

A behavioural finance approach to working capital Management in context of Pakistani Firms

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ABSTRACT

Behavioural finance incorporates cognitive psychology into conventional finance, suggesting that people are prone to various heuristic driven biases in the decision-making process. Nevertheless, the literature on behavioural finance and working capital is rather thin, as studies of working capital tend to focus on either its determinants or its relationship with profitability. We aim to bridge this substantial gap by exploring the influence of different behavioural biasness including self-serving biasness, level of confidence and loss aversion bias and representativeness bias altogether with different components of working capital management individually, which include cash management, inventory management, account receivables management, account payables (debt) management and risk management. The data collection from 97 finance professionals through self-structured questionnaire comprising 32 questions on likert scale. The data analysis is through Smart PLS. The result indicated that behavioural biasness exerts direct influence to all Working capital parameters but a weak relationship for account payables in context of Pakistan's services and manufacturing companies.

Keywords: Working capital management, behavioural bias, self-serving biasness, level of confidence, loss aversion bias, representativeness bias.

1. Introduction:

1.1 Background to the Study

Companies are able to minimize their financing cost and also ensure the readiness of funds for expansion by reducing the capital restricted in their net current assets (Hill et al., 2010). Beside this, a maximum level of net current assets helps the companies to manage successfully with sudden problems associated with price fluctuations, inventory shortages, and maintains good relationships with customers by giving maximum credits for trade (Petersen and Rajan, 1997).

Working capital management (WCM) is the domain of corporate finance with least researched in Pakistan. WCM maintains an optimum balance among the components of working capital and gives vital support for profitability and inter-temporal cash flows of the company (Afrifa, 2016).

A strong managerial effort is needed to maintain a balance and taking the decision for acquiring the right amount of working capital needs. Through optimum managerial activities working capital can meet the trade-off between efficiency and risk that increases the value of the firm (Wasiuzzaman, 2015).

A perfect management of working capital is very necessary for any company and also for the companies running in evolving economies. The companies in these economies are relatively smaller, going forward with narrow path to the capital market and financing for long-term funds. Moreover, the evolving economies are distinguished by inadequate corporate governance, increased interest rate, higher level of poor law and order situation, wealth distribution inequality and less developed financial markets. However, some companies prefer to rely on funds from internal such as working capital funds (Allen et al., 2012). In the modern era of fast globalization and liberalization, the companies operating in these developing countries confronts a high level of competition with strong businesses of developed countries. Therefore, it becomes all the more imperative for these firms to manage their working capital judiciously. However, at the same time, since a significantly larger number of these firms are in the nascent stage of their product lifecycle and face several future uncertainties, they may not always be able to follow the optimal working capital management policy systematically. Therefore, an optimum level of working capital should exist; the companies in these evolving markets might not always pro-actively follow it for many

other financial or functional constraints and changing strategic deliberations (Banerjee, P. & Chauhan, G. 2016).

The availability of optimum level of working capital policy and companies that meet to that optimum level with the increase or decrease of their investment in working capital expands their functional and inventory performance. The corporate investment is the mode by which effective working capital management moves towards greater firm performance. The effective WCM gives an opportunity to the firms to reorganize underutilized resources of corporate to high value utilization, such as acquiring running cash from funding facilities (Petmezas et al., 2014).

The notions of behavioural biasness with combination of confidence level, anchoring, representativeness, self-serving and loss aversion have been combined discussed with distinguishing aspects of Working capital management with cash inventory, accounts receivable, accounts payables and risks discussed in the literature.

Behavioural finance studies the psychological aspect of financial decision-making and explains the irrationality of investors in investment decision-making. Usually, the investor's behaviour deviates from making rational or logical decisions and leans towards influence by various behavioural biases. These biases influence the investor's rationality in investment decision-making. Kahneman and Tversky (1979) developed prospect theory and explained that the investor's decision-making is based on potential gains and losses rather than on final outcomes. This phenomenon occurs because of the cognitive biases that affect the judgement of these gains and losses. Investors show several types of behavioural biases, and we have reviewed four biases in the following sections.

According to Khalid et al., (2018) Overconfidence is a known build-up and joint bias that allow people to become more confident for their ability, skills and knowledge overlook the risks attached with investment. Previous researches in this domain have told us about the impact of overconfidence bias on rational behaviour for decision making.

According to Marchand (2012), loss aversion has two consequences. First, investors show readiness for taking risks easier if they assess their investment amount occasionally. Secondly, when all possible parameters are increase adequate to eliminate losses, investors will have more acceptance for more risk. Prospect theory is an economic theory of behaviour that explains choices between multiple alternatives that involve risk. This theory also known as the loss aversion theory says that individuals take decisions since their potential value of profit and loss and instead to their

last result and also provide base to take decisions on expected gains instead of perceived losses. Among two equal choices for a person is, one is from perceived profits and the other in perceived losses, a person would choice the first one.

According to Marchand (2012), investors often fails to take decisions to do enough research due to several kinds of date for collection and analysis. Rather than they take forward step based on a single fact or figure, while neglecting the key information. Anchoring is right word for describing this irrational behaviour. Hoguet (2005) says that while investors require to explain a quantum investor would 'anchor' latest available information. In the same regards, investors behave to underreact to latest data. As per Sewell (2007), when a related value i.e. anchor is available, individuals start making expectations from beginning to a primary value (an anchor) and it is accustomed to produce the definitive answer.

De Bondt (2010) explains the three psychological strands of Behavioural finance. First is we call as behavioural or cognitive psychology, in which the whole mind of decision taker focuses on the required computations helpful in maximization of profits or revenue. The second strand is emotional response to the strength of trading, here decision maker takes more affirm and strong steps for computational process of maximization of wealth. The third strand is social psychology, which refers to recognition the requirements to search acceptability and inspiration of our acts. Certainly, rejection by our professional peers can be painful and potential costly in career terms. Individuals might prefer to fail conventionally instead they expose themselves to the social isolation and their instability comes.

1.2 Behavioural Biases and their impact on Working Capital management

Ramiah et al. (2014), the trade-off theory says that companies reduce their **accounts payables** when the probability of financial instability is high. A firm with a minimum credit rating usually fulfil its accounts payable timely, there is a high possibility that finance executives would do credit sales to the same company in the upcoming time. However, if there is late payment from the purchasing companies, the seller firm is becoming reluctant to make credit sales to the same buying company in future. Moreover, the chances of doing credit sales to another company with low credit rating was becomes affected and this represents the **anchoring or representativeness bias**. Business executives with anchoring bias are less likely to give importance to the inflation while taking cash decisions.

Individuals show likelihood to **self-serving** bias when they give credit of their good financial performance to their own capabilities also considered as internal factors and failure to the financial performance is due to external factors i.e. environment. During the time of superior performance, individuals hardly make difference between external and internal factors as they give performance to both. In periods of deficient performance, however, the respondents tend to blame external factors. Self-serving managers usually adopt techniques that are more under their control than those external to the firm, including factoring and outsourcing. Executives with self-serving bias focus more than those factors without this bias such as market liquidity, market regulations, exchange rates, inflation rates, efficient financial systems, financial environment, economic environment and security cost and technological advances. Moreover, corporate managers with self-serving bias give more to the transaction motives for utilizing accounts receivable. Managers tend to be highly confident during the right time of better performance but less confident during company's declining performance.

1.3 Problem Statement

If we talk about current economic changes in Pakistan, the firms are less likely to take strong decision making to execute their plans and implementing their strategies.

A comprehensive financial planning is the most crucial need of every business either operating as small or medium enterprise or a large organization. The planning behaviour majorly varies according to the size of company or the type of company and even it depends on the country in which it is operating its business. The planning does not always require expertise of financial experts, corporate managers and senior business executives but it involves certain type of behaviour. The ignorance to the cognitive behaviour is previously ignored by the experts but the different outcomes with same approach have led many thinkers and corporate treasurers to think about it.

It's very surprising to know how different consequences are faced with same planning level, same expertise, same educational background and same skills of decision takers. Therefore, some business experts (Belt and Smith 1991; Graham and Harvey 2001) conclude that there are some cognitive behaviours that exerts a greater part of influence while taking decisions and making financial and investment strategy. Nofsinger (2005) presented that high confidence level tend corporate treasurers to overestimate their skills and knowledge, they undermine apparent financial

risks and exaggerate their capability to handle unfavourable conditions. Li (2010) find out that corporate treasurers with self-serving attribution bias usually invest more due to having investment cash flow sensitivity. Wang and Webster (2007) expressed that distributors with loss aversion bias enhance their supply chain performance, and as an outcome it improves profitability. Representativeness demonstrates the degree of resemblance for an event with its parent population. It's very important for financial or investing decision makers to keep pace of their confidence level to the level of business' status; either they have required confidence level capable to confront the things unexpected and take a solid stance without any hindrance and reluctance. The other important thing is they must have ability to accept the responsibility to accept failure for losses and success to gains and realize the reasons due to internal or external results. The practical approach is that if there is loss in business, the failure is not only due to external factors but could be due to internal factor. In the same way the success to gain profit is not due to own potential of corporate executive but it is also due to economic condition and free space of expanding business. Further, the past experiences of a company create a crucial factor to take decisions in future either about their own business or doing business with another company. The problem occurs here, how to take decision by keeping in view of working capital management under effects of behavioural biases components including representativeness bias, self-serving bias, loss aversion bias and confidence level bias. Therefore, our research is to know the impact of behavioural biasness on the components of working capital including cash management, account payables, account receivables and inventory in Pakistan's context.

1.4 Research Objectives

The purpose of this study is to view a comprehensive scenario of Behavioural Financial Approach to working capital management of different companies related to different sectors of Pakistan. Our research is purposive to bridge the gap of cognitive behaviours and their influence of working capital management. This research is conducted on services and manufacturing companies of Pakistan including listed and non-listed. The influence of different behavioural biasness including self-serving biasness, level of confidence and loss aversion bias and representativeness bias altogether with different components of working capital management individually, which include cash management, inventory management, account receivables management, account payables (debt) management and risk management.. The behaviour biases as identified by high or low

confidence level of the firms taking debt for running their financial activities. Usually firms unrealistically overestimate their performance to perform well this and this is due to surface understanding of young decision makers thinking optimistically about situation being created in future (Graham, Harvey, and Huang 2009).

1.5 Significance

This uniqueness of our research explains a more detailed version of cognitive and financial study's combination and open doors for corporate finance executives to learn more about the cognitive behaviour and to plan and adopt working capital policies and practices aligning with right behaviours. This study would be helpful to make strategy to grow the existing business and developing of a new business. The behavioural aspects would help business top executives to assess the psychological level they are consisting in themselves with perspective to available working capital. . Our research pave the way for business students as well to make their understanding of financial decisions in new direction rather than just focusing on contemporary and conventional concepts of financial performance management concepts taught in academic text books. Our study would help finance executives to keep consideration of behavioural determinants while planning, executing their strategy or making tactics and taking final confident decisions. The results of our research indeed provide a relaxing advice and minimize the fear to corporate decision takers for expected uncertainty. After referring to this research, the corporate decision takers get an insight about setting their mind set, moods and behaviours accordingly.

2. Literature Review

Behavioural corporate finance literature is predominantly on the effects of overconfidence on debt. Kida, Moreno, and Smith (2001) show that emotions and moods tend to have a significant impact on capital-budgeting decisions. Fairchild (2005), Hackbarth (2008) and Barros and Da Silveira (2008) examine the effects of managerial overconfidence on the usage of debt and argue that managers with higher overconfidence are more inclined to use more leverage. Malmendier and Tate (2005) and Ben-David, Graham, and Harvey (2007) show that overconfident managers generally overestimate the return of their investment projects or underestimate the variance of future cash flows, leading to the use of a lower discount rate in their valuation. Li (2010) claims that managers with self-serving attribution bias tend to overinvest, as they have higher investment–

cash flow sensitivity. Nofsinger (2005) points out that overconfidence causes people to overestimate their knowledge, underestimate the risk they are exposed to and exaggerate their ability to control events. Wang and Webster (2007) demonstrate that retailers with loss aversion bias improve supply chain performance, which in turn boosts profitability understand a wider range of the WCM practices. Belt and Smith (1991) investigate cash management in Australia by focusing on the float and cash flows. Their study includes other current industry practices, such as centralisation of cash management decisions, diversification of bank transactions and streamlining bank relationships. Moreover, only limited inventory management approaches, such as just-in-time (JIT), were investigated by the same study. We embrace an expanded choice of inventory management techniques, including economic order quantity (EOQ), economic production quantity (EPQ) and the enterprise resource planning (ERP) system. Whereas the debt literature typically focuses on long-term financial management (Myers 1977, 1984; Flannery 1986; Graham 1996), Ramiah et al. (2014), conducted a study on a behavioural finance approach to working capital management. The purpose of this research paper is to examine the behaviour of those corporate executives directly involved in making decisions for the domain of accounts payable, cash, accounts receivable, risk management and inventory management during the period of world-wide economic and financial crises. The independent variable was Behavioural Biasness and independent variable was working capital management. The questionnaire used in research developed after taking interview of from working capital managers and literature review on the components of these research comprising of 28 questions shortened after pilot testing. The population was 1784 Australian firms and all responses collected from online resources of internet. The outcome of study confirm that Working Capital Management (WCM) including inventory, cash, accounts payable, accounts receivable, and risk is an undermine domain as 60% of the respondents emphasise the importance of WCM. Basic factors, such as foreign sales, size and industry are valuable for managing working capital, beside these age, performance and education have very less contribution.

Iqbal and Butt (2015), define the impact of behavioural biases on working capital management of manufacturing sector of Pakistan with an approach of non-parametric investigations. The research is to find out the relationship of loss aversion bias, overconfidence bias, anchoring bias and self-serving bias with working capital management. The population of the study is manufacturing companies listed Pakistan Stock Exchange (PSX). The study through a questionnaire adopted from

past research Ramiah et al., (2012). The sample size was 114 and this research is done exploratory, descriptive in nature and survey based. Further the study is applied with non-parametric tests to find the outcomes from target variables.

Kumar S. and Goyal N, (2015) studied on Behavioural biases in investment decision making with systematic analysis of literature review of over part 30 years to bridge the gap of behavioural biasness in contemporary studies. As a research methodology, systematic literature review method employed and the research assessed through study of 117 articles on behavioural biasness through assessing journal of publication, year of publication, country of study, citation analysis, types of statistical method and content analysis on the related literature. The result shows that the domain of behavioural finance is quite new and majorly empirical researches have been taken in developed countries of the world and on the top of list is USA. The logical reason is that markets are evolving in developing countries. Moreover, the reviews for behavioural bias are indecisive for most of empirical studies. The reason is that few studies few studies investigated behavioural bias in institutional investors and only few investigated adequately.

3. Theoretical Framework

3.1 Working Capital Management:

It is the part of business strategy formulated to ensure to monitor and control current assets and current liabilities. The main purpose is to efficiently provide business cash flow to fulfil short term debts and operating costs. The main factors of cash management practices are the liquidity on markets securities, economic and banking environment, market regulation currency rates, inflation effectiveness of the financial system (Tsamenyi and Skliarova 2005).

Cash Management: The objective of cash management is to enhance, control cash flows, liquidity and enhancing the funds value besides minimizing their cost (Polak and Kocurek, 2007).

Account Receivables management: The upcoming payments expected from customers. Asselbergh (1999) recommended that companies prefer utilizing accounts receivable instead cash for several reasons including financial, transaction, operating, tax and price.

Account Payables management: Following to the trade-off theory, companies minimize their short-term debts when the possibility of financial distress is high and investors are concerned about debt unpredictability. There are significant issues about the potential cost of financial distress gives

support to the trade-off theory. From the literature, transaction costs advise to use debt (Fischer, Heinkel, and Zechner 1989).

Inventory management: For inventory management perspective, Kanet (1984) explores the theories of effective and efficient inventory management, controls on inventory control and advances in inventory management. Skolnik (2007) shows that reduced inventory requirements are mechanisms for increasing cash balances. Carpenter et al. (1994) examine the link between inventory and internal financing and reveal that changes in inventory management can be a source of funding.

3.2 Behavioural Bias:

People exhibit different behaviours depend on different type of circumstances. Multiple researches used several biases but the most common and considerable biases with financial perspective are explained below.

Loss Aversion: This bias is based on Prospect theory and states that people perceive losses and gains in different manners. People give more importance to the same level of gains rather than same level of loss. Moreover, the pain of loss is felt more than the happiness for the same amount of profit as it reflects human nature (Tversky and Kahneman 1991).

Level of Confidence: Level of Confidence is cognitive bias that explains how people are assured about a reliable to their knowledge, skills and qualification and expertise. Those people with overconfidence usually ignore the risk associated with investment. Appropriate confidence level is required for any rational decision making. The overconfident corporate treasurers neglect risk probability (Nofsinger, 2005).

Self-serving Bias: Self-serving refers to the mean that decision takers executives credits their successes to personal or internal factors but do not own their failures and blame external factors out of their control (Babcock and Loewenstein 1997). Li (2010) stated that executives with self-serving attribution bias do efforts to overinvest in any sector due to their cash flow sensitivity for higher investments.

Representativeness Bias: Representativeness demonstrates the degree of resemblance for an event with its parent population. It is based on stereo types judgmental, past trends for same type of investment. A person with this bias evaluates the ambiguous events or uncertain sample by the

level at which there is be similarity in significant properties of its parent population. It shows characteristics of the creator process (Kahneman and Tversky in 1974).

The representativeness bias is similar to anchoring and here decision making relies on trends, patterns and stereotypes based financial and investing judgements. The self-serving decision makers exhibits behaviour that gives credit of all their success to their knowledge, ability and skills but not accept their failure to the external factors that were uncontrollable and beyond their approach. Loss aversion is a behaviour when people tend to exhibit tendency to avoid financial and profitability losses and definitely towards getting profitable revenue

H₁: Behavioural Biasness directly influence on Cash Management.

Baños-Caballero et al., (2014) mentions that an effective strategy of working capital management (WCM) would cause to minimization in both accounts receivable holding inventory of store. A reduction in inventory holding will lead to improvement in performance by minimising inventory-holding costs including warehouse storage costs, insurance costs and cost of spoilage and theft of inventory. A minimization in accounts receivable could also rise performance as it will cause high cash flow available to a company, it is requiring to operate daily functions.

Tauringana and Afrifa (2013) states that a company could also take a conservative strategy of WCM that cause a maximization in investment for working capital. This effective strategy stimulates sales by growing both accounts receivable and inventories for improving operational performance of a firm. Furthermore, higher level of inventories might cause prevention in production related activities and reduction of the risk to get in to stock out condition, minimize supply activity costs and price instability.

H₂: Behavioural Biasness directly influence on Inventory Management.

The renown experiments related to endowment effect, Thaler, Kahneman and Knetsch (1991) found that any chosen possessor of a commodity needed significantly Receivables to share with their possession than any chosen purchasers were willing to give payment to purchase it. Kaustia (2010) states that the endowment effect, also famous as status quo bias is the phenomenon for which people tend to pay a higher price for a commodity that they are possessor of than they could be ready to reduce receivables. These differences are exhibition of an unevenness of values that

Merchand (2012) proclaims as loss aversion. Loss aversion comes out when the non-utilization of given up a commodity is higher than the usage related with acquisition of this commodity.

H₃: Behavioural Biasness directly influence on Account Receivables.

According to Malam & Sah (2019), holding cash cause greater value to the company rather than investing in working capital. The result of their study indicate that more sales returns should reduce for the companies that increase the level of investments in firms and net operating working capital along conditional access to financing from external factors usually suffer more. As per statement of Kieschnick et al., (2013) and de Almeida and Eid (2014), accounts payables are positively links with the deficits of financing. The more cost attached with increasing capital form external sources for firms with high-litigation risk, firms may over-due their payment of account payables under short-term liabilities as this might serve as an extra source of utilization of capital. A firm by giving relaxation in inventory and credit facility policies can stimulate sales. In the form of account receivables, the provision of credit facilities could help increase sales.

H₄: Behavioural Biasness directly influence on Account Payables.

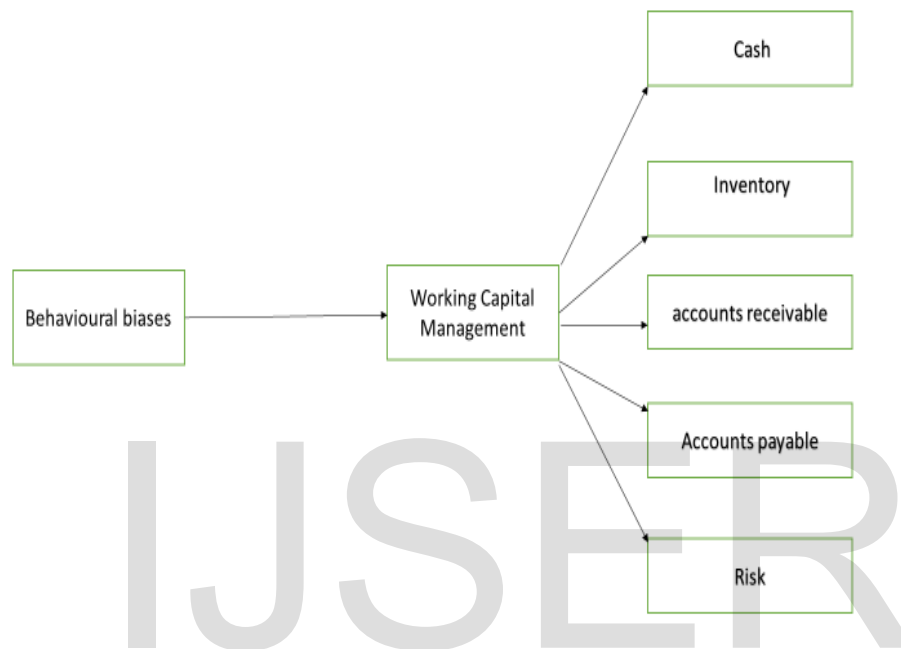
According to Ramiah et al., (2014) an important part of literature of financial behaviour assess the decision-making criteria of all kinds of investors (including investment experts, students, financial professionals) in terms of specific concepts (i.e. over-confidence, prospect theory and loss aversion). Behavioural finance academicians consider a different perception for risk and decision-making while comparing to standard finance studies. Investors do not look to the greatest return for a certain level of risk.

Malm, J., & Sah, N. (2019). In their research while testing hypothesis found that there is a significant relationship between the level of investment and litigation risk in working capital. It provides evidence to express that companies in a high legal environment usually have higher cash conversion cycle. The same research further expresses a positive link among days receivables outstanding, indicating that high-litigation risk firms take a long time to collect cash from their sales. We also find and litigation risk and a positive link among days inventory outstanding and litigation risk. The outcomes reveal that companies with high litigation risk require long time change goods stock in to cash. This research further says that days payable outstanding is

significantly linked with litigation risk showing that high-litigation risk companies make delays while payment to their suppliers on time.

H₅: Behavioural biasness directly influence on Risk Management.

Fig-1 Research Framework



4. Research Methodology:

4.1 Sampling

A self-administrated questionnaire is used here to compile data. The questionnaire was sent to 153 companies related to manufacturing and services sectors of Pakistan specially Karachi (a metropolitan and industrial city). The manufacturing sector includes engineering, chemicals, powers, food, ceramics, cement, textile and others. While, services sector includes banks, large network consisting private educational institutes, insurance, financial and other investments institutes.

Sampling technique we used is non-probability convenient sampling and population was business executives of different levels and designations of their companies. The response rate is about 63% as the questionnaire sent to 153 companies of above mentioned sectors. We gathered only 105 responses, out of which only 97 were in condition to analyse.

The conduction of data is by self-administered survey through self- structured and close ended questionnaire consist of 34 questions on likert scale. The data is collection is from primary sources through convenience non-probability sampling. For this, five-point likert scale with level from strongly disagree (1) to strongly agree (5) has been configured to measure the responses or viewing the disagreements or agreements of the partakers on a symmetric agree-disagree scale for assorted items configured in the questionnaire related to the variables under study.

5. STRUCTURAL EQUATION MODELING

To test the study hypothesis we have used the structural equation model (SEM) whereas the testing has been gone through Smart PLS software. Moreover, to evaluate the indirect and direct effects of all the constructs the testing was done. In order to check the all direct and indirect effects, a technique has been implemented which is known as bootstrapping (Shrout & Bolger, 2002). We took Structural Modelling Equation (SEM) through partial least squares (Smart PLS) path modelling method and calculated PLS Algorithm, blindfolding and bootstrapping by running the data of 97 samples.

5.1 The Measurement, Outer Model

The below mentioned parts describe the reliability and construct validity. The calculated discriminant validity, convergent validity and content validity as expressed here.

5.2 The content validity: The content of literature is analysed through multi-variate techniques, where the items of constructs indicating higher loadings for its constructs greater than other constructs of the research model, its content validity is essential (Hair et al., 2010). Elimination of items are possible through loading more on other constructs rather than its' constructs' loadings.

Table 1. Results Factor Analysis

Construct	Item	Financial Behaviour	Cash Management	Inventory Management	Account Payables	Account Receivable	Risk Management
Financial Behaviour	FB1	0.680	0.398	0.318	0.347	0.244	0.248
	FB2	0.707	0.355	0.370	0.574	0.296	0.278
	FB3	0.411	0.162	0.061	0.433	0.095	0.078
	FB4	0.562	0.501	0.366	0.349	0.350	0.384
	FB5	0.564	0.173	0.341	0.183	0.419	0.265
	CM1	0.421	0.707	0.373	0.154	0.415	0.359

Cash Management	CM2	0.500	0.786	0.517	0.459	0.392	0.575
	CM3	0.304	0.620	0.403	0.241	0.311	0.401
	CM4	0.020	0.307	0.047	0.156	-0.067	0.195
	CM5	0.307	0.612	0.279	0.299	0.236	0.463
	CM6	0.068	0.110	0.080	0.146	-0.090	0.108
Inventory Management	IY1	0.028	-0.256	-0.086	0.126	-0.015	-0.323
	IY2	0.110	0.040	0.324	-0.064	0.040	0.001
	IY3	0.205	0.161	0.392	0.250	0.298	-0.034
	IY4	0.410	0.415	0.780	0.245	0.367	0.593
	IY5	0.454	0.610	0.848	0.360	0.509	0.635
Account Payables	PB1	0.454	0.416	0.382	0.834	0.230	0.312
	PB2	-0.010	0.300	0.166	0.082	0.065	0.224
	PB3	-0.290	0.021	0.119	-0.335	-0.010	0.105
	PB4	0.129	0.214	0.331	0.044	0.346	0.494
	PB5	0.020	0.153	0.195	0.069	0.303	0.188
Account Receivable	RC1	-0.088	-0.001	0.035	0.036	-0.089	-0.024
	RC2	0.189	0.165	0.169	0.099	0.253	0.190
	RC3	0.246	0.185	0.411	0.177	0.651	0.286
	RC4	0.386	0.433	0.420	0.327	0.781	0.379
	RC5	0.404	0.428	0.424	0.226	0.821	0.384
Risk Management	RK1	0.171	0.287	0.302	0.129	0.480	0.528
	RK2	-0.061	-0.122	-0.042	0.067	0.121	-0.018
	RK3	-0.005	0.198	0.124	0.004	0.285	0.300
	RK4	0.302	0.470	0.448	0.134	0.526	0.740
	RK5	0.449	0.561	0.513	0.361	0.340	0.830
	RK6	0.195	0.407	0.289	0.395	0.130	0.530
	RK7	0.169	0.233	0.186	0.034	0.187	0.233
	RK8	0.251	0.395	0.512	0.263	0.180	0.720

5.3 The Convergent Validity: It means the level through which a set of variable items converges for computing a construct (Hair et al., 2010). The average variance extracted (AVE), composite reliability and factor loadings are the parameters to test this. Therefore, the loadings ought to be very significant for variables' statistical measurement with the least value of factor loadings 0.7 for computing AVE, each construct.

Table 2. The Convergent Validity Analysis

Construct	Item	Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Financial Behaviour	FB1	0.680	0.55	0.55	0.73	0.35
	FB2	0.707				

	FB3	0.411				
	FB4	0.562				
	FB5	0.564				
Cash Management	CM1	0.707	0.58	0.66	0.71	0.33
	CM2	0.786				
	CM3	0.620				
	CM4	0.307				
	CM5	0.612				
	CM6	0.110				
Inventory Management	IY1	-0.086	0.37	0.59	0.60	0.32
	IY2	0.324				
	IY3	0.392				
	IY4	0.780				
	IY5	0.848				
Account Payables	PB1	0.834	0.55	-0.68	0.10	0.16
	PB2	0.082				
	PB3	-0.335				
	PB4	0.044				
	PB5	0.069				
Account Receivable	RC1	-0.089	0.49	0.61	0.64	0.36
	RC2	0.253				
	RC3	0.651				
	RC4	0.781				
	RC5	0.821				
Risk Management	RK1	0.528	0.67	0.76	0.73	0.31
	RK2	-0.018				
	RK3	0.300				
	RK4	0.740				
	RK5	0.830				
	RK6	0.530				
	RK7	0.233				
	RK8	0.720				

5.4 The Discriminant Validity:

The “square root” of AVE of each latent variable should be higher than the correlations within the latent variables (Fornell and Larcker, 1981).

Further, the items from construct ought to have variances within these higher than the lying on different things of the constructs. The below table represented a diagonal of figures expressing the square roots of AVE with the correlation of constructs.

Table 3. Discriminant Validity

	Account Payables	Account Receivable	Cash Management	Inventory Management	Financial Behaviour	Risk Management
Account Payables	0.41					
Account Receivable	0.33	0.60				
Cash Management	0.44	0.49	0.57			
Inventory Management	0.38	0.55	0.58	0.56		
Financial Behaviour	0.64	0.49	0.57	0.52	0.59	
Risk Management	0.37	0.48	0.66	0.63	0.45	0.55

5.5 Hypothesis Testing

In PLS-SEM, bootstrapping is one of the key stride, which gives the data of constancy of factor guesstimate. Sub-tests are drawn everywhere from the first example including substitution, in this process (Hair, Matthews, Matthews, & Sarstedt, 2017). Bootstrapping provides the information of stability of coefficient estimate. In this process, a large number of sub-samples are drawn from the original sample with replacement (Hair et al. 2016). After running the bootstrap routine, SmartPLS shows the t-values for structural model estimates derived from the bootstrapping procedure. The results of path coefficients for all the hypothesis are shown in the following table. The t-value greater than 1.96 ($p < .005$) shows that the relationship is significant at 95% confidence level ($\alpha = 0.05$). Paths showing whether the relationship between measured and latent variables are significant or not. The path diagram showed in figure 2.

5.6 Hypotheses Testing Final Results:

After testing the reliability and construct validity, another step is to test hypotheses by using computation system of Bootstrapping and Algorithm with Smart PLS.

Fig-2 Research Hypothesis Result

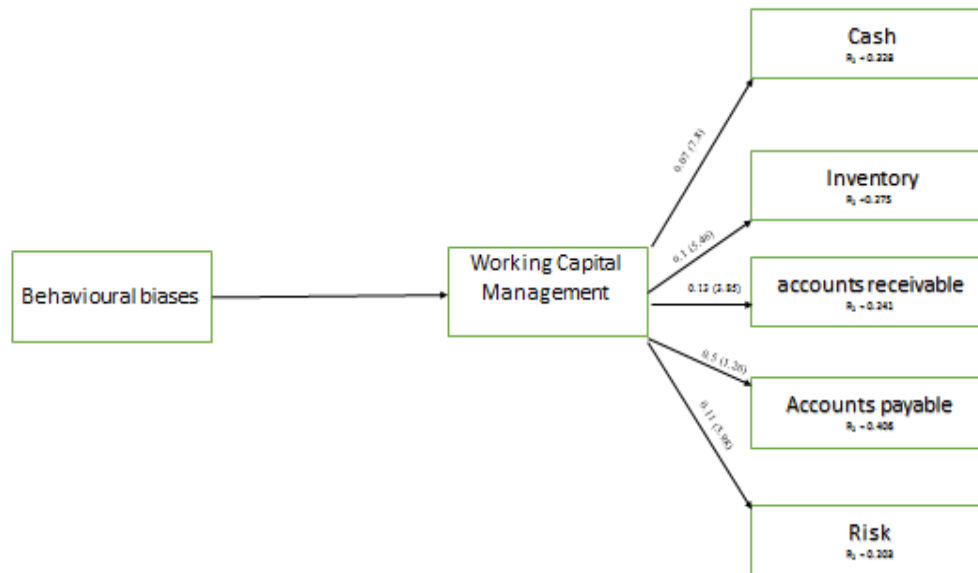


Table 4. Testing Results for Hypothesis

N o.	Hypothesis	Path Coef	Mean	s.d	T Stats	P Values	Decision
1	Financial Behaviour -> Account Payables	0.64	0.35	0.5	1.26	0.21	Not Support
2	Financial Behaviour -> Account Receivable	0.49	0.51	0.1	3.85	0.00	Supported
3	Financial Behaviour -> Cash Management	0.57	0.61	0.0	7.80	0.00	Supported
4	Financial Behaviour -> Inventory Mgmt	0.52	0.56	0.1	5.46	0.00	Supported
5	Financial Behaviour -> Risk Management	0.45	0.50	0.1	3.98	0.00	Supported

As illustrated in above Table, Behavioural Biasness has a weak effect on Account Payables at the 0.21 level of significance ($\beta=0.50$, $t= 1.26$, $p>0.001$). Behavioural Biasness has positive and significant impact on Account Receivable at the 0.001 level of significance ($\beta=0.13$, $t= 3.85$, $p>0.001$). Financial Behaviour has a positive and significant effect on Cash Management at the 0.001 level of significance ($\beta=0.07$, $t= 7.80$, $p<0.001$). Financial Behaviour has a positive and significant impact on Inventory Management at the 0.001 level of significance ($\beta=0.10$, $t= 5.46$,

$p < 0.001$). Financial Behaviour has a positive and significant effect on Risk Management at the 0.001 level of significance ($\beta = 0.11$, $t = 3.98$, $p < 0.001$). Hence, the proposed hypotheses H2, H3, H4, H5 as presented here in this study are supportive results while H1 is relatively weak.

5.7 Predictive Relevance of the Research Model:

Cross-validated redundancy taken by smart PLS is the power of prediction of framework. The considered, and values of R square while 0.02 is weak, 0.13 is considered as moderate and 0.26 is very substantial (Cohen, 1988). The model's quality is tested through the employment of Cross-Validated Redundancy and Commuality by computing the calculation of Blindfolding through Smart PLS. The idea of Blindfolding technique is utilized to expel few values of data and finally ponder it as values lost from data.

Table 5. Prediction Relevance of the Model

Construct	R Square	Adjusted R Square	Construct Cross-validated Redundancy	Construct Cross-validated Commuality
Account Payables	0.406	0.400	0.014	-0.218
Account Receivable	0.241	0.233	0.062	0.112
Cash Management	0.328	0.321	0.079	0.104
Inventory Management	0.275	0.267	0.058	0.049
Risk Management	0.203	0.195	0.029	0.138

The result shows that through R square 40% of Account Payables 24% of Account Receivable, 32% of Cash Management, 27.5% of Inventory Management and 20% of Risk Management explains Behavioural Biasness. To analyse the framework's predictive quality in this research, value for cross-redundancy should be more than zero. The above table reflects that the cross-validated redundancy values confirms that the model has a meaningful prediction quality.

6. Conclusion

The working capital Management with respect to behavioural biasness is the domain of research with less publications and less academic work in Pakistan. If compare to other countries we found sufficient studies from different countries including USA, UK, South Arica, India, Malaysia and Middle East but the volume of research is still very minimum. The reason could be lack of ideas on this topic or the importance is hidden from the eyes of researchers in this specific subject area. However, each and every company belonging to any country show some psychological behaviour

for the decision makings of managing their working capital and overcoming their short-term liability.

Pakistan is a country where economic situation has taken a sudden turning point in 2018, when Pakistan's quite stable currency get down to a very low value in comparison to other international currencies. This low currency value brought storm of inflation, high tax rate, less buying power, weak monetary and fiscal policy lead to uncertainty among investors to utilize their money in business growth. Further, the financial instability is the main distress for losing the more avenues of business growth and investing opportunities. A fear is present among business operators either large scale companies or small or medium level companies to take a forward step to increase their business by adopting a good behaviour in favour of their firm stability, performance and financial growth.

The previous study of Ramiah et al. (2014) was in context to Australian firms, the similar pattern adopted with Pakistan's perspective. All behaviours emphasized with respect to working capital management. The significance of our study is that we have not only covered the behaviours explained by (Ramiah et al., 2014) but also taken extensive population to cover the cognitive behaviour's scenario in broader view by including service sector beside manufacturing sector without limitation of its listing status in Pakistan Stock Exchange. The implication of this research is indeed helpful for academicians learning finance extra mile ahead in terms of cognitive behaviour irrespective of their financial management's books. The best thing is that the corporate finance experts got a new dimension to think while taking a strong and final step for executing their planning prior coming in to practice

This research reveals that when behavioural biasness related to financial decisions including confidence level, Anchoring, representativeness, self-serving and loss aversion altogether exerts their influence on Working Capital Management collectively. The hypothesis supported that behavioural biasness causes a certain level of impact but when talk about Account Payables we found a relatively minimal impact. Although the impact is satisfactory for cash management, accounts receivable, account payables, inventory management.

The result highlights that high confidence level is the key factor for a business to take decision while going for new avenues of business developments. Each business asks investors to take a certain level of risks some time it needs to trade-off between inventory cost or increase of payables. For the irrelevant behaviour known as anchoring, business need to take a decision they usually fail

to do so because it requires too much collection of data and then analysing it rather than they go for simple facts found in surrounding and thus ignore the right and meaningful and true information.

6.1 Research Limitation:

The word convenience sampling is not as its apparent meanings. While dealing with different manufacturing and services sectors of Pakistan, its' very difficult to render responses from across these sectors. It's a quite challenging task to approach executive of different companies and creating willingness to answer the given questionnaire with 34 questions related to behavioural biasness and working capital management. It took time to get correct responses even out of 153 approaches we got 105 responses which is sufficient to conduct this newly research. However, due to lack of understanding we need to contact directly with respondents to make them understand our questionnaire completely. Out of 105 responses we rejected 8 responses as those were not able to consider. The other main challenge we faced that there is less literature on this unique topic especially in context with Pakistan's scenarios. Although, we have tried our best to fill this gap by our research on this topic.

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