THE EFFECT OF IMPLEMENTING ENTERPRISE RESOURCE PLANNING SYSTEMS ON PROFITABILITY RATIOS, ACTIVITY RATIOS, AND SOLVENCY RATIOS OF COMPANIES

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Abstract

Enterprise Resource Planning (ERP) is an integrated information system designed to support the management of enterprise resources such as funds, people, and materials. Although ERP is expected to improve operational performance and efficiency, its implementation often faces significant challenges related to process integration complexity, time, and cost. This study aims to examine the effect of ERP implementation on firm performance with a focus on profitability, activity, and solvency ratios after three and five years of implementation. The quantitative method was used with a sample of 29 Indonesian companies listed on the Indonesia Stock Exchange and have implemented ERP. Data was analyzed using logarithmic regression through SPSS 23.0 to compare financial performance before and after ERP implementation. The results showed that in general ERP implementation did not have a significant effect on profitability, activity, and solvency ratios in the short (3 years) and medium (5 years) terms. However, there is a significant effect on the activity ratio after five years, namely a decrease in asset turnover and an increase in labor productivity. This finding indicates that the benefits of ERP are more visible in internal efficiency and productivity improvements rather than direct changes in financial performance. In conclusion, ERP provides long-term benefits especially in operational and decision-making aspects, although the financial impact is not always immediately apparent. This study suggests the need for long-term evaluation and adjustment of business processes to maximize ERP benefits.

Keywords: Enterprise Resource Planning, Profitability Ratios, Activity Ratios, Solvency Ratios, ERP Implementation

INTRODUCTION

Enterprise Resource Planning (ERP) is an integrated information system designed to support the daily operations of companies in the management of various resources such as funds, people, machines, materials, and capacity. ERP integrates various functions such as finance, distribution, manufacturing, and human resources into a single system, thereby accelerating the delivery and improving the accuracy of information needed in managerial decision making (Ullah et al., 2018). Through the adoption of best practices, centralized management, real-time reporting, and process automation, ERP plays an important role in creating efficiency, lowering costs, and increasing return on investment and competitive advantage (Alomari et al., 2018). ERP architecture is also characterized by four main characteristics, namely integration, standardization, centralization, and automation of daily work (Barna et al., 2021).

Although ERP systems are expected to improve organizational performance and operational efficiency, their implementation often faces serious challenges due to the complexity of process integration, especially related to time and high costs. Successful ERP implementation requires careful planning, training, system integration, identification of key activities at each stage, proper resource allocation, and thorough evaluation of project performance and success (Jagoda & Samaranayake, 2017). In addition, ERP demands re-engineering of business processes to fit the system features, which is often complicated due to rapid changes and system uncertainty. ERP itself is a solution with complex code and standardized standards, while companies usually already have the best internal processes that need to be adjusted in order to benefit from the ERP system. The high failure rate of ERP projects shows the huge risks that organizations of all sizes face, with only about 30% of implementations claimed to be successful (Jagoda & Samaranayake, 2017; Xu et al., 2011), and the other 70-85% failing due to cost overruns, time delays, or incompatibility with the company's business processes (Ravasan et al., 2019; Sudhaman & Thangavel, 2015).

Several cases of ERP implementation failure have been recorded in large companies, such as Nike and Levi Strauss. Nike lost about $48 million of projected profits in 2001 due to system and project management failures after ERP implementation, although the company then spent more than $500 million until 2005 before finally reaping the benefits of the system. Levi Strauss also experienced a 98% drop in net income in the second quarter of 2008 due to ERP system failures that disrupted the supply chain and caused a loss of approximately $47 million. According to Oracle NetSuite's ERP Implementation Statistic 2024, as many as 50% of ERP implementations fail on the first attempt, with costs ballooning to three to four times the original budget and implementation duration that is 30% longer than expected. In addition, about 51% of companies experience operational disruptions after ERP implementation, caused by challenges such as poor project management, weak software integration, low data quality, and inadequate business process testing and re-engineering. These failures generally stem from vendor and software selection mismatches, as well as unclear objectives of the ERP system implementation itself.

Although ERP offers many benefits, its impact on business performance is still debatable, as many companies have only partially implemented it and have not maximized its potential. The large initial investment and high implementation risk are also concerns, although the impact of ERP is highly dependent on the term of use, both short and long term. Research on the challenges of ERP implementation is plentiful, but studies assessing its

benefits on organizational performance are limited as it takes at least five years to see tangible results (Serhan & El Hajj, 2019). ERP does not always show immediate results, so measuring success needs to be done longitudinally to assess its effect on revenue and costs (Galy & Sauceda, 2014). The difference in time scale in measuring ERP impact is a major obstacle in reconciling results between studies, where ERP success can be assessed at pre-implementation, implementation, and post-implementation stages (Nour, 2023).

Based on the background that shows the existence of various factors, risks, and conditions that affect the success of ERP implementation and the length of time it takes to see its impact, this research is relevant to be carried out in measuring the effect of ERP implementation on company financial performance ratios. This study aims to test and analyze whether ERP implementation affects company performance, especially in terms of profitability ratios, activity ratios, and solvency ratios, by comparing the conditions of companies in Indonesia before and after ERP implementation. This research is useful for companies, especially small and medium-sized companies, as a reference in understanding the direct impact of ERP implementation on the company's financial performance. In addition, for academics, this research is a means to apply the knowledge gained during lectures, especially in the field of accounting information systems related to ERP implementation.

REVIEW OF LITERATURE

Company Performance Measurement

Organizational performance measurement serves as a tool to assess the effectiveness of programs and the use of resources in achieving goals. Information from these measurements assists management in making decisions and allocating resources more efficiently to stay focused on the key success factors of the program. In addition, performance measurement also supports budget planning by showing how taxes and other revenues are optimally used (Wild et al., 2005).

Financial performance assessment is conducted to evaluate the efficiency of each part or process within the company, assess individual work results, and determine profit potential. Financial ratio analysis is a commonly used approach to assess performance, both for short-term and long-term decisions, as well as to improve the efficiency and operations of the company. Financial ratios are usually grouped into four main categories: overall financial performance, profitability, investment, and financial condition (Munawir, 2014).

Overall, organizational performance can be seen from two dimensions, namely operational performance and strategic performance. Operational performance emphasizes production efficiency based on inputs and outputs, while strategic performance reflects the company's ability to compete, earn revenue, and reduce costs through market advantage. Both dimensions are influenced by the company's internal actions as well as responses to competitors in the market.

Business Value of ERP

Research on the effect of information technology investments on organizational performance has been growing since the 1980s with mixed results, but in the late 1990s the research focus began to turn towards the business value of Enterprise Resource Planning (ERP) systems. ERP integrates business functions within an organization through a single

database that accelerates information flow and improves operational efficiency and liquidity. ERP systems provide various benefits such as process standardization, unified system integration, and improved key performance indicators (Tian & Xu, 2015), while eliminating silo effects and integrating cross-functional processes in a centralized database. In addition to operational efficiency, ERP is also able to increase productivity and become an important tool in managing data flows and business transactions to achieve competitive advantage (Acar & al., 2017; Kiran & Reddy, 2019).

The development of ERP systems continued with the addition of new features such as customer relationship management (CRM) and supplier relationship management (SRM) known as extended ERP in the 2000s. Demand for ERP systems is not expected to decline, with the global ERP market projected to reach $49.5 billion by 2024 and continued growth. Organizations are implementing ERP as a way to streamline business operations, improve performance, and generate value through the integration of best work processes and real-time reporting capabilities that support competitiveness in the market. In addition to tangible benefits such as cost reduction, productivity improvement, and cycle time reduction, ERP also provides intangible benefits such as standardization, transparency, and improved decision-making (Wanchai, 2019).

Data from ERP Implementation Statistic 2024 by ORACLE NetSuite shows the rapid growth of the global ERP software market, reaching $48 billion in 2022 and expected to increase to $96 billion by 2032. The manufacturing, information technology, and healthcare sectors are the major contributors to this market growth. The ERP market for small and medium-sized enterprises is expected to grow at an annual rate of 7% through 2025, while large enterprises account for 39% of the market share. The main reasons organizations implement ERP are to replace legacy systems, consolidate disparate applications, and update technology to more modern versions, with the global ERP market projected to reach $78.4 billion by 2026 (Oracle NetSuite, 2024).

The Impact of ERP Implementation

Various international studies have shown that information technology investments, particularly the implementation of Enterprise Resource Planning (ERP) systems, have diverse effects on company performance, ranging from increased productivity and decision-making to high implementation failure. ERP is designed as a best practice solution that integrates business functions through specific modules and industry-standard processes, but successful implementation is highly dependent on the adjustment of the company's business processes to the ERP system itself (Menon, 2019). The high ERP failure rate, estimated at 75%, is partly due to misconceptions about these systems and lack of top management support as well as issues such as data quality and change management (Jordan, 2018).

Although many studies investigate the direct relationship between information technology capabilities and firm performance, the results are still inconsistent. Some studies show a positive effect of ERP on the financial and non-financial performance of companies, including improved liquidity ratios, solvency, and key performance indicators such as reporting processes and meeting customer needs (Barna et al., 2021). However, other studies have shown no significant effect of ERP on financial performance such as profitability or ROI, both in South Korea and China (Oh et al., 2016). In Indonesia, studies show an increase in productivity and inventory management after ERP is implemented, but do not prove a significant increase in profitability.

Another study in Romania showed that although ERP implementation did not have a significant impact on overall financial performance, there was a positive impact on increasing sales turnover (Ungureanu, 2022). This indicates that ERP benefits operational and sales aspects rather than directly increasing profitability in the short term. Overall, the success of ERP implementation depends on various organizational and technical factors, and requires time and adjustment for the long-term benefits to be optimized.

RESEARCH METHOD

This research method uses a quantitative approach with a population of all companies in Indonesia that have implemented an ERP system. The research sample was selected through purposive sampling method, namely companies listed on the Indonesia Stock Exchange (IDX), have implemented ERP, have data on the completion time of ERP implementation between 2010 and 2018, and have complete financial reports for five years before and five years after ERP implementation. The data used is secondary data obtained from news portals, financial reports, previous research, ERP consultants, company official websites, and IDX official websites.

The variables in this study consist of productivity ratio numerator as the dependent variable, as well as productivity ratio denominator, after 3 years dummy, and after 5 years dummy as independent variables. The analysis model uses a logarithmic approach based on the equation log(A/B) = log(A) - log(B), so it can be estimated as log(A) = intercept + a1 log(B). The analysis was conducted with the SPSS 23.0 for Windows program, using logarithmic regression without requiring classical assumption tests, to compare the company's financial performance before and after ERP implementation.

Financial performance ratios are analyzed through the numerator and denominator of ratios such as: cost of goods sold (cogs), inventory, pretax income, equity, sales, assets, account receivables, debt, and number of employees. The use of dummy variables for three years and five years post ERP implementation allows the analysis of the short-term and long-term effects of ERP on firm performance. This model follows the approach used by (Hitt & Zhou, 2000) in analyzing the impact of information systems on business performance. So, the regression analysis is:

Log_productivity ratio numerator = α + log_productivity ratio denominator + after3 dummies + after5 dummies + ϵ

Description:

1. Productivity ratio numerator: Numerator in the fraction of the ratio company performance measurement
2. α: Constant
3. Productivity ratio denominator: Denominator in fractions of the ratio of the company performance measurement
4. After 3 dummies: After 3 implementation years
5. After 5 dummies: After 5 implementation years
6. ϵ: Error.

RESULTS AND DISCUSSION

Regression Analysis

Hypothesis testing in Table 1 uses log regression, so it does not use the three classical assumptions. In estimating the regression, there is a numerator of the productivity ratio as the dependent variable and a control for its denominator on the opposite side.

Table 1.
Regression Analysis Results Regression Analysis Results

Variabel Dependen	Pretax Income	Cogs	Pretax Income	Pretax Income	Sales	Sales	Debt	Sales
Interpretasi (Rasio)	**ROA**	**invturn**	**ROE**	**Profit Margin**	**Asset Turn**	**acc recv turn**	**debt to equity**	**labor productivity**
Variable Independent								
after3	-4.051	0.013	-3.921	-4.201	0.081	0.070	0.070	-0.121
Signifikansi	0.091	0.937	0.1	0.08	0.3	0.639	0.647	0.467
Nilai t	-1.696	0.08	-1.648	-1.758	1.037	0.470	0.459	-0.728
after5	2.048	0.051	1.716	2.403	-0.177	-0.022	-0.083	0.368
Signifikansi	0.363	0.729	0.445	0.282	0.017*	0.875	0.562	0.017*
Nilai t	0.912	0.347	0.764	1.078	-2.392	-0.157	-0.580	2.391
asset	1.164				0.902			
Signifikansi	0.047*				0.000**			
Nilai t	1.994				47.004			
inventory		0.682						
Signifikansi		0.000**						
Nilai t		19.155						
equity			1.419				0.873	
Signifikansi			0.012*				0.000**	
Nilai t			2.525				24.234	
sales				1.047				
Signifikansi				0.088				
Nilai t				1.712				
Piutang						0.830		
Signifikansi						0.000**		
Nilai t						20.175		
employee								0.857
Signifikansi								0.000**
Nilai t								16.508
F	2.470	128.070	3.280	2.117	756.604	141.226	204.989	95.297
Signifikansi	0.062	0.000**	0.021*	0.098	0.000**	0.000**	0.000**	0.000**
Adj r2	0.015	0.576	0.024	0.012	0.890	0.600	0.685	0.502
n	282	282	282	282	282	282	282	282

*Significant at the 0.05 level; **significant at the 0.01 level :

1. Analysis of the Effect of ERP Implementation on Profitability

The profitability ratio measures the company's ability to generate profits compared to revenue, assets, or equity. The following are the results of the analysis of the Effect of ERP Implementation on Profitability:

a. ROA Regression Analysis

Table 1. explains Adjusted R Square has a value of 0.015 or 1.5%. The F test has a value of 2.470 with a significance of 0.062. The asset variable has a coefficient of 1.164 with a t-value of 1.994 and a significance level of 0.047. These results indicate that the independent variables together can explain the pretaxincome variable by 1.5% while the rest is explained by other factors, and the asset variable has a significant effect on the pretaxincome variable. The influence exerted by ERP implementation is not significant at 3 years after implementation. This is indicated by the significance level of the after3 variable of 0.091 with a t-value of -1.696. The effect provided by ERP implementation is also insignificant after 5 years of implementation as indicated by the significance level of the after5 variable of 0.363 with a t-value of 0.912. From the regression coefficient, the regression equation of the ROA ratio can be formed as follows:

Log_pretaxinco= -11,132(0,506) + 1,164(0,047) log_asset - 4,051(0,091) after3 + 2,048(0,363) after5 + ϵ

b. ROE Regression Analysis

Table 1 explains Adjusted R Square has a value of 0.024 or 2.4%. The F test has a value of 3.280 with a significance of 0.021. The equity variable has a coefficient of 1.419 with a t-value of 2.525 and a significance level of 0.012. These results indicate that the independent variables together can explain the COGS variable by 2.4% while the rest is explained by other factors, and the equity variable has a significant effect on the pretaxincome variable. The effect provided by ERP implementation is not significant at 3 years after implementation. This is indicated by the significance level of the after3 variable of 0.100 with a t-value of -1.648. The effect provided by ERP implementation is also insignificant after 5 years of implementation as indicated by the significance level of the after5 variable of 0.445 with a t-value of 0.764. From the regression coefficient, the regression equation of the ROE ratio can be formed as follows:

Log_ pretaxinco = -17,431(0,268) + 1,419(0,012) log_equity – 3,921(0,100) after3 + 1,716(0,445) after5 + ϵ

c. Regression Analysis of Profit Margin

Table 1 explains that Adjusted R Square has a value of 0.012 or 1.2%. The F test has a value of 2.117 with a significance of 0.098. The sales variable has a coefficient of 1.047 with a t-value of 1.712 and a significance level of 0.088. These results indicate that the independent variables together can explain the pretax income variable by 1.2% while the rest is explained by other factors, and the sales variable does not have a significant effect on the pretaxincome variable. The effect provided by ERP implementation is not significant at 3 years after implementation. This is indicated by the significance level of the after3 variable of 0.080 with a t-value of -1.758. The effect provided by ERP implementation is also insignificant after 5 years of implementation as indicated by the significance level of the after5 variable of 0.282 with a t-value of 1.078. From the regression coefficient, the regression equation of the profit margin ratio can be formed as follows:

Log_ pretaxinco = -7,869(0,655) + 1,047(0,088) log_sales – 4,201(0,080) after3 + 2,403(0,282) after5 + ϵ

2. Analysis of the Effect of ERP Implementation on Activity

The activity ratio measures a company's efficiency in using resources to generate sales. A high activity ratio indicates that the company is able to utilize its assets effectively to increase sales, which in turn can contribute to profitability. The following are the results of the analysis of the Effect of ERP Implementation on Activity:

a. Inventory Turnover Regression Analysis

Table 1. explains that Adjusted R Square has a value of 0.576 or 57.6%. The F test has a value of 128.070 with a significance of 0.000. The inventory variable has a coefficient of 0.682 with a t-value of 19.155 and a significance level of 0.000. These results show that the independent variables together can explain the COGS variable by 57.6% while the rest is explained by other factors, and the inventory variable has a significant effect on the cogs variable. The influence exerted by ERP implementation is not significant either at 3 years after ERP implementation or 5 years after implementation. This is indicated by the significance level of the after3 variable of 0.937 with a t-value of 0.080 and the significance level of the after5 variable of 0.729 with a t-value of 0.347. From the regression coefficient, the regression equation of the Inventory Turnover ratio can be formed as follows:

Log_COGS = 10,273(0,000) + 0,682(0,000) log_inventory + 0,013(0,937) after3 + 0,051(0,729) after5 + ϵ

b. Regression Analysis of Asset Turnover

Table 1 explains Adjusted R Square has a value of 0.890 or 89%. The F test has a value of 756.604 with a significance of 0.000. The asset variable has a coefficient of 0.902 with a t-value of 47.044 and a significance level of 0.000. These results show that the independent variables together can explain the sales variable by 89% while the rest is explained by other factors, and the asset variable has a significant influence on the sales variable. The influence exerted by ERP implementation is not significant when 3 years after ERP implementation. This is indicated by the significance level of the after3 variable of 0.300 with a t-value of 1.037. The effect provided by ERP implementation is significant after 5 years of implementation as indicated by the significance level of the after5 variable of 0.017 with a t-value of -2.392. With a coefficient of -0.177 or about -16.2% ((e-0.177-1)×100%), after 5 years of ERP implementation, the company's asset turnover decreased by an average of 16.2% compared to the period before ERP implementation. From the regression coefficient, the regression equation of the Asset Turnover ratio can be formed as follows:

Log_sales = 2,894(0,000) + 0,902(0,000) log_asset + 0,081(0,300) after3 - 0,177(0,017) after5 + ϵ

c. Regression Analysis of Account Receivable Turnover

Table 1 explains Adjusted R Square has a value of 0.600 or 60%. The F test has a value of 141,226 with a significance of 0.000. The accounts receivable variable has a coefficient of 0.830 with a t-value of 20.175 and a significance level of 0.000. These results indicate that the independent variables together can explain the sales variable by 60% while the rest is explained by other factors, and the accounts receivable variable has a significant effect on the sales variable. The influence exerted by ERP implementation is not significant either at 3 years after ERP implementation or 5 years after implementation. This is indicated by the significance level of the after3 variable

of 0.639 with a t-value of 0.470 and the significance level of the after5 variable of 0.875 with a t-value of -0.157. From the regression coefficient, the regression equation of the Account Receivable Turnover ratio can be formed as follows:

Log_sales = 6,807(0,000) + 0,830(0,000) log_piutang + 0,070(0,639) after3 - 0,022(0,875) after5 + ϵ

d. Regression Analysis of Labor Productivity

Table 1 explains Adjusted R Square has a value of 0.502 or 50.2%. The F test has a value of 95,297 with a significance of 0.000. The employee variable has a coefficient of 0.857 with a t-value of 16.508 and a significance level of 0.000. These results indicate that the independent variables together can explain the sales variable by 50.2% while the rest is explained by other factors, and the employee variable has a significant influence on the sales variable. The influence exerted by ERP implementation is not significant when 3 years after implementation. This is indicated by the significance level of the after3 variable of 0.467 with a t-value of -0.728. Meanwhile, the effect provided by ERP implementation is significant after 5 years of implementation as indicated by the significance level of the after5 variable of 0.017 with a t-value of 2.391. With a coefficient of 0.368 or 44.5% ((e0.368-1)×100%), after 5 years of ERP implementation, the company's labor productivity ratio increased by an average of 44.5% compared to before ERP implementation. From the regression coefficient, the regression equation of the Labor Productivity ratio can be formed as follows:

Log_*sales* = 22.064 (0.000) + 0.857 (0.000) log_employee - 0.121 (0.467) after3 + 0.368 (0.017) after5 + ϵ

3. Analysis of the Effect of ERP Implementation on Solvency

The solvency ratio measures the company's ability to meet its long-term obligations. The following are the results of the analysis of the Effect of ERP Implementation on Solvency:

a. Debt to Equity Regression Analysis

Table 1 explains that Adjusted R Square has a value of 0.685 or 68.5%. The F test has a value of 204.989 with a significance of 0.000. The equity variable has a coefficient of 0.873 with a t-value of 24.234 and a significance level of 0.000. These results indicate that the independent variables together can explain the debt variable by 68.5% while the rest is explained by other factors, and the equity variable has a significant effect on the debt variable. The influence exerted by ERP implementation is not significant either at 3 years after ERP implementation or 5 years after implementation. This is indicated by the significance level of the after3 variable of 0.647 with a t-value of 0.459 and the significance level of the after5 variable of 0.562 with a t-value of -0.580. From the regression coefficient, the regression equation of the Debt to Equity ratio can be formed as follows:

Log_debt = 3.315(0.001) + 0.873(0.000) log_equity + 0.070(0.647) after3 - 0.083(0.562) after5 + ϵ

Discussion

For profitability and solvency ratios, ERP implementation has no significant effect both in 3 years and 5 years after implementation. For several activity ratios measured using inventory turnover and accounts receivable turnover, ERP implementation has also not been able to have a significant effect on these ratios, both in the 3 years and 5 years after

implementation. However, for activity ratios measured using asset turnover and labor productivity ratios, although no significant effect has been seen in the first 3 years after ERP implementation, but after 5 years of implementation a significant effect of ERP implementation was found. From the regression results, it was found that ERP implementation had a different impact on the two activity ratio indicators. In the asset turnover ratio, there was a significant decrease of 16.2% after 5 years of ERP implementation. Conversely, in the labor productivity ratio, there was a significant increase of 44.5% after 5 years of ERP implementation. This shows a decrease in the efficiency of the Company's performance in generating sales from its assets, but on the one hand, it also shows that with the implementation of ERP, there is an increase in organizational efficiency and an increase in employee productivity in the medium term (5 years).

These results are consistent with several studies conducted previously. In accordance with research conducted by (Kristianti & Achjari, 2017) shows that there is no significant difference in ROA and profit margin ratios between before and after ERP implementation, but there is an increase in the labor productivity ratio after ERP implementation. Research conducted by (Ravasan et al., 2019), shows that the effect of ERP implementation on inventory turnover does not show a significant effect. Another study conducted by (Shen, 2008) also shows that there is no significant effect on ROE and account receivable turnover ratios after ERP implementation, while the asset turnover ratio shows a negative effect when compared to before ERP implementation. Research conducted by (Hitt & Zhou, 2000) showed no significant effect of ERP implementation on the debt-to-equity ratio after comparing the 3 years before and after implementation.

Thus, based on the results of the regression analysis above, the hypothesis H1a where there is an increase in the Company's return on assets after 3 years of ERP implementation, H1b where there is an increase in the Company's inventory turnover after 3 years of ERP implementation, H1c where there is an increase in the Company's return on equity after 3 years of ERP implementation, H1d where there is an increase in the Company's profit margin after 3 years of ERP implementation, H1e where there is an increase in the Company's asset turnover after 3 years of ERP implementation, H1f where there is an increase in the Company's account receivable turnover after 3 years of ERP implementation, H1g where there is an increase in the Company's debt to equity after 3 years of ERP implementation, H1h where there is an increase in the Company's labor productivity after 3 years of ERP implementation is rejected.

Likewise for hypothesis H2a where there is an increase in the Company's return on assets after 5 years of ERP implementation, H2b where there is an increase in the Company's inventory turnover after 5 years of ERP implementation, H2c where there is an increase in the Company's return on equity after 5 years of ERP implementation, H2d where there is an increase in the Company's profit margin after 5 years of ERP implementation, H2e where there is an increase in the Company's asset turnover after 5 years of ERP implementation, H2f where there is an increase in the Company's account receivable turnover after 5 years of ERP implementation, H2g where there is an increase in the Company's debt to equity after 5 years of ERP implementation is rejected. However, the hypothesis H2h, where there is an increase in the Company's labor productivity after 5 years of ERP implementation, cannot be rejected.

CONCLUSION

Based on the results of research on 29 companies in Indonesia that have implemented ERP systems and are listed on the Indonesia Stock Exchange, it is found that in general ERP implementation does not have a significant effect on the company's financial performance ratios, especially on profitability, activity, and solvency ratios in the short (3 years) and medium term (5 years) after implementation. However, significant results were found in the activity ratio after five years of implementation, namely a decrease in asset turnover and an increase in labor productivity. These findings indicate that the benefits of ERP are more visible in the form of improved internal organizational efficiency and productivity rather than directly reflected in financial ratios. The implications of these results suggest that ERP provides long-term benefits especially in operational aspects and better decision-making, although its impact on financial performance is not always immediately apparent.

This study has several limitations, including a relatively small sample size, the exclusion of non-financial variables and control variables such as organizational change, and the absence of data on ERP implementation failures that may affect the accuracy of the analysis results. In addition, the limited time coverage of up to five years post-implementation has not been able to fully represent the long-term benefits of ERP. Therefore, it is recommended that future research involve more samples and include non-financial variables and other controlling variables. In addition, it is necessary to compare ERP user and non-user companies, as well as add long-term phases (up to eight years) to describe the impact of ERP more comprehensively, from the early, mature, to long-term benefits phases.

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