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Revitalizing the Pakistan Textile Industry: Strategies for Growth and Competitiveness

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Abstract

This study examines the decline of Pakistan's textile industry, which once contributed over 60 percent to the country's total exports in the 1990s but has experienced a significant downturn in recent years. Key factors contributing to this decline include the global economic recession, internal security challenges, rising production costs due to energy crises, and the depreciation of the Pakistani rupee. Additionally, high inflation rates and financing costs have further exacerbated difficulties for the industry. To revitalize the textile sector and restore its growth trajectory, government intervention is essential. One critical measure involves providing subsidies to facilitate the acquisition of new machinery or upgrading existing equipment. Modernizing machinery and technology will enhance efficiency, reduce production costs, and improve overall productivity. Additionally, allocating resources to research and development (R&D) initiatives is vital for optimizing production processes and fostering innovation. Investment in R&D can enable the textile industry to remain competitive in both domestic and international markets. By implementing these strategic measures, the government can stimulate growth in the textile sector, create employment opportunities, and strengthen export competitiveness. Moreover, fostering a favorable investment climate and encouraging innovation will enhance the sector's long-term sustainability. Ensuring stability in energy supply, streamlining regulatory processes, and improving financial accessibility for manufacturers can further support the industry's revival. A comprehensive approach addressing these challenges will position Pakistan's textile sector for resilience and long-term prosperity in an increasingly competitive global market.

Keywords: Pakistan, Textile Industry, Economic Revitalization, Competitiveness

JEL Codes: L67, O14, O25

1. INTRODUCTION

The textile industry holds significant importance in Pakistan's economy, being the 8th largest exporter of textile products in Asia. Similar industrial importance has been emphasized in sectoral studies such as Ali and Ahmed (2014), Marc and Ali (2017), and Ali and Rehman (2015), who note that manufacturing sectors contribute critically to national competitiveness. This sector contributes substantially to the country's GDP, accounting for 9.5%, and plays a crucial role in employment generation, providing livelihoods to approximately 15 million people, which represents around 30% of the total workforce (Economic Survey of Pakistan, 2015). Comparable patterns of sector-driven employment have also been documented by Singh and Kumar (2018), Wiafe (2018), and Okurut and Mbulawa (2018) in other emerging economies. Despite its substantial domestic contributions, Pakistan's share in the global textile trade remains less than one percent, consistent with underrepresentation challenges noted by Maurya (2018) in India's textile-linked markets and Siddiqi (2018) in Pakistan's financial sectors. Pakistan remains the 4th largest producer of cotton, annually producing 12 million bales, and possesses the 3rd largest spinning capacity in Asia after China and India, contributing 5% to the global spinning capacity (Economic Survey of Pakistan, 2015). As highlighted by Gorus and Groeneveld (2018) and Zhang (2018), countries with strong natural-resource-based industries often gain strategic advantages in global trade. The textile sector's structure also reflects insights provided by Asif and Simsek (2018), who highlight that value differentiation enhances international competitiveness. These statistics reinforce Pakistan's strong production foundation and the sector's potential for global expansion, as also noted by Hussain (2018) and Manzoor and Agha (2018).

Since gaining independence, Pakistan has prioritized the development of its manufacturing sector, particularly agro-based textile industries. This trajectory mirrors industrial-expansion patterns found in Ali et al. (2016), Ali and Bibi (2017), and Ali and Zulfiqar (2018), which highlight agriculture-linked sectors as critical pathways for economic diversification. Leveraging its cotton resources, Pakistan adopted a model of resource-driven industrialization, resembling the development frameworks discussed by Luna and Luna (2018) and Clark and Adam (2018). This strategy underlines Pakistan's commitment to industrial growth, similar to the macroeconomic foundations analyzed by Ali (2015) and Ali and Audi (2016). As of the latest evidence, Pakistan's textile sector features 1,221 ginning units and 442 spinning units (Zaidi, 2015). The presence of both large and small spinning units aligns with global structural trends noted by Ahmad (2018), Iqbal (2018), and Kumar (2018), who emphasize the relevance of scale in manufacturing performance. As the sector evolved, the focus shifted toward fine yarns, hosiery, apparel, and value-added textile goods. Such value-enhancement transitions are in line with modernization frameworks proposed by Koocheki (2018) and Muhieddine (2018). A similar emphasis on structural upgrading is shown by Ali and Naeem (2017), who explain that modernization is vital for export-oriented sectors in Pakistan.

Pakistan today boasts an integrated textile supply chain from yarn to finished garments and home textiles. This breadth reflects integrated-sector dynamics also observed by Marc and Ali (2016) in their analysis of energy-intensive industries and by Ali and Ahmed (2014) in socio-economic development contexts. The textile sector's wide-ranging operations mirror industrial ecosystems described in Sajid and Ali (2018) and Ali and Audi (2018), who emphasize the role of industry linkages in macroeconomic stability. As highlighted in the Economic Survey of Pakistan (2015), this sector remains the cornerstone of Pakistan's industrial landscape. The industry's structure also aligns with sectoral interdependence patterns identified by Ali and Bibi (2017), emphasizing the importance of backward and forward

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linkages. Since 1947, Pakistan's textile-industry growth has been remarkable. Cotton production increased from 1.1 million bales in 1947 to 10 million by 2000, a progression consistent with agricultural-industrial linkages identified by Ali et al. (2016) and Ali and Ahmed (2014). Similarly, the number of textile mills expanded from three to 600, while textile machinery such as spindles increased from 177,000 to approximately 8 million. Comparable industrial expansion was highlighted by Manzoor and Agha (2018), who emphasized the transformative role of investment in capacity enhancement. The growth patterns also correspond with sector-energy interactions studied by Ahmad (2018), Iqbal (2018), and Zhang (2018).

The resilience and continued expansion of Pakistan's textile sector also reflect the broader institutional insights offered by Riaz and Safdar (2018) and Khan and Ahmad (2018), who emphasize governance and regulatory efficiency as key determinants of industrial success. International comparative studies, such as Clark and Adam (2018), Luna and Luna (2018), and Koocheki (2018), similarly suggest that modernization, energy efficiency, and technology adoption enhance a country's textile competitiveness. Moreover, financial dynamics that influence textile investment patterns, as discussed in Shahbaz (2018), Asif and Simsek (2018), and Wali (2018), remain pivotal for sustaining the sector's growth trajectory. Environmental sustainability within the textile production chain also resonates with the ecological-economic frameworks established by Ahmad (2018), Gorus and Groeneveld (2018), and Okurut and Mbulawa (2018), as textile processing is inherently energy and resource intensive. Complementary macroeconomic analyses by Ali and Zulfiqar (2018), Ali (2015), and Sajid and Ali (2018) support the argument that industrial sectors require stable economic policies to maintain productivity, competitiveness, and export performance. Therefore, the continued expansion of Pakistan's textile industry aligns with global industrialization patterns discussed in Clark and Adam (2018), Kumar (2018), and Singh and Kumar (2018). Strong comparative advantages, coupled with strategic modernization efforts, position Pakistan as a competitive textile producer in Asia. With sustained technological upgrading, supported by institutional frameworks examined by Marc and Ali (2016, 2017) and Ali and Audi (2016), Pakistan can further strengthen its textile sector's global presence and enhance its long-term growth trajectory. This aligns with broader economic-development discussions across the literature, including Maurya (2018), Zahid (2018), Wiafe (2018), and Ali et al. (2016), reinforcing that textiles remain a critical engine of economic progress.

2. LITERATURE REVIEW

Zameer (2009) emphasized the significant challenges confronting the Pakistani textile industry, particularly in maintaining its competitive position against global rivals. Among the prominent issues highlighted were the deficiencies in technology adoption, energy shortages, and inefficiencies in production processes. The textile sector in Pakistan has been grappling with these challenges, which have impeded its ability to compete effectively in the international market. The lack of modern technology adoption has hindered the industry's capacity to enhance productivity and quality standards, placing it at a disadvantage compared to more technologically advanced competitors. Additionally, persistent energy shortages have exacerbated the challenges faced by the textile industry, leading to disruptions in production schedules and increased operational costs. The unreliable energy supply has hindered the sector's ability to operate at optimal capacity, impacting its competitiveness and profitability. Moreover, inefficiencies in production processes have further compounded the industry's woes, leading to suboptimal utilization of resources and higher production costs. Addressing these inefficiencies is crucial for enhancing the sector's competitiveness and profitability in the global market. To address these challenges, Zameer (2009) advocated for comprehensive policy planning aimed at bolstering the textile industry's competitiveness and sustainability. This includes initiatives to promote technology adoption, improve energy infrastructure, and enhance production efficiency. Moreover, increased financing support from both the government and financial institutions is deemed essential to facilitate the modernization and expansion of textile operations in Pakistan. By implementing these strategic measures, the Pakistani textile industry can overcome its challenges and emerge as a formidable player in the global market, ensuring its long-term growth and prosperity.

Khan and Khan (2010) highlighted a multitude of challenges plaguing the textile sector in Pakistan, ranging from the energy crisis and inadequate research and development (R&D) in the cotton sector to the absence of modern equipment and high input costs. They identified factors such as the removal of subsidies, high inflation rates, rupee depreciation affecting export competitiveness, and the resultant unemployment as significant hurdles faced by the industry. In light of these challenges, Khan and Khan (2010) proposed several recommendations to address the issues confronting the textile sector. They suggested tariff reduction measures to lower input costs and enhance the sector's competitiveness. Additionally, advocating for technology upgradation initiatives to modernize production processes and improve efficiency was deemed essential. Moreover, they emphasized the importance of facilitating access to low-interest financing options for textile businesses to invest in modern equipment and technology upgrades. The focus on value addition was underscored as a strategic approach to diversifying product offerings and enhancing the sector's competitiveness in global markets. Furthermore, Khan and Khan (2010) recommended the reinstatement of subsidies to support the growth and development of the textile industry. By providing financial incentives and support measures, policymakers can incentivize investment and foster innovation within the sector, thereby promoting its sustainable growth and contributing to economic development and employment generation in Pakistan.

Alam (2011) highlights the significant impact of the 2008 financial crisis on Pakistan's textile sector, particularly on its exports. The aftermath of the crisis resulted in a substantial trade deficit, characterized by volatility in transfer payments, net services, and transfers, coupled with a decline in workers' remittances. These developments underscored the severity of the crisis and its far-reaching implications for the economy. In addition to the financial crisis, Alam (2011) identifies

various other macroeconomic challenges affecting the textile sector's profitability. These include the persisting issues of inflation, energy crisis, rising unemployment, and transportation bottlenecks. These factors collectively contribute to the overall operating environment for textile firms, influencing their financial performance and bottom-line outcomes. The study concludes that Pakistan lacks comprehensive fiscal and monetary policies to adequately address the ramifications of the financial crisis on the textile sector. The absence of targeted policy interventions tailored to mitigate the adverse effects of the crisis exacerbates the challenges faced by textile firms, hindering their ability to recover and thrive in the post-crisis period. Addressing these systemic shortcomings in policy formulation and implementation is crucial to safeguarding the resilience and competitiveness of Pakistan's textile industry in the face of external shocks and domestic challenges. Sheikh et al. (2011) delved into the repercussions of the global financial crisis on the textile industry, aiming to illuminate the adverse effects resulting in decreased exports. The study underscored the formidable challenges confronting the textile sector, including unemployment, energy shortages, and high taxation. To investigate these issues, Sheikh et al. (2011) gathered cross-sectional data from 25 textile firms and employed E-view technique for data analysis. This approach allowed for a comprehensive examination of the multifaceted impacts of the financial crisis on the industry, shedding light on the interconnected dynamics at play. The findings of the study likely provided valuable insights into the specific vulnerabilities and stress points within the textile sector exacerbated by the global financial downturn. By uncovering the underlying factors contributing to reduced exports and highlighting the broader challenges faced by textile firms, the research may have contributed to informing policy interventions and strategic responses aimed at bolstering the resilience of the industry in the face of external shocks.

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 performance of the sector. To investigate this phenomenon, three HRM models—recruitment and selection, training, and appraisal—were employed. Through an examination of these HRM variables, Yasir (2011) demonstrated their interconnectedness with worker performance within the textile industry. The research findings underscored the importance of effective HRM practices in optimizing worker productivity and enhancing the operational efficiency of textile firms. Ultimately, the study concluded that the absence or inadequate implementation of HRM practices was adversely affecting the proper functioning and performance of the textile industry. By shedding light on the pivotal role of HRM in shaping organizational outcomes, the research likely provided valuable insights for industry stakeholders and policymakers seeking to address the challenges facing the textile sector in Pakistan.

Shah et al. (2012) conducted a study to investigate the factors contributing to the decline of Pakistan's textile industry. They identified key indicators such as the energy crisis, deteriorating law and order situation, lack of new investments, and increased production costs as significant factors influencing the industry's downturn. The researchers employed personal observations and informal interviews to gain insights into these challenges. The findings underscored the urgent need for government intervention and policy reforms to address the pressing issues facing the textile sector. Specifically, Shah et al. recommended that the government focus on the textile industry by providing tax relief and revising import and export duties. Additionally, they emphasized the importance of taking corrective measures to alleviate the electricity crisis, which was identified as a major impediment to the industry's growth and competitiveness. The study warned of the dire consequences if these problems were left unaddressed, highlighting the risk of mass unemployment among textile workers and further deterioration of the sector's competitiveness. By shedding light on these critical challenges, Shah et al. aimed to inform policymakers and industry stakeholders about the urgent need for targeted interventions to revitalize Pakistan's textile industry.

Afzal (2012) conducted a study to examine the impact of the electricity crisis and interest rates on the production of the textile sector in Pakistan. The research revealed that due to the electricity crisis and high interest rates, textile producers were forced to reduce their production levels, leading to a decrease in exports. This decline in production capacity adversely affected the competitiveness of the industry in the international market. To address this challenge and ensure the survival of the textile industry, the study recommended several measures. Firstly, the government should provide subsidies to support textile producers and alleviate the financial burden caused by high production costs. Additionally, there is a need for a reduction in electricity tariffs to make production more cost-effective and sustainable. Furthermore, improvements in textile production processes and efficiency are essential to enhance competitiveness. Finally, reducing the overall cost of doing business in Pakistan would create a more favorable environment for textile manufacturers, enabling them to thrive in the global market. By highlighting the detrimental effects of the electricity crisis and high interest rates on the textile sector, Afzal's study aimed to inform policymakers and stakeholders about the urgent need for targeted interventions to support the industry and ensure its long-term viability and competitiveness.

Ahmad et al. (2012) conducted an analysis of human resource management (HRM) issues in the textile sector of Pakistan, focusing on the relationship between job satisfaction, job stress, and turnover. The study underscored the importance of supporting employees amidst the challenging circumstances faced by the textile industry, particularly due to the energy crisis in Pakistan. The research highlighted the difficulties faced by the human resource department in retaining employees to ensure the success of the textile industry. By employing a specific scale for data collection, the study aimed to provide insights that would assist human resource managers in reducing organizational costs by minimizing the turnover rate. The findings of Ahmad et al.'s study contribute to the understanding of HRM challenges in the textile sector and offer practical implications for improving employee satisfaction, managing stress, and addressing turnover issues. By addressing these factors effectively, organizations can enhance their workforce stability and ultimately improve their overall performance and competitiveness in the industry.

Shah et al. (2013) investigated the impact of the energy crisis on the textile industry of Pakistan. They observed that during the period of the energy crisis, key financial metrics such as return on assets (ROA) and return on equity (ROE) experienced a decline, while indicators like inventory turnover ratio and assets turnover ratio increased compared to the pre-energy crisis period. The study highlighted that the energy crisis significantly affected the liquidity, debt management, and profitability of the textile sector in Pakistan. Methodologically, the researchers employed horizontal analysis to analyze the financial data. The findings of this study offer valuable insights for policymakers and industry stakeholders to develop strategies aimed at improving the resilience and sustainability of the textile sector in the face of energy challenges. By addressing the issues identified, such as improving energy infrastructure and management, the textile industry can enhance its financial performance and overall competitiveness. Tahir et al. (2014) examined the improvement prospects of the textile sector and the impact of taxation policies on this industry in Pakistan. Their study uncovered that direct taxes, excise duty, and sales duty exerted a negative influence on the textile sector. Additionally, custom duty also had a negative impact, although the coefficient was not statistically significant. The research highlighted that while taxation revenues are essential for the progress of any country, the taxation system in Pakistan has become burdensome due to incorrect policies and mismanagement. The authors recommended that taxation should be implemented through proper consultation methods, ensuring that the tax burden on the textile sector is alleviated. Furthermore, the study proposed that the Government of Pakistan should consider providing special incentives to the textile sector to stimulate its growth and enhance its competitiveness in both domestic and international markets. Such measures could potentially mitigate the adverse effects of taxation and contribute to the overall development of the textile industry in the country.

3. THE MODEL

Based on review of literature, the model for this study become as:

$Y=a+b1x1+b2x2+b3x3+b4x4+\ldots. E$

Dependent Variable

Growth rate of Textile (Y)

Independent Variable (X)

X1=Energy crisis

X2=Labor

X3=Global financial crisis

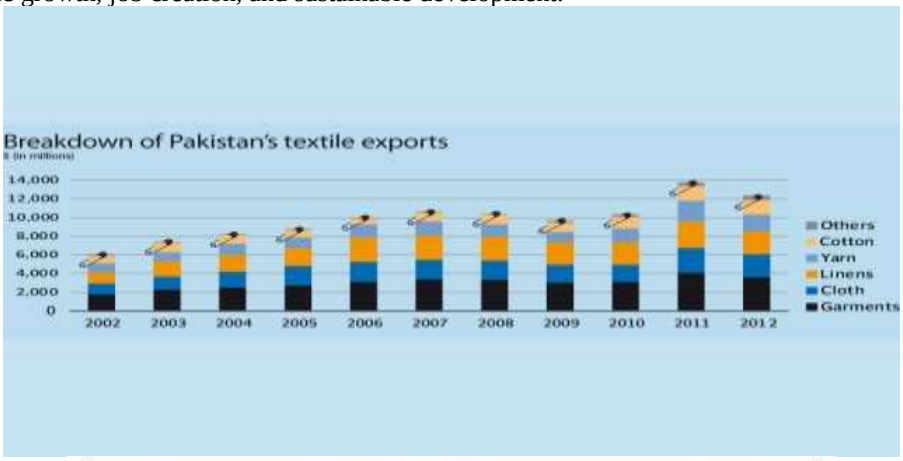
X4=Export

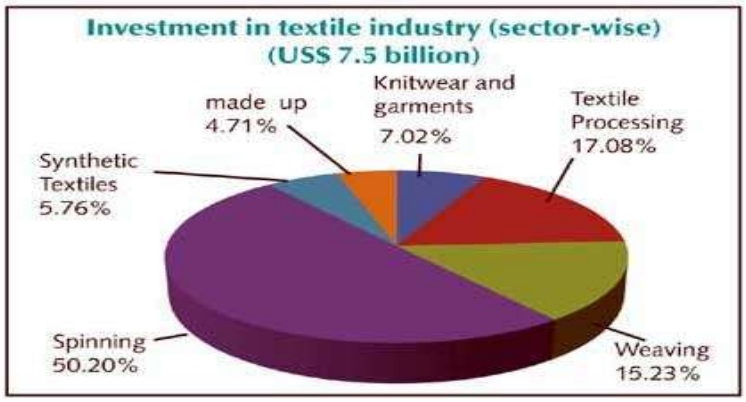
X5=Taxes

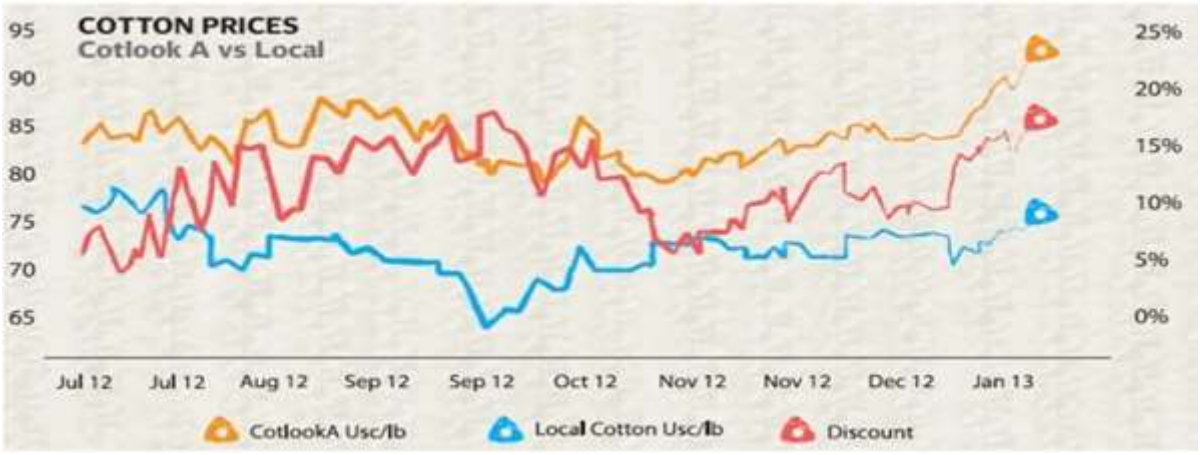
The financial crisis of 2008 in the United States and Europe had a profound impact on countries like Pakistan, which heavily depend on exports to these developed markets. As major destinations for Pakistani exports, the slowdown in economic activity in the USA and Europe resulted in reduced demand for Pakistani goods, leading to a decline in exports and economic instability within Pakistan. The decline in Pakistan's textile exports, historically a substantial portion of its total exports, signals a prolonged trend that has persisted over time, reaching from 67% in 1997 to 55% in 2008. This decline, exacerbated by the global financial crisis, has had far-reaching implications, particularly in terms of heightened unemployment within the Pakistani textile industry. Furthermore, the scarcity of energy presents a formidable challenge to the textile sector in Pakistan. Persistent energy shortages, characterized by frequent electricity and gas load shedding, disrupt textile production processes at every level, from spinning and weaving to fabric processing and finishing. The textile industry's reliance on consistent energy supply cannot be overstated, as electricity and gas are vital inputs for powering machinery and facilitating production operations. However, the chronic energy deficit in Pakistan has severely constrained the industry's capacity to operate efficiently and meet production targets. The erratic availability of electricity and gas disrupts production schedules, leads to downtime, and hampers overall productivity. Consequently, textile manufacturers face increased costs, reduced output, and heightened operational uncertainty, which ultimately undermine their competitiveness in both domestic and international markets. Moreover, the energy crisis has wider implications beyond the confines of the textile industry. It reverberates throughout the economy, impacting various sectors and exacerbating socio-economic challenges. Unemployment rates rise as textile factories operate below capacity or shut down altogether due to insufficient power supply. This not only deprives individuals of livelihoods but also constrains economic growth and development at the national level.

Indeed, addressing the energy crisis in Pakistan's textile industry necessitates a comprehensive approach that encompasses policy reforms, infrastructure enhancements, and strategic investments. To effectively mitigate the energy shortfall, government initiatives must be targeted at several key areas. Firstly, enhancing energy infrastructure is paramount to ensure reliable and uninterrupted power supply to textile manufacturers. This involves modernizing existing power plants, investing in new generation capacity, and upgrading transmission and distribution networks. By strengthening the energy infrastructure, the government can alleviate bottlenecks in the supply chain and minimize disruptions to textile production. Expanding power generation capacity is another critical step in overcoming the energy crisis. This may involve diversifying the energy mix to include a greater proportion of renewable sources such as solar, wind, and hydroelectric power. Investing in renewable energy projects not only reduces reliance on fossil fuels but also promotes sustainability and environmental stewardship. Improving distribution networks is equally essential to optimize energy delivery to textile factories. This entails upgrading transmission lines, substations, and grid infrastructure to minimize transmission losses and ensure efficient distribution of electricity. By enhancing distribution networks, the government can enhance the reliability and stability of the energy supply, thereby reducing downtime and productivity losses for textile manufacturers.

Furthermore, incentivizing the adoption of energy-efficient technologies is crucial for reducing energy consumption and enhancing the resilience of the textile industry to energy disruptions. Government incentives, such as tax breaks, subsidies, and grants, can encourage textile manufacturers to invest in energy-efficient equipment, processes, and practices. This not only reduces operating costs for manufacturers but also conserves energy resources and mitigates the impact of energy shortages. Addressing the energy crisis in Pakistan's textile industry requires a holistic approach that integrates policy interventions, infrastructure upgrades, and investment incentives. By prioritizing energy sector reforms and implementing sustainable solutions, the government can bolster the resilience and competitiveness of the textile industry, thereby fostering economic growth, job creation, and sustainable development.







4. DISCUSSION AND CONCLUSIONS

The detailed review of literature and personal observations highlight several factors influencing the productivity of the textile industry in Pakistan. One significant challenge is the high inflation rate, coupled with increased input costs, which have substantially elevated the overall cost of production. This surge in production costs has placed considerable strain on textile industries, particularly in light of their limited profit margins and occasional losses. The utilization of outdated machinery and technology in the textile industry has rendered Pakistan's textile exports less competitive in the international market. Compounding this issue, the government's imposition of heavy import duties on machinery has exacerbated the cost of production. Consequently, the textile sector is grappling with financial challenges, with high interest rates discouraging new investments in modernizing equipment and technology. The textile industry in Pakistan is notably deficient in research and development (R&D) initiatives. There is a dearth of significant research work

conducted within this sector, indicating a lack of investment and focus on innovation and development. The energy crisis emerges as a pivotal factor significantly impacting textile production in Pakistan. The insufficient supply of energy compels producers to curtail their production activities, consequently escalating their operational costs. This crisis has led to a surge in unemployment levels, attributable to the decline in the textile industry's performance exacerbated by the energy shortfall. Moreover, political unrest, inadequate law and order situations, and deficient infrastructure and transportation facilities further contribute to the decline of Pakistan's textile industry. These factors collectively escalate the cost of production, subsequently hampering exports and exacerbating unemployment levels. Indeed, there exists a positive relationship between Human Resource Management (HRM) practices and employee performance, growth rates, and investment facilities within the textile industry. Conversely, there is a negative correlation between factors such as energy crisis, productivity, financial downturns, export levels, taxes, and overall productivity within the sector.

REFERENCES

Afzal, H. M. (2012). Impact of Electricity Crisis and Interest Rate on Textile Industry of Pakistan. *Academy of Contemporary Research Journal*, 32-35.

Ahmad, S. (2018). Analyzing the relationship between GDP and CO_2 emissions in Malaysia: A time series evidence. *Journal of Energy and Environmental Policy Options, 1*(1), 1–4.

Ahmad, S. (2018). Credit scoring: Assessing creditworthiness and its implications for borrowers and lenders. *Journal of Business and Economic Options, 1*(2), 45–51.

Alam, I. (2011). Impact of Financial Crisis on Textile Industry of Pakistan. *Sanei Working Paper Series*, No. 11 - 02.

Ali, A. & Naeem, M.Z. (2017). Trade Liberalization and Fiscal Management of Pakistan: A Brief Overview. *Policy Brief-Department of Economics, PU, Lahore*. 2017 (1), 1-6.

Ali, A. (2011). Disaggregated import demand functions of Pakistan; An empirical Analysis. M-Phil Thesis, NCBA&E, Lahore, Pakistan, 1-70.

Ali, A. (2015). *The impact of macroeconomic instability on social progress: an empirical analysis of Pakistan*. (Doctoral dissertation, National College of Business Administration & Economics Lahore).

Ali, A. (2018). Issue of Income Inequality Under the Perceptive of Macroeconomic Instability: An Empirical Analysis of Pakistan. *Pakistan Economic and Social Review*, 56(1), 121-155.

Ali, A. and Bibi, C. (2017). Determinants of Social Progress and its Scenarios under the role of Macroeconomic Instability: Empirics from Pakistan. *Pakistan Economic and Social Review* 55 (2), 505-540.

Ali, A., & Ahmad, K. (2014). The Impact of Socio-Economic Factors on Life Expectancy in Sultanate of Oman: An Empirical Analysis. *Middle-East Journal of Scientific Research*, 22(2), 218-224.

Ali, A., & Audi, M. (2016). The Impact of Income Inequality, Environmental Degradation and Globalization on Life Expectancy in Pakistan: An Empirical Analysis. *International Journal of Economics and Empirical Research*, 4 (4), 182-193.

Ali, A., & Audi, M. (2018). Macroeconomic Environment and Taxes Revenues in Pakistan: An Application of ARDL Approach. *Bulletin of Business and Economics* (BBE), 7(1), 30-39.

Ali, A., & Rehman, H. U. (2015). Macroeconomic instability and its impact on the gross domestic product: an empirical analysis of Pakistan. *Pakistan Economic and Social Review*, 285-316.

Ali, A., & Zulfiqar, K. (2018). An Assessment of Association between Natural Resources Agglomeration and Unemployment in Pakistan. *Pakistan Vision*, 19(1), 110-126.

Ali, A., Ahmed, F., & Rahman, F. U. (2016). Impact of Government Borrowing on Financial Development (A case study of Pakistan). *Bulletin of Business and Economics* (BBE), 5(3), 135-143.

Ali, A., Mujahid, N., Rashid, Y., & Shahbaz, M. (2015). Human capital outflow and economic misery: Fresh evidence for Pakistan. *Social Indicators Research*, *124*(3), 747-764.

Ali, M. (2018). Inflation, interest and exchange rate effect on stock market prices. *Journal of Business and Economic Options, 1*(2), 39–44.

Arshad, S., & Ali, A. (2016). Trade-off between Inflation, Interest and Unemployment Rate of Pakistan: Revisited. *Bulletin of Business and Economics (BBE), 5*(4), 193-209.

Ashraf, I., & Ali, A. (2018). Socio-Economic Well-Being and Women Status in Pakistan: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(2), 46-58.

Asif, M., & Simsek, S. (2018). The difference between price and value: Empirical discussion. *Journal of Business and Economic Options, 1*(1), 10–14.

Clark, W., & Adam, A. (2018). Sustainable power choices: An analysis of CO_2 mitigation and renewable energy in USA. *Journal of Energy and Environmental Policy Options, 1*(3), 55–59.

Gorus, S., & Groeneveld, R. (2018). Vietnam's development trajectory: Threshold cointegration and causality analysis of energy consumption and economic growth. *Journal of Energy and Environmental Policy Options, 1*(2), 28–36.

Haider, A., & Ali, A. (2015). Socio-economic determinants of crimes: a cross-sectional study of Punjab districts. *International Journal of Economics and Empirical Research*, 3(11), 550-560.

Hamid, M. Y. (2018). Business valuation of discounted cash flow. *Journal of Business and Economic Options, 1*(3), 78–91.

Hussain, A. (2018). Banking privatization and profitability in Pakistan: A time series analysis. *Journal of Business and Economic Options, 1*(1), 30–38.

Iqbal, A. (2018). Determinants of microfinance in Pakistan. *Journal of Business and Economic Options, 1*(1), 15–22.
Iqbal, K., & Raza, A. (2018). Impact of foreign exchange rate volatility on money demand in Pakistan: An empirical analysis. *Journal of Policy Options, 1*(3), 106–120.
Iqbal, S. (2018). Electricity consumption and economic growth in Pakistan: An empirical analysis. *Journal of Energy and Environmental Policy Options, 1*(1), 5–8.
Khan, J. A., & Ali, R. (2018). Challenging misconceptions: Media portrayal of Islam and its impact on public perception. *Journal of Policy Options, 1*(1), 30–40.
Khan, M. W. (2018). A comparative study of customer satisfaction between public and private banks in Lahore, Pakistan. *Journal of Policy Options, 1*(2), 50–60.
Khan, R. I. A., & Ahmad, K. (2018). Revitalizing the Pakistan textile industry: Challenges and opportunities. *Journal of Policy Options, 1*(1), 20–29.
Koocheki, S. (2018). Evaluating energy dynamics: A comparative analysis of pulses production systems in Iran. *Journal of Energy and Environmental Policy Options, 1*(3), 65–72.
Kumar, N. (2018). Examining total factor productivity and energy intensity in the landscape of Indian manufacturing. *Journal of Energy and Environmental Policy Options, 1*(2), 46–54.
Luna, A., & Luna, G. (2018). Exploring investment dynamics in renewable energy for low-carbon economies through a global comparative analysis. *Journal of Energy and Environmental Policy Options, 1*(3), 73–79.
Mahmood, H., & Aslam, M. (2018). Impact of plastic money adoption on consumer purchasing habits: A study in Pakistan. *Journal of Policy Options, 1*(1), 41–49.
Manzoor, M., & Agha, A. (2018). Determinants of domestic savings in Pakistan: An economic analysis. *Journal of Policy Options, 1*(2), 62–80.
Marc, A. & Ali, A. (2017). Environmental Degradation, Energy consumption, Population Density and Economic Development in Lebanon: A time series Analysis (1971-2014). *Journal of International Finance and Economics*, 17(1), 7-20.
Marc, A. & Ali, A. (2017). Socio-Economic Status and Life Expectancy in Lebanon: An Empirical Analysis. *Archives of Business Research*, 5(11), 159-170
Marc, A., & Ali, A. (2016). A Causality and Co-integration Analysis of Some Selected Socio-Economic Determinants of Fertility: Empirics from Tunisia. *Bulletin of Business and Economics (BBE)*, 5(1), 20-36.
Maurya, R. (2018). Indian mutual funds: An empirical investigation. *Journal of Business and Economic Options, 1*(1), 23–29.
Muhieddine, M. (2018). The nexus between oil prices and current account deficit: An empirical analysis for Lebanon. *Journal of Energy and Environmental Policy Options, 1*(1), 9–13.
Okurut, F. N., & Mbulawa, S. (2018). The nexus of electricity, economy, and capital: A case study of Botswana. *Journal of Energy and Environmental Policy Options, 1*(1), 14–21.
Riaz, M., & Safdar, M. (2018). Exploring teachers' concerns: Student enrollment and absenteeism in primary schools of Punjab Province. *Journal of Policy Options, 1*(3), 121–130.
Sajid, A. & Ali, A. (2018). Inclusive Growth and Macroeconomic Situations in South Asia: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(3), 97-109.
Shah, B., Essrani, S. D., Shah, N., and Rahat, N. (2013). The Impact of Energy Crises on the Textile Sector of Pakistan (2005-2010). *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, 1(5), 401-413.
Shah, W., Warraich, U. A., and Kabeer, K. (2012). Challenges Faced by Textile Industry of Pakistan: Suggested Solutions. *KASBIT Business Journal*, 5, 33-39.
Shahbaz, S. (2018). Analyzing the determinants of dividend policy: A comprehensive study on ownership structure and cash flow characteristics in the banking sector of Pakistan. *Journal of Business and Economic Options, 1*(3), 65–77.
Siddiqi, M. W. (2018). Pakistan's mutual funds: An empirical analysis. *Journal of Business and Economic Options, 1*(1), 1–9.
Singh, J., & Kumar, K. (2018). Socio-economic dynamics of energy: A micro-level regression approach to domestic consumption in India. *Journal of Energy and Environmental Policy Options, 1*(3), 60–64.
Tahir, S. H., Ali, Y., Ismail, A., and Hanan, A. (2014). Impact of Direct and Indirect Tax Incentives on Textile industry (Pakistan). *Euro-Asian Journal of Economics and Finance*, 21-27.
Wali, R. M. (2018). Analysis of financial ratios and credit risk ratings in the banking industry: Insights and findings. *Journal of Business and Economic Options, 1*(2), 52–58.
Wiafe, A. (2018). Empowering progress: Investigating the electricity consumption-economic growth nexus in Ghana. *Journal of Energy and Environmental Policy Options, 1*(2), 37–45.
Yen, W. (2018). Exploring the nexus between mobile communication and traffic fatalities: A global perspective. *Journal of Business and Economic Options, 1*(2), 59–64.
Zahid, M. (2018). Economic misery, exchange rate, interest rate, and foreign direct investment: Empirical evidence from Pakistan. *Journal of Policy Options, 1*(2), 81–95.
Zhang, Z. (2018). Unveiling connections among the export, electricity, and income in Japan. *Journal of Energy and Environmental Policy Options, 1*(2), 21–27.