

Comparison of Fixed Assets Depreciation Method and Direction Influence on Company Profits in PT Akasha Wira International Tbk

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ABSTRACT

The purpose of this research is to determine the calculation of the depreciation cost allocation for fixed assets and its effect on operating income when using other alternative methods such as the double-declining balance depreciation method. Fixed assets will experience a decrease in economic value due to usage, damage, and obsolescence due to economic factors and technical factors. The method of depreciation of fixed assets that are used must be following the applicable accounting financial accounting standards, including the straight-line depreciation method and the double-declining balance depreciation method. Sources of data used in this study are secondary data types. Secondary data obtained in this study are from the official website of the IDX (Indonesia Stock Exchange) in the form of financial reports and fixed asset data for 2014-2018. The type of data of this research is quantitative, while the data processing method is the straight-line method and the multiple declining balance method. The results of the analysis in this study can be concluded that the method of depreciation of fixed assets used by the company is the straight-line depreciation method because operating income which is influenced by the straight-line depreciation method has a higher result compared to the double-decreasing balance depreciation method.

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1. INTRODUCTION

In general, a company is established to obtain optimal returns on its operational activities and to invest to maintain the smooth running of the business in the long term. The investment in question is an asset that is used in the normal activities of a company that has an economic age of more than one year [1]. Fixed-asset investment refers to the volume of activities in construction and purchases of fixed assets and related fees, expressed in monetary terms during the reporting period [2].

To achieve this, effective asset management is required in the use, maintenance, and accounting records. Every company has fixed assets, both tangible and intangible assets. Fixed assets can be used as a means of support in the company's operational activities because without fixed assets it could be that the business activity will not run well. So that will result in a decrease in profits at the company. The operating performance of new economy companies may turn profitable and lead to rapid growth in revenues and profits [3].

According to PSAK 16 regarding fixed assets, fixed assets are tangible assets held for the production process or provision of goods or services that are leased to other parties, or for administrative purposes, which are used for more than one period. The economic value of a fixed asset will decrease due to usage, damage, and out of date due to economic and technical factors so that it requires special management policies, both in the use, maintenance, and accounting records, and affects its production activities. Over time, the value of a fixed asset must be depreciated or charged appropriately, one way is to use the depreciation method. The depreciation method according to PSAK 17 is the amount that can be depreciated and allocated to each accounting period during the useful life of the asset using various systematic methods. Whichever method is chosen, consistency is needed in its use, regardless of the level of company profitability and tax considerations, to provide comparability of the company's operating results from period to period [4].

Each company in general must be able to calculate the allocation of the depreciation cost of fixed assets based on the appropriate method because the amount of profit that the company will receive can vary due to the application of different depreciation methods. If the depreciation method of the company's fixed assets is not by the company's conditions or generally accepted accounting principles, it will affect the profit that will be reported in each accounting period. In some cases, depreciation can trigger productivity losses and higher producer unit costs [5].

PT Akasha Wira International Tbk was established under the name PT Alfindo Putrasetia in 1985, then the company name has been changed several times, most recently in 2010 with the company name PT Akasha Wira International Tbk. The Articles of Association of the Company have been amended several times, the latest amendments were made by the Notary Deed of Jose Dima Satria, SH, M.Kn, No. 48 dated 25 June 2013 regarding changes to the Quorum, Voting Rights, and Decisions as well as regarding changes to the Duties and Authorities of the Board of Directors. PT. Akasha Wira International Tbk is engaged in the manufacture of drinking water products and cosmetic product distribution. The company has several types of fixed assets, namely, buildings or buildings, machinery and equipment, facilities and infrastructure, tools and equipment, IT equipment, dispensers, and vehicles.

Based on this description, it is necessary to understand further the fixed asset accounting policies that have been implemented by the company and compare them with the theories that have been studied. The author also chose the title "Comparison of Fixed Asset Depreciation Methods and Their Effect on Company Profits at PT Akasha Wira International Tbk".

2. RESEARCH METHOD

3.1. Types of Data

This research uses quantitative data types of research. Quantitative data research is a method used to describe the actual situation based on existing conditions in the field, usually analyzed by providing a clearer picture of the object under study. Many previous studies of patent analyses for technological trends and strategies are dependent on only quantitative analyses using structured data such as keyword networks and indicators, thus, these studies are difficult to offer detailed technological key components and trends on scientific perspectives [6], but the author uses quantitative research because the researcher wants to go deeper into the calculations related to the depreciation of the company's fixed assets, such as the straight-line depreciation method and the double-declining balance depreciation method as well as calculating the company's profit at PT Akasha Wira International Tbk.

3.2. Data Sources

This study uses secondary data sources. Secondary data is data collected from information obtained indirectly from the company but is obtained from document information held by the company. (Astuti, 2019). The author obtained secondary data from the official website of the IDX (Indonesia Stock Exchange). Secondary data used are financial reports such as profit/loss statements and fixed asset data at PT Akasha Wira International Tbk in 2014-2018 [7].

3.3. Data Processing Method

The third stage is the data processing method. This method is a method of depreciation of fixed assets, in which the calculation of depreciation of fixed assets can be done by several methods that can be grouped, including:

1) Straight-Line Depreciation Method

The straight-line depreciation method is a method of depreciation of fixed assets that provides the same benefits for each period during the period. the useful life of the assets concerned and asset loading is not affected by changes in the production process or asset efficiency. The straight-line depreciation method is a method of depreciation of fixed assets that provides the same benefits for each period during the period. the useful life of the assets concerned and asset loading is not affected by changes in the production process or asset efficiency. Therefore, the linear depreciation method is simple and accurate, does not require large recalculations of amounts, it is usually used for large objects such as buildings, structures, livestock, etc. Accounting depreciation measured by the straight-line method is set equal to a replacement, possibly with a correction for changes in prices [8]. Using the straight-line method, the amount of expense depreciation during the period can be calculated as follows:

a) Calculating Depreciation

$$\text{Expense Depreciation Expense} = \frac{\text{Cost-Residual Value}}{\text{Benefit Period}}$$

b) Depreciation Rate

$$\text{Depreciation Rate} = \frac{(100\%)}{\text{Benefit Life}}$$

2) Double-declining Balance Depreciation Method

The depreciation method uses the multiple declining balance method, where the periodic depreciation expense is calculated by multiplying a percentage rate to the asset book value, the depreciation rate is generally used twice the straight-line depreciation rate. According to the accounting policy of the company double-declining balance method is used in tax accounting and the annuity-based depreciation method in management accounting. To simplify, let us assume that the expected useful life is equal to the useful life for all types of accounting [9].

So it is called the double-declining balance method. The formula is:

$$\text{Depreciation Rate} = 2 \times \frac{100\%}{\text{Straight-Line Depreciation Rate}}$$

3. RESULTS AND DISCUSSION

The comparison of the amount of operating profit obtained by calculating using the straight-line depreciation method and the double-declining depreciation method are as follows:

Table 1. Comparison of Operating Income
(In Millions of Rupiah)

No	Year	Straight Line Method		Double-Declining Balance Method	
		Cost Depreciation	Operating Profit	Cost Depreciation	Operating Profit
1	2014	Rp 940,360	Rp 30 603. 640	Rp 1,880,720	Rp 28,366,087
2	2015	Rp 940,360	Rp 32,554,640	Rp 1,730,262	Rp 30,317,087
3	2016	Rp 940,360	Rp 55,498,640	Rp 1,591,841	Rp 53,711,087
4	2017	Rp 940,360	Rp 38,066,640	Rp 1,464,494	Rp 35,829,087
5	2018	Rp 940,360	Rp 52,588,640	Rp 1,347,335	Rp 50,351,087
Total		Rp 4,701,800	Rp 209,312,200	Rp 8,014,652	Rp 198,574,435

Source: Processed Data 2014-2018

The comparable operating profit in table 1, shows that the company has increased from 2014 In 2016, both from the straight-line depreciation method and the double-declining balance depreciation method, however, in 2017 the profit decreased by Rp. 35,829,087 then in 2018 the company again recorded an increase in profit of Rp. 50,351,087.

Based on the explanation in table 4.6, it can be seen that the comparison chart of operating income and the depreciation method is as follows:



Figure 1. Comparison of Operating Profits and Depreciation Method

Figure 1 on the comparison chart of operating income and the depreciation method at PT Akasha Wira International Tbk, shows that the straight-line depreciation method during 2014-2018 has the same amount of depreciation expense and the value of operating profit has changed every year. Meanwhile, the double-declining balance method experienced changes in depreciation costs and operating profits each year during 2014-2018.

The difference in the comparison of depreciation costs according to PT. Akasha Wira International Tbk can be seen in the following table:

Table 2 Difference in Operating Profit
(In million rupiah)

No	Year	Depreciation Method		Difference
		Straight-line	Balance Decreased Double	
1	2014	Rp 30,603,640	Rp 28,366,087	Rp 2,237,553
2	2015	Rp 32,554,640	Rp 30,317,087	Rp 2,237,553
3	2016	Rp 55,498,640	Rp 53,711,087	Rp 1,787,553
4	2017	Rp 38,066,640	Rp 35,829,087	Rp 2,237,553
5	2018	Rp 52,588,640	Rp 50,351,087	Rp 2,237,553

Source: Result Data Processed 2014-2018

The difference in operating profit in table 2 above shows the difference in operating profit of PT Akasha Wira International Tbk using the straight-line depreciation method with the multiple declining balance depreciation method. Where the difference between the straight-line method and the double-declining balance method, in 2014, 2015, 2017, and 2018 was IDR 2,237,553, while in 2016 it was IDR 1,787,553.

The results of the discussion in this study indicate the differences between the two depreciation methods used by several companies in Indonesia. One of the companies that the authors adopted in this study, namely PT. Akasha Wira International Tbk, which uses the straight-line depreciation method as the depreciation

method for the company's fixed assets. The depreciation method of fixed assets itself has a very indirect effect on company profits, this is due to differences in the determination of the acquisition price or cost of tangible fixed assets as the basis for calculating the depreciation applied by the company by the results of the analysis that has been done before on the depreciation method of assets remain tangible. The profit earned by the company apart from operational activities is also obtained from the sale of tangible fixed assets.

The amount of depreciation expense calculated using the double-declining balance depreciation method is greater than using the straight-line depreciation method so that the straight-line depreciation method is more profitable than the double-declining balance method. As for the use of the double-declining balance depreciation method, it is necessary to have a large number of calculation variables that must be involved in the company's operational activities so that accuracy is needed in calculating the estimated operating costs in these fixed assets, in this case, the type of fixed assets of the building or building is more appropriate using the straight-line method of calculation compared to other types of fixed assets. This is because the straight-line method only calculates the allocation of the function and the time to use the asset as its basis, while the double-declining balance method is to calculate the percentage value in the initial book of product purchases for a certain period.

Here is a graph comparing the difference in depreciation of fixed assets between the method of straight-line depreciation method depreciation double-declining balance and operating income of the company, according to the results of the analysis has been done:

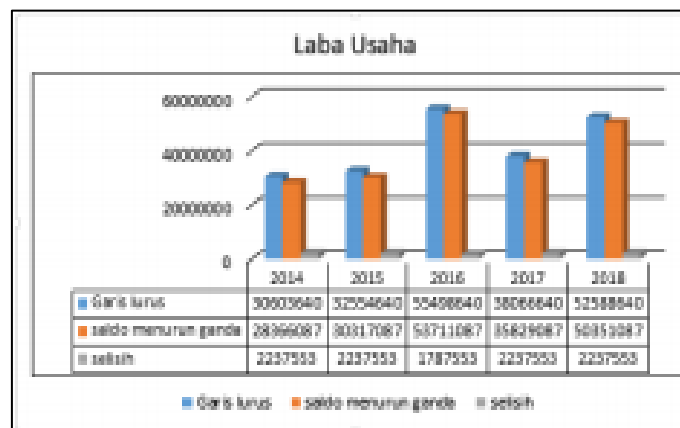


Figure 2 Graphics Comparison Difference Depreciation of Fixed Assets and Operating Income

Based on the explanation graphic image 2, then It can be seen that there is a depreciation expense for fixed assets between two different methods, in 2014-2015 it had a difference of Rp. 2,237,553 but in 2016 the difference in value decreased by Rp. 1,787,553 and in 2017-2018 there was an increase in the difference in value back to Rp. 2,237,553. The decrease in the value of the difference in 2016 was due to the increase in the company's operating profit due to a significant increase in the components of the financial statements in each of its items, resulting in the value of the difference in 2016 being smaller than in other years. This comparison is carried out to determine the magnitude of the impact of using different fixed assets depreciation methods on the operating income obtained by the company each year for 5 years, namely in 2014-2018.

The size of the results obtained from depreciation costs will certainly greatly affect the company's operating profit. The greater the company's depreciation expense, the smaller the profit the company will get. Therefore, the depreciation method applied by the company has an influence on the amount of company profit during the useful life of the asset [10].

4. CONCLUSION

Based on the results of the discussion on the research that has been conducted, it can be concluded that the amount of depreciation expense for fixed assets on the type of fixed assets of buildings or buildings owned by PT Akasha Wira International Tbk has an impact on the amount of operating profit that the company receives. The calculation of company profit using the straight-line depreciation method from 2014-2018 amounted to Rp. 209,312,200. While the calculation of company profit using the double-declining balance method is Rp. 198,574,435. So it can be seen that the operating profit reported by PT Akasha Wira International Tbk using the straight-line depreciation method has higher results compared to the double-declining balance depreciation method.

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REFERENCES

- [1] A. S. Manikas, P. C. Patel, and P. Oghazi, "Dynamic capital asset accumulation and value of intangible assets: An operations management perspective," *J. Bus. Res.*, vol. 103, no. June, pp. 119–129, 2019, doi: 10.1016/j.jbusres.2019.06.014.
- [2] R. Wang, Z. Qi, and Y. Shu, "Multiple relationships between fixed-asset investment and industrial structure evolution in China—Based on Directed Acyclic Graph (DAG) analysis and VAR model," *Struct. Chang. Econ. Dyn.*, vol. 55, pp. 222–231, 2020, doi: 10.1016/j.strueco.2020.09.001.
- [3] X. Xie and W. Zhang, "Can information confusion caused by the financing model of new economy companies be eliminated?," *China J. Account. Res.*, vol. 14, no. 1, pp. 1–23, 2021, doi: 10.1016/j.cjar.2020.11.002.
- [4] P. K. Ghosh, R. K. Bairagi, and A. Mondal, "Adoption of principle-based IFRS and intercompany comparability of operating performance," *Asian J. Account. Res.*, vol. 5, no. 2, pp. 341–352, 2020, doi: 10.1108/ajar-03-2020-0015.
- [5] C. Pagliacci, "Financial constraints and inflation in Latin America: The impacts of bond financing and depreciations on supply inflation," *Econ. Anal. Policy*, vol. 68, pp. 379–397, 2020, doi: 10.1016/j.eap.2020.10.006.
- [6] Y. Choi and S. Hong, "Qualitative and quantitative analysis of patent data in nanomedicine for bridging the gap between research activities and practical applications," *World Pat. Inf.*, vol. 60, no. August 2019, p. 101943, 2020, doi: 10.1016/j.wpi.2019.101943.
- [7] F. Havaei, O. L. O. Astivia, and M. MacPhee, "The impact of workplace violence on medical-surgical nurses' health outcome: A moderated mediation model of work environment conditions and burnout using secondary data," *Int. J. Nurs. Stud.*, vol. 109, 2020, doi: 10.1016/j.ijnurstu.2020.103666.
- [8] H. Hajiyev, "Accounting and tax accounting for the accrual of depreciation of fixed assets and ways of convergence," *SHS Web Conf.*, vol. 92, p. 02020, 2021, doi: 10.1051/shsconf/20219202020.
- [9] I. Nechitaylo and L. Guzikova, "Depreciation in the Context of Pricing in Digital Economy," pp. 1–8, 2020, doi: 10.1145/3444465.3444500.
- [10] C. J. Napier and E. Giovannoni, "Accounting for heritage assets: Thomas Holloway's picture collection, 1881–2019," *Br. Account. Rev.*, vol. 53, no. 2, p. 100944, 2021, doi: 10.1016/j.bar.2020.100944.

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