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# The Interactive Approach to Working Capital Knowledge: Survey Evidence

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#### Abstract

The purpose of the study is to examine the practices implemented by Bangladeshi listed companies on the Dhaka Stock Exchange (DSE) in the knowledge of working capital management. The author collects data from 97 financial managers using a self-structured questionnaire consisting of 32 questions on a Likert scale, and uses different statistical methods to evaluate for statistical significance. The result suggested that behavioral bias exerts significant impact on all parameters of working capital, but a poor relationship for account payable, in the context of Bangladeshi manufacturing and service companies. Cross-redundancy value should be greater than zero in order to determine the predictive efficiency of the system within this research. The study result reflects that the values of a cross-validated redundancy indicate a fair prediction standard for the model. Although dealing with various manufacturing and service sectors in Bangladesh, responses from across those sectors are very difficult to produce. The evidence diminishes questions about non-response bias and the willingness of Bangladeshi companies to generalize the results. This research fills a void in the literature by providing understandings into performs followed by Bangladeshi companies in dealing WCM and its mechanisms, by updating and expanding previous work on WCM.

*Keywords:* Behavioral corporate finance, Interactive Bias, WCM, Self-serving biasness, Level of confidence

## 1. Introduction

**Background to the Study** Corporate finance is focused on decisions regarding investment and financing. Nevertheless, within this context, the literature on finance has given little attention

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to working capital management (WCM). Likewise, in practice, WC managers are seen as passive contributors to major corporate decisions. The lessons learned from the global financial crisis (GFC) however underline the importance of WCM. We scrutinize the performance of corporate finance officers in this paper. More specifically, the researcher studies the effect of various interactive biases (high and low confidence levels, anchoring, representativeness, self-serving, and loss aversion) on the Risk Management, Inventory Management, Cash Management, Account Receivable, and Account Payables. In doing so, the researcher follows de Almeida & Eid (2014), who shows the significance of behavioral corporate finance and Chauhan Banerjee (2017) who highlight the necessity for research in this arena.

Companies will reduce their financing costs and also ensure that funds are available for growth by reducing the resources restricted in their current net assets. In addition, a sufficient level of net current assets allows companies to efficiently handle market volatility, inventory shortages, and maintain strong consumer relationships by offering sufficient trade credits (Levine, 2019). Working capital management (WCM) is the domain of the least-researched corporate finance sector in Bangladesh. WCM ensures an optimal balance between the working capital components and offers critical support for the company's competitiveness and inter-time cash flows (Afrifa, 2016). To maintain a balance and take the decision to acquire the right amount of working capital needs, a strong managerial effort is required. Working capital will meet the trade-off between productivity and risk that increases the firm's value by optimum managing activities (Pratap Singh & Kumar, 2014; Begum et al., 2012).

For any business and especially for the companies operating in emerging economies, perfect management of working capital is very important. The businesses in these economies are comparatively smaller, going ahead with a limited path into the stock market and long-term fund funding. In addition, the emerging economies are marked by insufficient corporate governance, higher interest rates, higher levels of poor law and order situation, the disparity in the distribution of income, and less developed financial markets. Some companies however tend to rely on internal funds such as working capital funds (Baker et al., 2017). In the modern age of rapid globalization and liberalization, the companies operating in these developing countries face a high level of competition with strong developed-country businesses. Therefore, it is all the more important for these businesses to judiciously control their working resources. Around the same time, though, since a considerably greater number of these companies are in the initial stage of their product lifecycle and are facing many potential challenges, they will not always be able to consistently follow the optimal working capital management strategy. Therefore an optimal amount of working capital should exist; for many other financial or functional constraints and shifting strategic decisions, companies in these emerging markets cannot always proactively pursue it (Chauhan & Banerjee, 2017).

The existence of the optimum level of working capital policy and companies that achieve the optimum level with rising or decreasing their expenditure in working capital increases their output in terms of functionality and inventory. Corporate investment is the process by which successful management of working capital moves towards greater efficiency in the business. The successful WCM offers businesses an opportunity to reorganize underused organizational capital for high-value use, such as collecting running cash from lending facilities (Bellouma & Belaid, 2016).

The notions of collaborative bias with a combination of confidence level, anchoring, representativeness, self-serving, and loss avoidance were combined with differentiating aspects of Working Capital Management with cash inventory, accounts receivable, accounts payable, and risks discussed in the literature.

Behavioral finance revisions the psychological side of financial decision-making and explains investors' irrationality in making investment decisions. The behavior of the investor usually deviates from making rational or logical decisions and leans to various interactive biases for influence. Those prejudices affect the judgment of the investor in making investment decisions.

Tversky & Kahneman (1991) developed a theory of the prospects and demonstrated that the decision-making of the investor is based on future profits and losses rather than on final performance. This trend is due to the cognitive biases that influence the benefits and losses decision. Overconfidence is a recognized build-up and joint bias that causes people to become more comfortable in their abilities, skills, and expertise to ignore the risks associated with the investment. Previous research in this area has told us about the impact of overconfidence bias on rational decision-making behavior. Prospect theory is an economic behavioral theory that explains choices between multiple risk-involving alternatives. This theory, also known as the theory of loss aversion, suggests that individuals make decisions based on their future benefit of profit and loss and not on their actual result and thus provide the basis for making decisions on anticipated benefits rather than perceived losses. This is from perceived gains and the other in perceived losses, an individual will prefer the first one of two equivalent options for one individual.

The three psychological aspects of Behavioral finance are explained by De Bondt (2010). First, we call it interactive or cognitive psychology, in which the whole mind of the decision-maker focuses on the computations required to optimize profits or wages. The second dimension is an emotional reaction to the power of trading, here decision-makers take more assertive and decisive action to optimize resources in quantitative processes. The third dimension is social psychology, which relates to understanding the criteria of our behavior to look for acceptability and motivation. Of course, our professional colleagues' rejection can be frustrating and potentially expensive in terms of employment. Individuals may choose to fail conventionally instead of exposing themselves to social isolation and there comes their instability.

Despite of many types of data for collection and analysis, investors frequently struggle to make decisions to do adequate work (Ahmed, 2016). Rather than taking forward steps on the basis of one fact or figure while neglecting the key information. Anchoring is the best term for unreasonable action to define. Investors should 'anchor' the latest available information when they need to describe a quantum investor. In the same vein, investors are acting to under-react to the latest results. When a related value, i.e. anchor, is available, as per Dacre Pool & Sewell (2007), individuals start making expectations from the beginning to a primary value (an anchor) and are accustomed to producing the definitive response.

#### **Problem Statement**

The corporate office in Bangladesh often manages several subsidiaries and takes cash management decisions for the subsidiaries. Centralizing cash management decisions can help firms manage cash effectively, and monitor cash flows properly (Ahkam & Alom, 2019). Ramiah et al. (2014) notes that the most common cash management method in Australia is the centralization of cash management decisions. Understanding existing WCM activities helps bridge the gap between theory and practice, and delivers the base for bringing forward strategies and policies to strengthen WCM. When we speak about current economic changes in Bangladesh, companies are less likely to take strong decisions to implement their plans and bring their policies into practice.

A comprehensive financial strategy is the most important requirement of any company functioning either as a small or medium-sized corporation or as a large organization. The planning conduct varies greatly depending on the size of the enterprise or the form of enterprise, and it depends on the country in which it operates. Planning does not necessarily include experience from financial analysts, general managers, and senior business executives but requires some kind of behavior. The experts have previously ignored the ignorance of cognitive behavior, but the different results with the same approach have led many thinkers and corporate treasurers to think about it. It's very interesting to learn how different outcomes are faced with the same degree of preparation, the same experience, the same educational context, and the same decision-makers skills.

Consequently, a business expert (Graham & Harvey, 2001) conclude that there are some cognitive behaviors that exert greater influence while making decisions and making financial and investment strategies. Nofsinger (2005) reported that high rates of confidence appear to overestimate their abilities and expertise among corporate treasurers, underestimate obvious financial risks, and exaggerate their ability to cope with unfavorable circumstances. Kumar Goyal (2015) points out that corporate treasurers with a self-serving attribution bias usually spend more because they are prone to company cash flow. Wang and Webster (2007) reported that distributors with loss aversion bias are improving their performance in the supply chain, and as a result, it enhances profitability. Representativeness indicates the degree of resemblance for an occurrence to its parent population.

It is very important for financial or investment decision-makers to keep pace with their level of confidence to the status of the business; otherwise, they have needed a level of confidence capable of facing the unforeseen issues and taking a sold stance without any hindrance and hesitation. The other important thing is that they must be able to accept responsibility for loss failure and success in gaining and realizing the reasons owing to internal or external results. The realistic solution is that the failure is not only due to external causes but may be due to internal factors if there is a loss of market. Similarly, the success of gaining income is not due to the corporate executive's own potential but is also due to the economic environment and free space of the expanding industry.

In addition, a company's past experiences provide a key factor for potential decisions either about their own business or about doing business with another company. Normally a company gives its customer credit sales and gets back payment on time, so the selling company will give more credit to the same customer in the future. Fear of losses is more than happy when it comes to making profits and this fear lasts an undeniable influence on decision-makers. The risk reduction strategy has to be on hand to prevent any potential future catastrophe scenario.

The question arises here, how to take decisions by holding components of interpersonal prejudices, including representativeness bias, self-serving bias, loss aversion bias, and trust level bias, under the effects of working capital management. Hence, our research is to know the effect of interactive bias on working capital components like cash management, account payables, account receivables, and inventory in the context of Bangladesh.

**Study Objectives** The aim of this study is to look at a detailed Behavioral Financial Approach scenario for working capital management of various companies linked to different sectors of Bangladesh. This study is intended to address the distance between cognitive activity and its impact on the management of working capital. This work is performed on the service and manufacturing companies of Bangladesh listed at DSE. The influence of various interactive biases including self-serving bias, level of confidence and loss aversion bias, and representativeness bias in conjunction with various components of individual work capital management, including cash management, inventory management, account receivables management, account payables (debt) management and risk management. The behavioral biases as defined by the high or low degree of confidence that the companies are taking into account to carry out their financial activities. Typically companies overestimate their success unrealistically to do so well and this is due to the surface perception of young decision-makers thinking optimistically about the future situations (Graham & Harvey, 2001).

Significance of the Study This uniqueness of our research explains a more detailed version of the combination of cognitive and financial study and opens doors for executives in corporate finance to learn more about cognitive behavior and plan and adopt working capital policies and practices that align with right behavior. This study would be useful in making a strategy for increasing established business and creating a new company. The interactive features will help top business executives determine the psychological degree with a view of the available working resources that they consist of in themselves. Their research paves the way for business students not only to concentrate on current and traditional principles of financial performance management concepts taught in academic textbooks but also to make their interpretation of financial decisions in a new direction. Our research will allow finance executives to keep an eye on interactive determinants while preparing, implementing their strategy or making strategies, and taking confident decisions at the end. Yes, the findings of our research offer calming advice and reduce the fear of potential ambiguity for corporate decisionmakers. The corporate decision-makers get an insight after listening to this research about setting their mind-set, moods and behaviors accordingly.

**Construction of Hypotheses** Another of investors' overconfidence in the digital phenomenon. The bias in representativeness is close to anchoring because here decision-making is focused on financial and investment judgments based on trends, patterns, and stereotypes. The self-serving decision-makers show conduct that gives credit to their experience, capacity, and expertise for all their performance but does not recognize their loss to the uncontrollable external factors and beyond their approach. Loss aversion is a phenomenon when people continue to show a propensity to prevent losses in terms of financial and productivity and, certainly, to gain income. According to Ahmed (2016), investors find personal intuitions about economic factors settlements and over-react to their accuracy and intuitions. As a result, mispricing for factor payoffs occurs and all cash flow manipulates these securities and influences from them. In addition, incorrect prices emerge from the confusion of customers, unclear details, and from the cash flow factor and demonstrate overreaction to changes of cash flow on base factors.

### $H_1: Interactive Biasness directly influence on Cash Management.$

Baños-Caballero et al., (2014) observed that a successful Working Capital Management Plan (WCM) would result in all accounts containing store inventories being minimized. Reducing inventory holding will lead to improved performance by minimizing the cost of inventory holding including the cost of warehouse storage, cost of insurance and cost of spoilage, and inventory theft. Minimizing the receivable accounts will also improve profitability because it would allow an organization to have high cash flow, which allows the running of daily functions. While minimization of both receivable accounts and inventories will affect revenue and the output of a company decreasing proportionally. If inventory holding is at a very minimum level, a firm may lose its income and profits (Ahmed et al., 2016).

Tauringana and Afrifa (2013) note that a business could also follow a conservative WCM strategy that leads to a maximization of working capital investment. This successful approach increases revenue by increasing both receivable accounts and inventories to improve a firm's operating efficiency. In addition, higher inventory levels could lead to the prevention of production-related activities and a reduction in the risk of getting into stock-out conditions, minimizing the cost of supply activity and price instability.

#### $H_2: Interactive Biasness directly influence on Inventory Management.$

Ahmed et al. (2016) discuss that the effect of the endowment is an overview in which individuals appear to claim more for selling a product than they actually want to pay to procure it. The outcome relates to the assumption that any deputy owners of a commodity will value the commodity that would be higher than the commodity's deputy owner.

The renowned experiments related to the endowment effect, found that any chosen possessor of a product required significantly Receivables to share with their possession than any chosen buyers were willing to pay to purchase it. Graham Harvey, 2001) notes that the endowment effect, also known as status quo bias, is the tendency for which individuals choose to pay a higher price for a product they own than they would be willing to reduce receivables. These discrepancies are an example of

the unevenness of principles declared by Ahmed (2016) as loss aversion. Loss aversion comes out when the non-use of giving up a commodity is higher than that associated with purchasing that commodity.

de Almeida and Eid (2014) further note that an increase in receivable accounts will improve revenue, as it provides buyers with time to pay and minimizes information inconsistencies between seller and buyer. More receivable accounts may help customers build the difference between goods, be an effective way to cut prices, and make a good long-term partnership between suppliers and customers. Hence, maximum investment in working capital may result in the cost of cash tied up in receivable accounts and inventory opportunities. More cash invested in working capital on average is expressively less than an additional cash investment (Tauringana and Afrifa, 2013).

 $H_3: Interactive Biasness directly influence on Account Receivables.$ 

According to Ahmed (2016), keeping cash, rather than investing in working capital, generates greater value for the company. Their study findings suggest that more revenue returns will typically suffer more for firms that raise the level of investment in firms and networking capital along with conditional access to financing from external factors. According to Kieschnick et al. (2013) and de Almeida and Eid (2014) claims, accounts payable was positively related to the funding deficits. The more costs associated with increasing capital from external sources for high-litigation risk firms, firms that overdue their payment of short-term liabilities accounts payable as this could assist as an extra source of capital utilization. Based on litigation-related implications, businesses in a highregulatory setting may typically face sales decline. The decline in revenue could cause businesses to raise the number of their inventories and make it impossible for their suppliers not to pay the account due on time. As a result, businesses in a high legal setting will need to give their consumers more discounts or discount deals to reach the desired amount of revenue. A firm will boost sales by giving relaxation in policies on inventory and credit facilities. Providing credit conveniences in the procedure of account receivables could help to increase sales.

#### $H_4$ : Interactive Biasness directly influence on Account Payables.

According to Ramiah et al. (2014) an important part of the financial behaviour literature assesses the decision-making requirements of all categories of investors (including investment experts, students, and financial professionals) in terms of common principles (i.e. over-confidence, prospect theory and aversion to losses). Academics in behavioural finance find a particular understanding of risk and decision-making as compared to traditional research in finance. Investors don't look at a certain amount of danger for the greatest return.

The comments made many years ago by psychologists working on experimental or cognitive psychology were that basic principles of classical decision theory are incorrect as people appear to act in a less than fully logical manner, but some of their errors are predictable. Tversky & Kahneman (1991) explicitly explained a theory of risk-taking behaviour, called the theory of prospects. Therefore, prospect theory conventions discuss the exits to the philosophy of rationality or classical decisiontaking for decision making and judgment making. Prospect theory further notes that for a given situation enduring prejudices are dictated by interactive variables that influence individuals making their choices under risky circumstances. It undertakes that individuals are averse to losses and have more concerns about losses rather than gains, leading to an individual assigning more meaning to avoid losses rather than gaining profits.

Malm & Sah (2019) found that the degree of investment and the likelihood of litigation in working capital is strongly related. This offers proof to convey that businesses usually have a higher cash conversion time in a high legal setting. Furthermore, the same research expresses a positive link between days of outstanding receivables, indicating that high-litigation risk firms take a lengthy time to assemble cash from their sales. We also consider the risk of litigation and a positive correlation between days of unpaid inventory and risk of litigation. The findings show that businesses with a high risk of litigation need long-term stock adjustments of products in cash. This study further notes that unpaid payable days are substantially related to litigation risk because high-litigation risk

companies making delays when paying to their suppliers on time.

 $H_5: Interactive bias ness directly influence on Risk Management.$ 

### 2. LITERATURE REVIEW

Behavioral research on corporate finance is mainly on the impact of over-confidence on debt. Kida, et al. (2001) demonstrate that emotions and moods continue to have a major effect on decisions about capital budgeting. Ahmed (2016) analyse the impact of excessive managerial trust on debt usage and suggest that directors with advanced self-confidence are more likely to use more leverage. Malmendier and Tate (2005), and Graham & Harvey (2001) indicate that overconfident managers usually overestimate the return on their investment ventures or underestimate the volatility in potential cash flows, resulting in a lower rate of discount being applied in their valuation. Kumar & Goyal (2015) argues that managers with self-serving bias in attribution prefer to overinvest, as they are more prone to investment – cash flows. Nofsinger (2005) points out that overconfidence results in people overestimating their abilities, underestimating the danger they are exposed to, and exaggerating their ability to manage events. Wang and Webster (2007) demonstrate that retailers with loss aversion bias increase the efficiency of the supply chain, which in turn improves productivity and embraces a broader spectrum of WCM practice. Their study includes other current practices in the industry, such as centralizing cash management decisions, diversifying bank transactions, and streamlining bank relations.

Additionally, the same research explored only specific approaches to inventory management, such as just-in-time (JIT). We grip an extended choice of inventory management techniques including the quantity of economic order (EOQ), the quantity of economic production (EPQ), and system of enterprise resource planning (ERP). Although debt literature usually focuses on long-term financial management (Graham & Harvey, 2001). Ramiah et al. (2014) published a report on an approach to working capital behavioral finance. The aim of the study is to analyze the actions of those directly involved corporate executives in making accounts payable, cash, accounts receivable, risk management, and inventory management decisions during the time of global economic and financial crises. The independent variable was Virtual Biasness and working capital optimization was a single variable. The questionnaire used in research produced after interviewing working capital managers and reviewing the literature on the components of this study, which included 28 shortened questions after pilot testing. The population was 1784 Australian firms, and all responses were gathered from internet online resources. Study outcome indicates that Working Capital Management (WCM) including inventory, cash, accounts payable, accounts receivable, and risk is an undermining area as 60 percent of respondents emphasize WCM's importance. Basic factors, such as foreign sales, size, and industry, are valuable for the management of working capital, and besides this age, performance and education contribute much less.

Kumar and Goyal (2015) examined interactive biases in investment decision-making with more than 30 years of systematic literature review research to bridge the difference between interactive biases in contemporary studies. As a research technique, the approach used for systematic literature review and the work evaluated through the study of 117 papers on interactive bias by assessing publishing journal, year of publication, country of study, citation analysis, forms of statistical method, and content analysis on the relevant literature. The result shows that the area of behavioral finance is very recent and mainly observational work has been carried out in the world's developed countries and the top of the list is the United States. The rational explanation for this is that developed economies are emerging markets. Additionally, for most empirical studies the interactive bias reviews are indecisive. The explanation is that few studies in institutional investors explored digital bias and a few studied adequately.

Sultan & Murtaza (2019) examines the effect of working capital management's aggressiveness on the benefit of the company. The researchers analyzed Karachi stock exchange data (61 companies) for 6-year (2013-2018) time tenure. The study revealed that Current ratio has a substantial effect on the benefit of the company. There is another study (Sameni & Fakour, 2019) exploring the impact of components of working capital management on financial efficiency and cash flows in operations. The data of the companies listed on the Tehran stock exchange for the period 2007 to 2011 used in this analysis. Research has shown that there is no substantial connection between working capital management components to operating cash flow and financial efficiency.

## 3. RESEARCH METHODOLOGY

For collecting data a self-administered questionnaire is used here. The questionnaire was sent to 153 companies especially Dhaka, related to the manufacturing and services sectors of Bangladesh. The manufacturing sector comprises electronics, chemicals, electricity, food, ceramics, cement, textiles, and others. Although, the services sector includes banks, insurance, financial, and other investment institutes.

Sampling methodology that we used is non-probability simple sampling and people were business executives of various ranks and their company designations. The response rate is about 63 percent, as the questionnaire was sent to 153 companies from the sectors listed above. We only received 105 responses, of which only 97 were in analysis condition.

The conduct of data is made up of 34 questions on a Likert scale by the self-administered survey through a self-structured and close-ended questionnaire. The data collection is by necessity nonprobability sampling from primary sources. or this reason, a five-point Likert scale with a level ranging from extremely disagree (1) to extremely agree (5) was designed to quantify the responses or interpret the disagreements or agreements of the participants on the asymmetrically agreed-upon scale for various items specified in the questionnaire relevant to the variables being tested.

## 4. STRUCTURAL MODELING

We used the Structural Equation Model (SEM) to test the study hypothesis, while the research was done through Smart PLS software. Additionally, the work was performed to determine the indirect and direct effects of all the constructs. The use of the (SEM) structural equation model was found to be a primary technique used below various regression models and methods (Barron & Kenny, 1986). It assessed the structural relation between exogenous and endogenous variables. It involves the study of variables and the study of multivariate. In addition, the equation of regression aims in describing each construct to determine the relationship between cause and effect when all variables in the causal model may demonstrate their cause and effect at the same moment. Likewise, the concept of using this model

guarantees the implementation of a bootstrapping technique which has been considered appropriate for both small and large sample sizes and needs no indirect effect of any kind (Hayes, 2013). A technique known as bootstrapping has been implemented to check all direct and indirect effects (Shrout & Bolger, 2002). We used the Structural Modelling Equation (SEM) path modelling method by partial least squares (Smart PLS) and calculated the PLS algorithm, blindfolding and bootstrapping by running the 97 sample results.

Construct	Item	Financial	Cash	Cash Inventory		Account	Risk
		Behavior	Management Management		Payables	Receivable	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
Risk	RK4	0.302	0.470	0.448	0.134	0.526	0.740
Management	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
	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
Account	RC3	0.246	0.185	0.411	0.177	0.651	0.286
Receivable	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
	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
Account	PB3	-0.290	0.021	0.119	-0.335	-0.010	0.105
Payables	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
	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
Inventory	IY3	0.205	0.161	0.392	0.250	0.298	-0.034
Management	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
	CM1	0.421	0.707	0.373	0.154	0.415	0.359
	CM2	0.500	0.786	0.517	0.459	0.392	0.575
Cash	CM3	0.304	0.620	0.403	0.241	0.311	0.401
Management	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
	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
Financial	FB3	0.411	0.162	0.061	0.433	0.095	0.078
Behavior	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

 Table 1: Results Factor Analysis

# The Outer Model, Measurement

The parts below describe the reliability and validity. The validity of the calculated content, as expressed here.

**Content validity:** Literature content is evaluated via multi-variate techniques, where the construct items indicating higher loads for their constructs are greater than other study model constructs, their content validity is important (Hair et al., 2010). Elimination of items is possible by loading more on other constructs than the loading of its constructs.



Figure 1: Graphical Presentation of Factor Analysis

Table 2. Testing Hypothesis Outcomes							
No.	Hypothesis	Path	Mean	s.d	T Stats	P Values	Decision
		Coef					
1	Financial Behaviour	0.45	0.50	0.11	3.98	0.00	Supported
	> Risk Management						
2	Financial Behaviour	0.52	0.56	0.10	5.46	0.00	Supported
	> Inventory Mgmt						
3	Financial Behaviour	0.57	0.61	0.07	7.80	0.00	Supported
	> Cash Management						
4	Financial Behaviour	0.49	0.51	0.13	3.85	0.00	Supported
	> Account Receivable						
5	Financial Behaviour	0.64	0.35	0.50	1.26	0.21	Not Support
	> Account Payables						

Table 2:	Testing	Hypothesis	Outcomes
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As shown in the above table 2, Interactive bias has a poor impact on Account Payables at significance level  $0.21(\beta = 0.50, t = 1.26, p > 0.001)$ . Interactive biasing has a favorable and significant effect on Account Receivable at significance level  $0.001(\beta = 0.13, t = 3.85, p > 0.001)$ .

Table 1 demonstrates a method used to reduce a large number of factors into smaller factor numbers. This helps researchers to explore principles that are not easily immediately evaluated by minimizing a large number of variables into a few underlying, interpretable ones. Figure 1 extracts from all variables the average common variance and positions them in a common ranking. We may use the score for further study as an index of all variables. Factor analysis helps to limit many individual objects to fewer dimensions.

# 5. HYPOTHESIS TESTING

Bootstrapping is one of the main steps in PLS-SEM which gives the factor guesstimate constancy data. The bootstrapping provides a coefficient estimate stability information. In this process, a large number of subsamples are taken with replacement from the original sample (Hair et al. 2010). Smart-PLS shows the t-values for structural model estimates derived from the bootstrapping procedure after the bootstrap routine has been running. The results of path coefficients for both hypotheses will be shown in the table below. The t-value above 1.96(p < .005) shows that the relationship is significant at a confidence level of 95 per cent ( $\alpha = 0.05$ ).

## Hypotheses Testing Results

After checking the reliability and construct validity, a further move is to test hypotheses using the Bootstrapping and Algorithm computation framework with Smart PLS.



Figure 2: Testing Hypothesis Outcomes

Figure 2 shows that the financial behavior has a positive and important impact on the 0.001 level of significance in cash management ( $\beta = 0.07, t = 7.80, p < 0.001$ ). Financial behavior has a positive and important effect on the 0.001 level of importance in inventory management ( $\beta = 0.10, t =$ 

5.46, p < 0.001). Financial behavior has a positive and important impact on the level of significance of 0.001 on risk management ( $\beta = 0.11, t = 3.98, p < 0.001$ ). The proposed hypotheses  $H_2$ ,  $H_3, H_4$ ,  $H_5$  as presented here in this study are therefore supportive outcomes whereas  $H_1$  is relatively weak.

# 6. PREDICTIVE RELEVANCE OF THE MODEL

Cross-validated redundancy taken from smart PLS is the strength of system prediction. R square's considered, and values while 0.02 is low, 0.13 is considered moderate, and 0.26 is very large (Cohen, 1988). The quality of the model is tested through the use of Cross-Validated Redundancy and Communality by computing the calculation of Blindfolding via Smart PLS. The idea of the Blindfolding technique is used to expel a few data values and finally think about it as values lost from data.

Table 3: Prediction Relevance of the Research Model						
			Construct	Construct		
			Cross-	Cross-validated		
		Adjusted	validated	Communality		
Construct	R Square	R Square	Redundancy			
Risk Management	0.203	0.195	0.029	0.138		
Inventory Management	0.275	0.267	0.058	0.049		
Cash Management	0.328	0.321	0.079	0.104		
Account Receivable	0.241	0.233	0.062	0.112		
Account Payables	0.406	0.400	0.014	-0.218		



Figure 3: Prediction Relevance of the Research Model

Table 3 shows that through R square 40 percent of Account Payables demonstrates Interactive bias, and 24 percent of Account Receivable, 32 percent of Cash Management, 27.5 percent of Inventory Management, and 20 percent of Risk Management. For graphical views, we have presented the Figure

3 for the prediction relevance of the research model. To assess the predictive efficiency of the system in this study, the cross-redundancy value should be greater than zero. The above table represents that the cross-validated redundancy values indicate a reasonable level of prediction for the model.

# 7. DISCUSSION AND CONCLUSION

The interactive facets of WCM are the impact of this research since it is typically not considered by the literature. The empirical results show that corporate financial officers in Bangladesh are disposed to several interactive biases (such as self-serving, high trust, loss aversion, and anchoring biases) and that those biases affect their judgments. The WCM is the area of study with fewer publications and less scholarly work in Bangladesh as regards interactive bias. Compared to other countries, we found enough studies from different countries including the U.S., UK, South Arica, India, Malaysia, and the Middle East but the research volume is still very low. The explanation may be a lack of ideas on this issue, or the significance of this particular subject area is concealed from the eyes of researchers. However, each and every company belonging to any country shows some psychological behavior in managing their working capital and overcoming their short-term liability for decision making.

Bangladesh is a country where the economic situation has taken a sudden turning point in 2016-2018 when the relatively stable currency of Bangladesh is going down to very low value compared to other foreign currencies. This low currency value triggered an inflation storm, a high tax rate, less purchasing power, a poor monetary and fiscal policy leading to confusion among investors in using their money to develop companies. Therefore, financial uncertainty is the biggest pain to lose further opportunities for company growth and investment. There is a fear among business operators that either large-scale firms or small or medium-sized firms will take a step forward to increase their business by adopting good behavior in favor of their firm's stability, performance, and financial growth.

Our findings indicate that WCM (including risk, inventory, cash, accounts receivable, and account payables) is a neglected field as most of our survey respondents emphasize WCM's importance. One possible clarification for performance is that company financial managers have a propensity to mimic the working capital arrangement of successful companies in poor performing firms. Education and age are not relevant as getting to be named as a financial manager require a lot of experience.

Ramiah et al. (2014)'s research was in comparison with Australian companies, the same approach adopted from the perspective of Bangladesh. All behaviors emphasized in relation to the management of working capital. The significance of our analysis is that not only have we covered the behaviors described by Ramiah et al. (2014), but we have also taken a large population to cover the scenario of cognitive activity from a wider perspective by including the service sector in addition to the manufacturing sector without restricting its listing status in Dhaka Stock Exchange. Indeed, the presence of this work is beneficial to students learning to fund the extra mile ahead in terms of cognitive behavior, irrespective of the books of their financial management. The best thing is that corporate finance experts have a new way to consider when taking a solid and final phase in carrying out their preparation before they come to work.

This research shows that while interpersonal bias relating to financial decisions like trust level, anchoring, representativeness, self-serving and risk aversion all exert their impact collectively on the management of working capital. The hypothesis endorsed that interactive bias causes some degree of impact but we found a fairly small effect when thinking about Account Payables. Although the effect for cash management is adequate, accounts receivable, account payables, management of inventories.

The result shows that a high degree of trust is the main element for a company to take decisions when exploring new business growth avenues. Each business asks investors to take some degree of risk some time it needs to the trade-off between inventory cost and payable increases. Business needs to make a decision about the meaningless actions known as anchoring that they typically struggle to do so because it takes so much data collection and then analyzing it rather than simply seeking facts in the surroundings, thereby missing the correct, important and valid knowledge.

#### References

- Afrifa, G. A. (2016). Net working capital, cash flow and performance of UK SMEs. Review of Accounting and Finance, 15 (1), 21-44. https://doi.org/10.1108/RAF-02-2015-0031
- [2] Ahkam, S. N., & Alom, K. (2019). Liquidity, level of working capital investment, and performance in an emerging economy. International Journal of Business and Economics, 18(3), 307-328. Retrieved from https://search.proquest.com/docview/2347765742?accountid=35493
- [3] Ahmed, A. A. (2016). Relationship between Foreign Direct Investment and Company Taxation: Case of Bangladesh. American Journal of Trade and Policy, 3(1), 11-14. https://doi.org/10.18034/ajtp.v3i1.394
- [4] Ahmed, A. A. A., Asadullah, A. B. M., & Rahman, M. M. (2016). NGO's Financial Reporting and Human Capital Development. American Journal of Trade and Policy, 3(2), 53-60. https://doi.org/10.18034/ajtp.v3i2.401
- Baker, H. K., Kumar, S., Colombage, S., & Singh, H. P. (2017). Working capital management practices in india: Survey evidence. Managerial Finance, 43(3), 331-353. http://dx.doi.org/10.1108/MF-07-2016-0186
- [6] Baños-Caballero, S., García-Teruel, P. J., & Martínez-Solano, P. (2014). Working capital management, corporate performance, and financial constraints. Journal of Business Research, 67(3), 332-338. https://doi.org/10.1016/j.jbusres.2013.01.016
- [7] Begum, R., Ahmed, A. A. A., & Neogy T. K. (2012). Management Decisions and Univariate Analysis: Effects on Corporate Governance in Bangladesh. Journal of Business Studies, 3, 87-115. https://doi.org/10.6084/m9.figshare.12102246.v1
- M., & [8] Bellouma, Belaid, F. (2016). Decision-making of working capital managers: А behavioral approach. Journal ofBusiness Studies Quarterly, 7(4),30-43. Retrieved from https://search.proquest.com/docview/1807470803?accountid=35493
- Chauhan, G.S., & Banerjee, P.K. (2017). Financial constraints and optimal working capital evidence from an emerging market. International Journal of Managerial Finance, 14(1), 37-53. https://doi.org/10.1108/IJMF-07-2016-0131
- [10] Dacre Pool, L., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. Education and Training, 49(4), 227-289. https://doi.org/10.1108/00400910710754435
- [11] de Almeida, J. R., & Eid Jr, W. (2014). Access to finance, working capital management and company value: Evidences from Brazilian companies listed on BM&FBOVESPA. Journal of Business Research, 67(5), 924-934. https://doi.org/10.1016/j.jbusres.2013.07.012
- [12] DeBondt, W., Forbes, W., Hamalainen, P. and Gulnur Muradoglu, Y. (2010), "What can behavioural finance teach us about finance?", Qualitative Research in Financial Markets, 2(1), 29-36. https://doi.org/10.1108/17554171011042371
- [13] Graham, J. R., and Harvey C. R., (2001). The Theory and Practice of Corporate Finance: Evidence from the Field. Journal of Financial Economics, 60 (2): 187–243. https://doi.org/10.1016/S0304 - 405X(01)00044 - 7.
- [14] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Englewood Cliffs: Prentice Hall. https://www.amazon.com/Multivariate-Data-Analysis-Joseph-Hair/dp/0138132631
- [15] Hayes, A. F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. Journal of Educational Measurement, 51(3), 335-337. https://doi.org/10.1111/jedm.12050
- [16] Kida, K., Moreno, K., & Smith, J. (2001). The influence of affect on managers' capital-budgeting decisions. Contemporary Accounting Research, 18(3), 477-494. https://doi.org/10.1506/CPKU-R1DW-VW7M-U158
- [17] Kieschnick, R., Laplante, M., & Moussawi, R. (2013). Working capital management and shareholders' wealth. Review of Finance, 17(5), 1827-1852. https://doi.org/10.1093/rof/rfs043
- [18] Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making–a systematic literature review. Qualitative Research in financial markets, 7(1), 88-108. https://doi.org/10.1108/QRFM-07-2014-0022
- [19] Levine, S.,C.F.A.C.M.T. (2019, 11). Working capital: Working hard or hardly working? Better Investing, 69, 36-37. Retrieved from https://search.proquest.com/docview/2424111473?accountid=35493

- [20] Malm, J., & Sah, N. (2019). Litigation risk and working capital. Managerial Finance, 45(1), 88-102. https://doi.org/10.1108/MF-03-2018-0129
- [21] Malmendier, U. & Tate, G. (2005).CEO Overconfidence and Corporate Investment. The Journal of Finance, 60(6), 2661-2700. https://doi.org/10.1111/j.1540 - 6261.2005.00813.x.
- [22] Nofsinger, J. R. (2005). Social mood and financial economics. The Journal of Behavioral Finance, 6(3), 144-160.  $https: //doi.org/10.1207/s15427579jpfm0603_4$ .
- [23] Pratap Singh, H., & Kumar, S. (2014). Working capital management: A literature review and research agenda. Qualitative Research in Financial Markets, 6(2), 173-197. http://dx.doi.org/10.1108/QRFM-04-2013-0010.
- [24] Ramiah, V., Zhao, Y., & Moosa, I. (2014). Working capital management during the global financial crisis: The Australian experience. Qualitative Research in Financial Markets, 6(3), 332-351. http://dx.doi.org/10.1108/QRFM 09 2012 0026.
- [25] Sameni, A. A., & Fakour, R. (2019). The Effect of Working Capital Management on Financial Performance and Operational Cash Flows of Companies Accepted in Tehran Securities Exchange. Humanities & Social Sciences Reviews, 7(6), 625-632. https://doi.org/10.18510/hssr.2019.7693
- [26] Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. Psychological Methods, 7(4), 422–445. https://doi.org/10.1037/1082 - 989X.7.4.422.
- [27] Sultan, D. K., & Murtaza, M. M. (2019). Impact of Aggressiveness of Working Capital Management on Firm's Profit. Humanities & Social Sciences Reviews, 7(3), 612-618. https://doi.org/10.18510/hssr.2019.7392.
- [28] Tauringana, V., & Afrifa, G. A. (2013). The relative importance of working capital management and its components to SMEs' profitability. Journal of Small Business and Enterprise Development, 20(3), 453-469. https://doi.org/10.1108/JSBED - 12 - 2011 - 0029.
- [29] Tversky, A., & Kahneman, D. (1991). Loss Aversion in Riskless Choice: A Reference-Dependent Model. Quarterly Journal of Economics, 106(4), 1039-1061, https://doi.org/10.2307/2937956.
- [30] Wang, C. X., & Webster, S. (2007). Channel coordination for a supply chain with a risk-neutral manufacturer and a loss-averse retailer. Decision Sciences, 38(3), 361–389. https://doi.org/10.1111/j.1540 5915.2007.00163.x.