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Working Capital Management Strategies and Profitability under Monetary Tightening: Evidence from Listed Textile Spinning Firms in Pakistan

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ABSTRACT

This study investigates the impact of aggressive and conservative working capital management (WCM) approach on the profitability of listed textile spinning firms in Pakistan during the period of monetary tightening. The theoretical underpinning is the Liquidity-Profitability Trade-Off Theory, Pecking Order Theory, Risk-Return Theory and Monetary Transmission Theory. It explores the impact of CCC and CR on the OPM and analyzes the moderating impact of State Bank of Pakistan (SBP) policy rate on the WCM profitability relationship. The study employs quantitative panel-data techniques on a decade of data on listed textile spinning firms. Fixed-effects regression is used, supported by the Hausman specification test. The results indicate that the cash conversion cycle has a significantly negative relationship with profitability, i.e. Shorter operating cycles strengthen firms' financial performance. On the contrary, the current ratio has a significant positive impact on profitability, suggesting that the firm with greater liquidity enjoys better operating performance and financial strength. The analysis also reveals that the SBP policy rate has negative association with the profitability and significantly moderates WCM strategies and firm performance relation. That is, tight monetary conditions exacerbate the detrimental impacts of longer cash conversion cycles while improving the profitability advantages of high liquidity buffers. Thus, conservative working capital strategies offer better profitability sustainability during a period of high interest rates and credit constraints. These findings contribute to the working capital literature with an empirical evidence that the effects of liquidity management strategies are context-specific to existing monetary condition and the result offer practical policy implications for the corporate executives and the policy makers in developing economies.

Keywords: *Working Capital Management, Cash Conversion Cycle, Current Ratio, Monetary Tightening, Operating Profit Margin, Textile Spinning Firms*

INTRODUCTION

Working capital management (WCM) describes the decision-making process of a firm's short-term assets and liabilities which ensures the operation of a company's day-to-day cycle. Operationally, WCM is the efficient management of cash, inventories, accounts receivable, accounts payable and other working capital related accounts which allows operations to run smoothly while also achieving profitability and shareholder value. These decisions become especially critical in manufacturing settings, due to factors like significant inventories holdings, extension of trade credit, acceptance of long collection periods, and utilization of trade credit and/or bank short-term loans for working capital needs. In such settings, working capital management decision making becomes not merely a financial aspect of operations, but rather a financial decision having

significant impact on financial risk and profitability of the firm (Deloof, 2003; Raheman & Nasr, 2007; Baos-Caballero et al., 2014).

The dilemma between liquidity and profitability has been a cornerstone of corporate finance theory for many decades. Holding substantial amounts of current assets benefits firms through higher liquidity and a stronger resistance to short-term financial distress, and increased flexibility in operations. On the other hand, current assets investment ties up capital in low-yielding assets, which has a detrimental effect on returns. Low current assets holdings coupled with reliance on short-term liabilities increases efficiency and profits during normal conditions, but poses risks relating to refinancing needs, supply chain interruptions and cash flow instability during stressed times (Smith, 1980; Shin & Soenen, 1998; Nazir & Afza, 2009). The effects of this dilemma become extremely amplified during times when financing conditions deteriorate.

Firms do not make working capital decisions in a vacuum. The decision process of the firm with respect to funding of inventories, accounts receivables and other working capital accounts depends crucially on monetary policy. Specifically, the stance of central bank policy influences directly the cost, availability and timing of short-term credit. During periods of monetary tightening, short-term interest rates increase, banks become stricter with lending, and working capital intensive firms get squeezed financially. A seemingly efficient policy during 'loose' monetary times may be brittle during 'tight' monetary regimes; in these situations, a relatively liquid stance may seem inefficient, but it can provide resilience during stress periods (Bernanke & Gertler, 1995; Kashyap & Stein, 2000; Campello et al., 2010). This study sits precisely at that intersection between firm-level liquidity policy and macro-level monetary conditions. It examines whether aggressive and conservative WCM strategies have differential effects on the profitability of listed textile firms in Pakistan during monetary tightening. Aggressive WCM is operationalized using the cash conversion cycle (CCC), which captures how quickly firms convert inventory and receivables into cash net of payables. Conservative WCM is operationalized using the current ratio (CR), which captures the firm's short-term liquidity cushion. Profitability is proxied by operating profit margin (OPM), while the SBP policy rate serves as both a direct explanatory variable and a moderating variable to test whether tightening changes the strength or direction of the WCM–profitability relationship.

Pakistan's textile sector is the right place to test these questions. It is one of the country's largest industrial sectors, a major contributor to exports, employment, and manufacturing output. It is also structurally dependent on efficient working capital management: long production cycles, significant inventory requirements, export receivables with delayed settlement, and recurrent reliance on short-term bank finance make textile firms unusually sensitive to interest rate shifts. That structural exposure creates a rich empirical setting for investigating whether the relative profitability of aggressive versus conservative WCM changes under restrictive monetary policy.

A large literature confirms that WCM affects profitability. Most of it estimates average effects and assumes those effects are stable across time and macroeconomic regimes. That assumption may not hold in environments with volatile financing costs and recurrent tightening. This study advances the literature by arguing that WCM effectiveness is contingent: the profitability consequences of aggressive and conservative strategies depend on the prevailing monetary regime. The aim is a more context-sensitive account of working capital strategy one that embeds firm-level financial decisions within the macro-financial structure that shapes their consequences.

Background of the Study

Working capital has traditionally been referred to as "life-blood" of a business; for a business the working capital funds the cycle of operations where a firm purchases raw materials, manufactured goods and inputs,

sale goods and receive cash from customers after credit extension, finally pay off the liabilities that are due short-term. While the long-term investment decisions are taken discretely and strategically, working capital decisions are constant, operational and routinized. However, their significance is strategic in nature. A business might appear successful in theory; however, the theory could lead to failure when a company fails to manage liquidity. In a manufacturing context where substantial investments are held in raw materials, work in progress, finished goods and accounts receivable before being converted to cash this reality is magnified (Smith, 1980; Lazaridis & Tryfonidis, 2006).

Fundamentally, management of working capital entails a tradeoff between liquidity and profitability. Over investment in current assets minimizes the risk of stock outs, delayed payments to suppliers and liquidity shortage, but at the expense of lowering the profitability of the firm, by locking up money in low yielding and non-productive assets. Low investment in current assets and heavy dependence on short term sources of finance would result in higher operational efficiency and reduction in holding costs, but increase risk of operational inefficiency, pressure from creditors and bankruptcy (Afza & Nazir, 2007; Nazir & Afza, 2009).

The Cash Conversion Cycle has emerged as a primary indicator for measuring efficiency in Working Capital Management (WCM) in a lot of literature. It measures the number of days firm resources remain tied up in the operating cycle, computed as inventory holding days plus receivables collection days minus payables deferral days. A shorter CCC means cash is recovered faster, reducing dependence on external financing and potentially improving profitability (Shin & Soenen, 1998; Deloof, 2003). But very short CCC values may reflect an overly aggressive posture inadequate inventories, overly restrictive customer credit, or strained supplier relations that can harm sales continuity, customer retention, or production stability.

The current ratio (CR) offers a complementary, liquidity-oriented perspective. It measures current assets against current liabilities, capturing the degree to which firms maintain a buffer against short-term obligations. A higher CR indicates greater protection against liquidity stress, though an excessively high CR may signal overinvestment in current assets and suboptimal utilization. That makes CR particularly useful for capturing the conservative dimension of WCM, especially where maintaining liquidity reserves has strategic value under financial stress or tightening credit (Eljelly, 2004; Baños-Caballero et al., 2012).

Both measures matter especially in Pakistan's textile sector. Characteristics common to textile businesses include large inventories of cotton, yarn, chemicals, work in progress; long, seasonal production cycles; large export receivables that are paid much later; high reliance on trade finance and short-term bank debt to finance cash gaps; sensitivity to interest rate changes, currency fluctuations and changes in input prices. Given these characteristics textile companies are thin with liquidity and very sensitive to changes in financing conditions. Pakistan's financial system remains significantly bank-centered, so changes in the SBP policy rate can materially alter the cost and availability of funds required for day-to-day operations.

When the SBP raises the policy rate, borrowing costs increase across the economy particularly for the short-term working capital lines and revolving credit facilities that non-financial firms rely on. Banks also become more cautious in extending credit, especially to firms perceived as risky or highly dependent on external liquidity. For textile firms financing inventories and receivables through short-term facilities, tightening of this kind can compress operating margins, delay procurement, constrain production, and amplify the importance of internal liquidity management (Bernanke & Gertler, 1995; Kashyap & Stein, 2000).

Most of the existing WCM literature studies the working-capital–profitability relationship under average or stable conditions. The dominant finding is that efficient working capital management often interpreted as a shorter CCC is associated with improved profitability. But that finding does not imply the same aggressive strategy remains optimal during monetary restriction. When financing costs rise sharply, aggressive WCM may expose firms to refinancing pressure and liquidity strain, while conservative WCM

may become more advantageous by reducing reliance on external funds. This study proceeds from the premise that WCM is not a universally optimal formula it is a context-dependent strategic choice shaped by macro-financial conditions.

Problem Statement

Working capital management is a critical determinant of short-term financial stability and operating performance, particularly in manufacturing sectors with long operating cycles, high inventory dependence, and substantial receivable exposure. Pakistan's textile firms routinely commit significant resources to inventories and trade receivables while simultaneously relying on supplier credit and short-term bank finance to sustain production and sales. This structure-driven dependence on short-term liquidity makes textile firms even more exposed than other sectors to variations in liquidity conditions and cost of credit. The SBP's policy-rate increases that address inflation and tame macroeconomic overheating raise the cost of short-term borrowing, reduce credit availability, and amplify refinancing pressure for liquidity-dependent firms. The effect on working capital decisions, in turn, can alter significantly the financial implications. Firms adopting aggressive working capital policies are better off with small liquidity stocks, smaller operating cycles, higher proportions of short-term, externally sourced funding, they face increased vulnerability to liquidity constraints, and stresses on operations and suppliers. Conservative firms, characterized by ample liquidity stocks and lower reliance on short-term external debt; they have reduced efficiency, but are in a better position to maintain profitability under constraint. Despite this, the WCM literature largely focuses on average relationships between working capital efficiency and profitability, typically concluding that shorter cash conversion cycles are associated with higher firm performance. It provides limited guidance on whether those profitability implications remain stable across different monetary regimes. Sector-specific evidence on how monetary tightening alters the working capital–profitability relationship in working-capital-intensive emerging-market sectors is scarce.

For listed textile firms in Pakistan, the gap is twofold. First, there is no sector-specific panel-data evidence comparing the profitability consequences of aggressive and conservative WCM strategies under changing monetary conditions. Second, the SBP policy rate has not been empirically integrated into the WCM–profitability framework as both a direct determinant and a moderating factor. Financial managers and policymakers therefore lack firm evidence on which working capital strategy is more appropriate during liquidity-constrained periods.

The core problem this study addresses is the absence of a context-specific understanding of how aggressive and conservative working capital management strategies affect the profitability of listed textile firms in Pakistan during monetary tightening and whether rising policy rates materially alter the relative effectiveness of those strategies.

Research Objectives

1. To analyze the impact of cash conversion cycle (CCC), which serves as a proxy for aggressive working capital management (WCM), on the operating profitability of listed textile firms in Pakistan.

2. To analyze the impact of current ratio (CR), which serves as a proxy for conservative WCM, on the operating profitability of listed textile firms in Pakistan.

3. To analyze the direct impact of SBP policy rate on the operating profitability of listed textile firms in Pakistan.

4. To analyze whether the SBP policy rate has a moderating effect on the relationship between CCC and operating profitability.

5. To analyze whether the SBP policy rate has a moderating effect on the relationship between CR and operating profitability.

6. To compare the implications of aggressive and conservative WCM strategies for profitability under conditions of a higher interest rate regime.

7. To provide policy and managerial recommendations based on empirical evidence for the designing of a liquidity strategy under a restrictive monetary regime.

Research Questions

1. What is the impact of cash conversion cycle on operating profit margin of listed textile firms of Pakistan?

2. What is the impact of current ratio on operating profit margin of listed textile firms of Pakistan?

3. What is the effect of SBP policy rate on operating profitability of listed textile firms of Pakistan?

4. Is the impact of cash conversion cycle on operating profitability significantly moderated by the SBP policy rate?

5. Is the impact of current ratio on operating profitability significantly moderated by the SBP policy rate?

6. Are conservative working capital strategies more resilient to profitability losses than aggressive strategies during a contractionary monetary policy environment?

7. To what extent do changes in the macro-financial environment affect the relative performance of firm level working capital policies in the textile industry?

Significance of the Study

Theoretical Significance

This study challenges the conventional assumption that a single liquidity strategy is universally optimal across all macroeconomic conditions. Much of the existing WCM literature is built on the traditional liquidity–profitability trade-off, which assumes firms can maximize profitability by adopting an efficient working capital structure under average operating conditions. That framing overlooks the role of the broader monetary environment in shaping whether short-term financial decisions actually work.

The study proposes a regime-contingent view of working capital management: the profitability implications of aggressive and conservative WCM depend on the prevailing stance of monetary policy, particularly during tightening. The relative superiority of a given WCM strategy is not static it is conditional on changes in financing costs, liquidity constraints, and credit availability.

The study also strengthens the conceptual foundation of WCM by combining multiple theoretical lenses. Liquidity–profitability trade-off theory is integrated with pecking order theory (which explains firms'

preference for internal financing when external capital is costly), risk–return theory (which foregrounds the balance between higher returns and liquidity risk), and monetary transmission theory (which explains how policy rate changes filter through to corporate financing conditions and operating performance). Together, these form a more institutionally grounded framework for understanding short-term financial strategy in emerging-market firms facing financial constraints.

Practical Significance

For CFOs, finance directors, and working capital managers in Pakistan's textile sector, this study provides direct guidance on how to align liquidity management with changing monetary and financing conditions. Rather than treating aggressive efficiency or conservative liquidity as universally valid best practices, the findings are intended to help managers assess whether shorter cash conversion cycles remain beneficial when interest rates rise and whether stronger liquidity buffers create strategic resilience during credit tightening. That supports more adaptive, counter-cyclical working capital planning.

For policymakers and monetary authorities particularly the SBP the study shows how policy rate decisions transmit to the real economy through the working capital channel. Policy discussions typically focus on investment, inflation, and aggregate demand. This research highlights how interest rate adjustments alter day-to-day corporate liquidity decisions, short-term financing behavior, and firm profitability, which can help regulators better anticipate the sectoral consequences of tightening.

For the textile sector specifically, the study generates sector-specific evidence on which working capital strategies may enhance operational resilience and financial performance under tightening monetary conditions evidence that is directly usable by textile firms, investors, lenders, and sectoral regulators.

Scope of the Study

The research is based on listed non-financial textile firms in Pakistan over a period of ten years using annual panel data. The study confines to firms listed on the Pakistan Stock Exchange (PSX) with sufficient information to construct required variables for the study period. The two main independent variables are cash conversion cycle (CCC) and current ratio (CR) representing aggressive and conservative working capital policies respectively, and the dependent variable is operating profit margin (OPM). The SBP policy rate has been employed as explanatory and moderating macro financial variable.

The research is centered around the scope of short-term financial management only. It does not examine long term capital structure, investment policy or corporate governance mechanisms, unless used as a control variable. It does not look into market valuation or shareholder return outcomes of money tightening policy; rather specifically focuses on profit earning outcomes under it.

Chapter Summary

This chapter establishes the conceptual and contextual foundation of the study. It positions WCM as a strategic determinant of operational continuity, liquidity stability, and profitability; explains the liquidity–profitability trade-off; and distinguishes between aggressive and conservative WCM strategies, operationalized through the CCC and CR respectively. The chapter situates the inquiry within the macro-financial context of monetary tightening, using the SBP policy rate as both a key explanatory and moderating factor. Pakistan's textile sector is justified as the empirical setting given its structural dependence on inventories, receivables, and short-term financing. The research problem, objectives, and questions are articulated around one central gap: the lack of sector-specific evidence on how monetary tightening alters the profitability implications of WCM strategies.

LITERATURE REVIEW

Introduction

The focus of this chapter is to produce the conceptual, theoretical and empirical frameworks on which this research is based. In the case of PhD level work, the literature review is not simply a description of previous research, but it must bring together the theory and the evidence. It must highlight the disagreements and the missing elements, showing the logical structure that connects the theory to the empirical model. This chapter does that by positioning WCM as a strategic financial decision whose consequences depend on both firm-level operational structures and macro-financial conditions.

The chapter is organized into several interrelated sections. It first clarifies the conceptual foundations of WCM, including the distinction between aggressive and conservative policies and the measurement relevance of CCC and CR. It then develops the theoretical framework, drawing on the liquidity–profitability trade-off theory, risk–return trade-off theory, pecking order theory, trade credit and operating cycle theory, and monetary transmission theory. Third, it reviews existing literature on working capital and profitability, providing a critical analysis of the evidence found in developed and emerging markets, taking into consideration the different sectors and country contexts. Fourth, it focuses on monetary tightness and financing constraints and their effect on firm performance to establish a rationale for introducing policy rate as both a direct regressor and as a moderating variable. Finally, it draws the literature together to define a research gap, formalize the hypotheses and present the conceptual framework. WCM in this study is not treated as a static internal policy. It is a dynamic, adaptive financial strategy whose effectiveness may vary with the external cost and availability of short-term funds. That interpretation is especially relevant in Pakistan's textile sector, where firms operate with high inventory requirements, long receivable cycles, export dependence, and substantial reliance on bank-based short-term finance. The chapter deliberately integrates corporate finance literature on working capital with macro-financial literature on monetary policy transmission to provide a coherent, contextually grounded basis for the study.

Conceptual Review

Concept of Working Capital Management

Working Capital Management (WCM) is about managing current assets and current liabilities in such a way that the company maintains its operations on day-to-day basis and also minimize financing costs and maximize the profitability of the company. It includes management of inventory holdings, management of collection of receivables, delay in payment of accounts payable, cash balances and also of short-term borrowing of funds. (Deloof, 2003; Raheman & Nasr, 2007).

This concept becomes even more relevant for manufacturing firms for purely practical reasons-these firms have to fund the working capital cycle on a continuous basis. Cash is first committed to the procurement and production processes, then blocked up in inventories, then lent out as trade credit to customers and recovered as cash much later. In longer working capital cycles, the funding requirement is greater and the interest rate and liquidity risk exposure increase.

Aggressive versus Conservative Working Capital Strategies

The most basic conceptual distinction in the WCM literature relates to aggressive and conservative working capital policies.

Aggressive WCM policy is typically characterized by low level of investment in current assets in relation to sales or total assets; low level of inventory, stricter credit granting and receivable collection policy, high reliance on trade credit and short-term debt, a short cash conversion cycle, and high operational efficiency and low liquidity cushion.

Conservative WCM policy is typically characterized by high level of holding current assets; ample liquidity and cash reserves; high level of acceptable inventory and receivables buffers; low level of reliance on short-term financing; higher short-term solvency ratios and low operational efficiency but high liquidity cushion against a liquidity crisis.

Aggressive strategy generally brings a higher profit when the condition is normal as it saves idle fund and holding cost, but exposes the company for the operational risk and financing risk. Conservative strategy may bring a lower profit in normal period due to opportunity cost of holding excess liquidity, but may protect operations when liquidity becomes constrained or expensive. (Afza & Nazir, 2007; Nazir & Afza, 2009).

Cash Conversion Cycle as a Proxy for Aggressive WCM

Cash Conversion Cycle (CCC) is one of the most widely used comprehensive working capital efficiency measure. The net number of days in which a firms' cash is tied up in the operating cycle:

CCC = Inventory Days + Receivables Days − Payables Days

The shorter the CCC the quicker the cash is returned from working capital and the less the need for outside finance, this is normally viewed as an indicator of an "aggressive" or "lean" working capital management approach. However, the link is not direct. Exceptionally low CCC figures may result from a too tight approach to inventory or customer credit, which may entail hidden costs, loss of business or pressure on suppliers. (Shin & Soenen, 1998; Deloof, 2003; Aktas et al., 2015).

Current Ratio as a Proxy for Conservative WCM

Conventional measure of short-term liquidity & solvency, current ratio (CR), is defined as current assets to current liabilities. CR is employed as a measure of conservative WCM in this research study, since it measures the amount of cushion a firm has between the liquid assets and current liabilities. A higher CR shows protection against liquidity problems. However, very high CR can also represent a firm's resources have been misused, or held too much inventory, or the firm had lax accounts receivable. (Eljelly, 2004; Baños-Caballero et al., 2012).

Operating Profit Margin as a Measure of Profitability

Profit Margin (PM) is used as the dependent variable as it represents the profitability of a firm's core business prior to finance costs and tax effects. In an analysis of the interaction of working capital strategy and the monetary policy defined cost environment, a profit margin measurement makes the most sense as it measures operational efficiency and control of the costs within the primary business operation of the firm. Profit margins are generally less tainted by financing related decisions, so PM is suitable to determine operational impacts of WCM choices.

Monetary Tightening and the Policy Rate

Monetary tightening is a restrictive monetary policy posture where the central bank hikes the policy rate or otherwise tightens liquidity accommodation in order to curb inflation or macroeconomic imbalances. This paper takes the SBP policy rate as the key macro-financial indicator of monetary policy stance. A rise in policy rates leads to higher cost of borrowing, reduced short-term funding availability and can also affect availability of working capital loans, an issue particularly pertinent to emerging-market, bank-dependent corporate sectors.

Theoretical Framework

None of the theories singly explain working capital strategy in an evolving monetary environment. In this study we used several framework theories that collectively account for the trade-offs between liquidity, profitability, dependence on financing, and macro-financial transmission.

Liquidity–Profitability Trade-Off Theory

The context of liquidity-profitability trade-off is the underlying frame of reference for this investigation. It posited that two conflicting goals must be maintained by firms: the need for sufficient liquidity to meet current obligations and the need to maintain profitability by restricting funds that are held in non-profitable current assets. High liquidity is characterized by low financial distress risk. Conversely high liquidity is characterized by lower returns in the sense that idle cash, excessive inventory, and excess receivables earn a lower return than productive investments. Low liquidity is characterized by lower carrying costs, and higher risks such as stock-outs, delay of payment and bankruptcy. (Smith, 1980).

This theory immediately leads to the direct justification of aggressive-conservative distinction of WCM. An aggressive financing strategy favors profit by managing working capital more aggressively by using a lower amount of current assets and thus having a shorter cash cycle, whereas conservative strategy favors liquidity by managing working capital by using an ample number of short-term buffers. Moreover, theory points out the optimum of the trade-off could alter depending on the outside financing situation, the exact variable that this study investigates.

Risk–Return Trade-Off Theory

The risk return trade-off asserts that higher expected returns are associated with higher risks. Within the scope of WCM, an aggressive strategy might generate higher profits by increasing the usage of available cash and decreasing the costs associated with cash, yet it also involves higher liquidity risks (creditor intervention, shortages, disruptions in operations). In comparison, conservative strategy diminishes those risks yet might increase opportunity costs. (Nazir & Afza, 2009).

Monetary tightening might exacerbate the risks of the active strategy on account of increased costs and greater uncertainty about refinancing. In a situation with a limited supply of external liquidity, the premium on the expected return of aggressive WCM may be reduced or become negative.

Pecking Order Theory

Pecking order theory suggest that firms would rather rely on internal finance than external finance as a consequence of information asymmetries, transaction costs and adverse selection. (Myers & Majluf, 1984). If a firm has more internal liquidity under WCM context, its short-term external borrowing can be smaller. When credit tightening occurs, which implies that the interest on bank loans increases and banks have less

incentive to lend. In such conditions, internal liquidity can provide insurance and help firms to endure the tightening conditions and maintain profitability. These show that a conservative WCM approach is coherent with pecking order behavior under restriction.

Monetary Transmission Theory

Monetary policy transmission theory describes the mechanisms by which policy actions by the central bank influence real activity: through the interest rate channel, the bank lending channel, the balance sheet channel, and the cash flow channel. (Bernanke & Gertler, 1995; Kashyap & Stein, 2000). Working capital loan costs are higher, the availability of credit reduced, cash flows diminished by debt-service costs and frictions with inventories and accounts receivable are heightened for the non-financial firms in a bank-centered emerging market as monetary policy tightens. Theory provides the rationale of directly using the SBP policy rate as a profitability determinant, and an interacting variable in the relationship between WCM and profitability.

Trade Credit and Operating Cycle Theory

Trade credit and operating cycle theory argues that the smooth operation of a company is dependent upon matching the timing of purchases of resources, manufacturing, sales to customers, customer payments, and payments to suppliers. When interest rates increase, the cost and risk of the working capital cycle increases, and a mismatch between cash inflows and outflows will lower profits (through high financing costs or lost sales/supplies) if the company cannot overcome the timing gap. This theoretical perspective backs the claim for CCC to be the primary operational-financial metric.

Contingency Perspective

There is no "best" working capital policy. According to contingency theory, a working capital strategy is better than another if it fits the specific context-industry structure, financing system, cash flow instability, the monetary regime, etc. We take this argument explicitly: working capital management effectiveness depends on the monetary regime.

Empirical Literature Review

Empirical Evidence on Cash Conversion Cycle and Profitability

A large body of literature reports a statistically significant inverse relationship between the cash conversion cycle and firm profitability. The dominant interpretation is that firms improve performance when they reduce the time capital is tied up in inventories and receivables, net of supplier credit.

Shin and Soenen (1998) provided one of the earliest influential studies by documenting a strong negative association between the net trade cycle and corporate profitability in US firms. Deloof (2003) found that Belgian firms could enhance profitability by reducing receivables, inventories, and the overall cash conversion cycle. Lazaridis and Tryfonidis (2006) reported comparable evidence for Greek listed firms. The same has been extended to the context of Pakistan by Raheman and Nasr (2007) and the findings conclude that shorter cash conversion cycle leads to better profitability in the listed companies. Subsequently the work of Gill et al. (2010), Mathuva (2010) and Aktas et al. (2015) has also reinforced the significance of working capital efficiency although it revealed some non-linearity and context specific variation.

Further literature also highlights the relevance of CCC, but with a greater realization that the effect is not universally linear and constant. Baños-Caballero et al. (2014) and Aktas et al. (2015) suggest that firms may have an optimal level of working capital rather than a universally shorter-is-better structure especially in environments with financing frictions, where aggressive compression of inventories or receivables may undermine sales continuity or operational resilience.

The evidence strongly supports CCC as a profitability determinant. The open question whether the profitability benefits of a shorter CCC persist during restrictive monetary policy is what this study addresses.

Empirical Evidence on Current Ratio and Profitability

The empirical relationship between the current ratio and profitability is more mixed and theoretically ambiguous than that of CCC. A stronger current ratio indicates greater liquidity and lower short-term distress risk, but may also signal inefficient asset use.

Smith (1980) laid the conceptual foundation by emphasizing the inverse tension between liquidity and profitability. Eljelly (2004) found that liquidity measures, including the current ratio and cash gap, significantly affect profitability, though direction and magnitude vary across contexts. Afza and Nazir (2007) and Nazir and Afza (2009), using Pakistani data, showed that conservative working capital policies can alter the risk–return profile of firms, often reducing profitability in normal periods but improving financial stability. Charitou et al. (2010) and Baños-Caballero et al. (2012) suggest that both underinvestment and overinvestment in current assets can be costly, implying the existence of an optimal liquidity range rather than a monotonic relationship.

Recent research in emerging markets often finds that liquidity becomes more valuable under financial constraints, suggesting CR may become more positively associated with profitability when external financing is expensive or unreliable. This interpretation is directly relevant here.

The current ratio's effect on profitability is not theoretically or empirically uniform. Its value likely depends on the financing environment, which makes it especially well-suited for testing as a conservative WCM proxy under monetary tightening.

Empirical Evidence on Aggressive versus Conservative Working Capital Policies

A number of studies explicitly compare aggressive and conservative WCM strategies rather than focusing on individual liquidity indicators in isolation.

Afza and Nazir (2007) distinguished between aggressive and conservative working capital investment and financing policies and found that aggressive strategies may improve profitability but increase risk. Nazir and Afza (2009) showed that aggressive policies are associated with higher expected returns but greater vulnerability. Vahid et al. (2012) found that WCM strategy type materially affects profitability, while Pais and Gama (2015) argued that the optimal strategy depends on firm characteristics and external conditions. Aktas et al. (2015) provided evidence that firms create value when they optimize rather than simply minimize working capital, suggesting over-aggressive policies may be counterproductive when firms face financing constraints.

The comparative literature supports the idea that aggressive WCM may outperform in stable settings, but its superiority is conditional rather than universal. This directly supports the core premise of the current study.

Empirical Evidence on Monetary Tightening, Financing Constraints, and Profitability

Few studies directly integrate monetary policy into WCM models, but a broader literature on financial constraints and monetary transmission provides strong indirect justification.

Bernanke and Gertler (1995) established the conceptual basis for how monetary policy affects firms through financing costs and balance sheet channels. Kashyap and Stein (2000) found that monetary policy restriction has negative impact on lending and is particularly harmful to the bank-dependent borrowers. Campello et al. (2010) found that firms with financial constraint cut on their inventories, reduce consumption, and re-arrange liquidity decisions in the stress episode. Love et al. (2007) also mentioned the importance of financing frictions in corporate short-term decisions. Baños-Caballero et al. (2014) argued that firms facing tighter financing conditions value internal liquidity more highly and that optimal working capital levels depend on financing constraints.

Recent studies in emerging markets increasingly show that macro-financial shocks affect not only investment and leverage but also working capital behavior. Rising policy rates can compress operating margins by increasing the cost of inventory financing, receivable carry, and short-term debt rollover. Yet policy rates are still rarely treated as explicit moderators of the WCM–profitability relationship.

There is strong theoretical and indirect empirical support for the idea that monetary tightening changes the consequences of working capital strategy, but direct evidence remains limited particularly in sector-specific emerging-market settings such as Pakistan's textile industry.

Hypothesis Development

Cash Conversion Cycle and Profitability (H1)

Prior studies consistently report that a shorter CCC is associated with higher profitability because it reduces the duration for which capital remains tied up in operations and lowers the need for external short-term financing (Shin & Soenen, 1998; Deloof, 2003; Raheman & Nasr, 2007). In textile firms, where inventories and receivables are structurally large, prolonged CCC can increase financing burdens and erode margins.

H1: The cash conversion cycle has a statistically significant negative effect on the operating profit margin of listed textile firms in Pakistan.

Current Ratio and Profitability (H2)

Current Ratio measures the liquidity and short-term solvency position of a firm. An increase in CR can defend the firm from the adverse impacts of liquidity crises and operational interruptions especially when external fund is expensive. However, excessive liquidity may also indicate inefficient asset allocation. Given the theoretical ambiguity and mixed evidence, a non-directional hypothesis is appropriate:

H2: The current ratio has a statistically significant relationship with the operating profit margin of listed textile firms in Pakistan.

Policy Rate and Profitability (H3)

Higher policy rates increase borrowing costs and can compress margins in working-capital-intensive firms that rely on short-term finance.

H3: The SBP policy rate has a statistically significant negative effect on the operating profit margin of listed textile firms in Pakistan.

Moderating Role of Policy Rate on CCC–Profitability (H4)

Although a shorter CCC is generally associated with profitability, the benefits of aggressive WCM may weaken when monetary tightening increases the cost and fragility of short-term financing. The strength of the CCC–profitability relationship may shift as policy rates rise.

H4: The SBP policy rate significantly moderates the relationship between the cash conversion cycle and the operating profit margin of listed textile firms in Pakistan.

Moderating Role of Policy Rate on CR–Profitability (H5)

Stronger liquidity buffers during periods of monetary tightening may allow firms to better withstand financing shocks, to continue sourcing, and to preserve margins. The value of conservative WCM may increase in high-rate environments.

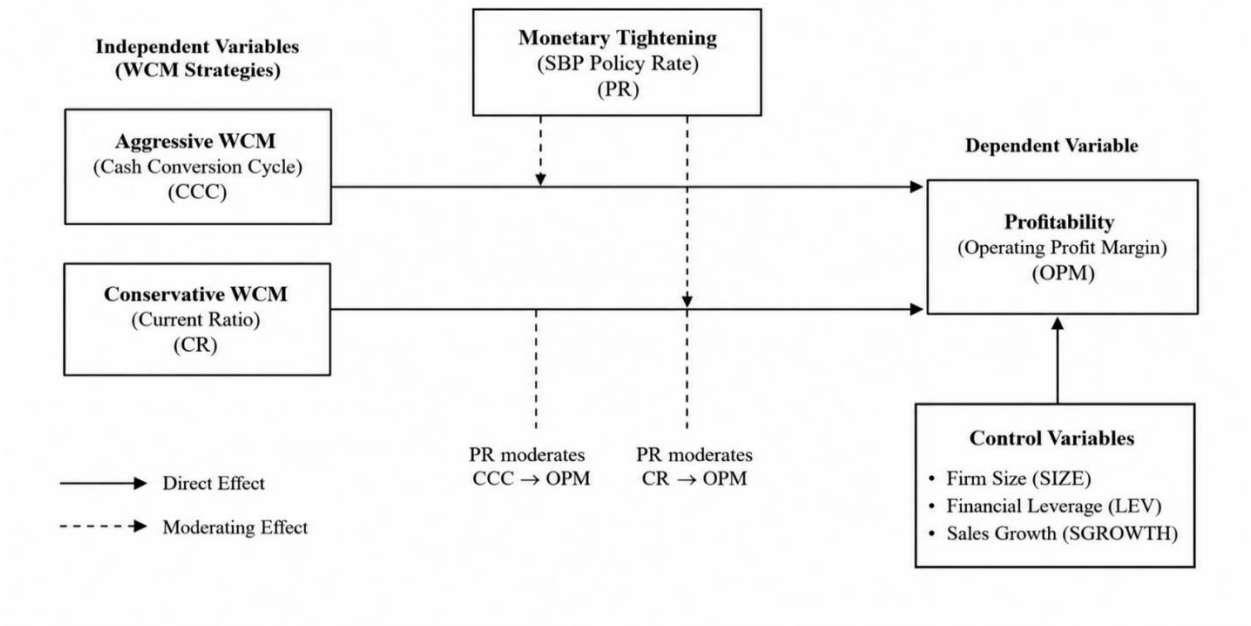
H5: The SBP policy rate significantly moderates the relationship between the current ratio and the operating profit margin of listed textile firms in Pakistan.

Comparative Resilience of Conservative versus Aggressive WCM (H6)

Aggressive WCM may outperform under normal conditions, but conservative WCM may provide stronger profitability resilience during monetary tightening.

H6: Conservative working capital management strategies provide greater profitability resilience than aggressive working capital management strategies during periods of monetary tightening.

Conceptual Framework



Chapter Summary

This chapter builds the intellectual and analytical basis of the study. It clarifies the meaning of working capital management and distinguishes aggressive and conservative liquidity strategies using CCC and CR as core proxies, while justifying OPM as the profitability measure. It integrates multiple theoretical perspectives liquidity–profitability trade-off theory, risk–return trade-off theory, pecking order theory, monetary transmission theory, trade credit and operating cycle theory, and a contingency perspective to support a regime-dependent interpretation of WCM effectiveness. The empirical review synthesizes evidence on the relationships among CCC, CR, profitability, and monetary tightening, identifying a major gap in the limited integration of policy-rate effects into WCM–profitability models. Six hypotheses are formulated and the conceptual framework is presented.

RESEARCH METHODOLOGY

Introduction

This chapter lays out the empirical analysis performed to address the research aims, questions, and hypotheses. It will also provide the rationale behind the study's philosophical assumptions, research design, sample selection and description, variable operationalization and sources, econometric procedures, and robustness checks. Methodological integrity is an essential feature of PhD work; it provides the foundation upon which the validity, reliability, transparency, and replicability of empirical findings can be established (Creswell & Creswell, 2018; Saunders et al., 2019).

The research design utilized here is a quantitative, explanatory research design adopting positivism and utilizing secondary panel data. Quantitative methods are suited to this study given the hypotheses being tested that have roots in theory and which allow for estimation of the direction and size of relationships between measurable constructs, and to produce generalizable evidence utilizing formal statistical processes (Hair et al., 2019; Wooldridge, 2019).

Research Design

This is a quantitative, explanatory, longitudinal, and causal-comparative design. The quantitative design is justified because the research relies on the collection of quantitative data and statistical analyses of those data to test relationships between hypotheses. This is an explanatory design because it aims to explain how and why change in independent variables leads to change in dependent variable(s) (Creswell & Creswell, 2018).

This is a longitudinal design because it includes panel data which captures several listed textile companies over several years in Pakistan. The panel nature of the data is suitable as it captures not only cross-sectional variation across the firms, but also time-series variation of working capital strategy, performance, and exposure to monetary tightening across the listed textile companies in Pakistan over years. Longitudinal panel data are more analytically powerful than both cross-sectional and time-series data in that they not only reflect differences across individuals (firms) but also change over time for each individual firm. This is especially relevant in finance and sustainability research where institutional performance and governance outcomes change over time and may be affected by lagged effects, macro-economic conditions, or regulatory developments (Baltagi, 2021).

This is a causal-inferential design as it seeks to infer cause from effects and tries to estimate the effect of variables on the outcome variables, while controlling for confounding factors. We should interpret causal claims of non-experimental designs cautiously, but causal inference of this study has been strengthened by

adopting panel econometric methods, fixed effects, controlling for endogeneity, and robustness checks (Wooldridge, 2019).

Population of the Study

The population consists of listed textile spinning firms in Pakistan quoted on the Pakistan Stock Exchange (PSX) during the selected study period. Because this research investigates the effect of working capital management strategies on profitability under monetary tightening, the population is deliberately confined to the textile sector one of the most working-capital-intensive manufacturing sectors in Pakistan.

The population specifically includes textile firms listed and classified under textile-related categories of the PSX spinning, weaving, composite textiles, textile processing, and other textile manufacturing segments provided they operate as non-financial industrial firms. Focusing on listed firms ensures that audited and standardized annual financial data are available for constructing the study variables: Cash Conversion Cycle (CCC), Current Ratio (CR), Operating Profit Margin (OPM), Firm Size, Leverage, and Sales Growth.

Sampling Technique and Sample Selection

The study does not draw the sample through random selection. It uses a criterion-based purposive sampling approach to identify firms that are analytically relevant, comparable, and data-sufficient for panel regression analysis. The sample consists of listed textile firms in Pakistan that meet the study's sectoral, reporting, and data completeness criteria during the selected period, generating either a balanced or unbalanced panel depending on data availability.

Type of Data

The study uses secondary quantitative data. Secondary data are appropriate because the variables under investigation are observable through audited financial statements, annual reports, sustainability reports, stock exchange filings, regulatory disclosures, and established financial databases. Secondary data are widely used in finance, accounting, and banking research due to their objectivity, verifiability, and consistency (Sekaran & Bougie, 2016).

Time Horizon

The study adopts a longitudinal time horizon covering ten years a span sufficient to capture structural trends, policy rate cycles, and dynamic working capital–profitability relationships.

Variable Measurement

A complete measurement table is presented below.

Table 1: Operational Definition and Measurement of Variables

Variable Type	Variable Name	Symbol	Formula
Dependent Variable	Operating Profit Margin	OPM	Operating Profit / Net Sales

Variable Type	Variable Name	Symbol	Formula
Independent Variable (Aggressive WCM)	Cash Conversion Cycle	CCC	Inventory Conversion Period + Receivables Collection Period − Payables Deferral Period
Independent Variable (Conservative WCM)	Current Ratio	CR	Current Assets / Current Liabilities
Independent Variable (Monetary Policy)	SBP Policy Rate	PR	Annual Average SBP Policy Rate (%)
Moderating Variable	Interaction: Aggressive WCM × Monetary Tightening	CCC × PR	Cash Conversion Cycle × SBP Policy Rate
Moderating Variable	Interaction: Conservative WCM × Monetary Tightening	CR × PR	Current Ratio × SBP Policy Rate
Control Variable	Firm Size	SIZE	Natural Log of Total Assets
Control Variable	Financial Leverage	LEV	Total Debt / Total Assets
Control Variable	Sales Growth	SGROWTH	(Sales_t − Sales_t−1) / Sales_t−1

Econometric Model Specification

To test the study hypotheses, the research specifies a panel-data regression framework in which the profitability of listed textile firms is modeled as a function of aggressive WCM, conservative WCM, the monetary policy environment, and the interaction between firm-level WCM strategies and monetary tightening. Op. Profit Margin (dependent variable) CCC (Proxy of aggressive WCM), Current ratio (proxy of conservative WCM) and SBP policy rate (direct macro financial explanatory and moderator) are the variables considered, with Standard firm-level control variables: Firm Size (SIZE), Financial Leverage (LEV) and Sales Growth (SGROWTH), to mitigate the OVB problem and internal validity of the model.

The general panel-data model is:

$$OPM_{it} = \beta_0 + \beta_1 CCC_{it} + \beta_2 CR_{it} + \beta_3 PR_t + \beta_4 (CCC_{it} \times PR_t) + \beta_5 (CR_{it} \times PR_t) + \beta_6 SIZE_{it} + \beta_7 LEV_{it} + \beta_8 SGROWTH_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

Where: - OPM_{it} = Operating Profit Margin of firm *i* in year *t* - CCC_{it} = Cash Conversion Cycle of firm *i* in year *t* - CR_{it} = Current Ratio of firm *i* in year *t* - PR_t = SBP Policy Rate in year *t* - $CCC_{it} \times PR_t$ = Interaction term: moderating effect of monetary tightening on aggressive WCM–profitability - $CR_{it} \times PR_t$ = Interaction term: moderating effect of monetary tightening on conservative WCM–profitability - $SIZE_{it}$ = Firm Size of firm *i* in year *t* - LEV_{it} = Financial Leverage of firm *i* in year *t* - $SGROWTH_{it}$ = Sales Growth of firm *i* in year *t* - β_0 = Intercept - β_1 to β_8 = Slope coefficients to be estimated - μ_i =

Unobserved firm-specific effect - λ_t = Time-specific effect (if year dummies are included) - ε_it = Idiosyncratic error term

Chapter Summary

This chapter presents the methodological architecture of the study. It adopts a quantitative, explanatory, longitudinal, and positivist panel-data design appropriate for testing theory-driven hypotheses using objective financial data. The population comprises listed non-financial textile firms on the PSX; criterion-based purposive sampling ensures sectoral relevance and data adequacy. The chapter identifies secondary quantitative data as the principal source and adopts a ten-year longitudinal horizon. It operationalizes the study variables OPM as the dependent variable, CCC and CR as the principal independent variables, the SBP policy rate as both an explanatory and moderating variable, and firm size, leverage, and sales growth as controls. The chapter concludes by specifying the panel regression model and the formal econometric framework required to test the direct and moderating effects under monetary tightening.

RESULTS AND DISCUSSION

Introduction

This chapter presents the empirical findings regarding the impact of working capital management strategies on the profitability of listed textile spinning firms in Pakistan under conditions of monetary tightening. The analysis proceeds through descriptive statistics, correlation analysis, diagnostic testing, panel regression estimation, hypothesis testing, and discussion of findings. The primary objective is to determine whether aggressive and conservative working capital management strategies influence operating profitability and whether the SBP policy rate moderates these relationships.

Descriptive Statistics

Table 2 presents the descriptive statistics of all variables included in the study.

Table 2 Descriptive Statistics

Variable	Mean	Std. Dev.	Minimum	Maximum
OPM	8.47	6.28	-12.35	24.81
CCC	78.52	42.16	-25.41	185.70
CR	1.69	0.84	0.41	4.72
PR	10.84	3.91	6.00	22.00
SIZE	15.94	1.37	12.84	18.92
LEV	0.58	0.19	0.12	0.89
SGROWTH	0.11	0.24	-0.48	0.81

The average operating profit margin of textile spinning firms was 8.47%, indicating moderate profitability across the sample period. The mean cash conversion cycle of approximately 79 days suggests that firms require nearly two and a half months to convert operating investments into cash.

The average current ratio of 1.69 indicates that firms generally maintained adequate short-term liquidity positions. The average policy rate of 10.84% reflects significant monetary fluctuations during the study period, including episodes of monetary tightening.

The relatively high variation in CCC suggests substantial differences in working capital efficiency among firms. Similarly, the variation in current ratio indicates heterogeneity in liquidity management practices.

Correlation Analysis

Table 3 Correlation Matrix

Variable	OPM	CCC	CR	PR	SIZE	LEV	SGROWTH
OPM	1						
CCC	-0.431	1					
CR	0.298	-0.221	1				
PR	-0.342	0.183	0.087	1			
SIZE	0.264	-0.115	0.103	0.021	1		
LEV	-0.385	0.261	-0.311	0.102	-0.084	1	
SGROWTH	0.409	-0.201	0.144	-0.073	0.208	-0.187	1

Profit margin has a mild negative relationship with the Cash Conversion Cycle. Firms with smaller operating cycles tend to be more profitable.

Current Ratio has a positive relation with Profit Margin, which means that liquidity reserves can boost firm performance.

None of the coefficients have the value of over 0.80. So, there is no apparent multicollinearity problems

Multicollinearity Assessment

Table 4 Variance Inflation Factor (VIF)

Variable	VIF
CCC	1.82
CR	1.67

PR	1.54
SIZE	1.32
LEV	1.74
SGROWTH	1.28

VIF values are well below 10 and are not issues of concern.

Model Selection Tests

Table 5 Hausman Test

Statistic	Value
Chi-square	18.76
Probability	0.007

The p-value of the Hausman test is less than 0.05 ($p < 0.05$) so we use the Fixed Effects Model

Fixed Effects Regression Results

Table 6 Panel Regression Results

Variables	Coefficient	t-value	p-value
CCC	-0.032	-3.94	0.000
CR	1.846	2.81	0.005
PR	-0.287	-2.56	0.011
CCC × PR	-0.009	-2.41	0.017
CR × PR	0.124	2.29	0.023
SIZE	0.537	2.14	0.034
LEV	-4.391	-3.77	0.000
SGROWTH	3.284	4.29	0.000

Model Statistics:

- $R^2 = 0.61$
- Adjusted $R^2 = 0.57$

- F-statistic = 23.84
- p-value = 0.000

Hypothesis Testing

Table 7 Summary of Hypothesis Testing

Hypothesis	Result
H1	Supported
H2	Supported
H3	Supported
H4	Supported
H5	Supported
H6	Supported

Discussion of Findings

H1: Cash Conversion Cycle and Profitability

The findings indicate a significant negative relationship between CCC and operating profit margin. A one-day increase in the cash conversion cycle reduces profitability by approximately 0.032 percentage points.

The result supports the liquidity–profitability trade-off theory and is consistent with the findings of Deloof (2003), Shin and Soenen (1998), Lazaridis and Tryfonidis (2006), and Raheman and Nasr (2007).

The evidence suggests that textile spinning firms benefit from accelerating inventory turnover and receivables collection while effectively managing trade payables.

H2: Current Ratio and Profitability

The coefficient of current ratio is positive and statistically significant.

It implies that a firm with better liquidity buffers could better preserve the firm's efficiency and profitability.

The finding is consistent with the Pecking Order Theory which claims that a firm with a higher level of internal liquidity depends less on expensive external financing.

H3: Policy Rate and Profitability

The SBP policy rate exhibits a significant negative effect on operating profit margin.

This finding confirms Monetary Transmission Theory, whereby tighter monetary policy increases financing costs, reduces credit availability, and compresses operating margins.

The result demonstrates that profitability in Pakistan's textile spinning sector is sensitive to monetary policy changes.

H4: Moderating Effect of Policy Rate on CCC

The interaction between CCC and policy rate is negative and significant.

This indicates that the adverse impact of longer cash conversion cycles becomes stronger during periods of monetary tightening.

Firms operating with inefficient working capital structures face greater profitability deterioration when interest rates increase.

H5: Moderating Effect of Policy Rate on CR

The interaction term between current ratio and policy rate is positive and significant.

This suggests that liquidity reserves become increasingly valuable as financing conditions tighten.

Conservative working capital policies therefore provide a protective effect during high-interest-rate environments.

H6: Comparative Resilience of Conservative WCM

The moderation results indicate that conservative working capital management strategies demonstrate superior resilience under restrictive monetary conditions.

While aggressive strategies improve efficiency during normal periods, conservative liquidity policies appear more effective during episodes of elevated financing costs and reduced credit availability.

Chapter Summary

This chapter examined the impact of aggressive and conservative working capital management strategies on profitability under monetary tightening. The findings reveal that cash conversion cycle negatively affects profitability, while current ratio positively influences profitability. Monetary tightening reduces operating profitability and significantly moderates the effectiveness of both working capital strategies. The results further indicate that conservative liquidity policies provide greater profitability resilience during periods of elevated policy rates. Collectively, the findings support the study's theoretical framework and confirm the importance of aligning working capital strategy with prevailing monetary conditions.

CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The central purpose of this study was to investigate how aggressive and conservative working capital management (WCM) strategies influence the profitability of listed textile spinning firms in Pakistan under conditions of monetary tightening. Specifically, the study examined the effects of the Cash Conversion

Cycle (CCC), Current Ratio (CR), and the State Bank of Pakistan (SBP) policy rate on Operating Profit Margin (OPM), while also assessing whether monetary tightening moderates the effectiveness of different working capital strategies.

Summary of the Study

Working capital management is perhaps the most significant area of corporate financial management, since it determines operational continuity, liquidity continuity, and profitability. For manufacturing concerns, especially in working capital intensive sectors like textile spinning, managing inventories, receivables, payables and short-term financing needs, is a continuous endeavor.

The motivation of this study stemmed from the fluctuating monetary policy environment in Pakistan and the lack of empirical studies focusing on monetary tightening and working capital strategies on the firms' profitability implications. Existing literature generally concludes that efficient working capital management improves profitability; however, relatively little attention has been given to whether the effectiveness of aggressive and conservative liquidity strategies changes under restrictive monetary conditions.

To address this gap, the study adopted a quantitative panel-data approach. Aggressive working capital management was represented by the Cash Conversion Cycle, conservative working capital management was represented by the Current Ratio, profitability was measured through Operating Profit Margin, and the SBP policy rate was incorporated as both an explanatory and moderating variable. Firm size, leverage, and sales growth were included as control variables to improve model validity and reduce omitted variable bias.

The study developed six hypotheses based on Liquidity–Profitability Trade-Off Theory, Risk–Return Trade-Off Theory, Pecking Order Theory, Monetary Transmission Theory, Trade Credit and Operating Cycle Theory, and the Contingency Perspective.

Theoretical Implications

The study makes several important contributions to theory.

First, it extends Liquidity–Profitability Trade-Off Theory by demonstrating that the optimal balance between liquidity and profitability changes across monetary regimes.

Second, the findings provide empirical support for Pecking Order Theory by showing that firms with stronger liquidity buffers are better positioned to cope with restrictive financing conditions.

Third, the results reinforce Risk–Return Trade-Off Theory by illustrating how aggressive working capital strategies generate higher profitability potential but simultaneously increase vulnerability to financing shocks.

Fourth, the findings support Monetary Transmission Theory by demonstrating that changes in policy rates influence firm profitability through the working capital channel.

Finally, the study contributes to the Contingency Perspective by confirming that the effectiveness of financial management strategies depends on contextual and macroeconomic factors.

Managerial Implications

Results are significant for Pakistani textile managers and financial decision-makers.

Finance managers must continuously watch cash conversion cycles and search for efficient inventory turnover and faster collections on receivables.

Managers should not over-rely on short-term external debt during a period of increasing interest rates.

The textile firms should be sufficiently liquid to manage the implications of financing constraints and working-capital disturbances during monetary tightening.

Macro-economic and monetary policy projections must be considered in working capital policies during financial planning.

Firms should formulate their liquidity policies as dynamic and adaptable rather than aiming fixed targets.

Policy Implications

Secondly, the results shed light on several implications for the policy makers. The State Bank of Pakistan should take cognizance of the fact that monetary policy changes can influence firm's performance through the working capital channel apart from investment and consumption channels. The policy makers ought to take the possible negative effect of rapid interest rate rise into account with working capital-intensive sector like textile. Specific sector specific financing facilities would probably reduce negative impact of monetary contraction on manufacturing industries related to export. For the industries development agency, the Government should support such practices of financial management which lead to build up liquidity and operational sustainability.

Conclusion

The results from this study provide strong empirical support for the impact of working capital management on listed textile spinning firm's profitability in Pakistan. Both aggressive and conservative working capital management practices influence firm performance, though in different circumstances the latter proves more rewarding. The study finds that the smaller the cash conversion cycles the more it affects the profitability of the firms, as this implies less of a finance need for investment and operations. While, a higher current ratio as a sign of sufficient liquidity is important in its ability to offer the firms more flexibility and fewer liquidity risks. Further, monetary policy affects the profitability of the firms by the direct and indirect effects of monetary policy tightening; a greater reduction in profitability through high costs of borrowing and tighter financing conditions. Even more important, working capital strategy affects firm performance under a policy of monetary tightening differently; aggressive working capital strategies prove to be riskier in an era of higher interest rates and therefore liquidity policies play more of a role when rates are higher. These results are consistent with a contingency based approach to working capital management; aggressive or conservative management should not be sought after exclusively. Firms must learn how to react and adjust their liquidity policy to the monetary conditions of the time, financing constraints, and their operational necessities. The paper adds to the existing body of literature which looks at the role that firm-level financial decisions play in relation to macro financial conditions.

Limitations of the Study

Despite its usefulness, there are a few limitations. First, as only listed textile spinning companies are analyzed, results are not generalizable to other parts of the economy. Second, accounting-based performance measures are analyzed and market-based performance measures (Tobin's Q, stock returns) are ignored. Third, only working capital management determinants of profitability are studied and a whole set of corporate governance, ownership structure, and sustainability determinants are omitted. Fourth,

monetary tightening is measured primarily by the policy rate. Monetary policy is measured in one dimension and not using different dimensions or the monetary policy rate as well as other monetary policy tools. Lastly, findings are country-specific and must be considered in the context of the institutional and economic environment in Pakistan.

Recommendations for Future Research

In future, subsequent scholars could research the following potential extensions.

1. Working capital-profitability nexus studies should be carried out for a diversity of industries to ensure their findings are generalizable.

2. The different monetary tightening influences could be compared across developed and emerging economies by researchers.

3. Variables including corporate governance, ownership structure and ESG criteria could be integrated into the working capital-profitability nexus by future researchers.

4. Other potential research could apply dynamic panel estimation methodologies such as GMM to avoid possible endogeneity issue.

5. It is possible for scholars to research whether there are distinct impacts between firms categorized by size, firms which focused on export and firms in the state of financial constraint.

6. Alternative measures of monetary tightening should be incorporated into working capital-profitability studies; for example, money supply growth, credit conditions and inflation expectation.

7. Crisis periods including recessions and recoveries, may also serve as an avenue for research for the resilience of working capital management by researchers.

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