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Effect of Cash Management on the Retail Industry's Financial Performance

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ABSTRACT

For all firms to improve their financial management and ensure their financial sustainability, cash management is essential. Each organization needs to use sophisticated cash management procedures in order to achieve its goals. The retail sector is also one of the most important for the growth of the Philippine economy and the creation of jobs, thus this study looked empirically at the impact of cash management on the financial performance of the sector over a five-year period, from 2016 to 2021. To determine whether cash management has had an effect on these five (5) significant retails organizations' financial performance, the study looks at their financial statements. The data was gathered from each retail company's financial statement and website on the Philippine Stock Exchange Edge website. The study used the cash management ratio, or Cash Ratio (CR), as the independent variable, and the financial performance ratios, or Return on Assets (ROA), Return on Equity (ROE), and Net Profit Ratio, as the dependent variables. In order to ascertain the correlations between different aspects of cash management and financial success, numerous regression and correlation analysis on the data were performed. The research found that the selected five (5) retail enterprises' financial performance was positively but marginally impacted by the Cash Ratio. The report thus advises that these key firms in the Philippine retail sector execute their cash management effectively in a way that enhances financial success.

***Keywords*—** Retail, Financial Management, Cash Ratio, Return on Equity, Return on Assets, Cash Management

I. INTRODUCTION

There has been a retail industry for ages. Retail involves purchases made through many channels, therefore products bought offline and online are both available. The term "retail" is sufficiently inclusive to include everything from prehistoric roaming salespeople to enormous malls, supermarkets, warehouse shopping chains, and online marketplaces. The sale of diverse items and services to customers with the goal of turning a profit is what is meant by retail, according to its most basic definition. Retailers shall collect, process, and hold cash payments and the necessary amount of change. Retailers still face a substantial problem in maintaining and managing a good cash flow on daily sales, though. Therefore, it has not yet been determined whether cash management can assist retailers in increasing efficiency and profit.

Gielens asserts that retailing is a significant industry and an important part of the economies of all nations [1]. Numerous merchants rank among the top firms in the world, making the retail sector one of the biggest and most diverse in the entire globe. Numerous stakeholders are involved in the retail industry, including shoppers, retailers, manufacturers (suppliers), investors, and legislators. The Philippine retail industry is fragmented.

According to Mordor Intelligence. Products (Food and Beverages, Personal and Household Care, Apparel, Footwear and Accessories, Electronic and Household Appliances, Furniture, Toys and Hobby, and Other Products) and Distribution Channels (Supermarkets/Hypermarkets, Convenience Stores, Department Stores, Specialty Stores, Online, and Other Distribution Channels) are divided into these two groups [2].

Retailing is one of the Philippines' economic strengths. After rising by just 4.3% in 2011, the gross value added in retail commerce increased by 7.8% in 2012, which is somewhat higher than the 6.8% real GDP growth for that year. The number of brand-new shopping centers, hypermarkets, grocers, and other retailers has virtually tripled during the past three years. Based on building permit applications gathered by the National Statistics Office, the overall area of retail-related development projects increased from slightly over 1 million square meters in 2009 to 2.9 million square meters in 2012. According to the National Statistical Coordination Board the value of construction projects than tripled over the same period, rising from 7.2 billion (US$170 million) to 26.7 billion [3].

All firms, big or little, employ a variety of resources to carry out their operations, according to Schroeder & Kacem [4]. One such crucial resource that can have a variety of impacts on the company's success is cash. All of the company's liquid cash on hand, including its cash deposits in the bank, is often represented as cash. Cash is an important part of a company's working capital because it is a component of the current assets of the company, which are meant to be used for day-to-day operations.

According to Morrison a company's ability to survive and flourish in the future depends on its ability to generate cash [5]. The management of short-term capital can be significantly impacted by excellent cash management techniques. Given that cash is a valuable resource, any firm must manage it properly and efficiently, which is often done using the method of cash management. According to Sam Sundar Chintha, the definition of cash management is "the management of a firm's cash and cash equivalents to ensure that there is sufficient cash available to support operations, finance investments, and satisfy all other financial obligations [6].

According to Sinclair and McPherson managing cash often entails controlling cash inflows and outflows based on the many operations and activities of the company. The basic objective of cash management is to allocate the company's cash resources in such a way as to guarantee an ideal cash balance that is neither too much nor too little compared to the needs. Additionally, research has been done on how cash flow influences the company's ability to make pertinent and useful decisions, which in turn affects the organization's overall performance, notably financial performance like profitability.

Cash flow forecasts are made in accordance with Ehrhardt and Brigham. Technology is used by businesses to expedite the cash collection process. All of this has to be accomplished while still having money left over to cover daily expenses. As a result, finding opportunities outside of established markets is essential for long-term growth in the global economy of today. As a result, effective cash management and increased visibility are essential for hastening and improving business decisions.

Hartill says that financial performance is a general word that refers to a company's overall financial health. When a company's financial performance is constant, it typically means its revenues are increasing, its debt is manageable, and it generates a sizable amount of free cash flow. Contrarily, financial performance is a subjective concept that defies quantitative measurement [7].

In accordance with Ali Matar in order to understand the elements that affect the financial performance of various industries, it is crucial for researchers as well as investors to pay attention to firm financial performance. Financial performance is a gauge of an organization's financial health and demonstrates how well an industry's top leadership is performing. The more successfully and effectively a corporation uses resources, the more it contributes at a macro level to the national economy. This is determined by its financial performance.

The current research on cash management has concentrated on how it relates to several crucial areas, such as how it affects a company's liquidity, financial performance, ability to avoid bankruptcy, and overall working capital. For shareholders and management, the connection between cash management and an industry's financial performance is of particular importance [8]. According to Waswa, Mukras, and Oima carefully studying and planning the management of funding liquidity is one of the ways to measure financial performance. As a result, businesses should increase their operating cash flow to positively impact their performance.

In order to determine the impact of cash management on the financial performance of the chosen retail enterprises in the Philippines, the study's objective is to determine this. Additionally, the current study investigation will aim to place an emphasis on the financial reports (balance sheets and income statements) and will try to find out if there are any substantial effects on the financial performance of the retail industry.

A. Research Question

Whether you're an individual or a company entity, "cash" is the main asset used to pay commitments, so it needs to be carefully handled to maximize earnings. The future expansion of the business is impacted by this. The research attempts to determine the impact of cash management on the financial performance of the retail industry while also maintaining cash balances and generating a return on cash flow, both of which are crucial factors. The following questions are addressed in this study:

1) How can the cash ratio be used to analyze the cash management of the retail sector?
2) How can the financial health of the retail sector be characterized in terms of:
   a) net profit margin
   b) Return on Investment Ratio (ROI)
   c) Return on Equity Ratio
3) What impact does the retail industry's financial performance have on cash management?

B. Research Objective

To examine the effect of cash management on the financial performance of the retail sector and to answer the following specific objective:

1) To assess how cash management affects the retail sector's net profit margin.
2) To ascertain how cash management affects the retail sector's return on assets.
3) To evaluate the impact of cash management on the retail sector's return on equity ratio.

C. Research Hypothesis

(H_{01}) There is no significant effect between Cash Ratio and Net Profit Margin (H_{a1}) There is a significant effect between Cash Ratio and Net Profit Margin

(H_{02}) There is no significant effect between Cash Ratio and Return on Asset Ratio (H_{a2}) There is a significant effect between Cash Ratio and Return on Asset Ratio

(H_{03}) There is no significant effect between Cash Ratio and Return on Equity Ratio (H_{a3}) There is a significant effect between Cash Ratio and Return on Equity Ratio

D. Significance of the Study

By analyzing the relationship between cash management and the financial success of the Philippine retail business, this study aims to increase the body of empirical evidence supporting a theoretical idea. The

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survey will also give background data to research groups and point out areas that need more investigation. The academic community will profit from this work. especially those working in finance or other similar fields, as well as all business retailers.

E. Scope and Limitations

The goal of the study is to determine how cash management affects the financial performance of five (5) different retail industries in the Philippines. Four ratios were utilized in this study to examine how cash management affects financial success. There is still room for improvement in this field, as cash flow, forecasting, and budgeting tools, among others, can be utilized to examine how cash management affects financial performance and draw more accurate conclusions. The current study, which is from the retailing sector and chose five (5) companies from the PSE, leaves a lot of room for future research in terms of sample size and study area. By choosing more businesses from the service and retail sectors, more research can be conducted.

The data and information used in this study will be taken from the most recent annual reports and financial statements of the five (5) chosen retailing companies listed on the PSE from the years 2016 to 2021, as well as from any other financial data and resources that are pertinent to the study and are readily available. The study's information gathering is constrained by the COVID-19 epidemic, which prevents the researchers from conducting surveys and interviews.

F. Theoretical Framework

Various studies on the management of cash flow activities have been conducted, considering a range of variables and the effects of these actions. The following ideas pertain to cash management, including the Cash Conversion Theory, Gitman 1974, which contends that the greater the financial performance, the longer the cash conversion cycle.

F.1 Cash Conversion Cycle

According to Churchill and Mullins, the Cash Conversion Cycle idea provides a gauge for inventory control in businesses to speed up inventory turnover and boost revenue. As a result, companies might increase their profitability. Long-term company growth and profitability are correlated with effective working capital management. Oluoch evaluated the cash management practices of 171 small and medium-sized businesses in Kenya. using multiple regressions, current and fast ratio-based liquidity measures, and CCC indicators for SMEs. They found that SMEs with good cash management practices saved money on transaction costs because they had internal cash on hand, which prevented the need for external borrowing and, consequently, saved money on interest.

Cash conversion cycle, receivable ratio, payable ratio, and inventory ratio were the variables examined in an assessment of the impact of the cash conversion cycle on the financial performance of construction materials/chemical and paint manufacturing companies in Nigeria by Ikechukwu and Nwakaego, using data from annual reports of Nigerian healthcare organizations. The results of least square multiple regression showed that inventory ratio and accounts receivable ratio had significant and favorable effects on businesses' profitability, while accounts payable ratio and cash conversion cycle had significant and non-significant effects on businesses' profitability [24].

The relationship between cash management and the success of Nigerian listed companies was examined by Augustine and Jacob. In this study, an ex post facto research methodology was employed to analyze the secondary data using descriptive statistics, correlation matrix, and Pool Ordinary Least Square Regression. The return on assets model's findings shows a strong positive relationship between cash conversion cycle, cash holdings, and firm return on assets, but a negative relationship between cash flow and firm size and return on assets. In the return on equity model, the variables of company size, firm growth, and cash flow are all negatively correlated with the variable of firm performance. Only the business size variable, however, showed a significant inverse relationship with the dependent variable at the 5% level. The cash conversion cycle variable and return on equity have a positive correlation [25].

In Thailand's agriculture and food industries, Linh and Mohanlingam (2018) found a link between the cash conversion cycle and profitability. In this study, data from 34 agricultural and food companies that were listed on the Thai Stock Exchange from 2009 to 2013 are examined. Pearson's correlation and regression analysis were used to examine the relationship between the cash conversion cycle and profitability. The results demonstrate that the cash conversion cycle (CCC) has a significant inverse relationship with profitability in Thailand's agriculture and food industries. Additionally, it was found that return on assets (ROA) and debt ratio have a strong negative correlation, whereas return on equity and payment cycle have a positive correlation. There was no evidence of an association between cash collecting cycle and profitability. [26].

G. Conceptual Framework

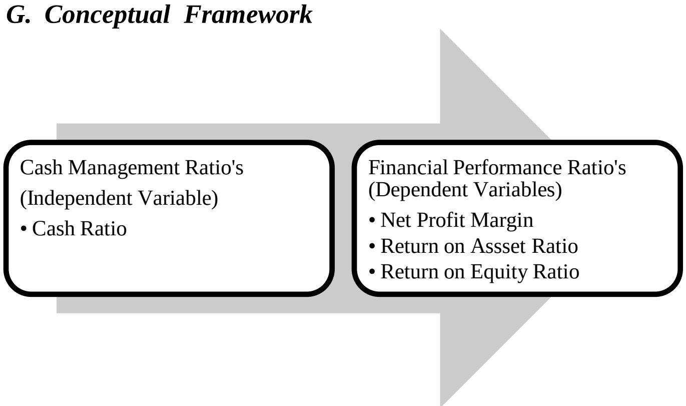

Figure 1: Conceptual Framework

The Conceptual framework was adopted from Sam Sundar Chintha in 2021; edited by the researcher in 2022. The relationship between the dependent variable of financial performance, which is measured by the net profit margin, return on asset ratio, and return on equity ratio, and the independent variable of cash management, which is evaluated by the cash ratio and operating cash to debt ratio, is shown in the graph above. Financial ratios, according to Carlson (2020), are useful tools that allow business managers and investors analyze and compare the financial links between the accounts on a company's financial statements. They are one tool that enables financial analysis that considers the history, sector, or industry of a corporation. In order to assess the indicated variables using the financial statements that are publicly available from the Philippine Stock Exchange, Inc. (PSE) and the relevant websites of the retailing companies, which are the focus of this study's analysis, the researchers will use financial statements from the selected retail industry.

II. REVIEW OF RELATED LITERATURE

A. Cash Management

Working capital management places, a strong emphasis on a company's ability to use its cash resources effectively. Accordingly, a company's ability to manage money effectively will affect how business tasks evolve [9] and ensuring that there is enough working capital to maximize profits [10]. To expedite the installation of debt obligations, increase corporate productivity, maintainability, and future planning, a company must maintain a good cash management system (Righetto, Morabito and Alem, 2016). The need of having sound cash management is shown by their heavy reliance on limited money assets [11]. The likelihood that financial institutions will approve your request for financial aid will be strongly influenced by your ability to manage your funds.

Cash equivalents are short-term, highly liquid investments that are easily convertible into known amounts of cash and are subject to a negligible risk of value changes, according to Nwarogu and Iormbagah's definition in their paper [12]. Cash and cash equivalents are defined as cash on hand and demand deposits. They continued by saying that managing the company's finances requires maximizing interest income on idle capital. According to the Chartered Institute of Management Accounting (CIMA).

The goal of cash management is to maximize interest on any extra funds that the organization may have but may not need right away, as well as to optimize the quantity of cash that is available to it. Managing a company's short-term resources to support ongoing operations, raise money, and maximize liquidity is both an art and a science. Cash management, according to Oluoch, is the transfer of monies through financial institutions to maximize liquidity. By maximizing investments and lowering interest payments, corporate fund management aims to boost interest income [13].

According to Slobodan Stamenkovi, a company's potential to create cash as well as its solvency and liquidity should be shown through the examination of cash flows. The cash flows produced in the current year serve as the starting point for all study and reporting on cash flows. However, the cash flows from the prior year are still taken into consideration to spot any changes or trends, particularly the net cash flows from operating activities. The organization's financial status and operational efficiency are examined using the observed trends in the cash flow. Analyzing the link between cash flow and profitability trends is one function of the cash flow statement. revealed techniques like predicting future cash demand as essential in improving financial stability and performance. Hutchison concurred and backed the same.

The conclusions of Gilbert indicate that cash management has little effect on financial performance. To test the effect of cash management on the financial performance of corporate entities in the Lira district, data from 124 respondents sampled from the Lira district were used. These respondents represented small, medium, and large business communities dealing in hotels, wholesale, metal fabrication, and retail [14].

The same research discovered that cash management had just a minor effect on financial performance is a difficult area for most business owners to master. The impact of cash management systems on profitability was the subject of an empirical investigation in a different study by Jama, Samantar, and Muturi [15]. The main objective was to examine the impact of cash management practices on the profitability of bottled-purified businesses in Garowe and Bosaso-Puntland, Somalia. Using a survey, document analysis, and interviews, 46 people were used as the sample population for the data collection. The data was examined using correlation and regression analysis. The Solvene's formula was also used in this inquiry. The study's conclusions showed that cash budgeting significantly impacted the firms' profitability. evaluated the indirect impact of cash management by putting those strategies into practice between the years of 2009 and 2016. methods in the heavy vehicle industries in India. By examining debtor turnover ratio, profitability, and company growth rate, they found a significant correlation between debtors' management and cash of 0.415, demonstrating that the extent to which a firm may increase its revenue depends on effective cash management [16].

According to research of Chintha cash management has an impact on a number of crucial areas, such as a company's liquidity, profitability, risk of bankruptcy, and total working capital. Throughout the years, from 2014 to 2019, 36 companies listed on the Muscat Securities Market (MSM) were selected to confirm the relationships between cash management and financial performance. The study included financial performance metrics including the cash ratio (CR), operating cash to debt ratio (OC-DR), return on assets (ROA), return on equity (ROE), and net profit ratio (NPR). Cash Ratio (CR) indicates a statistically significant positive link with ROA, ROE, and NPR.

A statistically significant positive correlation between ROA, ROE, and NPR is shown by the Cash Ratio (CR). The OC-DR significantly affected ROA and NPR when Return on Asset was employed as a dependent variable. The main conclusion is that Omani manufacturing enterprises' employment of cash management strategies is a significant contributor to their financial performance.

B. Financial Performance

Financial performance is a subjective evaluation of a company's capacity to generate income from its primary mode of business, according to Scott. A company's overall situation in terms of assets, liabilities, equity, costs, revenue, and overall profitability is also described using this phrase. A number of business-related algorithms are used to calculate it, giving consumers the ability to determine exact information about a company's potential effectiveness. state that valuation ratios, profitability ratios, growth rates, liquidity ratios, efficiency ratios, and leverage ratios were used to assess the company's financial performance [17].

The biggest factor affecting the financial success of retail businesses is Leverage ratios The assessment of a company's operating performance is very important because it is directly related to the company's advantage. by looking at all available financial data and basing judgments on the main financial capability indicators found in the most current financial statements, such as total assets, total revenue, profits, effective use of capital, revenue, profit growth rate, and operating strategy for that year. It can be seen that the two most crucial aspects of the operating performance of publicly traded retail firms are profitability and solvency. The annual ranking of the biggest retail chains in the world always includes all of the biggest and most well-known US shops.

The top five retailers are still Walmart, Costco, Kroger, Home Depot, and Target. The two brands with the most prestigious rankings in the Philippines are Puregold and SM retail outlets, and they still maintain the top spots. Financial performance measures how well a company has performed over a specific time frame and is reported in terms of overall earnings and losses. The majority of businesses in the retail sector prioritize maximizing earnings.

According to Tran A company with steady profitability appears to have a higher chance of surviving than one with fluctuating profitability or losses. A wide range of stakeholders, including managers, creditors, financial experts, current/potential investors, and researchers, are interested in evaluating the effects of an industry's financial performance and investigating the stock's determinants. In order to examine the performance of an organization in any industry, previous studies looked at a variety of criteria, including economic considerations, environmental considerations, social concerns, and service quality.

When Robert and Hamacher looked into how cash flow management affects the performance of mutual funds, they found that a better cash flow had a favorable impact on the business results [18]. According to Waswa, Mukras & Oima, carefully considering and planning funding liquidity management is one technique to gauge financial success. As a result, businesses should boost their operating cash flow to have a favorable impact on their performance. Both Makokha and Odindo concurred that the company's financial performance is negatively impacted by debt.

A study on the relationship between cash management and performance of companies listed on the Nairobi Securities Exchange was undertaken [19]. It was discovered that the size of the company had a detrimental and negligible impact on financial performance. concentrating on Nigerian manufacturers. Additionally, 67% of SMEs in Jordan were found to be unaware of cash control procedures [20]. The studies mentioned typically indicate that cash management aid in improving financial success. This appears to be accurate, nevertheless, in light of the company's rate of expansion. As firms expand, the situation is likely to change. For instance, cash management methods and the usage of technology have a significant impact on the financial performance of SMEs in Nyeri, Kenya [21]. According to research, cash management in Mogadishu was found to have a significant impact on the financial success of private secondary schools Similarly, operating cash flow management was found to have a considerable and favorable impact on return on assets and a modest but favorable impact on return on equity). The mutual funds in Kenya were the subject of this investigation [22].

C. Retail Industry

The retail sector is one of the most well-known in the world. In layman's terms, this denotes a face-to-face transaction with the customer. According to Pattanaik & Mishra the term "Retail" originates from the French word "Retailer," which means "to cut a portion off" or "to split bulk." Retailing refers to all activities involving the sale of products or services to final consumers for domestic or non-commercial use [23]. Any business, whether a producer, wholesaler, or retailer, that sells to the final consumer engages in retailing. It doesn't matter whether the products or services are sold in a shop, on the street, or at the customer's home, or whether they are sold face-to-face, via mail, phone, vending machines, or online. Retailing is also described as a group of business activities that enhance the goods and services that are provided to customers for domestic and private use. Activities that add value include offering assortments, breaking bulk, keeping inventories, and offering services.

Buying products or services from a producer, wholesaler, agent, importer, or other retailer and selling them to customers for their own use is known as retailing. It is the process of profitably transforming its appearance from traditional, haphazardly stacked stores to exquisitely styled, expertly run retail establishments with excellent ambiance and comfort.

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As a result, many businesses try to keep everything needed for daily use as well as items that are only needed rarely under one roof. A supply chain is used by retailers to meet identified demands.

For the study, creation, and use of advanced analytics, econometrics, and optimization approaches in fields like pricing and integrated marketing communications management, retail offers a framework of Pattanaik & Mishra. The retail sector is a global one and would not function without highly skilled workers in the factories and sales departments.

III. RESEARCH METHODOLOGY

A. Research Design

The researchers collected and analyzed the available numerical data as part of their quantitative investigation. The main goal of this study is to get a deeper understanding of how cash management affects the financial performance of the retail sector, particularly in the Philippines. The retailing companies' own historical data and financial statements were also utilized by the researchers to give quantitative data. Maurice Ayuketang asserts that the quantitative component is supported by true data drawn from financial statements, previous records of the form, and other sources. Customer financial strength can be determined, for instance, by creating an aging schedule for debtors, analyzing ratios from customer financial statements, and trend analysis.

In order to further analyze and determine if there is a significant influence on the effect of cash management on the financial performance of the retailing industry, the researchers also used a descriptive design to outline the distribution of existing variables, regardless of causality or other hypotheses. Despite the fact that the overall data collection and analysis employed in descriptive design are uncontrolled or manipulated, they nonetheless deliver the most information that is pertinent to the issue by making the most use of the resources at hand.

B. Sampling & Participants

Out of the 10 industries listed at the Philippine Stock Exchange from 2016 to 2021, the researchers chose to focus on the five (5) retail sectors because these companies are the leading participants in the sector and have complete data for the whole study period. A random sampling approach was utilized to gather data from published annual reports of the chosen retailing companies posted on the PSE website because the study focuses on the impact of cash management on the financial performance of the retail industry, notably in the Philippines. The five that the researchers chose are as follows:

1) SM Investments Corp
2) SSI Group.
3) Puregold Price Club Inc.
4) Robinsons Retail Holdings Inc.
5) Metro Retail Stores Group.

C. Data Instruments

Secondary data will be used as the information source in this investigation. These statistics were gathered from official websites, including those of the Philippines Stock Exchange and individual retail companies, as well as from pertinent research and studies conducted between 2016 and 2021. Information that has been compiled from primary sources and made available to researchers is known as secondary data. Since the advent of electronic media and the internet, sources have been more readily available. There are a variety of published publications available for different study themes.

On websites, most of the information is shared in an unregulated manner. On the other hand, the majority of government websites or private companies are paid data collectors. Governmental records are a useful and trustworthy source of secondary data. According to Quoc-Dien Trinh, they comprise information that can be applied to studies in the humanities, management, marketing, and social sciences.

D. Data Collection Procedures

Due to the limitations imposed by the COVID-19 pandemic, this analysis was carried out using secondary data of 5 retailing industries out of 10 retailing companies listed on the Philippine Stock Exchange for the previous 5 years. For the duration of the study, the researchers also made use of the data and resources made available by the retailing companies. The primary sources of information include annual reports, cash flow statements, internal business sources, profit, and loss accounts for the last ten years, and yearly reports. Additional information can be found on each company's website. The financial statements and annual reports that are made accessible to the public on the websites of the retailing firms and the Philippine Stock Exchange serve as the basis for the measures.

E. Data Analysis

To examine the study's variables, the researchers used multiple regression analysis, descriptive statistics, and accounting measures. The performance of the study's dependent variable, the retail industry, will be particularly examined using the net profit margin (NPM), return on assets (ROA) ratio, and return on equity (ROE) ratio.

E.1 Multiple Regression

In order to take into consideration all of the interrelations that occurred in the phenomenon under study, multiple regression analysis was proposed. Its objective is to characterize the relationships accurately and quantitatively between numerous independent factors and a dependent variable. It enables the assessment and mathematical description of the magnitude and direction of occurrences, as well as the forecast of one variable based on the values observed for other variables that are linked with it. [27]. As a statistical tool, multiple regression analysis is used to determine which independent factors are related to the dependent variable and to examine how the dependent variable changes when the independent variables are changed. The regression model applied in this research is listed below.

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Based on the above conceptual framework, the following multiple Regression Model has developed for analysis:

1. Effect of cash management on the financial performance measured by Net Profit Margin

$NPR = \beta 0 + \beta CR + \varepsilon$

2. Effect of cash management on the financial performance measured by Return on Assets

$ROA = \beta 0 + \beta CR + \varepsilon$

3. Effect of cash management on the financial performance measured by Return on Equity

$ROE = \beta 0 + \beta CR + \varepsilon$

Where,

ROA = Return on Assets
ROE = Return on Equity
NPR = Net Profit Ratio
CR = Cash Ratio
β = Coefficient of variables
e = Error term

Table I: Tabular Summary of Definitions of Variables

Type of Variable	Variable(s) Name	Measures	Notation	Measurement
Dependent	NPR	Net Income / Revenue	NPR	Percentage
	ROA Ratio	Net Income / Ave. Total Assets	ROA Ratio	Percentage
	ROE Ratio	Net Income / Ave. Shareholder's Total Equity	ROE Ratio	Percentage
Independent	CR Cash	Cash and Cash Equivalent / Total Current Liability	CR Cash	Numerical

E.2 Descriptive Statistics

Description-based statistics. Measures of central tendency and measures of variability are the two categories of descriptive statistics. Measures of central tendency include the mean, median, and mode, whereas measures of variability include the standard deviation, variance, minimum and maximum variables, kurtosis, and skewness. Following their identification by numbers, the researchers will employ descriptive statistics to further evaluate the variables and ideas indicated above. Using descriptive statistics, the numerical data is analyzed and evaluated during the duration of the study's five-year term, from 2016 to 2021.

F. Ethical Consideration

The researchers made use of secondary data from the Philippines' chosen retail sector. The aforementioned secondary data and information were obtained from publically accessible scholarly publications, articles, and journals as well as the PSE edge website. Even though they are considered secondary data, the information that can be accessed on the internet, particularly the financial report information, is treasured and safeguarded. The study is also exclusively intended for academic use. According to the IEEE reference system, all collected data, including authors, are expected to be recognized by the researchers.

IV. RESULT AND DISCUSSION

A. Descriptive Analysis

To measure the statistical analysis and determine the impact of cash management on the financial performance of the chosen five (5) retail companies—SM Investment Corporation Investments Corp, SSI Group, Robinsons Retail Holdings Incorporated, Metro Retail Stores Group, and Puregold Price Club Incorporated—the researchers used the Microsoft Excel spreadsheet.

Table II: Summary of Descriptive Statistics

	SM	SSI	ROBINSON	METRO	PUREGOLD
ROA	5.10%	1.18%	5.34%	4.79%	10.76%
ROE	10.03%	1.82%	8.22%	7.95%	12.61%
NPM	12.32%	0.40%	3.86%	1.74%	4.64%
CR	41.29%	31.36%	55.06%	65.16%	81.54%

The findings, which are summarized in Table 2, are from the descriptive statistics of the independent variables utilized in the conducted study, which had as its sample the five (5) selected retail businesses in the Philippines. Additionally, the information was gathered

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from the companies' financial records for the five (5) years running from 2016 to 2021.

The table II shows that the ROA ranged from 1.18% to 10.76%, with Puregold having the highest ROA for the 5-year period (10.76%) and SSI having the lowest ROA (1.18%). Additionally, it revealed that the ROE ranged from 1.82% to 12.61%. It shows that SSI has the lowest Return on Equity (1.82%) and Puregold has the highest Return on Equity (12.61%) during the past five years. NPM ranged from 0.40 to 12.32 percent, with SM having the highest NPM (12.32 percent) across the 5-year period and SSI having the lowest NPM (0.40 percent). The Cash Ratio (CR) ranged from 31.36% to 81.54%, with Puregold having the highest Cash Ratio (81.54%) for the 5-year period for the third time and SSI having the lowest (31.36%).

B. Regression Results and Analysis

Table III: Model Summary of the Regression Analysis

	NPM[1]	**ROA[2]**	**ROE[3]**
Multiple R	0.0946	0.8877	0.7643
R Square	0.0089	0.7879	0.5841
Adjusted R Square	-0.3214	0.7172	0.4455
Standard Error	0.0533	0.0182	0.0297
Observations	5	5	5

NPM[1] = Net Profit Margin, ROA[2] = Return on Assets, ROE[3] = Return on Equity

The study used a multiple regression model analysis, which displays a summary of the calculated independent variable and dependent variables indicated by the NPM, ROA, and ROE of SSI Group, Robinsons Retail Holdings Incorporated, Metro Retail Stores Group, and Puregold Price Club Incorporated. Table 3 accurately predicts the degree of influence they have on the outcome variable based on the information provided.

A provided data value of 0.0946 of the Multiple R demonstrates a very significant positive linear relationship between the Cash Ratio and NPM in terms of its impact on Net Profit Margin. Additionally, the predictor Cash Ratio accounts for about 0.89% (R Square = 0.0089) of the variability.

The presented data, which represents a Multiple R value of 0.8877, demonstrates a very strong positive linear relationship between the Cash Ratio and ROA in terms of its impact on Return on Assets. Additionally, the outcome demonstrates that the predictor used, Cash Ratio, accounts for 78.79% of the variability of R Square.

The provided data of 0.7643 of the Multiple R shows a very strong positive linear relationship between the cash ratio and ROE with regard to the impact of the cash ratio on return on equity. Additionally, the outcome demonstrates that the predictor Cash ratio accounts for 58.41% of the variability.

C. ANOVA Test Statistics

Table IV: Summary of ANOVA Test

		df	**SS**	**MS**	**S**	**Significance F**
NPM[1]	Regression	1	0.0001	0.0001	0.0271	0.8798
	Residual	3	0.0085	0.0028		
	Total	4	0.0086			
ROA[2]	Regression	1	0.0037	0.0037	11.1462	0.0444
	Residual	3	0.0010	0.0003		
	Total	4	0.0047			
ROE[3]	Regression	1	0.0037	0.0037	4.2131	0.1324
	Residual	3	0.0026	0.0009		
	Total	4	0.0064			

NPM[1] = Net Profit Margin, ROA[2] = Return on Assets, ROE[3] = Return on Equity

The ANOVA was used to assess the model's significance. The regression model is not significant, as shown by the study results shown by the NPM, since the Significant F = 0.8797 is higher than the alpha of 0.05. Since the Significant F = 0.0444 is less than the alpha 0.05, the regression model is significant in terms of ROA, according to the result. Finally, as the Significant F = 0.1324 is bigger than the alpha 0.05, the ROE result implies that the regression model is not significant.

D. Coefficients Analysis

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Table V: Coefficients Analysis - Independent Variable CR and Dependent Variable (NPM, ROA & ROE)

		Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
NPM	Intercept	0.0581	0.0779	0.7459	0.5099	-0.1899	0.3061
	Cash Ratio	-0.0222	0.1352	-0.1646	0.8798	-0.4524	0.4079
ROA	Intercept	-0.0304	0.0266	-1.1396	0.3372	-0.1152	0.0544
	Cash Ratio	0.1543	0.0462	3.3386	0.0444	0.0072	0.3014
ROE	Intercept	-0.0035	0.0434	-0.0808	0.9407	-0.1416	0.1346
	Cash Ratio	0.1545	0.0753	2.0526	0.1324	-0.0851	0.3941

The coefficients are shown in Table V. The Cash Ratio was given a p-value of 0.8797 in accordance with the model mentioned above, which suggests that the NPM increases by 3.87% for every unit that the CR increases. Due to the fact that this model uses multiple regression, even though the CR exhibits a positive effect, it is not significant. Accordingly, the coefficient of CR's result, which has a p-value of 0.1324, shows that the ROE has a positive but insignificant effect; as a result, for every 1 unit increase in Cash Ratio, there is an increase in ROE of 15.19%. As opposed to this, the correlation between CR and ROA, which has a p-value of 0.0444 and is displayed in the coefficient of CR, indicates a positive and significant relationship. This means that for every unit increase in the cash ratio, the ROA rises by 12.42 percent. According to Abigyan, the sample data are sufficient to reject the null hypothesis for the full population if the P-Value for a given variable is less than the significance level. In other words, the sample data are sufficient to reject the null hypothesis for the full population if the P-Value for a variable is less than the significance level. On the other hand, a p-value greater than 0.05 indicates that there is not enough data to rule out the null hypothesis.

V. CONCLUSIONS AND RECOMMENDATIONS

The results of the study indicate that five (5) particular retail industries are familiar with the core concepts of cash management. Cash management is one of the most crucial factors that must be efficiently managed because it affects operational efficiency and lowers total operating costs. Retailers that uphold a strong set of profitability management principles will undoubtedly increase a company's potential to profitably generate. According to the study's findings, the selected five (5) retail organizations' financial performance, as measured by their Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin, has a favorable relationship with their cash ratio (NPM). According to the study, raising the cash ratio will put retailers, particularly those in the Philippines, in a good financial position, as shown by a positive correlation between the cash ratio and financial performance.

In addition, the regression analysis revealed that total cash management has favorable effects on the study's dependent variables. Further, none of the variables have a negative impact on profitability, and cash management serves as one of the tools used to support and uphold the companies' financial performance. Finally, the statistical methods for ROA have been used to reject the null hypothesis. The Return on Equity (ROE) and Net Profit Margin, however, suggest that null hypotheses have been accepted, indicating that there are beneficial but insignificant effects (NPM). Despite this, every factor that was utilized to gauge financial performance had favorable effects that varied greatly in intensity. Maintaining equilibrium between cash management procedures and actual financial performance is equally critical for retailing businesses.

The researchers advise five (5) significant players in the Philippine retail market to execute their cash management effectively based on the study's findings. The empirical research used in this study indicates that cash management significantly affects the financial performance of the retail industry. The results of this study provide helpful guidance for implementing cash management for the five (5) Philippine retail businesses that were chosen because doing so will help them achieve profitability and enhance performance. The cash situation should be the primary concern of financial management in the retail sector at all times. The Philippine retail sector should maintain a steady financial position that allows it to quickly cover its short-term obligations with cash or cash equivalents on hand. Effective cash management procedures should also be implemented, with the finance manager creating a cash budget and cash flow statement for efficient cash planning and control.

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Understanding the cash position should be able to assist the retail sector in attracting additional capital to finance development and retaining people to accomplish growth. To ensure that commercial enterprises may continue operating, the cash management process must adhere to all relevant laws, rules, and professional and ethical standards. To obtain sufficient assistance in managing cash, more qualified accounting personnel should be hired in order to improve further and maintain the stable financial performance of any retailing company. Additionally, effective cash management plans coordinate and communicate with operations and treasury. Any company's main objective is to maintain a balance between cash inflow and outflow to protect it from a liquidity crisis. One of the most effective ways to make sure a business meets its goals is smart cash management.

Five years were used to conduct the study, which looked at the consequences of cash management at five (5) chosen enterprises from the Philippines' retailing sector. To achieve the goal of the research, return as dependent variables, Return on Assets and Return on Equity are used, while Cash Ratio (CR) is chosen as the independent variable. The researchers' analysis was restricted to the Philippines' retailing sector in particular. Because there are so few and limited studies on this subject, the researchers discovered a wide possibility for additional analysis of the cash management techniques in the Philippines.

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