Unraveling the Post Covid19 Challenges:

A Comprehensive Study of Pakistan's Textile Industry

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Abstract

Purpose

The study focuses on the textile industry in Pakistan, which has encountered numerous post-pandemic challenges impeding its growth and sustainability. This research aims to identify and evaluate the challenges of the textile industry's operations, financial stability, creditworthiness, and strategic decision-making.

Methods

By applying the Analytic Hierarchy Procedure (AHP), the study developed a close-ended questionnaire to collect data from the industry professionals, data was collected and analyzed using AHP statistical tools.

Results

The findings reveal that the textile industry in Pakistan faces significant challenges in the form of operational risks, financial risks, credit risks, and strategic risks. These challenges stem from factors such as political instability, currency volatility, uncertainties in the letter of credit processes, low sales turnover, liquidity management issues, unclear government policies, and regulatory concerns. Importantly, the research identifies credit risks as the most prominent challenge faced by the textile industry, specifically highlighting higher borrowing costs and liquidity management as major factors affecting industry performance.

Novelty

In Pakistan, many qualitative and quantitative studies have been conducted but hardly any were based on AHP analysis, which gives true insight of the area of the study

Keywords: Textile Industry, Operational Risks, Financial Risks, Credit Risks, Strategic Risks, AHP

1. Introduction

The global textile industry is a massive and complex sector, with diverse products, technologies, and markets. The industry encompasses all activities involved in the production and processing of fibers, yarns, fabrics, and garments. According to the World Trade Organization (WTO), the global textile and apparel industry's value was estimated at US\$2.5 trillion in 2020. The industry's growth rate has been steady over the years, with a projected Compound Annual Growth Rate (CAGR) of 5.5% from 2021 to 2028.

The Asia-Pacific region dominates the global textile industry, with China, India, and Bangladesh being the major producers and exporters. China is the world's largest producer and exporter of textiles and apparel, accounting for 37.4% of the global market share. India is the second-largest producer and exporter, followed by Bangladesh. Other significant players in the industry include Vietnam, Pakistan, Indonesia, and Turkey.

The textile industry in Pakistan is a significant part of the economy of Pakistan. Pakistan is the fourth largest producer of cotton in the entire world, and this enables it to be one of the most capable textile-making countries in Asia. According to the Economic Survey 2021-22, Pakistan's exports of goods and services witnessed an increase of 39% during FY2022; 61.24% of these exports came from textile industries. The textile industry constitutes 46 percent of the total manufacturing sector and employs 40 percent of the total labor force. It contributes significantly to the country's industrial exports.

Pakistan's textile industry faces fierce competition from countries like Bangladesh, Vietnam, India, and Thailand in the foreign market. And with expensive utilities, wage rates, and an inadequate flow of investment in the country, the textile industry is unable to rise to the challenge. All these competitive countries have a more favorable business environment, advanced technology, and lower production costs. This competition makes it difficult for Pakistani textile manufacturers to compete in the global market and expand their market share (Khan et al., 2018).

In the 2023-24 economic survey document issued by the Government of Pakistan, intent has been shown to prioritize the export sector which has high potential in supporting the country's balance of payments position. The government resolves to take concrete steps in bringing in the foreign direct investments and extend all out facilitation to overseas Pakistanis for realizing the full potential of home remittance.

During 2023-24, Pakistan's GDP grew by 2.38% showing a moderate improvement against previous year's contraction of 0.21%. After the disastrous floods in 2022, this year Agriculture emerged as a main contributor economic growth, registering a growth of 6.25% as compared to the Industrial sector which posted a growth of 1.21%. One significant indicator of fiscal stability is the steady exchange rate during the current fiscal year though achieving sustainable achieving macroeconomic stability remains a challenge (Bilal& Tanveer, 2023).

Large scale manufacturing (LSM) overall has been declining in Pakistan but textile sector especially the Apparel segment registered moderate growth during 2023-24. Government claims that 11 sectors out of 22 in the LSM are showing improvement while admitting that the improvement is minor (Ministry of Finance, Government of Pakistan, 2024).

1.2 Covid-19 and Textile Industry

Covid-19 has turned out to be a blessing in disguise for the textile industry as global buyers are increasingly turning towards Pakistan by cutting orders to regional players, resulting in 100% utilization of available production capacity. Textile orders shifted to Pakistan because of the more severe impact of the Covid-19 pandemic on regional countries. Pakistan's policy of early easing of lockdowns and opening the economy has diverted export orders from China, India, and Bangladesh to Pakistan This has given Pakistani exporters, particularly the key market players, an opportunity to quote competitive prices and offer better quality products so that the new buyers could become their permanent customers. According to the Pakistan Bureau of Statistics, textile group exports

registered an increase of 10.79% to \$1.32 billion in January 2021 compared to \$1.19 billion in January 2020.

Moreover, the global economic slowdown and the COVID-19 pandemic have adversely affected the demand for textile products in the global market. The reduction in sales turnover negatively affects the profitability of the textile mills, which reduces their ability to invest in research and development, thereby affecting their competitiveness in the global market (Bokhari et al., 2021).

1.3 Challenges in Textile Industries

In countries where political instability is common, such as Pakistan, the textile industry is particularly vulnerable to disruption and uncertainty. One of the main effects of political instability on the textile sector is a decrease in investment and capital inflows. Political instability creates uncertainty and risk for investors, leading to a decline in foreign direct investment (FDI) and other sources of financing. This can result in a lack of funding for new projects, modernization, and research and development. Political instability can also result in a lack of policy continuity and consistency, as changes in government or shifts in political priorities can lead to changes in regulations, policies, and incentives. This can create confusion and uncertainty for businesses, making it difficult for them to plan and make long-term investments. In addition, political instability can result in disruptions in the supply chain, particularly when there is civil unrest or conflicts. This can lead to delays in the delivery of raw materials, production equipment, and finished goods, as well as increased transportation costs and risks.

Over the years, the textile sector has undergone a rise and fall due to several reasons. The sector has struggled due to high manufacturing expenses, frequent power shortages, faulty strategies, and lack of support policies from the government. "Textile exports: dismal performance" (2019) reported that the initiatives by the government to terminate the tax exemption of textile sector on finished goods and has discontinued the credit facility on Value Added Tax has also affected production and export. This has resulted in higher prices and cost of goods sold. Unclear government policies refer to the lack of clarity and consistency in government regulations and policies. The Pakistan Textile Journal (2021) reported that the textile industry of Pakistan faces challenges related to unclear government policies, which can hinder investment and growth.

The availability of raw materials is crucial for the textile industry, and Pakistan heavily depends on imported raw materials like cotton and polyester. The prices of these raw materials are subject to global market trends and can fluctuate widely, which can have a significant impact on the cost of production and profitability of the textile industry in Pakistan (Nazir et al., 2019). In Pakistan, the cost of cotton and other raw materials used in the textile industry fluctuates greatly. The cost of production is negatively impacted by the sharp rise in raw material prices. Due to Pakistan's internal instability and double-digit inflation, the price of raw materials is constantly rising and falling. The demand for exports and domestic products declined due to the rise in production costs, which led to a firm's downsizing. As a result, unemployment will also rise (Khan & Khan, 2010).

The uncertain LC process is a significant challenge faced by the textile industry in Pakistan. The LC process is the most common method used by textile mills for payment of raw material imports. However, delays in the LC process can lead to a shortage of raw materials, thereby halting production. Furthermore, the fluctuating exchange rate of the US dollar against the Pakistani rupee also poses a significant challenge to the textile industry. The payment process is in US dollars, but

the fluctuation in the exchange rate makes it difficult to predict the payment amount. This makes it difficult for textile mills to plan their budgets and affects their financial stability (Hussain, 2019).

Currency volatility refers to the fluctuations in the exchange rate of a country's currency. Pakistan's currency has been volatile in recent years, which can affect the profitability of textile exports. Husain (2019) found that currency volatility has a negative impact on Pakistan's economy and suggested strategies for stabilization.

The currency volatility is a significant challenge faced by the textile industry in Pakistan. The Pakistani rupee is subject to frequent fluctuations in the exchange rate against the US dollar, making it difficult for textile mills to plan their budgets and predict their future earnings. The fluctuations in the exchange rate can also increase the cost of imported raw materials, which can adversely affect the profit margins of the textile mills (Ali & Haq, 2017). Moreover, the currency volatility makes it difficult for textile mills to compete in the international market. The textile industry in Pakistan is highly export-oriented, and any significant fluctuation in the exchange rate can adversely affect the competitiveness of the industry in the global market (Aftab et al., 2020).

Credit risk is also a financial risk that textile industries in Pakistan face. Credit risk refers to the risk of default by customers who do not pay for goods or services provided by textile industries. This risk is significant in Pakistan due to the prevalence of the cash economy, where many transactions are not documented, making it challenging to recover payments owed. Credit risk is a major worry for Pakistan's textile industry. Credit risk exists in Pakistan's textile sector due to a number of variables, including unpredictable global demand, rising raw material costs, and fierce competition.

1.4 Problem statement

Despite being a significant contributor to the national economy, the textile industry of Pakistan faces numerous challenges that hinder its growth and sustainability. These challenges arise from various operational, financial, credit, and strategic risks that affect the industry's operations, profitability, creditworthiness, and strategic decision-making. Pakistani textile manufacturers rely heavily on bank loans to finance their operations and investment in modern technology and infrastructure. However, high-interest rates and strict lending requirements make it difficult for textile manufacturers to access financing, leading to a high debt-to-equity ratio and high financial risk (Hussain et al., 2018). By lowering the weighted average cost of capital, debt can be added to a capital structure to help it reach its ideal level and boost company value. Management balance the advantages and costs of taking on debt, such as tax benefits and bankruptcy expenses, when determining their desired debt ratio. How much debt and equity a company should maintain to take advantage of such trade-offs is a question that can be answered for all companies since debt financing can offer a tax shield for profits with significant financial risk and bankruptcy exposure (Nazir et al., 2021).

1.5 Objective of the study

To identify and evaluate the challenges faced by the textile industry of Pakistan and their impact on the industry's operations, financial stability, creditworthiness, and strategic decision-making.

1.6 Scope of the study

The study focuses on the challenges faced by the textile industry of Pakistan and their impact on the industry's operations, financial stability, creditworthiness, and strategic decision-making. The study does not cover the entire textile industry value chain but focuses on the challenges faced by the industry's primary players, including manufacturers, exporters, and traders.

1.7 Significance of the study

The significance of this study lies in its contribution to the existing literature on the challenges faced by the textile industry of Pakistan. The study provides valuable insights into the major risks that hinder the industry's growth and sustainability and their impact on the industry's operations, financial stability, creditworthiness, and strategic decision-making. The study's recommendations can be used by policymakers, industry stakeholders, and regulatory bodies to address these challenges and promote the industry's growth and sustainability, ultimately contributing to the country's economic development.

2. Literature Review

The textile sector in Pakistan faces various business decision issues that can make it challenging for companies to make strategic decisions. These issues may include unclear market trends, changing customer preferences, and volatile raw material prices. Additionally, the overall economic and political environment in Pakistan can also impact business decisions.

A study by Hashmi et al. (2021) found that liquidity management is a significant predictor of financial distress in the textile industry in Pakistan. The study found that companies with poor liquidity management are more likely to experience a decline in their profitability than companies with good liquidity management. Liquidity remains an important parameter for the companies regarding the evaluation of assets. One of the main factors related to liquidity is the working capital which plays a mediating role in managing short-term funds for companies. If liquidity is managed for the company, then it directly increases the working capital and tends to provide profitability measures (Sattar, 2020).

Liquidity ratios are used to measure the ability to meet short term requirements of the organization. Corporate liquidity is a crucial factor of an organization. The excess liquidity will indicate the inefficiency of the management as it indicates the lower profitability. The insufficient liquidity will frustrate the business because short term needs will not be met (Gupta, 2022).

Study, by Khan et al. (2017), found that the prohibitive cost of imported raw materials had a negative impact on the industry's employment. The study found that the prohibitive cost of raw materials led to job losses, as businesses were forced to lay off workers in order to cut costs.

High inflation is another financial risk faced by the textile industry of Pakistan. Inflation refers to the rise in prices of goods and services over time. Khan and Khan (2018) found that inflation has a negative impact on economic growth in Pakistan and suggested policy interventions to manage inflation. The inflation rate in Pakistan has been consistently high, which increases the cost of production for textile mills. The high inflation rate results in increased input costs, including the cost of labor, raw materials, and energy, which adversely affects the profit margins of the textile mills (Imran et al., 2019).

Liquidity management refers to the ability of a company to meet its short-term financial obligations. Hameed et al. (2021) found that liquidity management is a significant predictor of financial distress in the textile industry in Pakistan. The study found that companies with poor liquidity management are more likely to go bankrupt than companies with good liquidity management.

Interest rate fluctuations can significantly affect the profitability and financial stability of Pakistani textile manufacturers. High-interest rates increase the cost of borrowing, reduce the company's profit margins, and make it difficult to invest in modern technology and infrastructure (Iqbal et al., 2020). The success of the company is negatively impacted by high interest rates and more complicated financial leverage policies. By offering low interest rates, the government can play a significant role in changing financial leverage regulations and resolving the problems associated with financial leverage. Businesses that completely rely on their equity and do not borrow money for business purposes are free from fixed costs and high interest rates, which indicates that their companies do not have any financial leverage (Igbal & Usman, 2018).

Political instability, frequent policy changes, and lack of long-term policies have been a significant challenge for the textile industry in Pakistan. This instability affects investor confidence, increases uncertainty, and makes it difficult for businesses to plan for the long term (Khan et al., 2018). The textile industry is significantly impacted by political unrest. Nothing is certain and there is no possibility of achieving balance when anything is in an unstable state. Hence, when there is political unrest, industrialists must deal with dire problems. Inflation, production costs, and a lack of appropriate power will all rise in a country where political polarization is present, diminishing profitability and driving textile factories to close (Yasmeen et al., 2022). Similarly, the Pakistan Textile Journal (2021) reported that political instability and security concerns have led to a decline in foreign investment in the textile industry.

A number of studies have examined the impact of political instability on the textile industry in Pakistan. One study, by Ataullah (2013), found that political instability had a negative impact on the industry's performance, as measured by exports and investment. The study found that political instability led to uncertainty and risk, which made it difficult for businesses to plan and invest. It leads to an unfavorable business environment, creating uncertainty and unpredictability, thereby deterring investment in the textile industry (Khan, 2018). The uncertain political environment creates a negative impact on the foreign direct investment in Pakistan. The textile industry is highly dependent on foreign investment for its growth and development.

Another study, by Hasan (2014), found that political instability had a negative impact on the industry's productivity. The study found that political instability led to disruptions in production, as businesses were forced to close or operate at reduced capacity. Arslan et al. (2016), found that political instability had a negative impact on the industry's labor market. The study found that political instability led to job losses, as businesses were forced to lay off workers in order to cut costs.

Janguo and Solangi (2023) identified financial and technological barriers faced by the textile industry in Pakistan for achieving higher growth and getting better prices for its products. Root cause of general failure of the industry in adopting green supply chain management (GSCM) practices is the perceived financial risk in investing upfront in such practices.

Due to cyclic nature of the textile industry the manufacturers face liquidity challenges and have to rely on short-term borrowing which is available at a much higher interest rate as compared to the competitors in the region (Bilal & Tanveer, 2023). The significantly higher interest rates along with the inconsistent government regulations (Iqbal et al, 2022) pose greatest challenge for the textile industry in performing better.

The above cited studies identifies the challenges for the textile industry in Pakistan from the perspective of sustainability, political stability, technology or lack of investors' trust. However, there seems to be a gap in the literature that the challenges have not been analysed from the risks perspective effectively. Further research is needed to explore strategies for risk management and mitigation in the textile industry of Pakistan. Moreover, the existing literature mainly focuses on the challenges faced by the textile industry of Pakistan, and there is a need to explore opportunities for growth and expansion in the industry.

Building on the existing literature, this research intends to contribute to a better understanding of the challenges faced by the textile industry of Pakistan and their impact on the Industry's operations, financial stability, creditworthiness, and strategic decision-making. The research analyses the different risks faced by the textile industry in Pakistan in a structured way and examines the risks using the lens of a resource-based view. The next section presents the research methods used in this research.

3. Methodology

3.1 Research design and approach

The research employed a quantitative research methodology to investigate the various challenges confronted by the textile industry in Pakistan and their consequential effects on crucial aspects such as operational efficiency, financial stability, creditworthiness, and strategic decision-making. The study involved the administration of a comprehensive survey to gather data from professionals within the textile industry, aiming to obtain a detailed understanding of the industry's landscape and the implications of these challenges on its overall performance. To facilitate rigorous analysis, Analytic Hierarchy Process (AHP), was employed to process and interpret the gathered data. AHP is applied because it offers a systematic and robust framework for decision analysis, helping decision-makers make informed choices by structuring complex decision problems, assessing priorities, and ensuring consistency in evaluations. This approach ensured that the research findings were based on experts' opinions of the field studied, enabling valuable insights into the critical issues faced by the textile industry and their implications for its functioning and strategic planning.

3.2 Sampling and participants

The study's sample consisted of several industry professionals, including manufacturers, exporters, and traders, selected using a purposive sampling technique. The participants were selected based on their experience and expertise in the textile industry of Pakistan.

3.3 Data collection methods

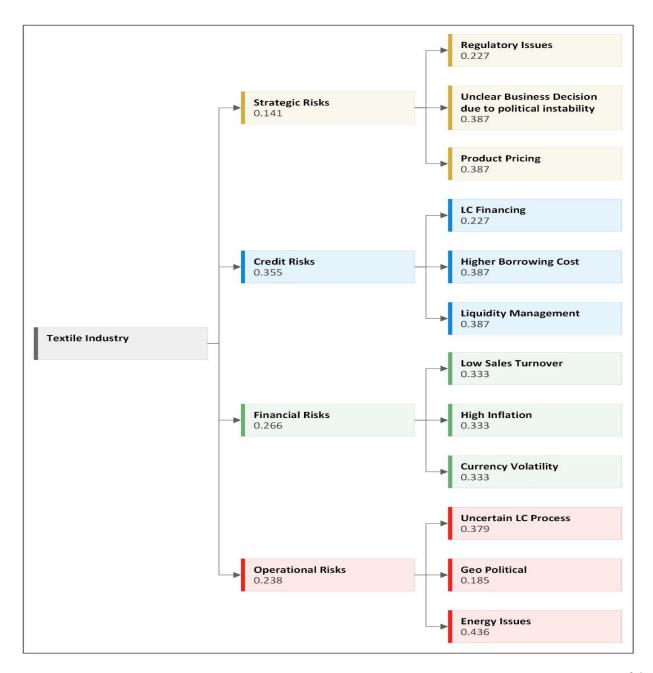
The study collected primary data using a survey questionnaire administered to the participants via email/social media/personal contacts. The questionnaire included questions on the challenges faced by the industry and their impact on the industry's operations, financial stability, creditworthiness, and strategic decision-making. The data collected were analyzed using statistical tools, including descriptive statistics and regression analysis.

3.4 Data analysis techniques

The study used descriptive statistics to analyze the survey responses and identify the major challenges faced by the textile industry of Pakistan. The study also used regression analysis to evaluate the impact of these challenges on the industry's operations, financial stability, creditworthiness, and strategic decision-making.

3.5 Model Framework

The model framework used in this study is based on the four major risk categories identified in the research questions: operational risks, financial risks, credit risks, and strategic risks. The framework provides a structured approach to identify and evaluate the challenges faced by the



textile industry of Pakistan and their impact on the industry's operations, financial stability, creditworthiness, and strategic decision-making.

3.6 Theoretical Framework

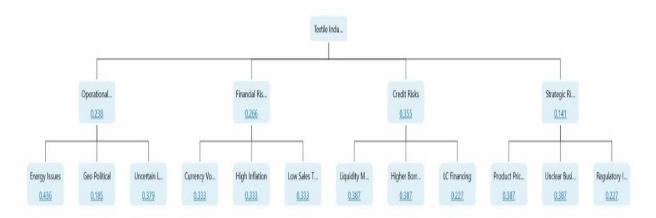
The theoretical framework used in this study is based on the resource-based view (RBV) of the firm. The RBV theory suggests that a firm's resources and capabilities are key determinants of its competitive advantage and long-term success. In the context of this study, the textile industry's resources and capabilities are evaluated in terms of their ability to manage the risks identified in the model framework.

4. Results Analysis

4.1 Overview of the findings

The study's results showed that the major challenges faced by the textile industry of Pakistan are operational risks, financial risks, credit risks, and strategic risks. These risks arise from factors such as political instability, currency volatility, uncertain LC processes, low sales turnover, liquidity management, unclear government policies, and regulatory issues.

4.2 Presentation of the results



4.3 Discussion of the results

The study's results highlight the significant challenges faced by the textile industry of Pakistan, particularly in terms of operational risks, financial risks, credit risks, and strategic risks. These risks have a significant impact on the industry's operations, financial stability, creditworthiness, and strategic decision-making. The study's findings suggest the need for industry stakeholders, policymakers, and regulatory bodies to address these challenges to promote the industry's growth and sustainability.

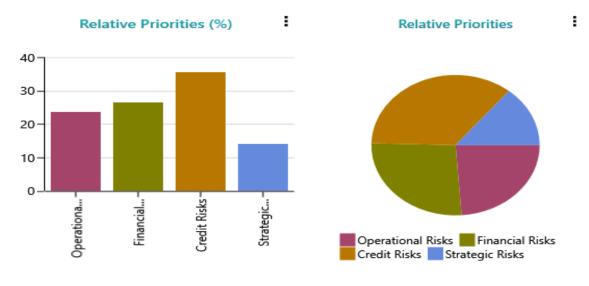
4.4 AHP Software Analysis

The textile industry operates in a dynamic and challenging business environment, facing various risks that can significantly impact its operations and financial performance. To ensure sustainable growth and competitiveness, textile companies must identify and effectively manage these risks. This analysis focuses on four key segments of risk faced by the textile industry: Operational risks, financial risks, Credit risks, and Strategic risks. By understanding and mitigating these risks, Textile companies can enhance their resilience and long-term success.

4.5 Priority Trade-offs

	Operational Risks	Financial Risks	Credit Risks	Strategic Risks	Priorities
Operational Risks	1	1	0.5	2	0.24
Financial Risks	1	1	1	2	0.27
Credit Risks	2	1	1	3	0.35
Strategic Risks	0.5	0.5	0.33	1	0.14
* Consistency Ratio	0.023				

- 4.5.1 Operational Risks (Weight: 23.85%): Operational risks are inherent in the textile industry due to factors such as Energy Issues, Geo-Political, and Uncertain LC processes. With a weight of 23.85%, operational risks are of critical importance to Textile companies.
- 4.5.2 Financial Risks (Weight: 26.62%): Financial risks encompass Currency Volatility, High Inflation, and Low Sales Turnover issues within the textile industry. Given a weight of 26.62%, Financial risks deserve significant attention and strategic planning.
- 4.5.3 Credit Risks (Weight: 35.49%): Credit risks encompass Liquidity Management, Higher Borrowing Costs, and LC Financing. Credit risks pertain to the ability of textile companies to manage their financial obligations and access credit facilities. With a weight of 35.49%, Credit risks are a significant concern that demands careful attention and strategic decision-making.
- 4.5.4 Strategic Risks (Weight: 14.05%): Strategic risks encompass challenges related to Product Pricing, Unclear business decisions due to political instability, and Regulatory Issues. Although relatively lower in weight, strategic risks should not be overlooked as they have long-term implications for textile companies' success.



1.6 Operational Risks:

Operational risks encompass numerous factors that can disrupt the day-to-day operations of the Textile Industry. Three variables within this segment have been identified: Energy Issues, Geopolitical and uncertain LC (Letter of Credit) processes.

Operational 0.238	Risks	Energy Issues	Geopolitica l	Uncertain LC Process	Prioritie s
Energy Issues		1	3	1	0.44
Geopolitical		0.33	1	0.5	0.18
Uncertain LC Process		1	2	1	0.38
* Consistency Ratio		0.023			

- 4.6.1 Energy issues (Weight: 43.6%): Given its substantial weight, addressing energy issues should be a top priority for textile companies to ensure smooth operations and minimize disruptions. Energy Issues, with a score of 0.436, highlights the challenges related to energy availability, cost, and reliability. The textile industry is energy-intensive, and any disruptions in energy supply can severely impact production schedules and overall efficiency. Mitigating measures such as investing in renewable energy sources and adopting energy-efficient technologies can help mitigate the impact of energy issues.
- 4.6.2 Geo-political (Weight: 18.5%): While slightly lower in weight compared to energy issues, Geo-Political risks are still significant and require proactive management. Geo-political risks, scoring 0.185, point to the risks associated with political instability, trade regulations, and geopolitical tensions. These factors can lead to disruptions in supply chains, changes in trade policies, and currency fluctuations. Textile companies need to closely monitor geopolitical developments and establish contingency plans to navigate through uncertain times.
- 4.6.3 Uncertain LC processes (Weight: 37.9%): The assigned weight underscores the importance of streamlining LC processes to avoid delays and financial complications. Uncertain LC processes, with a score of 0.379, underline the challenges related to the letter of credit processes, which are crucial for international trade. Delays or discrepancies in LC processes can lead to payment delays, affecting cash flow and business relationships. Textile companies should establish robust communication channels with financial institutions and streamline their LC processes to minimize delays and mitigate associated risks.



1.7 Financial Risks:

Financial risks are inherent in the textile industry, given the complexities of global markets and economic fluctuations. This segment comprises three variables: Currency Volatility, High Inflation, and Low Sales Turnover risks.

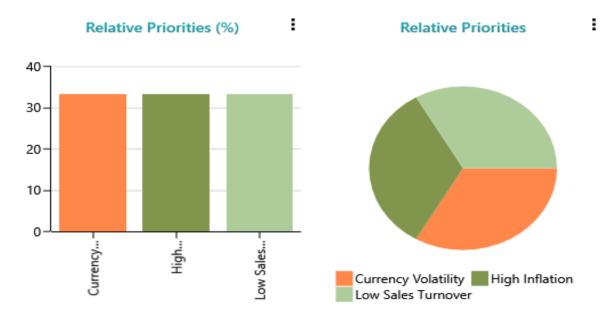
Financial Risk 0.266	S Currency Volatility	High Inflation	Low Turnover	Sales Priorities
Currency Volatility	1	1	1	0.33
High Inflation	1	1	1	0.33
Low Sales Turnover	1	1	1	0.33

^{*} Consistency Ratio 0

4.7.1 Currency Volatility (Weight: 33.33%): With this weight, textile companies must actively monitor currency markets and employ effective hedging strategies to mitigate the potential impact of volatile exchange rates. Currency volatility, scoring 0.333, highlights the risks arising from exchange rate fluctuations. Textile companies engaged in international trade are exposed to currency risks, as fluctuations can impact import costs, export revenues, and overall profitability. Effective risk management strategies such as hedging, diversification, and continuous monitoring of exchange rates can help mitigate the adverse effects of currency volatility.

4.7.2 High inflation (Weight: 33.33%): Given its substantial weight, textile companies need to adopt proactive measures such as cost control, negotiation tactics, and process optimization to navigate the effects of high inflation. High inflation, also scoring 0.333, signifies the challenges associated with rising inflation rates. Inflation erodes purchasing power and increases the cost of inputs such as raw materials, labor, and energy. Textile companies need to implement effective cost control measures, negotiate favorable contracts with suppliers, and explore opportunities for process optimization to mitigate the impact of high inflation.

4.7.3 Low Sales Turnover (Weight: 33.33%): This weight emphasizes the need for textile companies to focus on market analysis, diversification, and robust marketing strategies to maintain healthy sales turnover. Low Sales Turnover, also scoring 0.333, highlights the risks associated with declining sales and revenue generation. Factors such as changing consumer preferences, economic downturns, and intense market competition can lead to reduced sales turnover. Textile companies should focus on market intelligence, product diversification, and customer relationship management to mitigate the impact of low sales turnover.



4.7.4 Credit Risks

Credit risks pertain to the ability of textile companies to manage their financial obligations and access credit facilities. This segment comprises three variables: Liquidity Management, Higher Borrowing Costs, and LC financing.

Credit 0.355	Risks	Liquidity Management	Higher Cost	Borrowing	LC Financing	Prioritie s
Liquidity Management		1	1		2	0.39
Higher Born Cost	rowing	1	1		2	0.39
LC Financing		0.5	0.5		1	0.23

^{*} Consistency Ratio 0.015

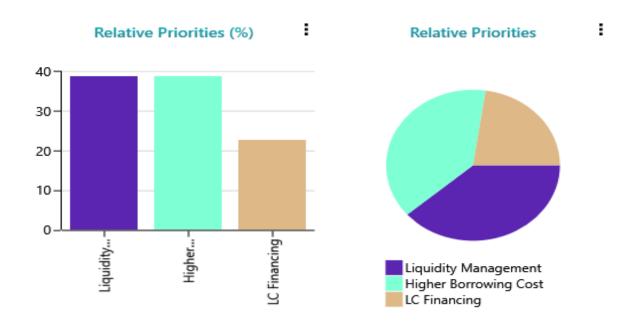
4.8.1 Liquidity Management (Weight: 38.66%): This weight underscores the importance of implementing effective liquidity management strategies to ensure financial stability and operational continuity.

Liquidity management issues, with a score of 0.387, emphasize the challenges associated with managing cash flow and working capital. Insufficient liquidity can hinder the ability to meet

operational expenses, invest in growth initiatives, and fulfill financial obligations. Textile companies should develop robust cash flow management strategies, including effective receivables and payable management, to ensure adequate liquidity.

4.8.2 Higher Borrowing Costs (Weight: 38.66%): With this weight, textile companies should prioritize measures to optimize borrowing costs, including exploring alternative financing options and negotiating favorable lending terms. High borrowing costs, also scoring 0.387, signify the risks arising from expensive borrowing and interest rates. Textile companies heavily reliant on debt financing may face challenges in servicing debt obligations, particularly during periods of high interest rates. Effective financial planning, exploring alternative financing options, and maintaining a healthy credit profile are essential in mitigating high borrowing costs.

4.8.3 LC Financing (Weight: 22.68%): The assigned weight stresses the need for textile companies to proactively manage their LC financing processes, establish strong relationships with financial institutions, and seek alternative financing mechanisms if necessary. LC financing, with a score of 0.227, points to the difficulties in obtaining favorable LC financing terms. LCs play a significant role in international trade, and any issues related to LC financing can affect the smooth execution of transactions and increase borrowing costs. Building strong relationships with financial institutions, exploring alternative financing options, and maintaining a good credit history can help mitigate LC financing risks.

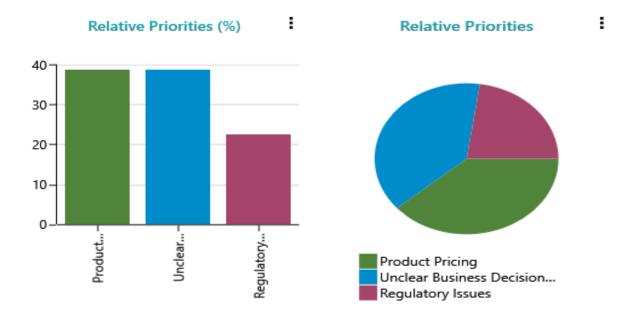


1.8 Strategic Risks:

Strategic risks encompass factors that can impact the long-term competitiveness and sustainability of textile companies. This segment comprises three variables: Product Pricing, Unclear business decisions due to political instability, and Regulatory Issues.

Strategic R 0.141	isks Product Pricing	Unclear Business Decision due to Political Instability	Regulatory Issues	riorities
Product Pricing	1	1	2 0	.39
Unclear Business Decision du Political Instability	e to 1	1	2 0	.39
Regulatory Issues	0.5	0.5	1 0	.23
* Consistency Ratio	0.015			

- 4.9.1 Product Pricing (Weight: 38.66%): The assigned weight underscores the need for textile companies to conduct regular pricing analysis, optimize cost structures, and differentiate their products to maintain profitability. Product pricing, scoring 0.387, highlights the challenges associated with pricing strategies and market competitiveness. Textile companies need to balance pricing decisions with factors such as production costs, market demand, and competitor pricing. A thorough analysis of market trends, effective cost management, and differentiated product offerings can help mitigate the risks associated with product pricing.
- 4.9.2 Unclear business decisions due to political instability (Weight: 38.66%): Given this weight, textile companies should carefully evaluate political risks, diversify their geographic presence, and maintain flexibility in their business strategies. Unclear business decisions due to political instability, also scoring 0.387, signify the risks arising from political uncertainties and their impact on business decisions. Political instability can lead to changes in policies, regulations, and business environment, creating challenges in strategic planning and decision-making. Textile companies should closely monitor political developments, engage in scenario planning, and maintain agility in adapting to changing circumstances.
- 7.9.3 Regulatory Issues (Weight: 22.68%): Textile companies should closely monitor regulatory changes, ensure compliance with standards, and actively engage with industry associations to mitigate regulatory risks. Regulatory issues, with a score of 0.227, point to the risks arising from regulatory frameworks and compliance requirements. The textile industry is subject to various regulations related to labor, environment, trade, and intellectual property. Non-compliance can result in legal liabilities, reputational damage, and disruptions in operations. Textile companies should establish robust compliance systems, engage in proactive stakeholder engagement, and stay updated with evolving regulations to mitigate regulatory risks.



4.10 Consistency Ratio Analysis:

These consistency ratios indicate the level of consistency or inconsistency in the pairwise comparisons made within each segment. A consistency ratio of zero signifies perfect consistency, while higher values suggest greater inconsistency in the comparisons. It is important to strive for low consistency ratios to ensure the reliability and accuracy of the analysis.

Risk	Ratio		
Operational Risk	0.023		
Financial Risk	0		
Credit Risk	0.015		
Strategic Risk	0.015		
Priority Trade-offs (Overall)	0.023		

According to Thomas L. Saaty, the consistency ratio should be less or equal to 0.1. Therefore, it is necessary to revise the judgments if the result appears to be greater than 0.1.

In this case, the operational risks segment demonstrates a consistency ratio of 0.023, which is considered acceptable. However, the financial risks segment has a consistency ratio of zero, indicating perfect consistency in the pairwise comparisons. The credit & strategic risks segments display a consistency ratio of 0.015, which indicates a reasonably consistent set of comparisons. Overall, a consistency ratio of 0.023 for all segments is considered acceptable.

These consistency ratios provide confidence in the validity of the pairwise comparisons made within each segment, ensuring that the weights assigned to the variables accurately reflect their relative importance in the risk analysis.

2. Conclusion - AHP Software:

The study's findings suggest that the textile industry of Pakistan faces significant challenges that hinder its growth and sustainability. These challenges requires collaboration between industry stakeholders, policymakers, and regulatory bodies. By addressing these challenges, the textile industry can contribute to the country's economic development and enhance its global competitiveness.

The main Risks along with their Weightage are:

- 1. Credit Risk i.e., 35.49%
- 2. Financial Risk i.e., 26.62%

- 3. Operational Risk i.e., 23.85% and,
- 4. Strategic Risk i.e., 14.05%
 - In Operational risk, energy issues consider the most problematic having 43.6% weightage and uncertain LC processes containing 37.9% whereas Geopolitical constain 18.5%.
 - In Financial risk, all three factors, namely, currency volatility, high inflation, and low sales turnover contain an equal weightage of risk as all three factors are important and play a vital role in production.
 - In Credit risk, liquidity management and high borrowing cost contain an equal weightage which is 38.66% whereas LC financing is 22.68%.
 - Similarly, In Strategic risk, product pricing and unclear business decisions due to political instability contain 38.66% weightage whereas regulatory issue's weightage is 28.66%.

3. Recommendation:

The government should introduce advanced machinery which works in a better way in less time. This is the time to make the right decision by the government to take steps to reduce the cost of imported raw materials. The uncertain LC process can be solved by improving communication between banks and businesses, providing training to the business on the LC process, establishing a trade credit insurance scheme, strengthening the legal framework for trade, and encouraging the use of alternative payment methods. Furthermore, for currency volatility, the government should promote exports and reduce imports. They can also invest in R&D as most of the successful companies have invested millions of millions in R&D. The Government should increase the production of cotton which will only be possible through.gh advanced machinery, by giving training to the laborers. The quality of the textile product will automatically increase. The regulatory framework in Pakistan is weak so government should take steps to work for it. For LC financing issues the government should develop policies and regulations that motivate banks to offer LT financing to the textile industry. The government can support the export promotion of textile products by offering incentives for export-oriented firms. The Pakistani government needs to take steps to address the problem of political instability. The government needs to improve the rule of law and ensure that the political system is stable and predictable.

The primary focus of this study was on the identification of the main challenges faced by the textile industry in Pakistan. All stakeholders will need to play their roles in addressing these challenges. For instance, the government needs to make regulations and take steps to stabilize the macroeconomic indicators of the country. However, the private sector must also invest in research & development, new technology, and sustainable practices. It will take all the stakeholders to work together to overcome the identified challenges. The identified challenges are an outcome of chronic issues in the economy which need long-term structural reforms. These reforms will certainly require bold steps from the government for example stopping the subsidies and may have a political cost in the short term. Similarly, the private sector's upfront investment will bear fruit only in the long term. As the country continually faces short-term crises after crises necessitating keeping focus on the short term making it difficult to invest for the long-term gain.

4. Limitations and future research directions

The study has some limitations, such as a small sample size and a focus on a specific industry. Future research can address these limitations by using a larger sample size and exploring other industries to identify familiar challenges and risks. Additionally, future research can examine the effectiveness of proposed solutions and strategies to address the identified risks and challenges.

While AHP provides a structured framework for decision-making, the method relies on subjective judgments during pairwise comparisons. The accuracy of the results may be influenced by the biases or preferences of the individuals making these comparisons. Therefore, there is a risk of introducing bias into the analysis.

The findings of the research may have limited generalizability beyond the context of the textile industry in Pakistan. Factors such as industry-specific dynamics, regulatory environment, and market conditions may vary across different regions or sectors. Therefore, caution should be exercised when extrapolating the results to other contexts

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