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Revitalizing the Pakistan Textile Industry: Challenges and Opportunities

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Abstract

Pakistan's textile industry, historically a major contributor to the country's exports, has witnessed a significant decline in growth in recent years. Various factors have contributed to this downturn, including global economic slowdowns, internal security concerns, and rising production costs driven by persistent energy shortages. The depreciation of the Pakistani rupee has further aggravated the situation by increasing the cost of imported raw materials and essential inputs. Additionally, high inflation rates and expensive financing options have created further obstacles to the industry's growth and competitiveness. However, with targeted government intervention and strategic measures, the textile sector has the potential for recovery and revitalization. Addressing energy shortages, ensuring access to affordable financing, and stabilizing currency exchange rates are essential steps toward restoring the industry's global standing. Providing subsidies to textile manufacturers for acquiring new machinery or upgrading existing infrastructure can be an effective strategy to improve efficiency and productivity. Modernizing equipment will enhance the industry's global competitiveness, allowing it to better meet international demand. Furthermore, investment in research and development (R&D) is crucial for optimizing the productivity of modernized machinery, leading to long-term industry sustainability. Encouraging innovation and technological advancements within the textile sector can help strengthen its resilience in the face of economic challenges. Government support in these areas, including financial incentives for modernization and R&D initiatives, can play a crucial role in ensuring the long-term sustainability and growth of Pakistan's textile industry, ultimately contributing to economic stability and enhancing its position in the global textile market.

Keywords: Pakistan Textile Industry, Economic Downturns, Government Policies

1. INTRODUCTION

The textile industry plays a significant role in Pakistan's economy, contributing approximately 9.5% to the country's GDP and employing around 15 million people, which accounts for 30% of the total workforce. Despite being the 8th largest exporter of textile products in Asia and the 4th largest producer of cotton, Pakistan's share in the global textile trade remains relatively low, at less than one percent of the total volume, which is estimated at around US$18 trillion per year. These statistics underscore the importance of the textile sector to Pakistan's economy while also highlighting the potential for further growth and expansion in the international market. Pakistan's textile industry boasts the third-largest spinning capacity in Asia, trailing only behind China and India, and contributes significantly to the global spinning capacity, accounting for approximately 5%. Since independence, Pakistan has prioritized the development of its manufacturing sector, with particular emphasis on agro-based industries. As one of the leading producers of cotton worldwide, Pakistan has leveraged its abundant resources to propel the growth of its textile industry, marking a fundamental step towards industrialization and economic development (Ali & Rehman, 2015). Currently, Pakistan's textile industry comprises 1,221 ginning units,

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442 spinning units, including 124 large spinning units, and 425 small units dedicated to textile production (Zaidi, 2011; Ali & Chani, 2013; Siddiqi et al., 2014). Since independence, Pakistan's textile sector has undergone a gradual transition towards the production of higher quality counts, hosiery, garments, and other value-added items. This evolution reflects the industry's commitment to meeting changing market demands and enhancing its competitiveness on both domestic and international fronts.

Today, Pakistan boasts an integrated textile industry encompassing various sectors such as cotton spinning for yarn, cotton weaving for cloth, cotton fabric production, fabric processing, home textiles, towels, hosiery, knitwear, and apparels. These products are manufactured on a large scale as well as through small and medium cottage industries, highlighting the diverse and robust nature of the textile sector in Pakistan. The textile industry is of paramount importance as it encompasses the production of yarn, cloth, and the subsequent design or manufacturing of clothing, followed by their distribution. In Pakistan, the textile sector plays a central role in the economy, as highlighted by the Economic Survey of Pakistan in 2012. The growth in cotton production and the expansion of the textile industry in Pakistan since 1947 have been quite remarkable. Cotton bales increased from 1.1 million bales in 1947 to 10 million bales by 2000. The number of mills also saw a significant rise, increasing from 3 to 600, with spindles expanding from about 177,000 to 805 million. Similarly, looms and finishing units also experienced considerable growth during this period. The textile industry in Pakistan can be broadly categorized into two sectors: a large-scale organized sector and a fairly disjointed cottage/small-scale sector. The different sectors that form part of the textile value chain include:

Most of the spinning industry in Pakistan operates in an organized manner, often integrated with in-house weaving, dyeing, and finishing facilities. This integrated approach allows for greater control over the production process, from raw material sourcing to the final finished product. By having spinning, weaving, dyeing, and finishing facilities within the same organization, companies can streamline operations, reduce lead times, and ensure quality control throughout the manufacturing process. This integrated model is common in larger textile manufacturing companies, where economies of scale and vertical integration can lead to greater efficiency and competitiveness in the global market (Ali & Ahmad, 2016).

The cottage and small-scale sector of the textile industry in Pakistan comprises small and medium-sized entities, ranging from ill-organized household setups to moderately organized larger units. These entities often operate independently or as part of small clusters, focusing on specific stages of the textile value chain such as spinning, weaving, dyeing, or finishing. While some of these units may lack advanced technology and infrastructure compared to larger, organized firms, they play a significant role in the overall textile ecosystem by providing employment opportunities and contributing to local economies. Despite their size and organizational structure, these entities can be agile and responsive to changing market demands, particularly in niche or specialized segments of the textile market.

The processing sector of the textile industry encompasses activities such as dyeing, printing, and finishing. While a small portion of this sector operates under an organized structure and has the capacity to produce large quantities, the majority of units within this sector are characterized by inefficiency. These units often operate independently or as part of small-scale setups, lacking the resources and infrastructure to maximize their production capacity. As a result, they may face challenges in meeting quality standards, achieving economies of scale, and competing effectively in the market. Efforts to improve the efficiency and competitiveness of the processing sector could involve investments in technology, infrastructure, and capacity building, as well as initiatives to enhance coordination and collaboration among industry stakeholders.

Within the processing industry of the textile sector, printing holds a prominent position, followed by textile dyeing and fabric bleaching. Printing involves applying designs or patterns onto fabric using various techniques, while dyeing refers to the process of imparting color to textiles. Fabric bleaching is another important activity in textile processing, involving the removal of impurities and color from fabric to achieve a desired level of whiteness or brightness. Together, these segments contribute significantly to the value chain of the textile industry, playing crucial roles in enhancing the aesthetic appeal and functionality of textile products.

The garments manufacturing segment holds a significant position within the textile value chain, generating the highest employment opportunities. It is characterized by the presence of a large number of small-sized units, which account for over 75% of the total units in this segment. These small-scale entities play a crucial role in the production of garments, contributing to both the domestic market and export-oriented manufacturing. Garments manufacturing encompasses various processes, including cutting, sewing, and finishing, and it represents a vital component of the textile industry, contributing to economic growth and employment generation.

The knitwear industry primarily comprises factories operating as integrated units, which encompass knitting, processing, and garment making facilities. This integrated approach allows for streamlined production processes, from the initial knitting of fabric to the final assembly of garments. By consolidating various stages of production under one roof, knitwear manufacturers can effectively manage quality control, production scheduling, and resource allocation. Integrated knitwear units play a crucial role in meeting the diverse demands of both domestic and international markets, producing a wide range of knitted garments for various purposes and consumer segments.

The Textile and Clothing Industry has been a key driver of Pakistan's economy over the past five decades, contributing significantly to foreign earnings and domestic job creation. Despite its historical importance, the industry is currently facing challenges that have led to a decline in its growth trajectory. This study aims to identify the main determinants of this decline, shedding light on factors such as global economic conditions, internal security concerns, and energy crises that have adversely impacted the sector. By understanding these challenges, policymakers in Pakistan can formulate targeted strategies to revitalize and promote the textile sector, ensuring its continued contribution to economic growth and job creation. Additionally, this study adds to the existing literature on the subject, providing valuable insights for researchers and policymakers alike.

2. LITERATURE REVIEW

Several studies have delved into the challenges faced by the Pakistan textile industry. Ali (2011) explored the role of various sectors within the industry, shedding light on their contributions and challenges. Abida (2008) highlighted a range of significant obstacles encountered by the textile sector, including outdated technology, insufficient investment in research and development to enhance competitiveness on the global stage, high input costs, unreliable energy supplies, elevated interest rates, and inadequate government policies. These findings underscore the multifaceted nature of the challenges confronting the

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textile industry in Pakistan and emphasize the need for comprehensive strategies to address them effectively. The absence of robust research and development initiatives in the cotton sector has had detrimental effects on both the quantity and quality of cotton production in Pakistan. Consequently, Pakistani textiles are perceived as less competitive compared to counterparts in countries such as India and China. Furthermore, the energy crisis has had a significant impact on textile mills across the board, with larger mills and small to medium-sized mills being particularly hard-hit. These challenges underscore the urgent need for strategic interventions to revitalize the cotton sector and address the energy crisis in order to bolster the competitiveness of Pakistan's textile industry.

Zameer (2009) highlights that the Pakistan textile industry confronts significant challenges in maintaining its competitive position vis-à-vis its rivals. Key issues such as technological deficiencies, energy shortages, and inefficient production methods exacerbate these challenges. To address these issues, it is imperative for policymakers to implement comprehensive policy frameworks aimed at enhancing production efficiency. Additionally, there is a pressing need for increased financial support from both the government and financial institutions to bolster the textile sector and foster its growth and sustainability.

Khan and Khan (2010) underscore the multifaceted challenges confronting the textile sector in Pakistan, including the energy crisis, insufficient research and development in the cotton sector, outdated equipment, high input costs, removal of subsidies, inflation, currency depreciation leading to decreased exports, and rising unemployment. To address these challenges, they propose a range of measures such as tariff reductions, technological upgrades, lower interest rates, emphasis on value addition, and reinstatement of subsidies to foster growth in the sector. These recommendations aim to enhance competitiveness, promote innovation, and stimulate economic development within the textile industry.

Alam (2011) highlights the significant impact of the 2008 financial crisis on Pakistan's textile sector, particularly in terms of exports. The aftermath of the crisis led to a substantial trade deficit, increased volatility in various financial indicators such as transfer payments and workers' remittances, and a decline in overall economic stability. The study identifies financial crisis, inflation, energy shortages, rising unemployment, and transportation issues as key determinants affecting firm profitability within the textile industry. Importantly, it concludes that Pakistan lacks comprehensive fiscal and monetary policies to effectively address the repercussions of financial crises, underscoring the need for robust economic strategies to mitigate future risks and support sustainable growth.

Sheikh et al. (2011) conducted a study to assess the repercussions of the global financial crisis on the textile industry, particularly focusing on its adverse impact on exports. The research revealed significant challenges faced by the textile sector, including heightened unemployment rates, energy shortages, and burdensome taxation. Employing a cross-sectional approach, data was gathered from 25 firms and analyzed using the E-view technique to ascertain the extent of the crisis's effects on the industry.

Yasir (2011) identified the deficiency in human resource management (HRM) as a significant factor contributing to the decline of Pakistan's textile industry. The study underscored the critical role of HRM practices in influencing worker performance and consequently, the overall sectoral performance. Three HRM models—recruitment and selection, training, and performance appraisal—were employed to investigate this relationship. The findings demonstrated that these variables were indeed associated with worker performance. Ultimately, it was concluded that the absence of effective HRM practices was impeding the optimal functioning of the textile industry.

Shah et al. (2012) conducted a study to investigate the factors contributing to the decline of the textile industry. They identified the energy crisis, deteriorating law and order situation, lack of new investment, and increased cost of production as key indicators for this decline. The researchers gathered data through personal observations and informal interviews to gain insights into these reasons. They recommended that the government should prioritize the textile sector by providing relief on taxes, import and export duties, and take corrective actions to address the electricity crisis. Failure to resolve these issues could result in millions of textile workers losing their jobs, thereby further diminishing the competitiveness of the textile sector.

Afzal (2012) conducted a study on the impact of the electricity crisis and interest rates on the production of the textile sector in Pakistan. The research found that due to the electricity crisis and high interest rates, producers reduced their production levels, leading to a decrease in exports. This situation has diminished the industry's competitiveness in the international market. The study recommended that for the survival of the industry, the government should provide subsidies, decrease electricity tariffs, improve textile production processes, and reduce the overall cost of doing business in Pakistan.

Ahmad et al. (2012) conducted an analysis of human resource management (HRM) issues in the textile sector of Pakistan. The study examined the relationship between job satisfaction, job stress, and turnover in the industry. It highlighted the challenges faced by employees in the textile industry, particularly due to the energy crisis in Pakistan. The study emphasized the importance of supporting employees during difficult circumstances to ensure the success of the textile industry. Human resource departments were identified as facing obstacles in retaining employees, which impacts the overall success of the sector. The researchers utilized an adopted scale for data collection, and the findings could assist human resource managers in reducing organizational costs by addressing turnover rates.

Shah et al. (2013) conducted a study to investigate the impact of the energy crisis on the textile industry of Pakistan. They found that during the energy crisis period, the return on assets (ROA) and return on equity (ROE) decreased, while the inventory turnover ratio and assets turnover ratio increased compared to the pre-energy crisis period. The energy crisis significantly affected the liquidity, debt management, and profitability of the textile sector. The researchers employed horizontal analysis as their methodology. Overall, the study provided valuable insights for strategies to improve the performance of the textile industry in Pakistan.

Tahir et al. (2011) conducted a study on the improvement of the textile sector and the impact of taxation on the industry in Pakistan. Their research indicated that direct taxes, excise duty, and sales duty had a negative impact on the textile sector. Although custom duty also had a negative impact, the coefficient was not statistically significant. The study emphasized the importance of taxation revenues for the progress of a country but highlighted the burden created by wrong policies and mismanagement in Pakistan's taxation system. The researchers recommended the imposition of taxes through proper consultation methods and suggested that the government provide special incentives to the textile sector to facilitate its growth.

Table 1

Author Name	Year	Variables	Methodology	Results
Zameer	2009	Growth of textile sector and investment facilities	OLS based analysis	Positive
Khan, Khan	2010	Energy crisis and exports	Observational	Negative
Alam	2011	Financial crisis and exports	Observational	Negative
Sheikh et al.,	2011	Global financial crisis and exports	A cross-sectional data analysis	Negative
Yasir	2011	HRM practices and performance of employee	Questionnaire based analysis	Positive
Shah et al.,	2012	Energy crisis and production	Primary data analysis	Negative
Ahmad et al.,	2012	HRM and turnover	Adopted scale	Negative
Afzal	2012	Electricity crisis and interest rate and production of textile sector	OLS based analysis	Negative
Shah et al.,	2013	Energy crisis and profitability of textile	Time series OLS	Negative

2.1.GLOBAL FINANCIAL CRISIS OF TEXTILE

The United States of America (USA) serves as a major export destination for Pakistan, with a significant portion of the country's manufacturing industries relying on exports to the USA. Additionally, Europe represents another crucial export market for Pakistan. Therefore, the financial crisis of 2008 in the United States and Europe had substantial repercussions on countries dependent on these developed markets. As consumer demand waned and economic activity slowed in the US and Europe, Pakistani exporters faced challenges due to reduced orders and demand for their products, impacting the overall economy of Pakistan. The share of Pakistan's textile exports in the country's total exports has experienced a decline from 67% in 1997 to 55% in 2008, with this trend continuing over time. The global financial crisis further exacerbated this situation, leading to unemployment within the Pakistan textile industry. As a result of reduced demand and economic challenges stemming from the financial crisis, the textile sector faced significant setbacks, impacting both employment opportunities and the overall contribution of the textile industry to Pakistan's economy.

2.2.ENERGY CRISIS

Energy is indispensable for production; without it, the production process cannot proceed. Unfortunately, Pakistan is grappling with a significant energy crisis. Shortfalls in energy supply have severely impacted textile production in the country. The Pakistan textile industry is contending with electricity load shedding of 8 to 10 hours per day and gas load shedding of 2 to 4 hours per week. These interruptions in energy supply disrupt production schedules, hampering the efficiency and output of textile manufacturers. According to the Economic Survey of Pakistan 2011, out of the 2000 factories in Punjab, approximately 800 factories have been forced to close their operations due to the shortage of electricity. This closure of factories has resulted in widespread unemployment, exacerbating economic challenges for the affected individuals and communities. Furthermore, the textile industry's exports have also been significantly impacted by the energy crisis, further exacerbating the economic strain on the sector and the country as a whole.

2.3.TAXES

Taxes play a crucial role in funding government operations and public services, but in Pakistan, high tax burdens pose significant challenges for firms, particularly those in the textile industry. With narrow profit margins, many textile companies struggle to afford high tax payments, leading to adverse effects on production levels. In the fiscal year 2012-2013, the textile industry is expected to contribute approximately Rs. 20.5 billion in taxes, highlighting both the sector's substantial tax burden and its significance in contributing to government revenue. Mismanagement in tax policies exacerbates the heavy tax burden on industries like textiles, leading to increased costs of goods and reduced purchasing power for consumers. To address these issues, the government needs to undertake comprehensive tax reforms aimed at achieving desired outcomes and fostering growth in the textile sector. Providing incentives to the textile industry, such as tax breaks or subsidies, could help alleviate the burden and stimulate production and investment in the sector. By implementing effective tax policies, the government can support the competitiveness and sustainability of the textile industry while promoting economic growth and development.

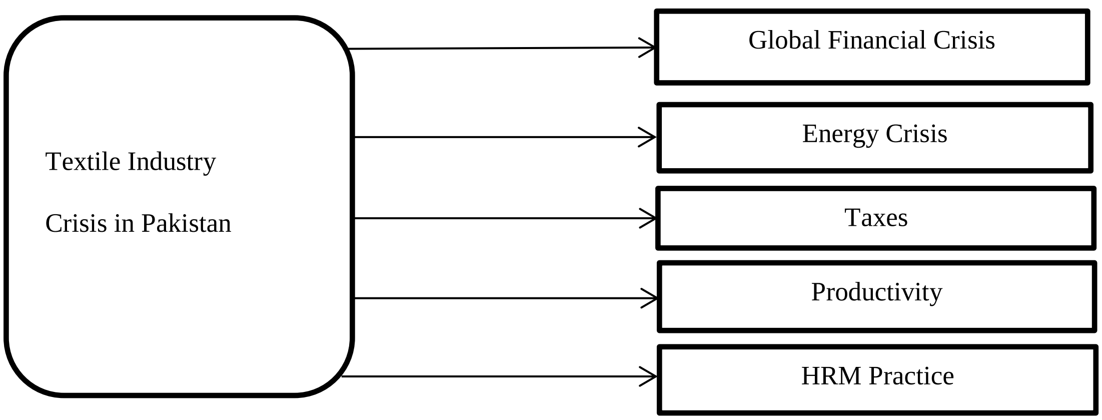
2.4.HRM PRACTICE

The Pakistan textile industry, despite being one of the major players globally, faces intense competition from other export-oriented countries. However, a significant challenge for the industry is the migration of labor to other countries due to comparatively lower salaries and inadequate training opportunities. This trend not only undermines the workforce stability within the textile sector but also hampers the industry's overall productivity and competitiveness. To address this issue, concerted efforts are needed to improve labor conditions, enhance training programs, and offer competitive wages to retain skilled workers within the Pakistan textile industry. Additionally, creating a supportive environment for professional growth and development can help attract and retain talent, thereby strengthening the industry's position in the global market. The lack of attention to Human Resource Management (HRM) practices in many textile industries has significant repercussions on employee skills, job satisfaction, and organizational profitability. When HRM practices are not effectively implemented, employees may lack the necessary training and support to perform their roles optimally, leading to lower productivity and morale. To address this issue, textile industries should prioritize the implementation of comprehensive HRM practices that focus on recruitment, training, performance management, and employee engagement. By investing in their workforce and fostering a supportive work environment, textile companies can enhance employee skills, job satisfaction, and ultimately improve organizational performance and profitability.

2.5.PRODUCTIVITY

The Pakistan textile industry is grappling with significant challenges, including an energy crisis, outdated equipment, insufficient investment, high taxes, the impact of global recession, and a lack of research and development. These factors collectively undermine the productivity and competitiveness of the textile sector. The energy crisis, characterized by frequent power outages and gas shortages, disrupts production processes and increases operating costs. Outdated equipment limits efficiency and innovation, hindering the industry's ability to meet modern standards. Insufficient investment and high taxes further strain the financial health of textile businesses, impeding their capacity for growth and modernization. The global recession has exacerbated these challenges by reducing demand for textile exports and intensifying market competition. Additionally, the lack of research and development stifles innovation and inhibits the industry's ability to adapt to evolving market trends. Addressing these challenges requires concerted efforts from industry stakeholders and policymakers to implement reforms and initiatives aimed at improving energy infrastructure, promoting investment, reducing tax burdens, and fostering innovation in the textile sector. The efficiency of labor in the Pakistan textile industry significantly impacts productivity, and inefficiencies can lead to negative outcomes such as increased unemployment, reduced exports, and the closure of firms. To address this issue, the government can play a crucial role by providing subsidies to the textile sector and enhancing financing options. Subsidies can help offset operational costs and encourage investment in modernizing equipment and improving workforce skills. Additionally, enhanced financing opportunities can enable textile businesses to access the capital needed to implement efficiency-enhancing measures, such as training programs and technology upgrades. By supporting the development of a skilled and efficient labor force, the government can contribute to the overall competitiveness and sustainability of the textile industry in Pakistan.

3. THE MODEL



4. DISCUSSION AND CONCLUSIONS

The detailed review of literature and personal observations indicate that several factors are influencing the productivity of the textile industry in Pakistan. High inflation rates and increased input costs have significantly raised the overall cost of production, rendering many industries unable to sustain profitability and sometimes resulting in losses. Moreover, the utilization of outdated machinery and technology further diminishes the competitiveness of Pakistani textile exports in the international market. These challenges highlight the urgent need for the modernization and upgrading of equipment and technology within the textile sector to enhance productivity and maintain competitiveness on a global scale. Government policies imposing heavy import duties on machinery have exacerbated the cost of production in the textile sector. Additionally, the industry faces financial constraints, with high interest rates discouraging new investments. A significant issue is the lack of emphasis on research and development (R&D) within Pakistan's textile industry, leading to a dearth of innovation and modernization. Limited R&D efforts hamper the sector's ability to adapt to changing market demands and technological advancements, ultimately hindering its competitiveness and long-term sustainability. The energy crisis stands out as a critical factor significantly impacting textile production in Pakistan.

Insufficient energy supply forces producers to curtail their production and leads to increased output costs. This crisis has contributed to a rise in unemployment levels, stemming from the decline of the textile industry. Moreover, political unrest, poor law enforcement, and inadequate infrastructure and transportation facilities further exacerbate the challenges faced by Pakistan's textile sector, hindering its growth and competitiveness on the global stage. Addressing these multifaceted issues is essential to revitalize the industry and spur economic development in the country. Indeed, the interplay of various factors in the textile industry contributes to increased production costs, subsequently impacting exports and exacerbating unemployment levels. Furthermore, the positive relationship between effective human resource management practices and employee performance, growth rates, and investment opportunities underscores the importance of nurturing a skilled and motivated workforce. Conversely, the negative relationships observed among energy crises, productivity, financial instability, exports, taxes, and productivity highlight the detrimental effects of systemic challenges on the industry's overall performance and competitiveness. Addressing these issues holistically is imperative for fostering sustainable growth and development in Pakistan's textile sector. Indeed, implementing a comprehensive set of remedies is essential to revitalize the textile industry in Pakistan. Embracing advanced machinery and cutting-edge technology can enhance productivity and competitiveness. Increased research and development efforts can drive innovation and address industry-specific challenges. Effective human resource management practices are crucial for nurturing a skilled and motivated workforce. Addressing the energy crisis through investment in sustainable energy sources is imperative for uninterrupted production. Lowering interest rates can encourage new investments and stimulate growth. Additionally, government intervention is essential through corrective actions, supportive policies, and enhanced financing to bolster the resilience and sustainability of the textile sector.

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