ISA 500. Thus:

- a) par. A34 KSB/ISA 500 indicates the need to take into account the increase in risk when such an expert is not used (where expertise is required),
- b) par. A36 KSB/ISA 500 shows the impact of various factors on the way SA carries out the procedures, in relation to the work of the unit manager's expert,
- c) par. A37-A43 KSB/ISA 500 assist SA in assessing the competence, capability and objectivity of the entity manager's expert,
- d) par. A44-A47 of KSB/ISA 500 deepen the issue of obtaining an understanding of an entity manager's expert's work, including allowing consideration of whether SA needs to employ its own expert in order to understand that work (KSB/ISA 620),
- e) par. A48 KSB/ISA 500 extends the description of the issue of assessing the suitability of the unit manager's expert work.

It is worth noting that KSB/ISA 540 further extends the understanding of some elements of the above considerations by indicating that (e.g. in paragraphs A29-A30 of KSB/ISA 540) if the expertise is possessed by the employees themselves, or if the management has the relevant experience and competence to perform the estimate, it will not be necessary to employ an external expert in this respect.

As indicated above, in some cases SA will need to employ its own expert to assess the entity's estimates. A number of guidelines in this regard are provided by NSB 620. However, the necessary independence of such an expert is additionally worth emphasising. According to par. 7 d of KSB/ISA 220, the definition of "engagement team" does not include the external auditor's expert. However, as defined in Article 2(16) of the ASA, an expert is a member of the "audit engagement team", and according to Article 69(4) of the ASA, members of the audit engagement team are independent of the audited entity and are not involved in the decision-making process of the audited entity for at least the period covered by the audited financial statements and the audit period.

The manner in which the auditor's expert's work is assessed does not differ from that of the entity manager's expert. However, it should be stressed again that, according to par. 3 KSB/ISA 620, the SA is solely responsible for the audit opinion expressed and this responsibility is not limited by the fact that the work of the auditor's expert is used.

4 Examples of valuation deficiencies in the area of fair value

Valuation of financial statement elements at fair value applies both to statements prepared according to Polish Accounting Standards (PAS) and according to international standards (IFRS/IAS). Despite the fact that in some cases noted during the audit, valuers according to PAS claim that they should rely only on the definition (Art. 28(6) of the AoA) and the provisions relating to it (e.g. Art. 44b(4)), in practice both valuers and SAs apply the methodology commonly referred to as *patchwork*, i.e. patching up the deficiencies of observable market data with elements that are available at the time and seem most appropriate. In applying this methodology, there is rarely any concern for the consistency of the assumptions used. Therefore, this paper addresses and comments on some of the more commonly noted issues, such as the fair value standard, market participant, projected cash flows in the income approach, the discount rate in the income approach and premiums and discounts.

4.1 Fair value standard

According to both PAS and IFRS/IAS, there are circumstances, indicated by the regulations, in which balance sheet items should be measured at fair value. However, during the course of PANA's audits, reports were identified that valued items at standards other than fair value and reports that only indicated that they contained a 'value measurement' of an item, share or stock without any indication of the standard of value that defines the approach to the actual or hypothetical party to the transaction and the terms of the transaction. Recognised standards of value include, but are not limited to, fair value, fair market value, investment value or intrinsic value. The choice of standard of value depends, of course, on the applicable law, the subject of the valuation, the terms, the contract or other factors. The concept and essence of value in economic and accounting terms can be perceived differently, so the created value standards, meeting the needs of theory and practice, organise the valuation process. In summary, in order to ensure a full understanding of the financial information in the financial statements, it is necessary to indicate clearly whether the value standards adopted to determine value correspond to the rules required for the presentation of that item.

During a number of audits, SAs have been found to take responsibility (in place of the head of the entity), whether by acknowledging or not that, for example, a report on the estimation of fair market value according to the GASB's CRS (Polish Federation of Valuers' Associations, 2011) corresponds to the requirements of value in use according to IAS 36. It should be noted that without proper documentation of how the equivalence of the two valuation methods is reached, this is a very risky exercise in specific cases. Rarely does the audit documentation include how the above conclusion was reached.

4.2 Market participant

IFRS 13 defines market participants as buyers and sellers in the principal (or most advantageous) market for an asset or liability, who additionally have certain characteristics also defined in that standard, but primarily act in their best economic interest.

In the audits carried out, the most common responses seem to indicate that SAs do not apply either the guidance provided by IFRS/IAS or the commentaries or sets of good practices (International Financial Reporting Standards Foundation, 2013). There is no description in the audit documentation of the dialogue with the entity or of the attempts made by SAs to arrive at the identification of market participant characteristics, as indicated in IFRS 13, which would justify the assumptions made by the valuers and accepted by SAs¹. The most common reference to a market participant is replaced by an indication of the practice of valuation entities without a proper assessment of the competence and correctness of the valuation used by these entities. These entities can rarely be included in the group defined in IFRS 13 as market participants.

It should be borne in mind that 'market participant' is not a specific entity, but rather a concept². A correct definition of market participant and the application of this definition in practice by SA would definitely enhance the quality of both the valuation and the survey conducted.

4.3 Projected cash flows in the income approach

4.3.1 Perspective of the market participant and the specifics of the entity being valued

During the audit, models were encountered in which the projected flows were not justified by budgets, i.e. plans in accordance with KSUA/ISAE 3400, let alone projections, confronted with reports on the state of the market in which the valued entity operates. Not infrequently, the fact of the acquisition of new production lines and the entity's intention to go into foreign markets, sufficed as justification for optimistic projections, both in the detailed planning period and in the residual periods. Similarly, the confrontation of historical budgets and their execution in order to strengthen or weaken the justification of the entity's projected flows is one of the tools rarely used on the part of the valuers, but also on the part of SA, there was no explicit insistence on carrying out such a procedure during the study. It is worth recalling at this point that, pursuant to KSB/ISA 540, the SA adjudicates on the reasonableness of the model assumptions, so it is necessary during the audit for the SA to justify the recognition as reasonable of such a groundless forecasts.

At this point, it would be appropriate to refer to the idea of a market participant who should follow a rational approach, acting, by definition, in his or her best economic interest (IFRS 13.22).

4.3.2 Uncertainties in relation to the determination of the FCF growth rate over the residual period.

The audit's analysis of the techniques used to determine residual flows also highlights a number of methodological problems faced by both valuers and SAs examining valuations. Oftentimes, the determination of residual flows, subsequently used in the Gordon formula, is subject to fundamental accounting errors, ranging from the recognition of D_1 as D_0 , to the calculation of flows with implicit assumptions that are impossible to implement, such as perpetual depreciation without reinvestment

¹ IFRS 13.23.

² IFRS 13.22 and 23.

or a gradual, uniform reduction in working capital. The above points to problems that arise while one is trying to understand how the above assumptions for residual flows affect the economic sense of the valuation model.

4.3.3 Lack of understanding of the difference between the scenario method and the model based on the most likely or most prudent FCF scenario

The financial crisis of 2008-2012 resulted in an increased interest in scenario models as a kind of tool to help balance uncertainty in shaping prospective financial information. While the very basics of probability-weighted scenario models seem straightforward, the actual application, as well as their eventual control and evaluation, are no longer so. There are still models that do not use probability-weighted scenarios, but rather a single scenario that the valuers considered, often together with the entity and then SA, to be the most likely. It can of course be argued that this is a certain, specific variation of the scenario model when the remaining scenarios were assigned a probability of zero per cent, however, in the case of valuation, it is also these rejected scenarios that provide information on how the most likely scenario was arrived at and, above all, why the remaining scenarios were assigned a probability of zero per cent.

4.3.4 Unfamiliarity with the inclusion/non-inclusion of restructuring effects for DCF models at IAS 36

A separate issue, strongly related to the principles of cash flow forecasting, appears to be the question of whether or not to include the effects of restructuring in cash flows, when estimating value in use in an IAS 36 environment. A basic criterion, although considered by almost everyone to be vague, is the entity's commitment to the restructuring activities presented. As it is difficult to determine the point beyond which an entity is already committed, it has been assumed that commitment is evidenced by the creation of provisions for the effects of restructuring actions. However, there are often models estimating value in use based on restructuring actions declared in the audited entity's discussions with SA, with effects that are difficult to predict at a given point in time (let alone the difficulty of justifying them). Hence, the deficiencies of models estimating value in use, based on restructuring not supported by the entity's actual actions, were often noted.

4.3.5 Currency of flows versus currency of discount rate - FCF perspective

Views on what is and what is not a valid representation of the currency of the flows relative to the currency of the discount rate vary widely, both on the valuation and SA side. While on the flows side it is easy to identify the currency of the model, there is a high complexity of the issue when it comes to the discount rate. In most of the audited documentation, SA accepted as correct in terms of matching the currency of the flows and the discount rate models that were not based on such matching.

4.4 Discount rate in the income approach

During the period under review, the most popular models for estimating fair value in the income approach were those based on *Free Cash Flow to Firm* (FCFF) discounted at a rate reflecting both the

cost of equity and debt financing in proportion to their size (i.e. *Weighted Average Cost of Capital* (WACC)) and models based on *Dividend Discount Model* (DDM).

4.4.1 Market participant perspective vs. specifics of the entity being valued, cost of debt, capital structure

During the audits carried out, different approaches to determining the cost of debt and capital structure were encountered, in models based on FCF and WACC. However, in the valuations provided, there is no justification of such choices from the perspective of a market participant, on the part of the entity or the valuers. SA, for its part, did not provide considerations in the study documentation to justify the solution adopted, accepting without professional scepticism the treatment paths adopted by the audited entity.

While it can be agreed that there is no consensus on the one and only correct approach to determining the capital structure for WACC-based FCF models, one cannot agree with the assertion often made in interviews with audited SAs that there is a lack of guidance and direction in this regard. In the text of IFRS/IAS itself, it is difficult to find said guidance and direction, however, in the IASB's educational materials one can find not only guidance but also justification for it (International Financial Reporting Standards Foundation, 2013, par. 81).

In inspected audit files, it is increasingly common to come across an estimate of the cost of debt in the form of the sum of the risk-free rate for the country in which the entity is domiciled, always plus two per cent. This approach is uniformly used when estimating WACC, whether for small or large entities, whether for companies in the chemical, real estate or financial sectors. The authors of this study have not found support for this concept in any academic publication.

Another equally common approach is to use the cost of debt that the entity being measured incurs at the measurement date. The IAASB guidance (International Financial Reporting Standards Foundation, 2013, par. 105), however, indicate that, guided by the perspective of a market participant, estimates should be based on the cost of current period debt incurred by the entity being valued or the current market cost of debt incurred by comparable companies with similar creditworthiness to the entity being valued.

4.4.2 Superficial approach to the factual basis of specific risks

The very idea of considering the recognition or non-recognition of specific risk, whether by valuers or SA, is generally present in both the valuation documentation and the audit documentation. However, the issues of quantifying this risk and taking it into account, whether in flows or in the discount rate, are not considered in the study documentation. In most cases, SAs rely on the expertise of the valuers and leave this element entirely to their discretion. It should be noted that this is an extremely risky exercise, as it creates the possibility of manipulating the result of the valuation and, at the same time, distorting the outcome of the study.

4.4.3 The most common patchwork method and its effects

In the audited documentation, the most common way to apply the CAPM model in the valuation of Polish entities is to construct it from the available data in such a way that it is assumed to represent the cost of equity in PLN. However, significant inconsistencies in the factors used should be noted:

- Most commonly, the *risk free rate* (R_f) was substituted for the yield on 10-year **Polish** government bonds, calculated at a date close to the valuation date,
- then used *Beta*, calculated on the basis of **European** companies from a database made freely available by Prof. Damodaran (Damodaran, 2022),
- Such a result was multiplied by the market risk premium also from Prof. Damodaran's base or from Prof. Fernandez's surveys (**i.e. calculated on a basis other than Poland**).

In response to questions during the audit about the consistency of the data, SA respond that they accept the solutions used by audited entities and point out that the use of data determined on the basis of different, even inconsistent, assumptions still leads to a good, correct result if one uses the risk-free rate from the country and in the currency in which one wants to estimate the cost of equity capital in the CAPM model. However, it should be noted that these popular views contradict the IASB's guidance and guidelines (International Financial Reporting Standards Foundation, 2013, par. 85-92).

The problem of the appropriateness of discount rates relative to the currency of the flows recurs at this point. However, if one applies the IASB guidance and guidelines correctly and then adjusts for the Fisher effect, one can then use comparable data from a developed market (e.g. the US) when assessing a Polish investment (Mills, 2005: 170-172, International Financial Reporting Standards Foundation, 2013, par. 74, Pratt, et al., 2014: 1012-1014). During the audits carried out, statements were sometimes encountered that discount rates could be comparable despite the fact that they were estimated based on different currencies, or there were statements in the explanations that the Fisher effect relates to the inclusion of inflation, which was not captured in the model therefore not necessary. To agree with such a statement, it would be necessary to verify that the discount rates taken from the Damodaran's database were converted into the currency in which the audited financial statements were prepared, which was not shown in the audit documentation. A similar problem arises with the way Damodaran calculates the beta ratio, which is estimated, for example, for 'West Europe' according to local currencies, taking into account local stock indices.

4.4.4 Sources of data for estimating the cost of capital. Which sources meet the conditions for observable market data?

When estimating the elements of the cost of capital, it is not uncommon for valuation authors to cite "their entity", "own compilation", "based on their own analyses" or "methodology of [and here the name of the entity]", etc. as the source for the elements of the CAPM model. However, it is worth noting at this point that in studies by PwC (2019) or Catty (2012: 36-37) on the principles for determining fair value, it is possible to find a suggestion of what conditions the source of the information should meet in order to consider the data as *observable market data*. Information provided by both websites and specialist/industry institutes should meet the following conditions:

- Source of information and data is in the actual/executed transactions,
- Access to them, upon payment of a fee, is unrestricted,

- Publication/dissemination cycle ensures that they are up to date at the valuation date,
- Source (publisher) must be known and credible (provide credibility procedures) and be aware of providing data for valuation purposes,
- Data must be verifiable, e.g. match results from another source,
- If the data is shown as a range, the range must have its origin in a market consensus,
- Data provider must be actively involved in the market it describes.

There is no indication that the majority of companies preparing valuations in Poland meet all the above conditions. It is worth recalling that when dealing with Level 3 information under IFRS 13 methodology, this standard requires a quantitative analysis for financial instruments determined at fair value, based on Level 3 data, and both the manner in which the sensitivity analysis was conducted and its results should be presented. The analysis should be based on alternative scenarios to those used for valuation.

4.5 Premiums and discounts

4.5.1 SA's knowledge of estimating and applying premiums and discounts

The issues of premiums and discounts, related to gaining or lack of control and liquidity constraints, should be treated with special concern. The topic in Poland has been raised in the valuation and SA communities for years; however, due to the lack of periodic national studies, SAs rely on the knowledge of valuation experts. This, in turn, causes SAs to accept the premium and discount levels proposed by valuers without deep reflection or professional scepticism. The end result is that discounts and premiums are accepted if they fall within a 'market range acceptable to market participants', without giving much thought as to why it is at that point in the range that the discount for the limited liquidity of shares of just that entity is located. Which, if the range is in the order of 10%-15%, may result in a distortion of the valuation result to a similar extent. It is also important to bear in mind the source of confidence in the views of market participants without prior definition. The IASB's educational material (International Financial Reporting Standards Foundation, 2013 par. 59-67) provide quite a bit of guidance for both valuers and SAs in both shaping and evaluating the process of estimating premiums and discounts, but the issue of their technical calculation is still in the early stages of development.

It is urgent to put this matter in order as both valuers and SAs are beginning to cite documents and legislative solutions from other countries, sometimes unreflectively, to justify the use or non-use of particular discounts and premiums at all.

Good examples seem to be the models found in valuations, both by Audit Firms and by individuals and organisations not associated with the SA professional group, estimated on the basis of the US market, i.e. the Silber model and the Bid-Ask Spread model - both presented by Professor Damodaran in book publications (2001, 2002) and widely available educational materials made available online by the author (2009). In building his model, Silber made the assumption that shares of public companies not admitted to public trading that are traded off-market are ceded at some discount. This assumption proved to be correct and the average discount was calculated to be 33.75%. However, Silber (1991) decided to investigate whether the financial characteristics of a company affect the variation in the size of the discount. The result of the aforementioned inquiries is the formula quoted by Prof Damodaran, which was occasionally encountered during the audit. However, it is worth noting that

the estimation of the formula was based on 310 observations from the US market in 1981-1988. Thus, the justification that the mentioned formula can be applied to the estimation of fair value of Polish non-public companies seems at least questionable, and certainly not supported by research.

The model developed by Professor Damodaran is based on the assumption that the discount for the lack of liquidity can be determined from the Bid-Ask Spread Model difference between bids and offers for shares of public companies. The author rather enigmatically states that data from the end of 2000 were used for the calculation. It is worth mentioning at this point that the country where great importance is attached to a reasonably precise estimation of the discount for the lack of liquidity is, of course, the USA, as this discount is a mandatory element to be considered there when calculating fair market value for tax purposes. In the US regulator's published support material in this regard (Internal Revenue Service, 2009) one can read that Bid-Ask Spread-type models, such as the one developed by Prof Damodaran, have been counted as applicable. However, in the chapter on the main mistakes made by valuers using liquidity-constrained discounting, it is raised that these models, both Bid-Ask Spread and those based on simple regression, such as the Silber model, must be validated periodically on the basis of current market data. Otherwise, the models are not accepted by the US regulator. In conclusion, the uncritical application of the models described above when estimating fair value for financial reporting purposes does not appear to be the correct approach.

4.6 Expected credit loss

In order to strengthen investor confidence after the global financial crisis, a new impairment model for financial instruments, based on Expected Credit Loss (ECL), was proposed. This model, developed by the International Accounting Standards Board (IASB) and included in IFRS 9 Financial Instruments, became a mandatory measurement tool for impairment of financial assets from 2018 with IFRS 7 Financial Instruments: Disclosures.

Provisioning for expected credit losses is a key accounting issue as it reflects the changing exposure to credit risk and affects reported earnings and regulatory capital. It is also a key area of concern for SAs and users of financial statements. Loan loss provisions have typically been a source of Risks of Material Misstatement (ROMM) in a bank's financial statements. However, the ECL framework not only changes the accounting for credit losses, but also requires changes in the working methods performed by SAs. The expected credit loss framework poses new challenges for bank management (amounts and disclosures may require significant judgement to estimate and present them reliably), as well as for SAs, as amounts and disclosures are difficult to assess objectively and are more vulnerable to material misstatement due to management bias or error, as pointed out by the Basel Committee on Banking Supervision (2020).

Initial supervisory attention focused on assessing the impact of the new standards on the stability of the financial system (European Systemic Risk Board, 2019) with increasing academic interest in the detailed issues of the potential impact of the implementation of the ECL model.

Already in the early preparations for the implementation of this model, reservations were raised about the procyclical impact of its results. It was argued that the resulting revised loan loss provisions imply a reduction in Tier 1 capital, which imposes an additional burden on banks. There were also warnings that the changes are more severe (i) during an economic downturn, (ii) for low-quality loan portfolios, (iii) for banks that do not tighten their capital standards during an economic downturn. Consequently, the new provisioning rules further increase the pro-cyclicality of bank capital requirements (Krüger, et al., 2018). The above conclusion raises the question of how financial institutions, particularly banks,

implement the new reporting requirements in the face of awareness of their impact on the bottom line.

The 2021 study by the European Banking Authority revealed, especially in view of the impact of the COVID-19 pandemic, the first reservations about the quality and effects of these implementations (European Banking Authority, 2019). In light of the results of this study, once institutions have adopted criteria that lead to the removal of a financial asset from the balance sheet, following a change in its contractual terms, a materiality criterion of 10% was used in around half of the institutions in the sample, complemented by other qualitative and/or quantitative assessments. In addition, these criteria appear to be applied irrespective of the stage of impairment at which the financial asset is classified and have remained stable since their initial implementation. Lists of relevant factors are often supplemented by expert judgement regarding the internal and external factors considered in assessing whether there is no reasonable expectation of recovery for that asset. Such factors, particularly in the case of partial write-downs, remained quite heterogeneous. In terms of the percentage of recoveries after write-downs, most of the institutions surveyed presented recovery percentages below 10%. However, there were rare cases in which more than 30% of the amounts written off were recovered. In this context, it is worth highlighting that if high recovery percentages after write-offs are observed in subsequent reporting periods, internal policies may need to be improved. Given that the poor quality of practices in this regard has a direct impact on key supervisory indicators, this point may merit the attention of regulators and supervisors, as well as additional guidance on improving internal accounting policies (European Banking Authority, 2019: 14).

A particular issue heavily exposed to subjective selection is the inclusion of so-called Forward-Looking Information (FLI) in model variables. It appears that the evidence gathered confirms the need for supervisors to further investigate the approaches used to incorporate FLI scenarios for ECL model purposes, including, inter alia, the assumptions underlying the different scenarios and their impact on the final amount of expected credit losses. In this context, attention should be paid in particular to the sheer sensitivity of the assumptions underlying the downside scenarios, in order to assess whether they adequately reflect the risk of a further deterioration in the macroeconomic outlook and whether they include overly optimistic assumptions about the expected recovery. In conclusion, some aspects have been observed during the assessment of the practices used to incorporate FLIs that deserve in-depth attention from a supervisory and financial audit perspective (European Banking Authority, 2019: 13).

Taking into account the observations from the research documentation analysed by PANA, it is possible to formulate first conclusions for the audited entities. First of all, it should be emphasised that the implementation of IFRS 9 by financial institutions was, in most cases, a staggered process and not free of errors. In this process, the support of external entities, including those whose services were complementary to the SA activities, was used on more than one occasion.

There were also clear differences in the quality of implementation of the new standards between multinational corporations and domestically-based entities. In the case of the former, earlier preparations for implementation and a more consistent method of verifying the results of the models could be observed.

However, for both groups of actors, the issue of FLI implementation appears to be a problem. The lack of in-depth projections, the inability to implement macroeconomic data, which was sometimes assigned a marginal role in the light of statistical significance, raises concerns that the quantification of every available piece of information that could provide insight into future market developments, which is important from the point of view of the expectations placed on ECL models - as an answer to

the shortcomings of the models used before and during the 2008-2009 financial crisis - has not found its proper place in the models created.

In conclusion, therefore, it should be emphasised that SA auditing should confront to an even stronger degree this intractable process, often burdened by subjective judgements - all the more so as the current global macroeconomic situation profoundly verifies the forecast results of many models, including expected credit loss models.

4.7 Other observations

4.7.1 Lack of a market approach?

Noteworthy is the fact that valuations based on the market approach were almost non-existent in the research documents, and where they did occur they were complementary to the income approach and in most cases not consistent with the assumptions of the latter. Both the valuers and SA seem, for example, to have overlooked the importance of the decision to use dozens of companies from the part of Europe described by Prof Damodaran as "Western" for the Beta estimation, and only a few companies from the WSE for the market approach multiples. Moreover, it happens that only one or two of these companies are included by Prof. Damodaran in a given year in the sector in which the valued company should be placed. It is difficult to speak of methodological consistency of the valuation model in such a case.

4.7.2 Using valuation methods not found in the market - a market participant's perspective?

It happens that Polish entities, for unknown reasons, apply for valuation, and then for impairment testing, models and formulas that have been seldom used worldwide, especially in the antipodes. In such cases, it is difficult to argue that this is what a European market participant or even a global one would do.

The introduction of the market participant concept was intended, among other things, to systematise knowledge and valuation techniques and to focus on developing those concepts that have proven themselves, are understood and accessible to the majority of market participants and SA, i.e. outside the catalogue of so-called proprietary methods.

4.7.3 Indiscriminate use of unrealistic assumptions in complex valuation techniques

Occasionally, entities or external experts use techniques to estimate fair value in an income approach that IFRS classifies rather as tools to assist in justifying disclosures. Thus, for example, the Monte Carlo technique, which IFRS 7 (B.20) identifies as an element in a wide range of tools to support sensitivity analysis, is sometimes used to estimate the fair value of shares. The model itself is quite complex and requires the valuers to have advanced knowledge not only of mathematics to set up the model correctly, but also of the operational functioning of the entity being valued to avoid the inclusion of unrealistic assumptions. The results of Monte Carlo models should be treated as a presentation of a range of possible value development paths for a given time series, starting from a point T_0 to T_n . Their

random distribution should take into account the distribution of the historical data, and the interpretation of the results should be based on a probability density analysis of the matrix of the set of drawn series. Accepting the simple treatment that there is a single most likely scenario calculated as the average of all values is a mistake. The model should take a scenario-based approach, dividing the distribution of the obtained series into, for example, tertiles or quintiles, which gives the possibility of analysing one base case scenario and two or four alternative or extreme scenarios. Sometimes, valuers adopt model-generated variants of the entity's development that cannot pass the reasonableness test, e.g. the assumption of achieving full European market dominance in the second or third year of operations, or meeting/serving the majority of global demand. Presumably, a market participant in such a situation would expect SA to react to the use of unreasonable assumptions by valuers, however, professional scepticism seems to fail SA in these types of situations.

4.7.4 Simplified valuation models

During the course of the audit, situations are encountered, albeit occasionally, where the audited entity, e.g. in impairment testing, uses, in its opinion, a simplified model in the income approach, as the AoA allows this possibility³. However, it should be taken into account that if the entity applies simplifications, it should explain on what basis it assumes that the simplifications applied would not distort the result that would be obtained by applying the appropriate income approach, using the unreduced model, as recommended by IAS 4 and IAS 36. If the entity has applied simplifications, it should provide justification why it believes that the simplified model will produce the same results as the model without simplification. In turn, the SA auditing that entity's report should include documentation in the audit documentation verifying the validity of the entity's reasoning.

It is worth noting at this point that, when applying the most popular simplification in the income approach (Salter, et al., 2022) assuming that enterprise value equals $EBITDA/(1+WACC_{[pre-TAX]})$, it follows that only in very rare circumstances will it equal $FCFF_{[pre-TAX]}/(1+WACC_{[pre-TAX]})$. Therefore, if the entity identifies the occurrence of these circumstances and has adequately documented this, in this case the results of the two models will be strongly similar, if not equal, and there is no risk of distorting the result.

³ AoA Article 4(4).

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