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THE IMPACT OF WORKING CAPITAL MANAGEMENT ON THE PROFITABILITY OF TELECOMMUNICATION SECTORS OF AFGHANISTAN

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Abstract

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Current study aims to examine the association among management of working capital and profitability of telecommunication sectors of Afghanistan. In current study Cash ratio is used as cash management independent variables, Account receivable turnover ratio is used as Account receivable management independent variable, and inventory turnover ratio used as inventory management independent variable while Return on Assets is used as profitability dependent variable. Descriptive statistics are used to describe the data while correlation and fixed effect regression models are used to shoe the relationship among the dependent and independent variable. Five years panel data is collected from telecommunication sectors of Afghanistan from 2018 – 2022 and analysis through STATA. Finding of the study shows that both Cash management and Account receivable management shows significant and positive relationship with the profitability of the telecommunication sectors of Afghanistan. While inventory management shows an insignificant but still positive relationship with firm profitability.

Keywords: Ratio, Turnover. Inventory, Return, Assets.

Introduction

In the dynamic landscape of modern business, effective management of working capital has emerged as a critical determinant of profitability and overall financial health. Working capital management (WCM) involves the administration of a company's short-term assets and liabilities to ensure sufficient liquidity to carry out operations smoothly and efficiently. The central component of working capital includes account receivable, inventory and account payable. Proper management of working capital is essential for maintaining the balance between profitability and liquidity. Insufficient working capital can lead to liquidity crises, jeopardizing a firm's ability to meet its short-term obligations, while excessive working capital can result in idle resources that could otherwise be invested to generate return (Eljelly, 2004). Hence, striking an optimal balance is crucial for sustaining operational efficiency and profitability. Empirical studies have established a direct correlation between working capital management and firm profitability. Efficient working capital management minimizes costs associated with holding inventory and receivables while optimizing the timing of payables. This, in turn, enhances a firm's cash flow management, reduces the need for external financing, and ultimately leads to higher profitability (Deloof, 2003). Conversely, poor working capital management practices can result in overstock, causing missing sales opportunities and customer dissatisfaction (Lazaridis & Tryfonidis, 2006). In the context of increasing competition and globalization, firms need to be agile in their financial management practices to adapt to market changes quickly. Effective working capital management allows firms to leverage their short-term assets to gain a competitive advantage, thus contributing to long term financial sustainability and growth (Sharma & Kumar, 2011). The complexities of working capital management involve several strategic decisions, including the optimal level

of inventory, the credit policies for customers, and the terms of payments to suppliers. Each of these elements must be exactly managed to optimize the conversion cycle (CCC) that processes the time occupied between spending cash for raw material purchases and gathering cash from the sales of product. A short cash conversion cycle indicates more efficient working capital management, typically associated with higher profitability (Garcia - Teruel & Martinez-Solano, 2007). In conclusion, firms navigate through the complexities of the modern business environment, strategic management of working capital stands out as a cornerstone of financial performance and competitive positioning. This introduction sets the mechanisms for a deeper exploration of the mechanisms through working capital management, which influences profitability and the best practices that firms can adopt to enhance their financial outcomes.

Cash Management

Many organizations lack the financial resources necessary for various goals, cash management decisions are among the most crucial ones made in an organization. It serves as the hub for an organization's operational procedures so that its goals can be met. Planning with cash, controlling cash flows, periodically determining the ideal cash level, and investing excess cash are all part of cash management. To carry out their daily activities, businesses must strike a balance between liquidity and profitability. To guarantee that businesses can pay their short-term debts when they become due and retain profitability, they must have liquidity. According to Weston & Copeland (2008), businesses require a cash reserve to maintain a balance between their short-term cash inflows and withdrawals, which are not exactly matched. Liquidity and profitability are directly impacted by cash management (Raheman & Nasr, 2007). In addition to increasing a company's chances of surviving, effective cash management also helps it draw in investors who can finance its

growth, as these are the first things investors consider when assessing a company and its cash flow, which in turn reflects cash management practices (Merchant factors, 2013). Over time, the difference between cash outflows and cash receipts improves liquidity and profitability, which fuels overall business growth (Brinchk, Soeren & Gemuenden, 2011). The goal of cash management is to make sure that business entities retain an appropriate level of cash and that any excess is allocated to the right purposes. It is the responsibility of business organizations to make sure they do not misuse overdrafts as a source of funding. (Tabanja, 2005)

Inventory Management

The term inventory refers only to the products and services that companies keep on hand. Nonetheless, inventory is a crucial part of current assets since it is a well-considered liquid asset due to its ease of conversion into cash. It includes unfinished goods, work-in-progress, and raw materials. The ideal level of inventory is one that businesses want to always maintain to maximize profits. A company can maintain a large stock of raw materials to prevent supply delays that could have an impact on output. Consequently, the company should maintain adequate inventory to handle the unforeseen spike in demand, but the expense of doing so shouldn't outweigh the gain (Brealey & Myers, 2006). Like this, a corporation can lower its finished goods inventory by cutting production and just manufacturing enough to meet current demand. However, if the product's demand unexpectedly increases, this strategy could prove problematic for the business. Customers may become displeased in such a scenario, and even devoted patrons may decide to switch to the competitor's brand. With the right amount of inventory, the company may optimize earnings while avoiding unnecessary holding and ordering costs. Among other things, holding costs include utility expenditures, insurance, security costs, and warehouse fees.

Carrying cost, to put it briefly, is the total of all the costs businesses incur when managing inventories. Conversely purchasing raw material costs are associated with ordering new inventory. That includes time management and expenses related to telephone and all clerical expenses etc. Ordering large amounts of raw material can reduce fixed cost but I will increase inventory carrying cost. The finance manager can reduce inventory carrying cost by ordering the inventory as they needed by applying just in time inventory management procedure. Profitability of the firm can increase in both cases.

Account Receivable Management

In the word of Yator (2018) amount owed to an institution to their stakeholder by rendering services or sale of goods and the payment is made in future by these stakeholders are refer to Account receivable.so the management of A/R is essential factors for an institution these A/R are mentioned under the head of current assets in the balance sheet of the organization. Current assets are the assets that will be convertible into cash within one accounting period (Raza et al., 2015). Average collection period is used as a proxy in current study. Which specify the number of days in which institution collect their A/R from their customers (Pakdel & Ashrafi, 2019).

Profitability

According to Gartenberg, Prat, & Serafeim (2019), an organization's financial success is a measure of its overall health and ability to sustain its activities. Analyzing an organization's financial statements and records over a certain time allows for the determination of financial performance. A strong financial management plan is necessary to accomplish the fundamental goals of the firm. Scholars in the fields of business and strategic management have focused their research on the conventional measures of financial performance. Bulle (2017) states that many financial matrices and indicators have

frequently been used to measure the traditional indicator of organizational success. He noted that the trade-off between profitability, liquidity, and solvency was the enduring problem in attaining proper financial management, nevertheless. This study quantified the cumulative surpluses and deficit balances that show on the financial statements of the authorized public universities in Kenya to determine whether their financial performance is satisfactory.

Research Questions

- 1: How does cash management influences the overall profitability of firms?
- 2: Is there any relationship between account receivable management and firm profitability?
- 3: What inventory management practices are most effective in enhancing profitability?

Research Objectives

- 1: To evaluate the impact of cash management on firm profitability.
- 2: To investigate the relationship between accounts receivable management and firm profitability.
3. To identify effective inventory management practices that contribute to higher profitability

Literature Review

According to [Sarin, Gabriel & Alena \(2020\)](#) in their research topic "The Impact of Working Capital on Firm Profitability" They used Net Working Capital as on independent variable and Profitability as Dependent variable as panel data for their investigation and found that working capital has a positive relationship with profitability and they further highlight that solid relationship of Working capital and profitability. In their study on "Working capital management and firm profitability," [Knauer & Wöhrmann \(2013\)](#) used net working capital as an independent variable and profitability as a dependent variable. They discovered evidence of the beneficial effects of inventory and accounts receivable management on profitability. However, reverse causation drives

the findings about how accounts payable administration affects profitability. This paper concludes by highlighting important facets of earlier research and suggesting directions for further investigation. According to [Hina Agha \(2014\)](#), for her research paper on the topic of "Impact of Working Capital Management on Profitability," she utilized profitability as the dependent variable and networking capital management as the independent variable. The study's findings indicate that working capital management has a major effect on a company's profitability. According to the findings, the business can boost its profitability by managing its working capital effectively. According to [Mulualem Mekonnen \(2011\)](#), he employed a quantitative research strategy to test several research hypotheses in his study on the effects of working capital management on firms' profitability. He utilized profitability as the DV and networking capital management as the IDV. method of research approaches to test a series research hypothesis. The findings demonstrated a statistically significant inverse link between working capital management and profitability. It implies that by properly managing the cash conversion cycle and maintaining each component of working capital at the highest feasible level, managers of businesses can generate profits or value for their organizations and shareholders. Additionally, he discovered a strong inverse link between profitability and liquidity. In contrast, the study discovered no statistically significant inverse association between the amount of debt used and the profitability of the company. According to [Salman Sarwat \(2017\)](#), he employed panel data to investigate the relationship between working capital management as an independent variable and profitability as a dependent variable in his research paper, "Impact of Working Capital Management on the Profitability of Firms: Case of Pakistan's Cement Sector." According to the findings, the return on assets (ROA) is positively and significantly correlated with the assets

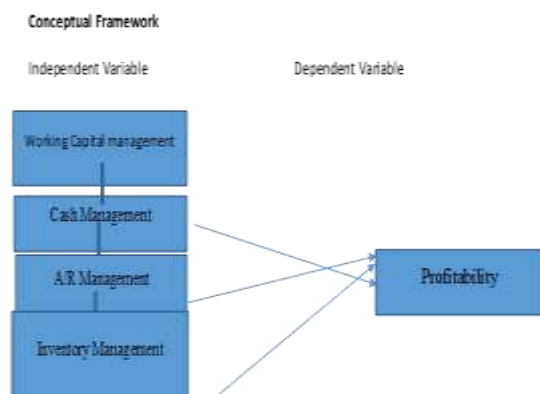
turnover ratio (ATO), current ratio (CR), and firm size (SLS). Additionally, the most crucial components of working capital—inventory, accounts receivable, and payable—were shown to be negligible. Therefore, this study suggests that working capital management effectiveness has no discernible impact on increasing business profitability in Pakistan's cement industry. The study also found that the days sales of inventory for total stocks clearly tend to become shorter due to a reduction in the days in inventory ratio for materials and finished products. Based on panel regression models, this study demonstrated that an improvement in inventory management efficiency is positively correlated with financial performance, measured as the return on operating assets. In accordance with the [Lyndon M. Etale & Paymaster F. Bingilar \(2016\)](#) in their research paper "The Effect of Inventory Cost Management on Profitability: A Study of Listed Brewery Companies in Nigeria" they used secondary data methodology for their investigation. They showed inventory management as an independent variable and profitability as dependent variable. They found from the research that study revealed that efficient inventory cost management have positive influence on the profitability of brewery companies in Nigeria. Also, from the findings it appears, the study recommended that brewery companies should adopt effective and efficient inventory cost management practices; arrange appropriate modern technology for effective inventory cost management; and employ capable and qualified staff who should be trained regularly on proper and efficient inventory cost management. According to [Genesis GyasiSah & JuditFüredi-Fülöp \(2022\)](#) in their research topic "The Effects of Proper Inventory Management on the Profitability of SMEs" and they used the primary data methodology for their investigation. In the words of [Julius Enqvist, Michael Graham & JussiNikkinen \(2013\)](#) in their research topic "The Impact of Working Capital

Management on Firm Profitability in Different Business Cycles: Evidence from Finland" and they used firm level data in this paper as well as they used Working capital management as independent variable and profitability as Dependent variable. In this paper they show the role of business cycles on the working capital-profitability relationship using a sample of Finnish listed companies over an 18-year period. They found the impact of the business cycle on the working capital-profitability relationship is more definite in economic downturns relative to economic booms. They also examined that the significance of efficient inventory management and accounts receivables conversion periods increase during periods of economic downturns. So, their results demonstrate that active working capital management matters and, thus, should be included in firms' financial planning. The findings of this paper show a significant and negative relationship between account receivable period and return on asset, return on equity, operating profit margin and net profit margin in the manufacturing industry. Also, they expect that managers can create value for shareholders by reducing the accountant receivable period, accountant payable period, and a cash conversion cycle. On the other hand, we found that there are significant and negative relationships between accountant receivable period, accountant payable period and operating profit margin, while there are insignificant and positive relationships between inventory conversion period, cash conversion cycle and operating profit margin. According to [Nadeem, Naveed Ahmad, Mehreen Kanwal& Sonia Anwar \(2014\)](#) in their research paper "Impact of Working Capital Management on Firm's Profitability: Evidence from Textile Sector of Pakistan" and they have adopted the methodology of [Hayajneh & Yassine \(2011\)](#) which they have used to determine the WC performance of Jordanian manufacturing firms and devise the similar model for profitability for their

research. They indicate the NWC as an independent variable. The independent variable has been divided into two sets. First one is WCM which includes: Cash conversion cycle (CCC) is used to measure the working capital management efficiency. CCC is measured as: $CCC = ACP + AAI - APP$ and the Second is control variable which includes: Current Ratio (CR) = Current Assets / Current Liabilities The moderator variable which includes: Management Policies of Inventory, account receivables and account payable and their effectiveness is measured through ACP, AAI and APP. and Profitability as dependent variable. They found that WCM and Profitability have a negative relationship with each other. This study is useful for financial managers for getting a better economic position and for attaining the short-term milestones of a firm as well as long-term goals of business. In the words of [Sunu Prince & Muda Pau \(2023\)](#) in their research paper "Empirical Study on the Impact of Account Receivables and Inventory Conversion Cycle on Profitability of Manufacturing Firms Listed on Ghana Stock Exchange" and they used quantitative research approach and a panel data as methodology. As well they indicate account receivable and inventory conversion cycle as independent variable and profitability as dependent variable in this research paper. They found that there is statistically negative (Beta = -0.201) and significant (P-value = 0.000) effect of account receivables period on return on assets. The study revealed that there is a statistically significant negative effect between inventory conversion period and return on asset (Beta = -0.273, P < 0.05). Also, the results indicated that (current ratio, sales growth and cash to sales) had no significant positive effect (Beta = 0.115, P > 0.05), (Beta = 0.071, P > 0.05), (Beta = 0.092, P > 0.05) on return on asset. In the words of [Fredrick Wafula \(2021\)](#) in their research paper "Effect of Accounts Receivable Management on Financial Performance of Chartered Public Universities in Kenya" used

descriptive and inferential research design for analysis the data while depending on variable is financial performance and independent variables is account receivable management, and they found that Kenya's chartered public universities' financial performance is impacted by accounts receivable management. Accordingly, the study concluded that Kenya's chartered public universities' financial performance was significantly and negatively impacted by accounts receivable management. Due to their inability to fulfill their responsibilities, chartered public universities with longer average collection periods had poor financial performance, which was reflected in their respective deficits. In the words of [Fred \(2021\)](#) in his research title "Effects of accounts receivable management on the financial performance of construction companies in Rwanda, a case of NPD Ltd" he used Account Receivable as Independent Variable and Financial Performance (Firm Profitability) as Dependent Variable as well as he used Primary and Secondary data method for his investigation. In this research the findings revealed that A/R management in NPD Ltd was not effective, especially in terms of Average Collection period and A/R turnover. This study has also shown that Average Collection Period and Bad Debts to Accounts Receivable Ratio (BDARR) negatively influence profitability whereas ART has a positive influence on profitability. Based on [Vishal N. Shah \(2020\)](#) in his research title "Impact of Receivables Management on Profitability: A Study on Selected Printing Companies Listed at Base in India" the researcher indicates Receivable Management as Independent Variable and Profitability as Dependent Variable and used quantitative methods for his investigation and he found that the receivables management across selected companies of printing industry is inefficient and showing significant impact on profitability. [Timgo Dingo \(2013\)](#) reports that she used quantitative methods for her investigation and identified

profitability as the dependent variable and net working capital management as the independent variable in her research topic, "Impact of Working Capital Management on Profitability of Micro and Small Enterprises in Ethiopia: The Case of Bahir Dar City Administration." The study's findings indicate a substantial positive correlation between the number of days an organization has outstanding debt and its profitability. On the other hand, the number of days inventory, the number of days receivable, and the cash conversion cycle all significantly affect profitability. Reducing the duration of the cash conversion cycle can boost an organization's profitability.



- H1:** Cash Management has a significant positive impact on firm profitability.
- H2:** There is a significant positive relationship between A/R Management and profitability.
- H3:** Inventory Management has a positive relationship with Profitability.

Research Methodology

The research approach employed for the study is explained in this section. The target population of the study, the sampling procedure, the size of the sample, and the type of instrument to be utilized are all covered in this chapter. Additionally, procedures for gathering data and methods for analyzing it are employed to analyze the results.

Research Design

The pattern and methods utilized to address research challenges are established by the

study design. The research employed Deductive reasoning is used in quantitative research designs; it is used to numerical data and hypothesis testing. Analyzing and collecting numerical data to find patterns, compute averages, assess correlations, and extract general conclusions are all parts of quantitative research. It is applied in many disciplines, such as the social and scientific sciences. The positive approach, which emphasizes the use of empirical data and scientific methods to explore and comprehend the world, is a philosophical perspective that is also employed in this research.

Population of the study

This research focuses on All Telecommunication Sectors in Afghanistan. And it has targeted all Telecommunication Sectors in Nangrahar, Afghanistan.

Sample Size

Since the population of the study all Telecommunication Sectors, so we take all Telecommunication Sectors as a sample in Nangrahar, Afghanistan. In quantitative research we mostly use secondary data and in sample size all the population will be tested, because it is accessible and convenient.

Source of Data

As we know the research method is Quantitative, so Secondary data has been collected from the financial statement of telecommunication sectors of Afghanistan from 2018 to 2022.

Operational Definition of Variables

Cash management

Descriptive Statistics					
Variable	Obs	Mean	Std. Dev.	Min	Max
Return on Assets	25	0.104	0.075	-0.1	0.23
Cash Ratio	25	0.354	0.152233	0.06	0.66
A/R Turnover ratio	25	4.4	1.607275	2	8
Inventory Turnover ratio	25	1.88	0.781025	1	3

Planning with cash, controlling cash flows, periodically determining the ideal cash level, and investing excess cash are all part of cash management. To carry out their daily activities, businesses must strike a balance between

liquidity and profitability. To guarantee that businesses can pay their short-term debts when they become due and preserve profitability, liquidity is a prerequisite. [Copeland & Weston \(2008\)](#)

Inventory Management

Keeping the optimal level of inventory as science as well art that the management keep in stock and at the same time manage the cost to achieve the objective of the entity refer to inventory management ([Jessop, 1999](#)).

Account Receivable Management

[Ahmet \(2012\)](#) emphasizes that “accounts receivable as a component of cash flow affects profitability of any firm. Cash flow management can be described as the management of cash inflows and cash outflows in and out of the firm. The main component of management of cash flow includes inventory, trade receivables, planning of cash flow and trade payables”.

Data Analysis Techniques

STATA software is used for multiple linear regression to analysis the data.

Independent Variables	Measure Through	Formula	Source
Cash Management	Cash Ratio	Current assets/Current liabilities	(Sorin Gabriel Anton & An Afloareinucu, 2020) used cash calculate cash management in t (working capital management and its profitability).
Inventory Management	Inventory turnover ratio	CGS / Average inventory	(Mugarura Fred, 2021) used A/R turn to calculate Account receivable man: his topic (Effects of ARM on the performance of construction cor Rwanda, a case of NPD Ltd).
Account Receivable Management	A/R Turnover Ratio	Net credit sales/Average account receivable	
Dependent Variable	Measure Through	Formula	Source
Profitability	Return on asset	Net Income/Average total Assets	Sorin Gabriel Anton and An Afloareinucu used ROA to compute F in their topic (the impact of work management on firm profitability).

Result and Analysis

Since the goal of the study is to analysis the impact of WCM on the financial performance of the telecommunication sectors of Afghanistan the collected data has been analysis through STATA software.

The mean value for return on assets is 0.104, which indicates that enterprises in the research have an average return on assets of 10.4%. This suggests a very moderate amount of profitability in relation to total assets. Standard

Deviation of 0.075 indicates that ROA varies between enterprises. A lower standard deviation relative to the mean implies that, while some firms have lower ROA, the majority group around the mean. The minimum number for ROA is -0.1, showing that some organizations are losing money, which could indicate issues with asset management or operational inefficiencies. While Max value of 0.23 demonstrates that some organizations do admirably, earning a 23% return on their assets. For Cash Ratio the mean score of 0.354 suggests that enterprises cover approximately 35.4% of their current liabilities with cash and cash equivalents, indicating a decent liquidity situation. The standard deviation of 0.152 demonstrates significant variety in liquidity among the firms, with some being more liquid than others. The minimal cash ratio of 0.06 shows that certain organizations may struggle with liquidity, but a maximum of 0.66 indicates that some firms are well-positioned to satisfy short-term obligations. The mean figure of 4.4 indicates that enterprises recover receivables approximately 4.4 times each year. Standard Deviation 1.607 suggests a broad range of efficiency in receivables management, with some companies performing much better than others. A score of 2 to 8 suggests that, while some businesses manage receivables efficiently, others are inefficient, which can have an influence on overall profitability. The average inventory turnover ratio of 1.88 suggests that enterprises sell and replace their inventory approximately 1.88 times per year. This could indicate that some businesses shift their merchandise slowly. Standard Deviation 0.781 indicates that there is moderate diversity in inventory management efficiency between organizations. A minimum value of 1 and a maximum value of 3 suggest that some businesses are slow to transfer goods, while others manage their inventory more efficiently. Overall, the inconsistency exists between working capital management and profitability among the firms generally stable financial

performance and liquidity suggested by the mean value of ROA and Cash ratio. But a significant difference is suggested among the firms by standard deviation and ranges.

VIF

Variable	VIF	1/VIF
Cash ratio	1.03	0.974569
Inventory turnover ratio	1.02	0.97644
A/R Turnover Ratio	1.00	0.99804
Mean VIF	1.02	

Correlation

A/R Turnover ratio and ROA have a weakly positive association of 0.28. Although the association is not extremely strong, this correlation shows that ROA tends to improve when the A/R Turnover ratio increases. Conversely, there is a weak negative association (-0.212) between ROA and Inventory Turnover ratio, suggesting that better liquidity (Cash Ratio) or higher inventory turnover may be linked to lower ROA. The Cash Ratio exhibits a small positive correlation of 0.2252 with ROA and a negative correlation of -0.1535, indicating that there may be a weak association between bigger cash holdings and reduced inventory turnover and higher returns on assets.

--Coefficients--

	(b)		(b-B)	Sqrt(diag(V_b-V_B))
	fixed	Random	Difference	S.E.
Cash ratio	-3.39	-3.39	0	0
A/R Turnover ratio	6.44	6.44	0	0
Inventory turnover ratio	8.60	8.60	0	0

There is minimal to no link, as seen by the negative (0.0443) correlation with A/R Turnover. A/R Turnover ratio and ROA have a weakly positive association (0.28), indicating that companies with effective receivables management may also have higher asset returns. It's extremely low correlation (-0.0443) with the Cash Ratio suggests no significant association. There is no association

between the correlation and inventory turnover, which is quite near to zero (0.0066). Higher inventory turnover may not always translate into greater asset returns or cash liquidity, as evidenced by the weakly negative association between inventory turnover and ROA (-0.212) and cash ratio (-0.1535). There is no association between the effectiveness of receivables collection and inventory management, as evidenced by the very weak correlation (0.0066) with A/R Turnover. These ratios often have weak correlations with one another, meaning that changes in one ratio do not always substantially predict changes in another. The noteworthy finding is that A/R Turnover and ROA have a positive association, indicating that effective receivables management can raise returns on assets. Higher liquidity (measured by the Cash Ratio) and a high inventory turnover rate are not always correlated with better asset returns, according to the negative correlations.

	Return on Assets	Cash Ratio	A/R Turnover ratio	Inventory Turnover ratio
Return on Assets	1			
Cash Ratio	0.2252	1		
A/R Turnover ratio	0.28	-0.0443	1	
Inventory Turnover ratio	-0.212	-0.1535	0.0066	1

Individual result of VIF for independent variables is well below 10 indicate that there is no issue for Multicollinearity. Also mean VIF is 1.02 and less than 10 indicate that Multicollinearity is not a problematic issue in current data and model.

Normality Test

Variable	Obs	Pr (Skewness)	Pr(Kurtosis)	joint -----	
				adj chi2(2)	Prob>chi2
residuals	25	0.6285	0.7245	0.9	0.7356

For checking the normality of data Skewness and kurtosis test were implement on data and the result for both Skewness and kurtosis is 0.6285 and 0.7245 respectively which in both cases more than 0.05 indicate that data is normal and found no issue of normality.

Hausman Test

b= consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\chi^2(0) = (b-B)'[(V_b-V_B)^{-1}](b-B) = 0.00$$

Prob>chi2 = .

(V_b-V_B is not positive definite)

To check whether either random effect model or fixed effect model is selected for current study Husman test is used and result of Chi square is well below 0.05 suggest fixed effect regression model for current study.

Fixed Effect Regression Model

Fixed-effects (within) regression	Number of obs	=	25
Group variable: id	Number of groups	=	5
R-sq:	Obs per group:		
within = 0.2424	Min	=	5
between = 0.0009	Avg	=	5
overall = 0.8043	Max	=	5
	F(3,17)	=	1.81
corr(u_i, Xb) = -0.2975	Prob > F	=	0.0493

Return on Assets	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]
Cash Ratio	.2210201	.1105708	2.00	0.042	-.012264 .4543041
A/R Turnover ratio	.0130787	.0084879	1.54	0.0342	-.0048291 .0309865
Inventory Turnover R	.008346	.0181224	0.46	0.065	-.0298889 .0465809
_cons	-.0474778	.0726744	-0.65	0.000	-.2008074 .1058518

sigma_u	.05557796
sigma_e	.06205053
Rho	.44514059 (fraction of variance due to u_i)

F test that all u_i=0: F(4,17) = 3.05 Prob > F = 0.0458

Model Summary

Five groups and a total of 25 observations were evaluated; the resulting R-squared values are within 0.2424. Shows that the independent factors within the same group account for about 24.24% of the variance in ROA. There is

0.0009 between values. Implies that variations across groups can only account for a very small portion of variance. Nonetheless, Overall, 0.8043 shows that the model can account for roughly 80.43% of the variance in ROA overall. F-statistic F (3, 17) = 1.81 assesses the regression model's overall significance. Given that p < 0.05, the model is statistically significant at the 5% level, as indicated by Prob > F 0.0493.

Coefficient Estimates

Current study investigates the effect of WCM in the profitability of the telecommunication sectors of Afghanistan. the study discovered that A one-unit rise in the Cash Ratio is linked to a 0.2210 increase in ROA, according to the Cash Ratio's coefficient of 0.2210 and P value of 0.042. This relationship is statistically significant at the 5% level. This implies that asset returns are positively impacted by increased liquidity. The A/R Turnover Ratio's coefficient value is 0.0131, and the P-value of 0.0342 shows that there is a substantial, one-unit increase in A/R Turnover that is correlated with a 0.0131 rise in ROA at the 5% level. This proposes that asset returns are directly impacted by actual Account receivables management. With a coefficient of 0.0083 and a P-value of 0.065, the inventory turnover ratio shows that a unit increase in inventory turnover corresponds to a 0.0083 rise in return on assets (ROA). At p = 0.065, this is marginally significant, indicating a possible positive. Overall, the fixed-effects regression model shows that return on assets have a statistically significant positive impact both with A/R Turnover ratio and Cash Ratio. Higher liquidity and effective receivables management are associated with better asset returns. Though Inventory Turnover shows a positive result, and the result is not significant at the 5% level. The model also highlights that significant variation in ROA exists across different groups, suggesting the importance of considering group-specific features in the analysis.

Conclusion

The study examines the impact of working capital management that is measured through cash management, Account receivable management and inventory management on the profitability that is measured through return on assets of telecommunication sectors of Afghanistan. Investigation reveals that cash management has a significant and positive relationship with profitability of the telecommunication sectors. This result is in line with H1 that indicates that cash management has a positive and significant relationship with profitability. Similarly Account receivable has also a significant and positive relationship with profitability of the telecommunication sectors. This finding justifies our H2 that indicates a positive and significant relationship between A/R management and profitability. While inventory turnover ratio has an insignificant and positive relationship with firm profitability. This finding is in contrast with H3 that shows significant relationship with profitability.

Recommendation

Base on the finding of the research study the investigator suggests some recommendation to the telecommunication sectors of Afghanistan. Firms should give close attention to their Cash management and should invest their ideal cash in profitable investment because the result of the current study suggests a positive and significant relationship with profitability of the firm. On the other hand, firm should also pay attention to their Account receivable management by accelerating their Account receivable collections policy. Alternatively, because recent research indicates that A/R management has a strong and favorable association with business profitability, it may reduce sales on account. Conversely, inventory management holds significance since it has been found to positively correlate with the profitability of Afghanistan's telecommunication industries.

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