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Interest Comparison on Paylater Schemes: Case Study on E-Commerce Shopee and Tokopedia

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Abstract

In recent years, paylater services in e-commerce, such as Shopee and Tokopedia, have experienced rapid growth by offering consumers the convenience of flexible shopping without paying in advance. This study aims to analyze the comparison of simple and compound interest models applied in the paylater schemes of the two platforms, with a focus on their impact on total payments and users' financial decisions. Primary data is obtained from the fee structure and interest rates applied by Shopee and Tokopedia, while secondary data is taken from related literature. The study used a quantitative approach with a case study method, involving payment simulations based on various nominal transaction scenarios (IDR 500,000, IDR 1,000,000, IDR 5,000,000) and tenors (3, 6, 12 months) calculated using Microsoft Excel. The results of the study show that Tokopedia offers a more economical fee structure, especially for large amounts and long tenors, with an interest of 2.75% per month and a fixed handling fee of IDR 5,000. In contrast, Shopee, although applying an interest of 2.95% per month, has a higher total payment due to a percentage-based handling fee of 1%. This study provides recommendations to users to choose a platform according to their financial needs. Tokopedia is recommended for large transactions and long tenors, while Shopee is more suitable for small transactions with short tenors. These results are also expected to be a reference for service providers to adjust their policies to improve competitiveness and user satisfaction. This study provides in-depth insight into the influence of interest models in paylater schemes and helps users make wiser financial decisions.

Keywords: Simple interest, compound interest, paylater, Shopee, Tokopedia

1. Introduction

In recent years, the use of paylater services in e-commerce has experienced significant growth, especially on platforms such as Shopee and Tokopedia. This service provides convenience for consumers to shop without having to pay directly, but with more flexible payment options in the future (Maurizka, 2021). Understanding the interest model applied in the paylater scheme is important, because it can affect the user's financial decisions. There are two commonly applied interest models, namely simple interest and compound interest. Each model has a different calculation method and impact on the total payment. This research is relevant for users who want to understand the costs associated with using paylater services and for service providers who need to consider how the interest structure can affect the appeal of their products.

Interest has two main models, namely simple interest and compound interest. These two models have fundamental differences in how they are calculated. Simple interest is calculated only based on the principal, while compound interest is calculated not only from the principal, but also from previously unpaid interest (Wachter, 2006). The application of these two interest models can be found in the paylater scheme on e-commerce platforms such as Shopee and Tokopedia.

On the Shopee platform, there is a handling fee of 1% per transaction and interest of 3% of the total payment. Meanwhile, Tokopedia may apply a different fee structure, which users need to pay attention to. The difference between these interest models has a significant impact on the total payment that users must make. Over a period of time, compound interest tends to produce a larger total payment than simple interest. Therefore, understanding the mechanism of calculating this interest is very important so that users can make wiser financial decisions.

This study aims to analyze the comparison between simple interest and compound interest models. By understanding both models, users are expected to be able to make wiser financial decisions. Users can recognize the interest patterns applied by platforms such as Shopee and Tokopedia, so they can get a clearer picture of the costs they may incur. In addition, this study also has the potential to provide recommendations to users regarding more profitable interest schemes. With the information provided, users can choose the paylater service that best suits their needs and financial capabilities. This study is expected to provide in-depth insight into the influence of interest models in paylater schemes, while also helping users make wiser decisions in transacting on e-commerce platforms.

2. Literature Review

2.1 Simple Interest Model

Simple interest is a method of calculating interest in which interest is calculated only on the original principal over a period of time. Simple interest formula:

$$I = P \times r \times t \tag{1}$$

Where :
I : Total interest
P:Principal of loan
r :Interest rate per period
t : Time (in the period corresponding to r)

Simple interest has several advantages, including its simple and easy-to-understand calculation, making it suitable for short-term loans. In addition, simple interest does not increase interest expense over time because interest is calculated only on the initial principal. However, there are also some disadvantages to simple interest. This model does not reflect the accumulation of interest over the long term, making it less ideal for investments or loans with more complex returns.

2.2 Compound Interest Model

Compound interest is a method of calculating interest where interest is calculated based on the initial principal and the accumulated unpaid interest from previous periods. Compound interest formula:

$$A = P \times (1 + r)^t \tag{2}$$

Where :
A : Final amount (principal + interest)
P : Initial point
r : Interest rate per period
t : Number of periods

Compound interest reflects the exponential growth of interest, making it suitable for long-term investments or loans. In addition, compound interest provides a more realistic future value in the accumulation of funds. However, compound interest has a disadvantage, namely a more complex calculation than simple interest. In addition, compound interest can significantly increase the payment burden if the loan tenor is long or the interest rate is high.

2.1. Paylater Scheme

Paylater is a credit-based payment service that allows users to purchase goods or services first and pay for them later, either through full payment or installments. This concept is similar to a credit card, but is fully operated digitally and integrated directly with e-commerce platforms. Here are the main characteristics of the paylater service:

- Fast application process
  Users only need to complete personal data, upload their ID card, and go through a simple verification process to activate this feature. This process is much faster than applying for a credit card at a bank.
- Have a credit limit
  Each user is given a credit limit calculated based on the service provider's analysis, taking into account the user's financial history, income, and spending patterns. This limit is used for transactions as needed.
- Installment tenor options
  Users can choose to pay the bill within 1 month (buy now, pay later) or pay in installments with a certain tenor, such as 3, 6, or 12 months.
- Interest and administration fees
  The interest charged depends on the simple or compound interest model as per the service provider's policy. In addition, users may be charged additional fees, such as administration fees or late payment fines.
- Digital security
  Paylater services use encryption technology to protect user data. In addition, this service is regulated by official financial institutions, such as the Financial Services Authority (OJK) in Indonesia, to ensure compliance with regulations.

With these characteristics, PayLater offers a practical and flexible payment solution for users, although it still requires wise financial management.

Paylater on e-commerce platforms offers various benefits for users, including ease of transactions, which makes it easier for users to purchase goods or services even though they do not have the funds available directly. In addition, paylater also offers payment flexibility, where users can choose the payment method that best suits their financial condition, be it full payment at a later date or installments. Another benefit is increasing purchasing power, which helps users access high-value goods or services without having to pay directly.

However, the use of paylater also has challenges that must be considered. There are additional interest and fees that, if not used wisely, can lead to large debts due to accumulated interest and late fees. In addition, there is a risk of bad debt if the user is unable to pay the bill on time, which has the potential to affect the user's credit score and their ability to access similar services in the future.

This paylater scheme is applied to various e-commerce platforms, including Shopee and Tokopedia. Shopee Paylater (SPayLater) is a credit loan service provided by Shopee for its platform users. This service allows users to purchase goods or services with an installment scheme or payment at a later date. Shopee offers installment terms of up to 12 months, with submission, use, and payment integrated directly into the Shopee application. In addition, Shopee also offers special promos such as 0% interest for a certain period to attract users.

Meanwhile, Tokopedia Paylater is a credit-based service that allows users to purchase products or services with the option of paying later or in installments over a certain period of time. Tokopedia collaborates with several fintech partners such as Kredivo, Indodana, and GoPayLater to provide credit facilities to users. This service emphasizes the flexibility of tenors and credit limits that vary based on the policies of each partner. Users can choose the partner that best suits their preferences to maximize the benefits of the service.

3. Methodology

This study adopts a quantitative approach with a case study method that focuses on Shopee and Tokopedia. The research process includes several steps, namely data collection, payment simulation, comparative analysis of results, and data validation. The primary data used includes information related to the cost structure and interest rates of both platforms, while secondary data is taken from literature discussing simple and compound interest models. Data processing is carried out using Microsoft Excel to simulate payments. The simulation includes various nominal transaction scenarios (IDR 500,000, IDR 1,000,000, IDR 5,000,000) and tenors (3, 6, 12 months) to compare the two interest models. The results of this simulation are then validated by comparing them to previous studies and official reports from each platform.

4. Results and Discussion

Table 1: Payment Simulation

Platform	Nominal (IDR)	Tenor (Month)	Interest per Month (%)	Handling Fee (IDR)	Total Payment (IDR)
Shopee	500000	3	2.95%	5000	IDR 549,250.00
	1000000	6	2.95%	10000	IDR 1,187,000.00
	5000000	12	2.95%	50000	IDR 6,820,000.00
Tokopedia	500000	3	2.75%	5000	IDR 546,250.00
	1000000	6	2.75%	5000	IDR 1,170,000.00
	5000000	12	2.75%	5000	IDR 6,655,000.00

In the simple interest method, the tenor (in months) is used as one of the components to determine the total interest to be paid during the payment period. The formula used is:

$$Total\ Payment\ =\ Nominal\ (Nominal\ \times\ Interest\ per\ Month\ \times\ Tenor)\ +\ Handling\ Fee$$

As an illustration, for a purchase of IDR 500,000 with a 3-month tenor, the total payment on Shopee (using simple interest) reaches IDR 546,250, while on Tokopedia (using compound interest) it is only IDR 519,193. This difference becomes more striking on longer tenors, such as 12 months. For a purchase of IDR 5,000,000, the total payment on Shopee is IDR 5,845,325, while on Tokopedia it increases to IDR 5,904,527.

5. Conclusion

Based on the results of the payment simulation, Tokopedia is overall more profitable than Shopee, both for small and large amounts. This is due to lower interest (2.75%) and a fixed handling fee of IDR 5,000. As an illustration:

- For a nominal of IDR 500,000 with a tenor of 3 months, the total payment on Tokopedia is only IDR 546,250, lower than Shopee which reaches IDR 549,250.

- For a nominal of IDR 5,000,000 with a tenor of 12 months, the total payment on Tokopedia is much more economical, which is IDR 6,655,000, compared to Shopee which reaches IDR 6,820,000.

These results show that Tokopedia's cost structure is more efficient, especially for large-value transactions with long tenors. On the other hand, although Shopee applies an interest of 2.95%, the total payment tends to be higher due to a percentage-based handling fee of 1% of the transaction amount.

Based on these findings, users are advised to choose a platform according to their needs and transaction patterns. Tokopedia is more suitable for large transactions with long tenors, as it offers lower interest rates and fixed handling fees. However, Shopee can be an attractive option for small transactions with short tenors, although users still need to consider additional percentage-based handling fees.

In addition, service providers can also review their policies. Shopee is advised to reduce handling fees on large transactions to be more competitive, while Tokopedia can consider additional incentives to attract users with short tenors.

References

Julita, E. (2022). The Influence of Using Shopee Paylater on the Consumptive Behavior of Muslim Students (Study on FEBI Students of UIN Fatmawati Sukarno Bengkulu). 15-19.

Laurenza, O. (2023, 12 13). PayLater & Tokopedia Installments: Economical Shopping Solutions! Retrieved from Tokopedia: https://www.tokopedia.com/blog/paylater-tokopedia-fin/?utm_source=google&utm_medium=organic

Maurizka, S., Handayani, P. W., & Pinem, A. A. (2021, October). The acceptance of pay later payment usage on business-to-consumer online marketplace in Indonesia. In *2021 International Conference on Informatics, Multimedia, Cyber and Information System (ICIMCIS* (pp. 187-192). IEEE.

RAMADHAN, AM (2024). THE EFFECT OF LITERACY AND PROMOTION ON THE USE OF SHOPEE PAYLATER (A STUDY OF POSTGRADUATE STUDENTS OF IAIN PAREPARE). 20-24.

Saretta, IR (2023, 01 06). hopee PayLater, Shop Now Pay Next Month. Retrieved from cermati.com: https://www.cermati.com/artikel/shopee-paylater-belanja-sekarang-bayar-bulan-depan

shopee.co.id. (2024, October 24). Retrieved from help.shopee.co.id: https://help.shopee.co.id/portal/4/article/71956-[%3Cem%3ESPayLater%3C%2Fem%3E-Limit-amp%3B-Aktivasi]-Apa-itu-%3Cem%3ESPayLater%3C%2Fem%3E?previousPage=search%20results%20page

Sinta Rahayu, KA (2024). Analysis of the Use of Shoppe Paylater in an Islamic Economic Perspective: Case Study of Employees of PT. Shoetown Kasokandel Majalengka, 32-33.

The Latest GoPay Later is Ready to Help You Fulfill Various Needs on the Gojek Application!(2024, 12 01). Retrieved from Gopay: https://gopay.co.id/blog/gopay-later-gojek

Wachter, J. A. (2006). A consumption-based model of the term structure of interest rates. *Journal of Financial economics*, *79*(2), 365-399.