Edu - Tech Enterprise

Edu - Tech Enterprise, 2024, 2:18
ISSN: 3084-7451
doi: 10.71459/edutech202418

ORIGINAL

Perception of the impact of accounts receivable on the profitability indicators of Nor Pacifico del Peru Adventist Educational Association, 2022

Percepción de la repercusión de las cuentas por cobrar en los indicadores de rentabilidad de la Asociación Educativa Adventista Nor Pacífico del Perú, 2022

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How to cite: Narro Ramírez, P. J. ., Quispe Campos, L. M., & Ruiz Rodríguez, M. J. (2024). Perception of the impact of accounts receivable on the profitability indicators of Nor Pacifico del Peru Adventist Educational Association, 2022. Edu - Tech Enterprise, 2, 18. https://doi.org/10.71459/edutech202418

Submitted: 07-05-2024 **Revised:** 18-08-2024 **Accepted:** 28-12-2024 **Published:** 29-12-2024

ABSTRACT

In the field of financial management of educational institutions, the evaluation and understanding of economic and financial indicators play a crucial role to ensure their sustainability and efficiency; in this context, the objective of this study was to determine what is the perception of the impact of accounts receivable on the profitability indicators of the Asociación Educativa Adventista Nor Pacífico del Perú, 2022, for this purpose, the quantitative approach was used, correlational level, with a non-experimental design of longitudinal cut. The population was constituted by 43 financial statements of the fiscal years 2018 to 2022 of the educational institutions belonging to the unit of analysis; the sample was non-probabilistic, and was used as a data collection technique, measurement ratios and descriptive data, where the financial statements were analyzed. The findings allow concluding that the efficient management of accounts receivable, measured by turnover and average collection term, is related to the economic and financial profitability of the company. The acceptance of the hypotheses supports the validity of the relationships observed in the study.

Keywords: accounts receivable; profitability; educational institutions; collection.

RESUMEN

En el ámbito de la gestión financiera de las instituciones educativas, la evaluación y comprensión de los indicadores económicos y financieros desempeñan un papel crucial para garantizar su sostenibilidad y eficiencia; en ese contexto, el objetivo del presente estudio fue determinar cuál es la percepción de la repercusión de las cuentas por cobrar en los indicadores de rentabilidad de la Asociación Educativa Adventista Nor Pacífico del Perú, 2022, para ello se utilizó el enfoque cuantitativo, el nivel correlacional, con un diseño no experimental de corte longitudinal. La población estuvo constituida por 42 estados financieros de los ejercicios 2018 al 2022 de las instituciones educativas pertenecientes a la unidad de análisis; la muestra fue no probabilística, y se utilizó como técnica de recolección de datos, las ratios de medición y datos descriptivos, donde se analizaron los estados financieros. Los hallazgos permiten concluir que la gestión eficiente de las cuentas por cobrar, medida por la rotación y el plazo promedio de cobro, está relacionada con la rentabilidad económica y financiera de la empresa. La aceptación de las hipótesis respalda la validez de las relaciones observadas en el estudio.

Palabras clave: cuentas por cobrar; rentabilidad; instituciones educativas; cobranza.

INTRODUCTION

In the financial management of educational institutions, the evaluation and understanding of economic and financial indicators play a crucial role in guaranteeing sustainability and efficiency. In this context, the proper management of accounts receivable emerges as an essential component that directly impacts these institutions' financial health.

In Asia, Liu et al. (2018), based on credit risk and the diversity of their main customers, discovered that companies with riskier accounts receivable have less financing capacity and lower profitability for their asset-backed securitizations. Another study by Zhu et al. (2022) reports that, due to a lack of funds, the average lifespan of SMEs as of 2018 is about three years, and only about a third of them can function generally after three years. The financing strategy has been adopted to address this problem, and accounts receivable have emerged as an issue that negatively affects the company's profitability. Likewise, Pattnaik & Baker (2023) point out that financial constraints have a significant impact on productive activities in the developing world because trade credit provides liquidity and stimulates economic activities in various markets and companies, depending on the active or passive mode; this could lead to problems when they become uncollectible.

In Europe, Surikova et al. (2022) report that the status of accounts receivable, their quality, size, and structure are significantly related to the company's overall financial situation, solvency, and profitability. The management of accounts receivable is a set of actions aimed at reducing the size and improving the quality of the institutional structure. The company tends to reduce the size of the financial cycle and the accounts receivable terms as much as possible without affecting its profitability. The analysis of accounts receivable carried out periodically using traditional and non-trivial methods makes it possible to evaluate the ability of the company's management to foresee and reduce the risk of non-payment of funds, identify specific factors of debt formation, and assess the overall quality of liability management.

In North America, Gofman & Wu (2022) point out that as more institutions borrow from their suppliers, the latter lend more money to their customers and maintain their net trade receivables. This effect on receivables is less intense for the most profitable institutions and the most extended chains. Firms in more central or profitable chains offer higher net trade credit, impacting their profitability.

At the national level, Lachira (2019) showed that the absence of liquidity affects profitability, so collection policies must be reconsidered to avoid futile actions. For this, it is necessary to have trained and qualified personnel for collection actions. Likewise, Espinoza et al. (2020) state that accounts receivable can become uncollectible, which means that the user does not value the service provided to them. Consequently, unpaid accounts receivable are related to and directly affect the institution's profitability. Likewise, Gabriel (2020) raises the importance of accounts receivable management and concludes that it is essential to identify the causes of irresponsible behavior and correct it without judging it. In the same context, Salas (2017) found that the correct management of accounts receivable is directly related to profitability in educational institutions. Likewise, Ramírez (2020) concluded that there is an inverse correlation between the control of accounts receivable and the level of default in his unit of analysis.

In context, an unusual phenomenon is present in the unit of analysis, which has been ongoing since 2020, in which loans were granted in teaching pensions to preserve the student body, which could affect the institution's profitability. Therefore, the following problem question was proposed: What is the perception of the impact of accounts receivable on the profitability indicators of the North Pacific Adventist Educational Association of Peru, 2022? This was decided as the following general objective: To determine the perception of the impact of accounts receivable on the profitability indicators of the North Pacific Adventist Educational Association of Peru, 2022; as a hypothesis, it was proposed that accounts receivable have a significant impact on the profitability indicators of the North Pacific Adventist Educational Association of Peru, 2022.

A detailed understanding of the relationship between accounts receivable and the profitability indicator is essential to designing effective strategies that guarantee long-term economic stability and the ability to fulfill the educational mission. Research into the perception of the impact of accounts receivable on profitability indicators explicitly addresses a gap in understanding how these financial elements affect the economic performance of educational institutions, in this case, the Nor Pacífico Adventist Educational Association of Peru. This study is based on economic and financial theories that explore the relationship between the efficient management of financial assets and liabilities and the overall performance of organizations.

The social relevance of this research lies in its contribution to the strengthening of educational institutions, as the improvement in the financial management of these institutions directly impacts the quality and accessibility of the education they offer to the community. By understanding how accounts receivable affect profitability indicators, tools will be provided to optimize the allocation of resources, guaranteeing long-term financial stability and, therefore, the continuity and improvement of educational services. This research ultimately seeks to benefit society by promoting the efficiency and sustainability of a key educational institution in the region.

From a practical perspective, this study provides the unit of analysis with concrete and actionable information to improve its financial management. The recommendations derived from the findings will contribute to informed strategic decision-making, enabling the institution to optimize the accounts receivable management and, therefore, improve its profitability indicators. This research will also benefit other educational institutions by providing a framework for evaluating and improving their own financial practices.

Literature review

Accounts receivable

According to Meza (2017), the control of accounts receivable is essential for the development of any business, as it is a factor that will stabilize the business financially and economically. For Rivera (2020), accounts receivable, recorded according to the accounting approach within current assets, is relevant for the organization because the service provided is of a nature to be paid for upon completion; therefore, accounts receivable are the implicit credits that the institution grants to those responsible for finances, through an account specifically for these purposes, during the ordinary course of operations, for the provision of the educational service; for accounting purposes, an account receivable represents enforceable rights against third parties, which have not been settled by the closing date, and is presented as a debit balance in the company's situational balance sheet, which could become income-deductible impairments (Romero et al., 2022).

For his part, Pinela (2017) states that poor management of accounts receivable would affect the institution's soundness and stability. In this particular case, due to the COVID-19 pandemic, many financial managers have lost their jobs, others have closed businesses, and only a few have been able to maintain their purchasing power, which is why differentiated control of accounts receivable is required, especially in post-crisis times.

Profitability

In the words of Eslava (2013), profitability is the relationship between the benefits provided by the operation and the investment made in that operation, plus the effort made to carry it out; in the financial sphere, this is expressed in percentages. According to Pantoja (2010), the educational service has an expected profitability, the magnitude of which could be calculated through the cost-benefit ratio.

Profitability shows how much a company has earned from its profits; this calculation is based on time as a fundamental variable, which is why it is done monthly considering the corresponding cash flow. However, there is the possibility of doing it annually. To calculate it, it is necessary to know the initial investment, so if you want to know the monthly profitability, you must know the monthly cash flow to divide it by the initial investment and multiply it by 100%, which will give us the profitability index consulted. In short, the higher the profitability, the shorter the payback period (Toro, 2017).

According to Arrunátegui (2017), the profitability indicator measures the updated value of the accounts collected and generated for each monetary unit invested. For their part, Aguilar and Cano (2017) argue that every organization needs to be managed efficiently to promote sustained growth in the face of competition. This process requires information in the financial statements, with indicators that show the analysis of what is invested and whether these investments are profitable. Consequently, profitability reflects the gains and errors in driving the organization's growth, which makes it possible to establish how well the capital was managed.

METHOD

The type of research was quantitative in focus, correlational in level, non-experimental in design, and longitudinal in nature. In this regard, Espinoza et al. (2023) point out that the quantitative approach collects data to test hypotheses based on numerical measurements, inferential analysis, and the establishment of behavioral patterns. For Quecedo and Castaño (2003), correlational studies measure two variables without the researcher manipulating or controlling them, the results of which can be positive, negative, or zero. Likewise, Ruiz (2012) states that non-experimental designs are carried out without arbitrarily manipulating the variables because their objective is to observe the phenomena as they happen in their real and natural context, to be analyzed later. According to Hernández and Mendoza (2018), longitudinal research collects data to observe repetitions or behaviors in particular groups over long periods.

The population consisted of 42 financial statements from 2018 to 2022 belonging to the unit of analysis and information about accounts receivable for those years; the sample was non-probabilistic, and measurement ratios and descriptive data were used as the data collection technique, where the financial statements were analyzed. According to Pino (2010), the population is the conglomerate of objects or people whose characteristics or situations we wish to know. The sample design contains a set of processes to choose and select a sample from within a population. The sample possesses the same characteristics that will ensure the results are accurate.

The data collection technique used measurement ratios and descriptive data; the financial statements were analyzed, formulas were applied, and the data was tabulated. A data matrix was created in Excel to identify the amounts needed to apply the corresponding formula for each dimension and the ratios to be analyzed. The data entered will be transferred to the SPSS program to focus on the analysis of the research study, where frequencies and percentages will also be considered. After that, descriptive and correlative tables were created and placed in the final deliverable of the research.

https://doi.org/10.71459/edutech202418

RESULTS

Descriptive analysis

Table 1 shows the descriptive results of the Accounts Receivable variable of the unit of analysis. The first indicator analyzed is the Accounts Receivable Turnover, which had the highest average in 2019 with 29,34 points and the lowest in 2018 with 8,30 points. The year 2019 also had a greater variability, with 24,16 points, indicating more significant variation in the Turnover of Accounts Receivable during these periods. The average collection period, the following indicator, obtained the highest average in 2022, with 55,36 points, while the lowest average was in 2019, with 22,36 points. The year 2022 had the most excellent dispersion, with 61,22 points.

Table 1.
Descriptive results of accounts receivable

Year	Rotation of accounts receivable				Average payment period			
	Average	Dev	Minimum	Maximum	Average	Dev	Minimum	Maximum
2018	8,30	2,49	3,93	10,45	60,75	23,14	36,25	96,43
2019	29,34	24,16	5,03	98,70	22,36	25,26	3,84	75,30
2020	8,60	3,86	3,32	13,80	55,02	31,93	27,46	114,06
2021	13,07	9,04	4,98	30,78	38,72	20,88	12,31	76,05
2022	9,38	5,52	2,44	15,89	55,36	61,22	23,84	155,23

The descriptive results of the profitability variable of the unit of analysis are shown in Table 2. The first indicator analyzed is the Return on Assets (ROA), where the highest average was obtained in 2022 with 0,47 points and the lowest average in 2021 with -0,22 points. In 2022, there was also more significant variability, with 0,69 points, which indicates a greater variation concerning economic profitability, and it should be emphasized that the results from 2018 to 2021 were negative. Return on Equity (ROE), the following indicator, had its highest average in 2018, with 0,24 points, while the lowest average was in 2022, with -1,61 points. The highest dispersion was in 2022, with 4,45 points, and the results were negative in 2020 and 2022.

Table 2.
Descriptive results of the profitability variable

Year	Economic profitability (ROA)				Financial profitability (ROE)			
	Average	Dev	Minimum	Maximum	Average	Dev	Minimum	Maximum
2018	- 0,14	0,50	- 0,96	0,19	0,26	0,22	- 0,14	0,54
2019	- 0,09	0,26	- 0,56	0,20	0,03	0,08	- 0,05	0,16
2020	- 0,01	0,19	- 0,29	0,25	- 0,06	0,18	- 0,35	0,11
2021	- 0,24	0,49	- 0,89	0,26	0,08	0,17	- 0,16	0,27
2022	0,49	0,68	- 0,58	1,47	- 1,65	4,48	- 10,68	0,56

Inferential analysis

The results in Table 3 indicate that the accounts receivable turnover is positively related to economic profitability (Rho=0,763) and financial profitability (Rho=0,731). Furthermore, the value of p=0,000 indicates the acceptance of the researcher's hypothesis. On the other hand, the average collection period is inversely related to economic profitability (Rho=-0,699) and inversely related to financial profitability (Rho=-0,723). Furthermore, the value of p=0,000 indicates the acceptance of the researcher's hypothesis.

The positive correlation suggests that as accounts receivable turnover increases, economic and financial profitability also tends to increase. This finding could indicate efficient account receivable management, which contributes positively to profitability.

A significant inverse correlation is observed between the average collection period and economic profitability (Rho=-0,699) and financial profitability (Rho=-0,723). The inverse correlation implies that economic and financial profitability tends to decrease as the average collection period increases. This result suggests that a more extended collection period can negatively affect the company's profitability, possibly due to a greater immobilization of resources in accounts receivable. The values of p=0,000 indicate that both results are highly statistically significant. This low p-value suggests that the results are unlikely to result from chance, supporting the acceptance of the researcher's hypotheses.

Table 3.
Accounts receivable and their relationship with profitability

			Economic profitability	Financial profitability
Spearman's rho	Rotation of accounts receivable	Correlation coefficient	0,763**	0,731**
		Sig. (bilateral)	0,000	0,000
		N	42	42
	Average payment period	Correlation coefficient	-0,699**	-0,723**
		Sig. (bilateral)	0,000	0,000
		N	42	42

**. The correlation is significant at the 0,01 level (bilateral).

DISCUSSIONS

The results of the present study show a positive relationship between accounts receivable turnover and economic profitability and a positive relationship between accounts receivable turnover and financial profitability. These results are consistent with Liu et al. (2018), who report that companies with riskier accounts receivable have lower profitability. They are also consistent with Zhu et al. (2022), who showed that delays in accounts receivable negatively affect the company's profitability.

They are similar to Surikova et al. (2022), who found that accounts receivable, quality, size, and structure significantly relate to a company's overall financial situation, solvency, and profitability. They disagree with Gofman and Wu (2022), who pointed out that maintaining net trade receivables positively impacts the profitability of the most profitable institutions.

They agree with Lachira (2019), who pointed out the need to reconsider collection policies to avoid futile actions, for which it is necessary to have trained and qualified personnel for collection actions. They agree with Espinoza et al. (2020), who pointed out that accounts receivable can become uncollectible; therefore, unpaid accounts receivable are directly related to and affect the institution's profitability. They are similar to Gabriel (2020), who raised the importance of accounts receivable management, concluding that it is important to identify the causes of irresponsible behavior and correct it without judging it. They are in line with Salas (2017), who stated that the correct management of accounts receivable is directly related to profitability in educational institutions.

CONCLUSIONS

The significant positive correlation (Rho=0,763) between the turnover of accounts receivable and economic and financial profitability suggests that efficient management of accounts receivable is associated with increased profitability. Companies that achieve a fast turnover of their accounts receivable tend to be more profitable, possibly due to effective management of financial resources.

The significant inverse correlation (Rho=-0,699) between the average collection period and economic profitability and financial profitability (Rho=-0,723) indicates that a more extended collection period is associated with decreased profitability. This result suggests that a delay in account collection can negatively affect profitability, possibly due to a greater immobilization of financial resources.

The statistical significance with p-values = 0,000 supports the conclusions' validity. The low probability that the results result from chance strengthens confidence in the relationships identified between accounts receivable turnover, collection period, and economic and financial profitability. This statistical support provides a solid basis for accepting the researcher's hypotheses and interpreting the results.

The findings allow us to conclude that the efficient management of accounts receivable, measured by turnover and the average collection period, is related to the company's economic and financial profitability. The acceptance of the hypotheses supports the validity of the relationships observed in the study.

REFERENCES

Aguilar, K., & Cano, N. (2017). Fuentes de financiamiento para el incremento de la rentabilidad de las MYPES de la provincia de Huancayo. Universidad Nacional del Centro del Perú.

Arrunátegui, J. (2017). El problema de liquidez y rentabildiad con un enfoque social en la gestión de la sociedad de beneficencia pública del Callao - Perú 2012 - 2014. Universidad Nacional Mayor de San Marcos.

Eslava, J. (2013). La rentabilidad: análisis de costes y resultados (ESIC Edito). https://bit.ly/3qKGNp0

Espinoza Casco, R. J., Sánchez Ca, argo, M. R., Velasco Taipe, M. A., Gonzáles Sánchez, A., Romero-Carazas, R., & Mory Chiparra, W. E. (2023). Metodología y estadística en la investigación científica. Puerto Madero Editorial Académica. https://www.ptonline.com/articles/how-to-get-better-mfi-results

Espinoza, S., Aquino, W., Lima, O., Villafuerte, R., Sánchez, J., & Mamani, K. (2020). La morosidad: factores motivacionales de los responsables financieros, en el contexto del COVID-19. Revista de Investigación Valor Contable, 7, 37-49. https://revistas.upeu.edu.pe/index.php/ri_vc/article/view/1395

Gabriel, T. (2020). Gestión financiera y la morosidad en Instituciones Educativas Peruanas: Una revisión teórica. Universidad Peruana Unión.

Gofman, M., & Wu, Y. (2022). Trade credit and profitability in production networks R. Journal of Financial Economics, 143(1), 593-618. https://doi.org/10.1016/j.jfineco.2021.05.054

Hernández-Sampieri, R., & Mendoza-Torres, C. P. (2018). Metodología de la investigación: las tres rutas cuantitativa, cualitativa y mixta. En Mc Graw Hill (Vol. 1, Número Mexico).

Lachira, V. (2019). Gestión de cobranza y la rentabilidad de una Institución Educativa Privada de Piura; 2017 - 2018. Tesis de grado, Universidad César Vallejo.

Liu, L. X., Mao, M. Q., & Nini, G. (2018). Customer risk and corporate financial policy: Evidence from receivables securitization. Journal of Corporate Finance, 50, 453-467. https://doi.org/10.1016/j.jcorpfin.2017.09.020

Meza, C. (2017). Contabilidad (EUNED).

Pantoja, F. (2010). Rentabilidad de la inversión en educación. Gestión y Desarrollo, 62. https://www.usbcali.edu.co/sites/default/files/2_restabilidadeduca.pdf

Pattnaik, D., & Baker, H. K. (2023). Factors affecting trade credit in India. International Review of Economics and Finance, 88(February 2022), 634-649. https://doi.org/10.1016/j.iref.2023.07.005

Pinela Mite, A. M. (2019). Propuesta de estrategias de recaudación de las cuentas por cobrar para minimizar su incidencia en la liquidez de la clínica Guayaquil [Tesis de grado, Instituto Superior Tecnológico Bolivariano de Tecnología]. http://repositorio.itb.edu.ec/handle/123456789/337

Pino, R. (2010). Metodología de la investigación (1.a ed.). Editorial San Marcos, E.I.R.L.

Quecedo, R., & Castaño, C. (2003). Introducción a la metodología de investigación cualitativa (Rev. Psico).

Ramírez Ramírez, F. (2020). Estrategias de cobranza y la morosidad en el Colegio Adventista Fernando Stahl, 2019 [Tesis de grado, Universidad Peruana Unión]. https://repositorio.upeu.edu.pe/bitstream/handle/UPEU/3416/Fiorella_Tesis_Licenciatura_2020.pdf?sequence=1&isAllowed=y

Rivera, K. (2020). Análisis del sistema control interno cuentas x cobrar de la empresa Pharmacid S.A.S. Ciencias Unisalle, 5(4), 112-154. https://ciencia.lasalle.edu.co/contaduria_publica//ciencia.lasalle.edu.co/contaduria_publica/1292

Romero-Carazas, R., Vásquez-Campos, S. A., Bernedo-Moreira, D. H., Rodríguez Llave, C. M., & Belleza Chávez, A. D. (2022). Estrategias de cobranza y morosidad en la Asociación Educativa Adventista Centro Oeste del Perú. Economía y Negocios, 4(2), 232-248. https://doi.org/https://www.doi.org/10.33326/27086062.2022.2.1467

Ruiz Olabuénaga, J. I. (2012). Metodología de la investigación cualitativa (Deusto). https://bit.ly/3DtxTSC

Salas, J. (2017). Cuentas incobrables y la rentabilidad en las instituciones educativas privadas en el distrito de San Juan de Miraflores, 2017. Tesis de grado, Universidad César Vallejo.

Surikova, E., Kosorukova, E., Krainova, I., & Rasskazova, M. (2022). Management of accounts receivable for railway transport enterprises. Transportation Research Procedia, 63, 1790-1797. https://doi.org/10.1016/j.trpro.2022.06.195

Toro, F. (2017). Costos ABC y presupuestos. ECOE Ediciones Ltda. https://search.ebscohost.com/login.aspx?direct=true&db=edsebk&AN=1516176&lang=es&site=eds-live

Zhu, X., Cao, Y., Wu, J., Liu, H., & Bei, X. (2022). Optimum operational schedule and accounts receivable financing in a production supply chain considering hierarchical industrial status and uncertain yield. European Journal of Operational Research, 302(3), 1142-1154. https://doi.org/10.1016/j.ejor.2022.02.008

FINANCING
None.

CONFLICT OF INTEREST
None.

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