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Debt Collection Practices and Cash Flow Management among Retail Businesses in Davao City

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Abstract
This study examines the debt collection practices (DCP) and cash flow management (CFM) of retail businesses in Davao City. The study utilizes quantitative random sampling involving one hundred twelve appliance centers. The results indicated a high level of DCP and CFM with an average mean of 3.937 and 3.956, respectively, with a significant relationship. The subdomains Days Sale Outstanding and Bad Debt Ratio have a moderate positive correlation, with a coefficient of multiple correlation of 0.769. Recommendations are to enhance debt collection, accounts receivable administration, and working capital management with staff education, technology, regular reviews, and financial awareness.

Keywords: cash flow management; debt collection; retail business; appliance centers

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1.0 Introduction

1.1 Background of the Study

Debt collection (DC) entities must walk a tightrope between protecting their financial rights on one side and keeping their customer relationships on the other. Debt collecting can be done more efficiently and thereby increase the procedure's success if debt collectors use their communication, timely contact, negotiating, and technical tools, the law is followed, and, where needed, professional mediation is utilized. Such practices, if deployed strategically and presented in a manner that does not taint the business's public image, tend to keep the balance between profitability and customer satisfaction (Mohamed, 2023). The debt collection process comes into the picture when a debtor doesn't repay (Respicio, 2024). In the debt recovery process, the creditor can take legal action at his or her disposal (Respicio, 2024).

A cash flow statement reports the movement of a company's cash that will affect a firm's financial health and efficiency. Financial management means measuring, evaluating, and optimizing the total amount of money that goes to the enterprise less than the money spent (Ward, 2022). Many businesses fail due to inadequate cash flow management (CFM), and this should not be ignored. A stable source of revenue is a firm's objective, which is to pay salaries and bills while also investing in the development that is essential to any company. For these reasons, cash flow management is the key factor in predicting the company's growth.

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Debt collection practices (DCP) can create obstacles in the complex retail trade sector. Payment arrears and overdue debts could be crucial to a retailer's financial health and development. The efficacy of cash flow management is significant in the retail industry, as it has specific characteristics, including seasonal and variable consumer demand and quick inventory turnover. CFM may be the most significant part of retail businesses' success or failure, mainly because of debt and cash-based operations. Finance officers should be armed with a comprehensive and watertight cash flow management approach (Saeb, 2023).

Smit (2012) reported small business failures during the first five years of operation, which can attributed to unmanaged risks. The rapid growth of microenterprises in Davao City is challenged because of the unavailability of funding sources and financial risks. These risks have resulted from the innate vulnerabilities of financial institutions, which can prevent them from extending credit facilities because of the absence of collateral, inadequate financial statements, and high interest rates that lead to slow cash flow. Consequently, they often use their resources as microlenders and may also have to borrow from friends, family, and relatives for operational capital or start-up funds.

The study focused on retail operations' characteristics, such as income, business model, and ownership structure. It can also benefit retail companies by identifying the dynamic factors driving or impeding their businesses. Based on this knowledge, they can more efficiently set up an insurance program and thereby decrease risks for their operations, and this will eventually help them stay on top.

1.2 Objectives of the Study

The study aims to (a) assess the Level of debt collection practices (DCP) of the retail businesses in Davao City in terms of the Collection Effectiveness Index (CEI), Days Sales Outstanding (DSO), and Bad Debt Ratio (BDR); (b) determine the Level of cash flow management of the retail businesses in Davao City in terms of Working Capital Ratio, Cash Flow to Debt Ratio, and Cash Flow Margin; (c) determine if there is a significant relationship between debt collection practices and the cash flow management of the retail businesses in Davao City and; (d) identify which among the domains of the debt collection practices significantly influence the cash flow management of retail business in Davao City.

This study hypothesizes that there is no significant relationship between DCP and CFM. The scope of limitation that retail businesses used in this study refers to appliance centers.

2.0 Literature Review

The Collection Effectiveness Index (CEI) is key in evaluating collections departments' outcomes. It looks at converting receivables into cash within a stipulated timeframe. The CEI is a more accurate value of a collection's efficacy as it records performance over time. The collection effectiveness index measures the ratio of the amount collected over a specific cycle to the entire outstanding accounts receivable during the same cycle. This figure lets the organization know if something needs improvement or if additional changes are required (Alpay, 2022). The daily sales outstanding (DSO) is a central preeminence financial metric that gauges the liquidity level and performance of the company's operations. It calculates the average days it takes to receive payment from a company after a sale occurs, and a shorter DSO indicates faster collections of receivables, higher cash flow, and lower credit risk (Asman et al., 2022). The bad debt ratio of collections receivable is an important part of the company and can be calculated directly or in an allowance way. On the contrary, direct techniques help when some bills are collectible, while allowance techniques regularly forecast revenue and report bad debt. Both methods are applied to maintain the receivables well (Rasyid & Suriansha, 2019).

The contribution of working capital management to higher returns to the stakeholders has been underrated and has received less attention from researchers and practitioners alike. Inefficiency in management may cancel out the benefits of short-term investments when working capital is not effectively managed (Nazir & Afza, 2009). The debt ratio provides information about how the company manages its finances, dividing the total debt amount by the total asset amount. It is the amount of assets that cover the obligations. Businesses arrange their capital like debt, which is safer than equity and equally safer than addition through retained earnings. This ordering is based on the unequal information issued by each financial market, and managers must consider which of the cheap sources of funds will work best for them (Obuya, 2017).

The cash flow margin shows the organization's efficiency in converting revenues into cash and is a reliable measure of profitability. It compares rivals in the same industry based on operating efficiency, overheads, and profits (GoCardless, 2020).

Moraes and Nagano (2013) discussed the Miller-Orr Model Theory as applicable to the company in managing to fund all its short-term cash requirements at the least cost possible by setting upper and lower limits on cash balances.

Atandi & Kirui (2022) emphasize the importance of credit recovery efforts and borrower-friendly strategies to minimize. However, there is insufficient focus on the study's psychological and behavioral aspects. CFM has expanded on models incorporating stochastic approaches to address process uncertainties. However, there is a limited exploration of the integration, such as debt collection practices.

Research on the effectiveness of debt collection is scant across different industries, especially in appliance centers, and overlooks the psychological and behavioral aspects of debt recovery (Kriebel & Yam, 2020). Further, the little exploration of stochastic models in debt collection (Bressan et al., 2017) combined with the insufficient comparative perspective of collection strategies across industries (Liu et al., 2019) makes it essential to pursue this.

While acknowledging those studies, there is a lack of comparative research on how debt collection practices contribute to cash flow management across industries, particularly in the appliance centers in Davao City.

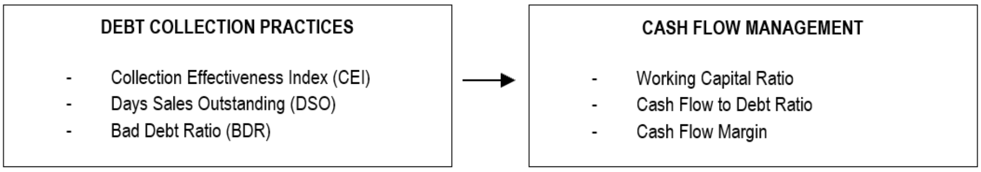

Figure 1. Conceptual Framework

3.0 Methodology

The study was conducted in Davao City, located in Mindanao, Philippines, which is known for its good governance, financial stability, and asset wealth (City Government of Davao, 2024). Using simple random sampling through Slovin's formula with a 5% margin of error, the proposed number of appliance centers sampled was 101 respondents. The researchers selected 112 out of 135 appliance centers listed in the Davao Business Bureau to ensure more representation (Nyimbili & Nyimbili, 2024).

The questionnaire was content-validated and pilot-tested with thirty (30) respondents to test the reliability. The questionnaire is on debt collection practices and cash flow management, featuring a scoring scale from 1 (lowest or very low) to 5 (highest or very high). The tool has a reliability score based on Cronbach's alpha of 0.88, indicating one of the acceptable values (Tavakol & Dennick, 2011).

The following statistical treatments were utilized: Mean refers to the sum of the scores divided by the number of points. This study used the mean to assess CFM levels. Pearson r is used to check the relationship of the variables. The said correlation was applied to measure the relationship and strength between levels of DCP and CFM. Regression analysis analyzes the relationship between a dependent and one or more predictors (Hair et al., 2019). This study applied regression to identify which DCP domains significantly influence CFM in retail businesses.

4.0 Findings

4.1 Level of the Debt Collection Practices of Retail Businesses

Table 1 shows the scores collected for debt collection practices. This collection effectiveness ratio (CEI) of 3.880 means a debt collections procedure tailored to easily log and track initiatives that consistently result in outstanding performance. Retail businesses' solid debt collection structure enables them to stay on track, considering that their DSO stands at 3.982. For these considerations, efficacy is confirmed through a strong performance on numerous indicators. Retail businesses carry out proactive communication with consumers to know consumers' payment preferences, introduce a payment collection system suitable for all customers, and prioritize the training of the employees.

Table 1. Level of the DCP

Variables	**Description**	**Mean***	**Standard Deviation**	**Descriptive Level***
Domain	Collection Effectiveness Index	3.880	0.642	High
	Days Sale Outstanding	3.982	0.643	High
	Bad Debt Ratio	3.948	0.666	High
	Overall	3.937	0.542	High

**Note: 4.20 to 5.00 – Very High; 3.40 to 4.19 – High; 2.60 to 3.39 – Moderate; 1.80 to 2.59 – Low; 1.00 to 1.79 – Very Low*

4.2 Level of Cash Flow Management of Retail Businesses

Retail businesses excel in financial management, evidenced by strong Working Capital and Cash Flow to Debt Ratios of 3.974 and 3.866, respectively. They focus on maintaining optimal working capital through stakeholder communication and strategic planning, ensuring operational and financial resilience. Emphasizing transparency, debt reduction, and cash flow evaluation fosters well-informed decisions and long-term stability. Their high Cash Flow Margin score of 4.028 reflects skillful cash flow control, achieved through monitoring, spending containment, and cash flow projection improvement. Renegotiating payment terms and proactive measures further enhance financial stability, forming a foundation for sustained growth.

Table 2. Level of the CFM

Variables	Description	Mean*	Standard Deviation	Descriptive Level*
Domain	Working Capital Ratio	3.974	0.662	High
	Cash flow to debt ratio	3.866	0.752	High
	Cash flow Margin	4.028	0.718	High
	Overall	3.956	0.613	High

**Note: 4.20 to 5.00 – Very High; 3.40 to 4.19 – High; 2.60 to 3.39 – Moderate; 1.80 to 2.59 – Low; 1.00 to 1.79 – Very Low*

4.3 The Correlation between DCP and CFM

Pearson r was used to determine the relationship between DCP and CFM, as shown in Table 3. The coefficient of correlation value is 0.757 with a p-value of <0.001, indicating a significant relationship between these two variables. Moreover, the strength of the correlation between the variables is moderately positive (Ratner, 2009). This strong link suggests that better financial cash flow management inside the company is correlated with efficient debt collection techniques. Improved debt collection procedures frequently result in improved cash flow management, as the correlation coefficient highlights the relationship between these two factors. Businesses can improve their financial resilience, allocate resources more efficiently, and successfully manage financial risks by emphasizing excellent DCP and strong CFM strategies.

Table 3. Relationship of DCP and CFM

Description		Pearson r	p-value	Remarks
Debt Collection	Cash Flow Management	0.757	<0.001***	Significant

*$p < .05$, ** $p < .01$, ***$p < .001$*

4.4 Regression Analysis of Debt Collection Domains to the Cash Flow Management

Table 4 shows the subdomains that contributed to the CFM. It is observed that subdomains contributed were DSO and BDR with the coefficient of multiple correlation of 0.769, suggesting a moderate positive correlation among these. Furthermore, the estimated final model is $\hat{y}$=0.611+0.139CEI+0.328DSO+0.380BDR. For every unit of DSO increases, the cash flow management score increases by 0.328, given the bad debt ratio, and collection effectiveness is constant. The cash flow management score increases by 0.380 when every unit of bad debt ratio increases, given that the two other domains are constant. However, the collection effectiveness index (CEI) p-value is more than 0.05, indicating no contribution to the cash flow management.

Table 4: Contributors to the CFM

Domains	Estimated $\boldsymbol{\beta}$	$\boldsymbol{se(\beta)}$	t	p-value
Intercept	0.611	0.293	2.083	0.040*
CEI	0.139	0.077	1.812	0.073
DSO	0.328	0.084	3.933	<0.001**
Bad Debt Ratio	0.380	0.077	4.957	<0.001**
$\boldsymbol{r = 0.769}$, Adjusted $\boldsymbol{r^2 = 0.592, F = 46.407, p < 0.001}$***				

** $p < .05$, ** $p < .01$, *** $p < .001$*

5.0 Discussion

5.1 On the Debt Collection of Retail Businesses

Retail businesses utilize DSO measurement, accounts receivable management, and cross-department collaboration to enhance financial performance. A high DSO index reflects strategies like customer engagement, debt collection policies, employee training, and technology adoption. Their proactive approach minimizes the impact of bad debt, ensuring stability. Studies (Aliaga et al., 2021; Dun & Bradstreet, 2023) highlight their success in debt collection strategies, with improved payment terms and faster operations through monitoring tools. Although managing bad debts, as noted by Murshidi et al. (2022), may not always immediately affect performance, it strengthens asset value and fosters profitability over time.

5.2 On the Cash Financial Management (CFM)

Section 4.2 highlights the critical role of Cash Flow Management (CFM) in driving business success, fostering growth opportunities, and enhancing employee morale, as supported by studies from Aren & Sibindi (2014) and Wallace (2023). CFM serves as a cornerstone for ensuring a business's prosperity and longevity. However, research by Wadesango et al. (2019) underscores the duality of cash management strategies, which can either bolster profitability or jeopardize sustainability, depending on their implementation. Furthermore, the reluctance of many SMEs to adopt effective cash management practices—stemming from resistance to change and limited resources—poses a significant challenge to achieving long-term success.

5.3 Relationship of DCP to the CFM

As shown in Table 3, the relationship between debt collection practices and cash flow management is confirmed by the study of Earnes, (2023). It stated that incentives are provided to firms in financial difficulties to detect and price cash flow management accurately. Debt collection is crucial for trust, loyalty, and long-term client relationships. Businesses integrating debt collection services with accounting systems and adopting a customer-centric approach can successfully manage debt recovery.

5.4 Contribution of Debt Collection Domains to the Cash Flow Management

Although most of the debt collection practices domains contributed to cash flow management, it was the exact opposite in the study of Akpadaka and Edeh (2024), where the result of the debt collection domain, specifically DSO, has no relationship to cash flow management. However, the contribution of the bad debt ratio to the CFM was confirmed in the study of Matemilola et al. (2014), where cash flow is related to the debt ratios.

6.0 Conclusion & Recommendations

Research explores how debt collection practices affect cash flow management in the retail appliance businesses in Davao City. Results reveal that both the levels of DCP and CFM are high. It shows that efficient debt collection practices have greatly helped cash flow management. It also shows the significant relationship between DCP and CFM, thus accepting the alternative hypothesis. It also reveals that DSO and BDR are the domains of DCP that contribute to CFM. The research underlines the need for prompt aftermath, clear communication, technology usage, and active risk management in debt collection. This suggests the necessity of well-rounded accounts receivable management systems, working capital optimization strategies, and cash flow management models for financial stability. Besides, the study illustrated the Miller-Orr Model Approach's support as it indicated it is essential in the operating performance, good client relationships, and the financial performance of the appliance businesses.

Retailers of appliances should develop incentive payment terms, efficient accounts receivables collection, and good management of the working capital. These tools may be helpful to clear up aging receivables and manage cash flows more effectively. Providing additional resources through training for employees and equipment for accounts receivable tracking can accelerate the company's operations and debt reduction efforts. Regular analysis of the working capital ratio in the company and applying methods to keep it at an optimal point will help make the financial condition of companies healthier. It is vital to direct debt reduction unless the operating performance of cash flow improves. Businesses must keep an eye on their debt levels; they must discuss the payment terms with clients and develop strategies for debt collection. Timely tracking from time to time will identify weaknesses and risks, which will further help to stay away from unessential ones. A financial culture incorporating staff understanding of financial issues is a testing pillar to achieve superior financial health and wealth.

The findings, specific to retail appliance businesses in Davao City, may not apply to other industries or regions with different economic contexts. While a significant relationship between DCP and CFM is observed, causality is not established. Future research could examine additional DCP domains, such as market conditions and customer behavior, and validate their relevance to diverse cash flow patterns in retail businesses.

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Paper Contribution to Related Field of Study

This research delves into the practices of businesses in Davao City in handling trade receivables and debt recovery. It specifically explores the correlation with the context. The document offers insights on debt collection strategies and their impact on cash flow along with suggestions for improving efficiency and financial stability. The study presents a blueprint for debt recovery and cash flow management that is relevant to policymakers, business consultants and academic researchers, among others. Furthermore, it delves into the challenges and opportunities faced by enterprises throughout the study.

References

Akpadaka, O. & Edeh, P. O. (2024). Impact of Cash Conversion Cycle and Financial Stability on Firm Value. Journal Of Accounting AND Financial Management. 10. 123-141. 10.56201/jafm.v10.no8.2024.pg123.141.

Aliaga, A. A.B., Aliaga, R. S.B., De la Cruz, E. T., & Valladares, S. S.J. (2021). Effect of collection strategies on the collection effectiveness of the Tax Administration Service of Trujillo -SATT. Journal of Business and Entrepreneurial Studies, 5(2). https://doi.org/10.37956/jbes.v5i2.197

Alpay, M. (2022). In The Management of The Collection of Receivables Reasonable Angle Balance. International Journal of Humanities & Social Development Research, 6(2).

Aren, A. O., & Sibindi, A. B. (2014). Cash flow management practices: An empirical study of small businesses operating in the South African retail sector. Risk Governance & Control: Financial Markets & Institutions, 4(2), 87–100. https://doi.org/10.22495/rgcv4i2c1art1

Asman, F. N., Fernandez, D., Jamaludin, N. A., Zaki, H. O., & Ghazali, A. W. (2022). Cash Conversion Cycle and Firm's Performance. Social Sciences, 12(11), 2682-2692

Atandi, F. G., & Kirui, G. (2022). Debt collection strategies and financial sustainability of mobile lending firms. International Journal of Academic Research in Accounting Finance and Management Sciences, 12(2). https://doi.org/10.6007/ijarafms/v12-i2/13184

Bressan, S., Peri, M., & Polato, M. (2017). A stochastic model for optimal debt management. SIAM Journal on Control and Optimization, 55(3), 1572-1591.

City Government of Davao (2024, December 18). Debt-free Davao City still one of the country's wealthiest cities - City Government of Davao. City Government of Davao. https://www.davaocity.gov.ph/local-government/debt-free-davao-city-still-one-of-the-countrys-wealthiest-cities/

Dun & Bradstreet (2023) Accounts Receivable and Days Sales Outstanding Industry Report, A Quarterly Report, December 18, 2023. https://www.dnb.com/perspectives/finance-credit-risk/accounts-receivable-aging-report.html

Eames, J. (2023) The importance of Debt Collections and Debt Collectors. https://www.cicm.com/resource/the-importance-of-debt-collections-and-debt-collectors.html

GoCardless (2020). Understanding the cash flow margin formula. https://gocardless.com/guides/posts/understanding-the-cash-flow-margin-formula/

Hair, J. F., Black, W. C., & Babin, B. J. (2019). Multivariate data analysis (8th ed.). Cengage Learning Emea.
Kriebel, C., & Yam, F. (2020). The role of debt collection agencies in financial markets. European Financial Management, 26(4), 897-922.

Liu, X., He, Q., & Chen, J. (2019). A Markov decision model for consumer term-loan collections. Review of Quantitative Finance and Accounting, 52(3), 689-710.

Matemilola, B.T., Bany-Ariffin, A.N. & Nassir, A. (2014). Debt and Cash flow Relationship in POT of Corporate Financing: Dynamic Panel Evidence. Empirical Economic Letters. 13.

Mohamed, W. (2023), Strategies and Techniques for Effective Debt Collection, https://www.linkedin.com/pulse/strategies-techniques-effective-debt-collection-wael-mohamed-1f/

Moraes, M.B.D.C. & Nagano, M.S. (2013). Cash management policies by evolutionary models: a comparison using the Miller-Orr model. JISTEM J.Inf.Syst. Technol.Manag. 10 (3) Sep-Dec 2013, https://doi.org/10.4301/S1807-17752013000300006

Murshidi, A.F.A., Zulkifli, A.A., Zolkiflee, M.F., Mohmud, A.A.W, Daud, P.N.S, (2022), The Effect of Bad and Doubtful Debt on The Bank Performance: A Study of Banking Institutions in Malaysia, ICBE Publication, Seventh Conference, e-ISSN: 2785-9479 (Page 36-52)

Nazir, Mian Sajid & Afza, Talat. (2009). Working Capital Requirements and the Determining Factors in Pakistan. The IUP Journal of Applied Finance. 15. 28-38.

Nyimbili, F., & Nyimbili, L. (2024). Types of Purposive Sampling Techniques with Their Examples and Application in Qualitative Research Studies. British Journal of Multidisciplinary and Advanced Studies, 5(1), 90–99. https://doi.org/10.37745/bjmas.2022.0419

Obuya, D. (2017). Debt Financing Option and Financial Performance of Micro and Small Enterprises: A Critical Literature Review. International Journal of Business and Management. 12. 221. 10.5539/ijbm.v12n3p221.

Rasyid, E. & Suriansha, R. (2019) Bad Debt Ratio and Non-Performing Loan Analysis on BUKOPIN Consumer Credit Division In Jakarta. International Journal of Scientific & Engineering Research Volume 10, Issue 8, August-2019 1521ISSN 2229-5518

Ratner, B. (2009). The correlation coefficient: Its values range between +1/−1, or do they? Journal of Targeting, Measurement and Analysis for Marketing, 17(2), 139–142.

Respicio, H. (2024, March 20). Legal steps to collect a debt in the Philippines. RESPICIO & CO. https://www.respicio.ph/commentaries/legal-steps-to-collect-a-debt-in-the-philippines

Saeb, F. (2023) Cash Flow Management in the Retail Industry, https://www.linkedin.com/pulse/cash-flow-management-retail-industry-fariborz/

Smit, Y. (2012). A literature review of small and medium enterprises (SME) risk management practices in South Africa. African Journal of Business Management, 6(21).

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International Journal of Medical Education, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Wallace (2023, July 19). The impact of poor cash flow management on your business. Universal Funding. https://www.universalfunding.com/poor-cash-flow/

Ward, S. (2022), Cash Flow Management in Business, https://www.thebalancemoney.com/cash-flow-management-2947138

Wadesango, N., Tinarwo, N., Sitcha, L., Machingambi, S. (2019). The impact of cash flow management on the profitability and sustainability of small to medium sized enterprises. International Journal of Entrepreneurship, 23(3), e-ISSN: 1939-4675 (Page 1-19).