Forward Contract Hedging Analysis as a Protection Effort
Transaction Exposure
(Case Study at PT. Akasha Wira International, Tbk)

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ABSTRACT
The purpose of this research is to identify the risks related to currency fluctuations that arise from transactions in foreign currencies or other currencies. A company must be capable of managing foreign exchange activities in order to reduce or eliminate risks. One way to do that is to carry out hedging trades. You may ensure that future fluctuations in foreign exchange rates won't affect the foreign exchange rate utilized for payments (outflow) or the amount of foreign currency received (inflow) by using hedging. Both a qualitative descriptive research design and a case study approach are used in this study. A case study called PT Akasha Wira International, Tbk was used.

INTRODUCTION
The current era of globalization is an era of opening up human life in the world. The impact of this era of globalization is that economic activities in the form of trade can be carried out between two or more countries. The existence of trade between the two countries results in transactions in different currencies accompanied by the emergence of financial risks for companies due to changes in currency exchange rates. These unanticipated changes in currency exchange rates cause uncertainty in the value of assets and liabilities in the currency of the importing (buying) country. The volatility of foreign exchange rates becomes more uncontrollable if the exchange rate system implemented in the country is a managed floating system. This is because with this system, the monetary authority gives a larger portion to the market to determine the exchange rate level in accordance with the value of demand and supply of foreign exchange. Characteristics of Indonesia as a small and open economy, which adheres to a free foreign exchange system coupled with the implementation of a free floating exchange rate system causes exchange rate movements in the market to become vulnerable to the influence of economic and non-economic factors (Sjamsul, 1998).

Multinational corporations that employ foreign exchange in their commercial transactions—a practice known as foreign exchange exposure—may be impacted by fluctuations in foreign exchange rates. Exposure to foreign currencies can have a significant impact on a company's profitability. Cash transactions could help to mitigate this danger. But not every business transaction can be completed with cash, which means that foreign currency debts and receivables will eventually accumulate. As a result, the corporation will either make or lose money if the foreign currency rate changes. Because of this, hedging is one way that the corporate sector is trying to improve risk management.

Hedging an asset, in this case a currency, is a security measure so that you are not in a position to have assets or net liabilities in that asset (Lindert and Kindleberger, 1995:342). Hedging is more complicated than one may think; one must truly consider experience, practice, and comprehension of the chosen technique. As
a financial strategy, hedging ensures that changes or variations in foreign exchange rates won't have an impact on the foreign exchange rate used to pay (outflow) or the quantity of money to be received (inflow) in the future.

Under the name PT Alfindo Putrasetia, PT Akasha Wira International Tbk ("Company") was established in 1985. The name of the company has changed multiple times; the most recent one was in 2010 when PT Akasha Wira International Tbk was adopted. The articles of association of the company have changed multiple times. The ultimate revision to the quorum, voting rights, and decision-making processes, as well as the duties and authorities of the board of directors, was made by Notarial Deed of Jose Dima Satria, SH, M.Kn, No. 48, dated June 25, 2013. Article 3 of the Company's Articles of Association states that the bread and cake sector, the confectionery, macaroni, wholesale trade, and the bottled drinking water industry are the areas in which the Company operates.

**METHODS**

This research uses descriptive research methods, namely research conducted to determine independent variables, either one or more variables (independent) without making comparisons, or connecting them with other variables (Sugiyono, 2005:11). And case study research, which is an approach that is carried out intensively, in detail and in depth towards an organism, institution or certain symptoms (Arikunto, 2002: 120). The related variable is transaction exposure, while the case study used is PT Akasha Wira International, Tbk with observations of the balance sheet and profit/loss report for 3 (three) years from 2020 until 2022.

The stages in data collection can be seen as follows:

1. **Data Collection Stage**
   At this stage, we collect the information and data needed for field needs. In conducting research, carry out library studies and collect data using computer assistance, namely via the internet (www.idx.co.id). The data taken is in the form of financial reports of PT Akasha Wira International, Tbk.

2. **Data Processing and Analysis Stage**
   At this stage the researcher selects the data then analyzes the data and makes conclusions from the data analysis and testing carried out. This research uses quantitative analysis and qualitative analysis. Quantitative analysis is related to calculating the value of the company's net assets and liabilities, as well as calculating the amount of profit or loss from applying hedging techniques in the forward market. The results of this quantitative analysis are then explained in the form of a qualitative analysis, namely with explanations directed at assessing the effectiveness and efficiency of the application of hedging techniques in the forward market on the company's net assets and liabilities.

   The stages in this analysis are:
   1) Make a summary of net assets and liabilities in foreign currency, financial statement rates, and foreign currency spot.
   2) Calculate the forward exchange rate used to hedge the company's net assets and liabilities in foreign currency.

   Formula (Faisal, 2001:56): \[ f_d/f = s_d/f \left(1 + r_d\right) \left(1 + r_f\right) \]
Notes:  
\[ f_d = \text{forward exchange rate of domestic currency (Rp) against foreign currency} \]  
\[ s_d = \text{spot exchange rate of domestic currency (Rp) against foreign currency} \]  
\[ r_d = \text{domestic interest rate (Rp)} \]  
\[ r_f = \text{foreign exchange interest rate} \]  

The forward exchange rate calculated is the forward exchange rate for one year starting January 2, 2021, and the forward exchange rate for two days from December 31, 2021, to January 2, 2022. The forward rate for one year is used to calculate the amount of contract payables and contract receivables (in foreign currency), while the forward rate for two days is used to calculate the settlement of contract receivables.

3) Contract debt is calculated by multiplying the amount of net assets/liabilities in foreign currency that will be hedged by the forward rate for one year that has been calculated.

4) Make adjustments to the forward contract. This is done by comparing the size of a forward contract for one year with a forward contract for two days. The difference from the forward contract is an adjustment that the company must report at the end of the year to the contract receivables account.

5) Know the profit or loss due to exchange rate differences if the company hedges without hedging.

3. Report Writing Stage
At this stage the researcher describes it in the form of a written report.

**RESULTS AND DISCUSSION**

1. **Assets and Liabilities in Foreign Currency**

The foreign currency (US dollars) transactions made by PT Akasha Wira International, Tbk during the year were recorded using the exchange rate that was in force at the time of the transactions. Foreign currency-denominated assets and liabilities are adjusted to reflect the exchange rate in force on the date of the balance sheet. The profit/loss statement for the relevant year is credited or debited with the resulting exchange gain or loss.

**Table 1.** Monetary Assets and Liabilities in Foreign Currency PT Akasha Wira International, Tbk December 31, 2020, December 31, 2021, and December 31, 2022 (in millions)

<table>
<thead>
<tr>
<th>Currency (Dollar AS)</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td>13,456,133.114</td>
<td>18,603,100.620</td>
<td>25,617,597.785</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td>3,624,867.598</td>
<td>4,768,661.115</td>
<td>4,837,538.355</td>
</tr>
<tr>
<td><strong>Total Net Liabilities</strong></td>
<td>(9,831,265.516)</td>
<td>(13,834,439.505)</td>
<td>(20,780,099.430)</td>
</tr>
</tbody>
</table>

Source: Notes to the Consolidated The PT Akasha Wira International, Tbk Financial Statements dated December 31, 2020, December 31, 2021, and December 31, 2022
From this data, from 2020 to 2022 it has net assets. However, hedging can also be done on net liabilities to obtain greater profits.

2. Foreign Exchange Rates and Differences

The exchange rate used by PT Akasha Wira International, Tbk and its subsidiaries in preparing financial statements is adjusted to the exchange rate in effect on that date.

<table>
<thead>
<tr>
<th>Currency</th>
<th>31 December</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>AS$ 1</td>
<td>14.034,48</td>
</tr>
<tr>
<td>(Dollar AS)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Notes to the Consolidated The PT Akasha Wira International, Tbk Financial Statements dated December 31, 2020, December 31, 2021, and December 31, 2022

From the table above, it can be seen that there are exchange rate differences from 2020 to 2022. This difference resulted in PT Akasha Wira International, Tbk having to bear the burden of exchange rate differences and interest which had an impact on the company's and subsidiaries' ability to pay debts in foreign currency. Furthermore, the company will experience losses due to exchange rate differences which will also have a direct impact on reducing company profits.

3. Calculation of Forward Foreign Exchange Rates and Hedging of Forward Contracts on Net Liabilities

The steps taken in carrying out hedging techniques in the forward market for net liabilities are: First, look for the forward rate, obtained by multiplying the spot rate by the division between the domestic interest rate and the foreign currency interest rate. This calculation is carried out twice, namely calculating the forward exchange rate for one year which is used to calculate the amount of the contract debt and calculating the forward exchange rate for two days as an adjustment to the forward contract. Second, look for the size of the forward contract from hedging the company's net liabilities, calculated by multiplying the amount of the liability by the forward rate for one year that was previously calculated. Third, the results of these calculations are included in the company's financial statements, and create new accounts on the balance sheet, such as contract payables and contract receivables.
### Table 3. Calculation of Hedging Forward Net Liabilities for 2020, 2021 and 2022

<table>
<thead>
<tr>
<th></th>
<th>NET LIABILITIES</th>
<th>FORWARD COURSE JANUARY 2 (RP)</th>
<th>FORWARD COURSE DECEMBER 31 (RP)</th>
<th>FORWARD JANUARY 2 (RP)</th>
<th>FORWARD DECEMBER 31 (RP)</th>
<th>ADJUSTMENT CONTRACT FORWARD (RP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
<td>(d) = (a x b)</td>
<td>(e) = (a x c)</td>
<td>(f) = (e – d)</td>
</tr>
<tr>
<td>2022</td>
<td>20,780,099.4</td>
<td>13,957,5</td>
<td>15,526,7</td>
<td>(290,038,302.896.008)</td>
<td>(322,647,618.957.130)</td>
<td>(32,609,316.061.122)</td>
</tr>
</tbody>
</table>

### 4. Comparison of Profits/Losses Due to Exchange Rate Differences

According to Beams (1998:476) what is meant by hedging operations is a contract to sell or purchase foreign currency to avoid the risk of holding debts or receivables in foreign currency. Meanwhile, according to Lindert and Charles (1995), hedging a foreign currency is a security measure so that you are not in a position to have assets or net liabilities in those assets.

#### Discussion

In the study of PT Akasha Wira International, Tbk, it is evident that the company faces significant challenges regarding assets and liabilities in foreign currencies, particularly in US dollars. Foreign currency transactions are recorded using the exchange rate prevailing at the time of the transactions, while the values of assets and liabilities are adjusted to the exchange rates at the end of the reporting period. From 2020 to 2022, there was a notable increase in both assets and liabilities in US dollars, reflecting business expansion or significant market fluctuations.

To manage the risk associated with exchange rate fluctuations, the company employs hedging strategies through forward contracts to protect its net liabilities. These forward contracts are calculated based on the difference in domestic and foreign interest rates and the spot exchange rate, aiming to reduce exposure to changes in exchange rates that could adversely affect the company's finances. While hedging provides stability and protects the company from exchange rate risks, the use of these strategies can also impact the company's profit and loss statement due to associated costs.

From a managerial perspective, the use of hedging techniques demonstrates PT Akasha Wira International, Tbk's efforts to effectively manage financial risks. This reflects the company's commitment to maintaining long-term financial stability and consistency in financial planning. These strategies not only influence financial reports but also illustrate the company's holistic and proactive approach to risk management.

#### CONCLUSION

In carrying out its operations, the company carries out many transactions in foreign currencies. So it does not rule out the possibility of financial risk due to changes in currency exchange rates. Hedging is a financial strategy to protect foreign exchange rates from being affected by changes or fluctuations in foreign exchange values. The forward contract hedging technique is the most widely known technique. Companies can make sales (purchases), receivables (payables) during a certain
period of time to reduce transaction exposure. The forward contract hedging technique used is a hedging technique in the forward market on net liabilities. A futures contract to hedge net liabilities can be used by importers to hedge trade payables, and by exporters to hedge trade receivables, which are denominated in foreign currencies. To hedge a net liability position, a company enters into a futures contract to purchase foreign currency that will be received in the future. The application of hedging techniques in the forward market on net liabilities is influenced by the spot rate, forward rate, domestic interest rate, foreign currency interest rate, foreign currency liabilities incurred, and foreign currency liabilities taken into account. Finally, it causes a change in the company's financial statements. In reality, sometimes a company's operating activities by implementing hedging are not always profitable for the company itself. Before hedging a forward contract, a company must consider the risk of differences. Changes in the value of foreign exchange rates, which tend to fall when a company makes a purchase, will result in the company experiencing greater losses if it hedges forward contracts. This is because the trade receivables account in the future will be smaller than the trade receivables account at the time the contract/agreement was executed. Meanwhile, changes in the value of foreign exchange rates, which tend to rise when the company makes sales, will result in the company experiencing greater losses if it hedges forward contracts. This is because the trade payable account in the future will be larger than the trade payable account at the time the contract/agreement was executed. For this reason, it is necessary to forecast exchange rates which will help the company to make a decision whether hedging is necessary or not.

REFERENCES