# Applicability Evaluation of Hedge Accounting Implementation under PSAK 71 (Case Study at PT XYZ)

Pebriansyah, Aria Farah Mita pebriansyah.arpah@gmail.com<sup>1</sup>, aria.farahmita@ui.ac.id<sup>2</sup>

Faculty of Economic and Business Universitas Indonesia Gedung Prof. Dr. Mohammad Sadli Kampus Sumitro Djojohadikusumo Jln. Salemba Raya No. 4 Kampus UI Salemba, Jakarta, 10430, Indonesia

**Abstract.** The most common risk faced by companies is financial risk. Financial risk can come from fluctuations in currency exchange rates, interest rates, commodity prices, or stock prices in the future. The best option in dealing with these risks is to carry out hedging transactions while applying hedge accounting. In addition to the benefits of risk mitigation, profit will be presented more stable. However, implementing hedge accounting comes at the cost of additional effort to document, measure effectiveness, and perform additional journal entries that tend to be difficult for companies. This research was conducted to study and answer the question of how the applicability of hedge accounting at. PT XYZ based on PSAK 71. This study used a qualitative method with case studies at PT XYZ. Qualitative data is processed through descriptive methods. Interview questions were addressed to officials and staff who carry out and understand hedging transactions assigned to separate Division, namely the Treasury Business Division, Risk Management Division, Accounting Division, and Operational Division. The results of the study illustrate that the main thing that needs to be prepared by PT XYZ is the procedure for documenting the accounting hedge relationship. In addition, the research results provide an overview of what PT XYZ needs to prepare such as updating accounting policies, making guidelines or procedures for implementing hedge accounting, making forms, and determining the methodology for measuring hedge effectiveness.

Keywords: Hedging; Hedge Accounting; Derivative; Risk Management; Profit and Loss Fluctuation

# 1 Introduction

All economic entities operate in tandem with the risks around them [4]. The risks faced vary for each industry, segment, market, and other factors. The most common risk in every entity is financial risk. Financial risk can come from fluctuations in currency exchange rates, interest rates, commodity prices, or stock prices in the future. Usually in middle to upper-scale entities, this financial risk is mitigated with derivative instruments.

The use of derivative instruments over the last few decades has significantly increased [5]. The European Securities and Markets Authority in 2018 [3] presented a trend of increasing volumes that was visible even for a year. In fact the European derivatives market in 2017 has grown from a nominal amount of EUR 605 Trillion to EUR 660 Trillion by the end of the year [3]. This figure reflects a growth of more than 9%.

In Indonesia, based on the [13] article, it describes that the impact of the pandemic that has been felt since the beginning of the year on the Indonesian financial market has increasingly shown the need for a more reliable hedging or hedging mechanism to facilitate financing, manage stock and commodity volatility and mismatches. duration and exchange rate. In the Indonesian over the counter (OTC) market, the volume of Indonesia's derivative transactions compared to neighboring countries is still relatively small. This could be due to the minimal variety of derivative products.

Derivative transactions in the Indonesian market are still dominated by exchange rate derivative products at 97.27%, followed by commodity derivatives with a composition of 1.82%, and a 0.91% portion of interest rate derivative products for 2019. On the other hand, the Bank can perform transactions with a wider market due to easier access to foreign money markets [13].

Another trend that is increasing is the use of derivative financial instruments in corporate risk management [10]. So, the importance of derivatives is no longer limited to financial strategy, but has basically expanded to the accounting field [12].

In 2010 PSAK 55 which regulates the recording of derivative transactions became effective in Indonesia. This PSAK is a convergence of International Accounting Standards (IAS) 39. With this guideline, entities account for derivative instruments at fair value as assets or liabilities in balance sheet and also recognize the fluctuation of the fair values through profit or loss. The impact is higher volatility in income statement compared to the previous historical cost accounting approach [8].

Still based on research by[8], PSAK 55 provides an additional option for unusual accounting treatment, namely hedge accounting but with strict terms and conditions. From the perspective of investors, hedge accounting can give a better understanding of how companies manage their risks. This accounting policy allows companies to recognize fair value changes of the hedging instrument as well as the hedged item simultaneously in the same periode of income statement. Thus, it can be a solution to reduce the volatility of profit and loss. Under normal conditions without the application of hedge accounting, frequent hedging activities lead to earnings volatility.

According to [11], the hedge accounting requirements under PSAK 55 frustrate many users because the requirements are often not directly linked to risk management practices. Highly detailed rules sometimes make hedge accounting impossible or very expensive, even if the hedge reflects an economically rational risk management strategy.

Hedge accounting is a technique that modifies normal records to recognize gains and losses on the related hedging instrument and the hedged item, so that both are recognized in profit or loss or OCI (other comprehensive income) in the same accounting period. This is a matching concept that eliminates or reduces volatility in the statement of comprehensive income that would otherwise arise if the hedged item and hedging instrument were accounted for separately under PSAK in general [11]. This is why many companies do not apply hedge accounting based on the results of previous research by [8]. Including PT XYZ

Although it does not apply hedge accounting, PT XYZ has so far carried out hedging transactions to manage risks to its assets and liabilities. One way to mitigate the bank's portfolio from exchange rate risk, PT XYZ only opens a maximum gap of 10% of the difference between financial assets and liabilities in foreign currency. Then, if there is a commitment to pay or receive money in foreign currency that has exchange rate risk, the Bank will purchase forwards, swaps, or currency options. As of December 31, 2020, PT XYZ has a spot buying position and derivatives of IDR 6.9 Trillion, and a selling position of IDR 59.1 Trillion. The transaction is a combined portfolio of derivatives for trading and hedging purposes.

Another example of the existing hedging relationship in PT XYZ, some financial liabilities exposed to interest rate risk are mitigated with IRS derivative instruments (interest rate swaps). It is a hedge of future cash flows. The concern in applying hedging with derivative instruments is the potential for fluctuations in the income statement. Derivatives are carried at fair value, while hedged liabilities are carried at amortized cost so that there is an accounting mismatch. Due to not applying hedge accounting, fluctuations in the fair value of these derivative instruments are recorded in the company's profit or loss and affect performance. Based on the data obtained, there was an unrealized loss recorded in the Bank's income statement of Rp 35 billion as of December 31, 2020 as a result of the purchase of the IRS derivative. If applying hedge accounting, the loss can be deferred because it is recorded in equity, which is other comprehensive income. Delay in recording the mark-to-market derivatives can be done if the cash flow hedging relationship is proven to be effective.

On January 1, 2020, PSAK 71 became effective to replace PSAK 55. PSAK 71 is a convergence of IFRS 9 which was already effective. There are three requirements revised in PSAK 71, namely changes in the basic classification and measurement of financial instruments, changes in the approach in establishing allowance for impairment losses, and the third changes in hedge accounting requirements [6].

There are five changes to the requirements related to hedge accounting, requirements. The first requirement that differentiates between PSAK 71 and PSAK 55 regarding hedge accounting is what can be recognized as a hedging instrument. According to PSAK 55, in addition to derivative transactions, non-derivative financial assets or liabilities can be hedging instruments but are limited to hedging exchange rate risk. Apart from these risks, non-derivative financial assets and liabilities cannot be considered as hedging instruments. On the other hand, PSAK 71 provides a broader offer by allowing all non-derivative financial assets and liabilities classified as FVTPL to become hedging instruments.

The second change of hedge accounting requirements is what can be designated as a hedged item. In PSAK 55, if the hedged item is in the form of a non-financial asset or liability, the measurement of the risk inherent in the hedged item must be in its entirety, in other words, it is impossible to choose the risk to be hedged. Whereas in PSAK 71, an entity can determine only certain risks that are hedged from a hedged item.

The third thing that has changed is the test of hedging effectiveness. PSAK 71 no longer continues complex calculations to test effectiveness. The effectiveness test can be carried out prospectively and using the entity's own calculations. In other words, retrospective testing is no longer needed to assess whether the hedging relationship is effective. PSAK 71 provides guidance for assessing effectiveness based on the following principles: 1) there is an economic relationship between the hedging instrument and the hedged item, 2) credit risk does not dominate, 3) the hedging portion is determined from the actual value of the hedged item and hedging instrument. So there is no need to conduct a quantitative assessment to determine the feasibility of a hedging relationship.

Then the fourth requirement change is adjustment or rebalancing. If in the middle of the hedging period the entity wishes to make modifications, PSAK 71 allows the necessary adjustments for risk management purposes without terminating the existing hedging relationship. This is in stark contrast to the rules of PSAK 55 which requires the termination of an ongoing hedging relationship and then a new hedging relationship is recorded. The revised provisions also make it easier for entities to manage risk while taking advantage of hedge accounting options.

The last significant change related to hedge accounting in PSAK 71 is the permit for early termination of hedge accounting. PSAK 71 prohibits the termination of hedge accounting voluntarily or without a basis. Thus, if the entity has decided to apply hedge accounting to a set of relationships, the consequence is that the hedging relationship must be settled until maturity. In stark contrast to PSAK 55 which allows an entity to terminate the hedging relationship at any time.

When implementing the implementation of PSAK 71, PT XYZ is more focused on modeling for the classification of financial instruments and the establishment of allowance for losses on financial instruments. Both of these things have a significant effect on the recording of financial instruments in the Bank so that it requires great effort to be successfully implemented. On the other hand, the accounting rules for hedges, which are the rules of choice, have not been studied further because the Bank has not implemented hedge accounting with the previous accounting standards. Therefore, it is necessary to study more deeply regarding the application of hedge accounting at PT XYZ based on PSAK 71. Based on the results of interviews, when the hedge accounting requirements were still regulated in PSAK 55, the entity had not considered applying hedge accounting because the results of previous studies showed that its application quite inconvenient on the operational side.

# 2 Literature Review

### 2.1 Hedge Accounting

Hedge accounting is the special accounting treatment for a hedged item which can be an existing asset or liability, firm commitments of the company, as well as expected cash inflows or outflows, and the hedging instrument which is often a derivative contract. Eligibility for the application of hedge accounting allows companies to better manage their risk exposure according to [1]. The result of associating a derivative to a hedged item is that a company that actively manages its risk exposure may find it useful that changes in the fair value of the derivative instrument and the hedged item are reflected in the financial statements of the same period.

PSAK 71 aims to show users of financial statements the impact of an entity's risk management activities using financial instruments in order to manage exposures arising from certain risks that can affect the entity's profit or loss. (PSAK 71, par. 6.1.1)

Derivative instruments that are measured at fair value through profit or loss (FVTPL or Fair Value through Profit or Loss) can be designated as hedging instruments. Meanwhile, non-derivative financial assets and liabilities in the FVTPL classification can also be designated as instruments unless changes in their fair value are affected by credit risk. In addition, only transactions with external parties can be recognized as hedging accounting instruments (PSAK 71, par. 6.2.1 - 6.2.3). Thus, if the entity enters into an intra-group derivative transaction, the transaction cannot be included in this hedging relationship.

The hedged item may be a recognized asset or liability, an unrecognized firm commitment, an estimated transaction or net investment in a foreign operation. The hedged item can be a single item or a portfolio. The hedged item must be reliably quantifiable. (PSAK 71, par. 6.3.1 - 6.3.2)

According to PSAK 71 par 6.4, a hedging relationship is eligible for hedge accounting only if the following conditions are met, firstly the hedging relationship only connects the hedging instrument and the eligible hedged item. Secondly at the initial determination of the hedging relationship there is formal documentation of the hedging relationship as well as the entity's risk management objectives and strategies in carrying out the hedging. The documentation includes the identification of the hedging instrument, the identification of the hedged item, the nature of the risk being hedged, and finally how the entity assesses the effectiveness of the hedge. The last is that a hedging relationship is said to meet all the requirements for hedging effectiveness if there is an economic relationship between the two components, namely the hedged item and the hedging instrument. The influence of credit risk is not a factor that dominates changes in value. Credit risk can be defined as the risk that one party in a financial instrument has the potential to cause financial losses to another party due to non-fulfillment of obligations. PSAK 71 PP 6.4.8 exemplifies credit risk that dominates a hedging relationship, namely when an entity hedges commodity price risk with uncollateralised derivatives. When a counterparty to a derivative transaction experiences a credit rating downgrade, the fair value of the derivative is likely to change. changes caused by commodity prices may be smaller than changes in the counterparty's ability to pay. The hedging ratio of the hedging relationship is the same ratio that is obtained by comparing the quantity of the hedged item and the quantity of the hedging instrument.

In PSAK 71 par. 6.5.2 states that there are three types of hedging relationships, namely Fair value hedge that is a hedging activity against the risk of changes in the fair value of assets or liabilities in the balance sheet, or unrecognized firm commitments, or components of these items, which are attributable to certain risks and can affect profit or loss. Secondly Hedging cash flows. It is a hedge against exposure to future cash flow variability. Then, Net investment Hedging in foreign business activities

If the hedging relationship no longer meets the hedging effectiveness requirements related to the hedging ratio, on the other hand, the risk management objectives for the designated hedging relationship remain the same, then the entity adjusts the hedging ratio of the hedging relationship so that it meets the qualifying criteria again. This is also known as rebalancing.

### 2.2 Previous Studies

Based on research by [8], the implementation of hedge accounting can only be carried out with complex procedures and under strict requirements. As a result, many entities decide not to implement hedge accounting and take the consequency of profit volatility. In research conducted on companies in Germany and Switzerland that were non-financial industries, more than 90% of survey-taking companies use derivative instruments to hedge financial risks. But, among those companies only 72% of them apply hedge accounting. This is especially true for companies with larger scale and more experience with IFRS. The advice given is to reduce the complexity in the application of hedge accounting.

[12] in his work, developed a simulation to illustrate the different quantitative impacts when applying hedge accounting based on two rules, namely IFRS 9 and IAS 39. Muller found that there was a difference between model company portfolio management when using IFRS 9 and IAS 39.

[2] concludes that the impact of applying hedge accounting in his research is a decrease in the fair value gain on the Par Forward hedging instrument and a decrease in the fair value loss on the interest rate swap (IRS) instrument. The total loss that is deferred recognition in profit or loss is reduced.

In conducting preliminary research, no case studies have been found that describe how the steps for implementing hedge accounting are. Throughout this study, the research will cover all aspects that need to be prepared by the company, the calculations or methods taken to calculate effectiveness, documenting the hedging relationship, as well as simulating the application of hedge accounting based on PSAK 71.

# 3 Research Methods

This research is a case study research. The case study form was chosen because research questions on phenomena that occurred at PT XYZ Bank would be more appropriate if answered with in-depth information so that it was more appropriate to use a case study approach. Researchers can dig deeper into how effective the strategy adopted by PT XYZ in implementing hedge accounting is.

This study uses a qualitative method, qualitative data is processed through descriptive methods. The reason for using descriptive qualitative methods is that case studies are the main vehicle that provides space in reconstructing subjective opinions of a case. Then a case study is built to reveal "unseen knowledge" because without this research, the public does not know what the company is facing. Finally, case studies provide studies that are easier to understand because qualitative research can add meaning to a social phenomenon.

The data used in this study are primary data, namely PT XYZ data obtained from sources, namely officials and staff at the Head Office, namely the Treasury Business Division, Enterprise Risk Management, and the Financial and Management Accounting Division. The data in question is data on interviews with officials and staff who play a role in the company's hedging activities. The interview list was developed from the requirements stated in PSAK 71 and its explanatory paragraphs. Apart from accounting standards, the authors also add questions in the form of supporting components that may be needed by the object of research to apply hedge accounting. This support system is a rule or procedure as well as an application that is in the object of research in conducting hedging transactions. In addition, observations were also made on documents related to hedging from the Treasury Business Division, Accounting Division, Operations Division, and Risk Management Division, as well as the company's financial statements.

This research requires informants who must understand well about the object under study and can provide relevant information regarding the object of research. The unit of analysis that is the object of this research consists of 5 informants who are personnel considered to be involved in hedging transactions. The informants are Treasury Senior Manager, Treasury Dealer, Risk Manager, Accounting Manager, and Operations Staff. Each informant's name is kept confidential to maintain the confidentiality of his identity so that the author gives the code A1, A2, and so on up to A5.

The focus of this research is the application of hedge accounting at PT XYZ Bank. Therefore, the selected informants are considered to understand and have experience in their respective fields in carrying out hedging

transactions and also implementing hedge accounting. The following is the profile of each informant and the reasons why the author chose the informant.

### 1. Informant Category Senior Manager Treasury (Informant A1)

Informant A1 is a member of management in the Treasury Business Division who frequently conducts hedging transactions with more than 10 years of experience. This informant has acted as a proposer, examiner, or giver of approval for hedging transactions at PT XYZ with various hedging instruments. This informant is the main focus of the author to obtain information related to the general description of hedging transactions. There are five Senior Managers in the Treasury Business Division. For the purposes of this research, only one Senior Manager is needed, namely those who are directly involved with the approval of hedging transactions. The interview with informant A1 was held on Saturday, October 23, 2021 for 45 minutes.

### 2. Informant Category Senior Dealer (Informant A2)

Informant A2 is a senior staff member in the Treasury Business Division who carries out hedging transactions with derivative instruments on a daily basis. The position is called a dealer because its main responsibility is to deal with other banks or other corporations in the global market. Dealers are part of the front office in hedging transactions. The interview with informant A2 was held on Saturday, October 30, 2021, for 20 minutes.

# 3. Informant Category Risk Manager (Informant A3)

Informant A3 is a manager in the Market, Portfolio, & Enterprise Risk Division who acts as the middle office in hedging transactions. His role is to monitor the overall portfolio at PT XYZ, oversee the fair value of each financial instrument and oversee transaction limits made by dealers. This interview with informant A3 focused on the issue of measuring hedging effectiveness and risk management policies in general. The interview was conducted on Saturday, October 30, 2021 for 30 minutes.

### 4. Informant Category Accounting Manager (Informant A4)

Informant A4 is an accountant at PT XYZ with more than seven years of experience in preparing treasury accounting policies. The information expected from A4 informants is the history of the application of hedge accounting, as well as accounting policies related to dealing room transactions in general. Information collection through interviews was carried out on Monday, October 25, 2021 for 45 minutes.

# 5. Operation Staff Category Informant (Informant A5)

Informant A5 is an operational staff who settles treasury transactions including hedging transactions. The focus of the questions addressed to this informant is related to the supporting components in implementing hedge accounting. The questions asked about this supporting component are related to the rules or procedures that guide the hedging transactions and the application or system used. The interview was carried out on Monday, October 25, 2021 for 20 minutes.

In qualitative research, the process of data collection and data analysis are interrelated and inseparable, thus forming a cycle. Technique of analysing data in this study is an interactive model according to [9] which consists of:

### 1. Data collection

Data collection was carried out before, during, and at the end of the study. This data comes from the interview and documentation process. The data collected is in the form of an overview related to hedging transactions, risk management policies, accounting policies, to bookkeeping procedures and their supporting systems.

### 2. Data reduction

Data reduction is a process that combines and homogenizes by selecting, simplifying, focusing, and changing the data that has been collected in written manuscripts. This data can be reduced by selecting, summarizing or paraphrasing and eliminating irrelevant data.

# 3. Data presentation

Presentation of data is a process that is possible to draw conclusions. The form of data presentation can be in the form of narrative text that comes from a combination of information from the results of data reduction. This process can help to see whether the conclusions are correct or need to be re-analyzed.

### 4. Conclusion

The conclusion in this data analysis process is a summary of the results of data collection. The data are summarized to obtain a conclusion on the applicability of hedge accounting at PT XYZ.

The data analysis technique can be seen in figure 3.1 below which shows the interactive nature between data collection and data analysis, namely data reduction, data presentation, and conclusions. The data that has been collected is then reduced to facilitate the presentation of data for making conclusions. Because this process is interactive, it interacts with each other.

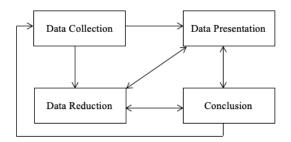


Figure 3.1 Components of Data Analysis

Source: Miles & Huberman (1994:12) [9]

# 4 Company Profile

PT XYZ is one of the largetst banks in Indonesia. With the largest number of assets among other banks in Indonesia, PT XYZ has set the ambition to bethe most valuable group in Southeast Asia. The size of these assets requires reliable management. In addition to disbursing large amounts of credit, PT XYZ also manages funds in the form of placements, securities, notes, and other financial instruments.

The management of non-credit assets is mostly carried out by the Treasury Business Division. The Treasury Business Division diversifies investment by purchasing government or corporate securities, conducting placements in the form of bank placements, reverse repos, open market operations with BI, conducting currency exchange in the form of today, tom, spot, forward schemes, to derivative transactions such as the IRS. (Interest Rate Swap), CCS (Cross Currency Swap), Currency Option, Call Spread, OIS (Overnight Interest Swap). The transaction was carried out by the Treasury Business Division, either for investment purposes or for hedging.

In hedging the work units involved are the Treasury Business Division which conducts transactions and establishes communication with third parties as the front office, the Risk Management Division as the middle office which carries out risk monitoring, and the Operations Division and Accounting Division which carries out transaction settlement and reporting.

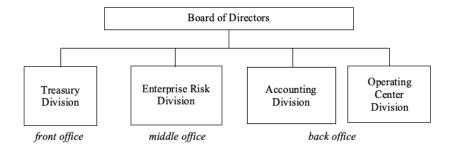


Figure 4.1 Working Unit Related to Hedging Transaction

# 5 Analysis

This section will analyze the current condition and discuss the potential application of Hedging Accounting at PT XYZ. The analysis and discussion is based on the results of interviews and document reviews that have been carried out. The interviews were conducted both separately and together.

Table 5.1. Results of Analysis of the Main Requirements of Hedging Accounting

Interview Questions		Requirement s Analysis	Recomendation
	What items are commonly hedged? Does the hedged item meet the requirements for applying hedge accounting? (PSAK 71 par. 6.3.1 s/d par. 6.3.6 dan par. 6.4.1)	Fulfilled	The hedged item is eligible. PT XYZ can assess the potential for a wider range of hedging items such as net investment abroad
<i>'</i>	What are the hedging instruments commonly used for hedging transactions? Does the hedging instrument qualify for the application of hedge accounting? (PSAK 71 par. 6.2.1 s/d par. 6.2.6 dan par. 6.4.1.a)	Fulfilled	Hedging instruments have met the requirements because currently they are only in the form of Derivatives. Other instruments can also be further assessed, such as using non-derivative financial assets
,	Did management create formal documentation of the hedging relationship at initial initiation? (PSAK 71 par. 6.4.1.b)	Partially Fulfilled	An entity documents the hedging instrument without being linked to the hedged item in a single specific document. It is recommended that an entity establish a form to document the hedging relationship.
2	Whether the documentation in the items above includes the identification of the hedging instrument, the identification of the hedged item, the nature of the risk being hedged, and finally how the entity assesses the effectiveness of the hedge. (PSAK 71 par. 6.4.1.b)	Not Fulfilled	

PT XYZ already has guidelines in the implementation of hedging financial assets owned or financial liabilities issued. These guidelines govern when and how the Bank performs hedging. The hedging strategy is crucial because the goal is to mitigate risk, it may change direction to increase risk exposure if it is not done carefully.

Every hedging is carried out by implementing the four eyes principle or in other words it must be approved by at least two people. So there must be someone in charge of preparing proposals and analysis, and someone else who verifies the truth of the analysis as submitted by Informants A1 and A2 from the Treasury Division.

The most frequently hedged financial items are financial liability instruments that use floating interest rates. These financial liabilities can come from bilateral loans from other banks or from the issuance of securities. In this example, the main risk is interest rate fluctuations. Referring to PSAK 71, this hedged item meets the requirements for applying hedge accounting.

Based on the interview, the details of the debt cannot be disclosed in this writing. The loan is obtained in foreign currency and requires a floating interest rate with semi-annual payments. The debt has a term of seven years. At the time of obtaining debt, PT XYZ projects that the benchmark interest rate will increase in the future, so that instruments are needed to mitigate the risk of rising interest rates. The Bank then purchases an Interest Rate Swap (IRS) with a pay-fix receive-float position with the same tenor and notional as the debt.

The IRS which is a financial instrument that in the concept of hedge accounting is also called a hedging instrument because its purpose is to protect debt that has risks. Meanwhile, debt with a floating interest rate is called a hedged item because it is a component that is protected by the company. Referring to PSAK 71, the two transactions have a cash flow hedging relationship because they protect the risk of fluctuations in floating interest payments in the future.

An example of a fair value hedging relationship that has been carried out by PT XYZ is when it has government securities with a fixed interest rate and with a significant value. The Treasury Business Team projects that interest rates will fall and potentially lower the price of these securities in the secondary market. The step taken is to buy IRS derivative instruments but with pay-float receive-fix positions. Thus, the risk of decline in the fair value of the securities can be compensated by the increase in the fair value of the IRS derivatives. These derivatives are also made with tenors, notionals, and interest rates similar to those of the hedged securities.

Apart from micro-hedge, PT XYZ is also active in conducting portfolio hedges where the Banking Book Team of the Treasury Business Division periodically evaluates the risk exposure in the Bank's overall portfolio. The risk that is most often monitored is foreign exchange risk by looking at the Bank's net open position (NOP). NOP is a ratio that shows the absolute difference between foreign currency assets and liabilities compared to the

Bank's capital. To avoid exposure to large risks due to currency fluctuations, NOP is strived to be as small as possible.

However, PT XYZ has so far not documented the hedging relationship as required by PSAK 71 for the application of hedge accounting. The document at least describes the hedging instrument used, the item being hedged, the risk being protected, and lastly the effectiveness of the hedge. This documentation is mandatory if PT XYZ wants to apply hedge accounting.

Table 5.2. Results of the Analysis of the Measurement of Hedging Effectiveness

Interview Questions		Requirement s Analysis	Recomendation
1	Does the hedging transaction have an economic relationship between the two components, namely the hedged item and the hedging instrument? (PSAK 71 par. 6.4.1.c.i)	Fulfilled	The entity has identified the derivative instrument used must have an economic relationship.
2	Is the influence of credit risk not a factor that dominates changes in value? (PSAK 71 par. 6.4.1.c.ii)	Fulfilled	The entity hedges the financial liabilities it has issued and the risk of interest rate fluctuations not the entity's credit risk. It is necessary to establish a policy that limits the nature and type of credit risk of hedged items.
3	Is the hedging ratio of the hedging relationship the same ratio that is obtained by comparing the quantity of the hedged item and the quantity of the hedging instrument? (PSAK 71 par. 6.4.1.c.iii, PP 6.4.9 s/d PP 6.4.11)	Fulfilled	The entity hedges either the entire % of the nominal value item or part of it. If the hedging is partial, the hedging instrument used is nominally adjusted to the effective reserve close to 100% ratio.
4	Is hedging effectiveness assessed on a periodic basis? If so, every how many periods of testing is done? (PSAK 71 PP 6.4.2, PP 6.4.3, dan PP 6.4.12)	Not Fulfilled	Not fulfilled. Entities should prepare policies and procedures to measure hedge effectiveness on a regular basis.

The effectiveness of hedging instruments in covering fluctuations in value caused by movements in the value of a hedged item must be measured periodically. The effectiveness of the hedge is quantitatively indicated by a percentage, the closer to 100%, the more effective the hedge is.

At the initiation of the hedge, the entity must project its effectiveness and then periodically re-measure it. However, PT XYZ does not yet have guidelines for measuring effectiveness as required by PSAK as presented by Informant A3.

Based on the results of interviews, the effectiveness of this hedging is only carried out by PT XYZ at the time of hedging initiation as a feasibility analysis which is then submitted to the relevant officials for approval. Therefore, PT XYZ must make a policy to measure the effectiveness of hedging periodically, at least every month because PT XYZ publishes monthly interim reports on its website.

On the other hand, the effectiveness measurement carried out by PT XYZ is correct because it does not include the credit risk element of its counterparty. This is in accordance with PSAK 71 which does not allow the hedging relationship to be dominated by credit risk.

Table 5.3. Results of Analysis of Hedging Accounting Supporting Components

	<b>Interview Questions</b>	Requirement s Analysis	Recomendation
1	Does PT XYZ have bookkeeping procedures for hedging transactions?	-	The entity already has a hedging transaction procedure

2	What is PT XYZ's risk management policy in general? Does PT XYZ consider hedge accounting as part of risk management?	-	The risk management policy does not touch the accounting aspects of hedging in the implementation of hedging.
3	Does PT XYZ have a hedge accounting policy based on PSAK 71?	-	The entity does not yet have a hedge accounting policy under PSAK 71. It is recommended that the entity update its hedge accounting policy with PSAK 71
4	Does PT XYZ apply hedge accounting? a) If yes, how is the bookkeeping done? Has it been accommodated by the application/system or by manual adjusting journal? b) If No, what causes the management of PT XYZ not to apply hedge accounting?	-	Not. The entity has not felt the need for hedge accounting so that it has not carried out an analysis. Entities can use the results of this study to prepare implementation of hedge accounting.
5	Does PT XYZ have a system or application that supports hedge accounting?	-	The entity does not yet have a special system that supports automated hedge accounting bookkeeping. It is advisable to establish procedures that provide guidance on the implementation of hedge accounting.
6	What work unit is responsible for policy making and implementation of hedge accounting?	-	It is advisable to conduct a joint study by each work unit.

In applying hedge accounting, the entity must have a system that supports such as the availability of adequate policies. PT XYZ already has bookkeeping procedures that are updated regularly, including hedging transactions. Based on interviews with managers in the Accounting Division, the bookkeeping procedures increased along with the wider variety of types of transactions at PT XYZ. Furthermore, the bookkeeping manual is always updated a maximum of once every 3 years. On the other hand, accounting procedures to adjust the impact of applying hedge accounting are not yet available.

The Accounting Division previously issued a Decision Letter on Hedging Accounting in 2015. The decree became the umbrella for hedge accounting policies at PT XYZ but still refers to PSAK 55. With the enactment of PSAK 71 in 2020, PT XYZ should revise the policy because there are several new rules stipulated in PSAK 71.

Meanwhile, according to informant A3, the risk management policy in general does not regulate when and how management should hedge. The implementation of hedging still refers to the treasury transaction guidelines.

Hedging transactions that are currently actively executed are supported by a special recording application for treasury transactions. The application supports daily Mark-to-market to adjust the fair value of financial instruments. However, the application does not yet support the hedge accounting relationship and cannot automatically perform the bookkeeping to adjust the impact of hedge accounting. So manual bookkeeping instructions for hedge accounting are needed for future application.

The implementation of hedge accounting is still considered difficult and not really necessary. Therefore, PT XYZ needs to establish a work unit that is responsible for initiating the implementation of hedge accounting.

## 6 Conclusion

This study aims to evaluate the applicability of the concept of hedge accounting in hedging transactions at PT XYZ. The research focuses on hedging transactions conducted by the Treasury Business Division with a qualitative descriptive method. The approach used is a case study by collecting data in the form of document review and interviews.

Based on the research results, the application of the concept of hedge accounting is very possible for PT XYZ. The object of research has carried out hedging activities well. Each investment in financial assets or financial liabilities is analyzed regularly and then determined whether management will allow exposure or hedge. This hedging strategy has also been documented by the Treasury Business Division. However, the management of PT XYZ has so far chosen not to apply hedge accounting.

When planning to apply hedge accounting, PT XYZ must prepare several main things, namely hedge accounting policies, methods of measuring hedge effectiveness, hedging relationship documentation forms, as well as detailed implementation instructions for each stage of applying hedge accounting to the required adjusting

entries. These requirements and supporting components need to be met in order for hedge accounting to be applied and benefit the financial statements.

### References

- [1] Beil, Frank J. Akuntansi untuk Aktivitas Derivatif dan Lindung Nilai, Business Expert Press, ProQuest Ebook Central. (2013).
- [2] Damopolii, Octrini Lucia. Dampak Penerapan Akuntansi Lindung Nilai pada Laporan Keuangan Independent Power Producer: Studi Kasus PT MNO tahun 2013. Jakarta: Universitas Indonesia. (2015).
- [3] European Securities and Markets Authority. ESMA annual statistical report on EU derivatives markets. Accessed on April 23, 2021, from https://www.esma.europa.eu/sites/default/files/library/esma50-165-639\_esma-rae\_asr-derivatives\_2018.pdf. (2018).
- [4] EY. Applying IFRS: Hedge accounting under IFRS 9. Accessed on 14 Januari 2020 from https://www.ey.com/en\_gl/ifrs-technical-resources/hedge-accounting-under-ifrs-9-financial-instruments. (2014).
- [5] Hull, J. C. Options, futures, and other derivatives (10th ed.). Pearson. (2018).
- [6] Ikatan Akuntan Indonesia (IAI). Berita Pengesahan ED PSAK 71: Instrumen Keuangan. Accessed on 14 Januari 2021 from http://iaiglobal.or.id/berita-kegiatan/detailberita-949=berita-pengesahan-ed-psak-71-instrumen-keuangan. (2016).
- [7] Ikatan Akuntan Indonesia (IAI). Pernyataan Standar Akuntansi Keuangan (PSAK) No 71: Instrumen Keuangan. Jakarta: IAI. (2019).
- [8] Martin Glaum & André Klöcker, Hedge accounting and its influence on financial hedging: when the tail wags the dog, Accounting and Business Research, 41:5, 459-489, DOI: 10.1080/00014788.2011.573746. (2011)
- [9] Miles, Mathew B., dan A. Michael Huberman. An Expanded Sourcebook: Qualitative Data Analysis. London: Sage Publications. (1994).
- [10] Panaretou, A., Shackleton, M. B., & Taylor, P. A. Corporate risk management and hedge accounting. Contempor- ary Accounting Research, 30(1), 116–139. Accessed on 14 Januari 2021 from https://doi.org/10.1111/j.1911-3846.2011.01143.x. (2013).
- [11] PWC. In depth: Achieving hedge accounting in practice under IFRS 9. Accessed on 9 Juli 2022 from https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-9/achieving-hedge-accounting-in-practice-underifrs-9.pdf. (2017).
- [12] Viktoria, Müller. Hedge Accounting and its Consequences on Portfolio Earnings A Simulation Study, Accounting in Europe, 17:2, 204-237, DOI: 10.1080/17449480.2020.1775267. (2020).
- [13] Sya'bani, Apri. Bisnis (2020). Derivatif Jadi Alternatif Lindungi Investasi, Sayang Pilihannya Terbatas. Accessed on Januari 14, 2021 from https://ekonomi.bisnis.com/read/20200617/9/1253800/derivatif-jadi-alternatif-lindungiinvestasi-sayang-pilihannya-terbatas