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Catalyzing the Impact of High Cost of Living on Demand and Supply of Textile Industry: A Prospective of Emerging Economy

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ABSTRACT

The high cost of living is unrestful for all economic agents. The shocks in the cost of living badly affect emerging economies like Pakistan. This study provides a novel analysis of the impact of "different types of living costs" on the demand and supply of the textile industry of Pakistan. It used the Structural Vector Autoregressive (SVAR) model to analyze the impact of the shocks in cost of living on textile industry demand and supply using monthly data from July 2008 to June 2020. The study's findings suggest that rising energy, housing, clothing, and footwear cost weaken demand for the textile sector, mostly through lower purchasing power. While education costs diminish supply, food costs raise producer price index, and transportation costs have no effect. Our findings contribute to the body of knowledge and give vital information on which types of living costs affect the textile sector and which might lead to improvement. The study's findings aid in the establishment of strategies for the textile industry's long-term viability and development. Furthermore, the study provides a novel insight that not all sorts of costs are detrimental to the textile industry.

1. INTRODUCTION

The high cost of living is the primary concern of every citizen of Pakistan. The recent surge in the cost of living can be seen through food items increased by approximately 40%, housing by 41%, clothing and footwear by 22%, and transportation by 20% in June 2023 compared to June 2022. On the other side, the producers of many major industries like textiles are in trouble; they can't make investment decisions in the long run due to commodity price uncertainty (Arslan et al., 2022). The high cost of living is badly affecting the aggregate production of Pakistan's economy. The textile industry is the oldest in Pakistan, accounts for 60% of total exports, has a share of 46% in total manufacturing, and provides jobs to approximately 45% of the labor force. Pakistan's textile industry has an inbuilt advantage in production mainly due to the availability of high quality and quantity of raw material cotton and cheaper labor (Hussain et al., 2020). However, as this has a large share in the country's total export earnings, the economy of Pakistan becomes more sensitive to any shock that affects the production and demand of the textile industry (Wajid et al., 2023).

Recently, the shocks in the cost of living have become the most prominent shock affecting the economies (Knop & Vespignani, 2014). The increase in the cost of living directly affects economics through inflation (Beckerman & Jenkinson, 1986). According to the Kaldor effect hypothesis,

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the shocks in energy costs increase production costs and reduce industrial output. The real balance effect states that an increase in the cost of living reduces the real balance of money, increases money demand, and increases interest rates (Khan & Ahmed, 2011; Tang et al., 2010). Further, through the real balance effect, the high cost of living reduces the purchasing power of the citizens, lowering the aggregate demand and economic growth of an economy (Kilian & Park, 2009).

The high cost of living affects the performance of the textile industry of Pakistan. Producers cannot make decisions in the long run, and this creates uncertainty and unrest in the industry (Imdad, 2023). Although the textile industry has an inbuilt advantage in its production, the industry is still far behind in competition in the international market (Hussain et al. (2020). The high cost of living affects the domestic demand for the textile industry, and it also has a significant impact on aggregate inflation that, at the same time, negatively affects the export of textile products (Subhani et al. (2007). Many empirical studies examined the impact of the cost of living through different aspects. However, what has been lacking is the analysis of the "different types" of cost of living. All costs are not alike; according to the nature and use of commodities, each commodity cost has a different economic impact. Limited literature analyzes the effect of different types of living costs. The majority of the studies focused on energy costs. There is abundant literature investigating various aspects of energy costs affecting an economy (Hamilton, 1983; Papapetrou, 2001). However, some studies investigate the impact of oil and food costs on the economy (Fardous, 2011; Heady & Fan, 2008; Khan & Ahmed, 2014).Further, there are studies on the impact of housing costs on investment and economic growth (Miller et al., 2011).

The comprehensive analysis of different types of living costs remains neglected. So, this study aims to fill this gap and consider seven different living costs: food, clothing and footwear, housing, energy, education, transportation, health, and others, and study their impact on the textile industry's demand and supply. The performance of the textile industry is the leading indicator of the growth of Pakistan's economy. The empirical studies on the textile industry mainly focus on its exports' determinants (Hussain et al., 2020; Siddiqi et al., 2012; Subhani et al., 2007). At the same time, one stream of literature emphasizes the analysis of the comparative advantage of the textile industry (Ahmad & Kalim, 2014; Hanif & Jafri, 2008; Irshad & Xin, 2017; Maqbool et al., 2020). However, no well-known study has examined the impact of different types of cost of living on the demand and supply of the textile industry of Pakistan.

This study provides a novel analysis and adds to the literature on the topic under discussion. It used the Structural Vector Autoregressive (SVAR) model to analyze the impact of shocks in cost of living on textile industry demand and supply using monthly data from July 2008 to June 2020. Based on the above-mentioned research objectives, we have developed the following research questions;

- How do we identify textile industry demand and supply?
- What is the impact of shocks in the cost of living on identified demand and supply?
- Do all types of shocks in the cost of living have the same or differential impact on Pakistan's textile industry?

The study proceeds in the following way: Section two reviews the literature for our study's theoretical and empirical underpinning. Section three describes the data and methodology. Section four concludes our study with policy implications and suggestions for future research.

2. LITERATURE REVIEW

After the establishment of the Pakistan Industrial Development Commission (PIDC) in 1952, the development of the textile industry started, and the inauguration of the modern Valika textile mill in Karachi in 1953 provided a breakthrough in this development. During the mid-sixties, most textile units (approximately 180) were in Karachi and Punjab. At the same time, the textile industry's significant investment was witnessed at the end of the sixties with imported modern machines and techniques. However, it faced the problem of limited capital and a shortage of technical staff. In 1970-1975. Pakistan's textile industry faced heavy losses due to the separation of East Pakistan. Further, the nationalization of significant textile units by the Cotton Export Corporation (CEC) discouraged production. However, in the eighties, the textile industry flourished with the boom in the international market and investment-friendly policies of the government. In the first six years of the 1990s, there was a massive expansion in the spinning sector, and due to the duty-free import of textile machinery, domestic textile units increased to 440. The start of 2005 eliminated the quota regime and opened up more opportunities for textile exports. However, Pakistan's textile industry has not been able to get the benefits of elimination compared to its competitors like China, Bangladesh, and India.

The textile industry is the major contributor to the export of Pakistan. 2018-19 witnessed an improvement in the export of textiles with ready-made garments and hosiery, accounting for Rs. 544 billion of total trade. Whereas nylons, socks, and other off-the-shelf clothes contribute 24% of total revenue from exports. Other significant contributors are bed sheets and pillow covers, with a revenue share of 18%; cotton clothes, with a revenue share of 9%; and cotton thread, with a revenue share of 5%. The importance of the textile industry in Pakistan's economy attracts many researchers to examine it from different aspects. Subhani et al. (2007), analyzed the primary determinants of the textile industry performance in Pakistan. The study highlights that satisfaction, the strategy of pricing, the intensity of export, the development of the export market, past track of export, industry commitment, and passion are the key determinants of short-run export performance. Siddiqi et al. (2012) examined the fundamental determinants of export demand in the textile industry using cointegration methodology. The study's finding suggests that the textile industry's demand is positively cointegrated with aggregate income, inflation, trade openness, and exchange rate. Hussain et al. (2020) used annual data from 1971 to 2014 and employed the ARDL model to examine supply-side factors' long-run and short-run impact on the textile industry. It finds that the cost of production and relative prices play a central role in the determination of the supply of the industry. The capacity and domestic demand are significant determinants of the long run, whereas relative prices and cost of production for the short run.

The revealed advantage and comparative advantage analysis of the textile industry of Pakistan also gained much attention from researchers. Ahmad and Kalim (2014) used revealed comparative analysis of annual data of 21 years and found that Pakistan's textile industry has a comparative advantage in its exports. The results of the Maqbool et al. (2020) study are also consistent with the findings of Ahmed et al. The issue of uncertainty and energy crisis regarding the performance of the textile industry has been addressed by Yasmeen et al. (2022). The study revealed that a shortage of energy negatively affects the supply and revenue of the industry, as one one-hour shortage of electricity caused the loss of income by about 24%. Arslan et al. (2022) examine the impact of the energy crisis and political instability on the performance of the textile industry of Pakistan. The study used annual data from 1992 to 2016 and the VAR model for analysis. Results of the study showed that political crises, energy shortages, instability, and labour costs negatively affect Pakistan's textile industry. The link between supply chain management and the performance of the textile industry is examined by Wajid et al. (2023). Supply chain management plays an essential role in the performance of the textile industry, along with information quality and information sharing. The literature review suggests that different studies examine the performance of the textile industry from various aspects. However, the in-depth analysis of the cost of living on the textile industry's demand and supply remains neglected. Although studies address the export demand determinants and energy cost impact, the analysis of different types of cost of living has been missing. This study aims to fill this gap and adds significantly to the literature.

3. METHODOLOGY

The study will use data from seven types of cost of living, energy cost, food cost, health cost, housing cost, transportation cost, education cost, clothing and footwear cost. Further, the macro-economic variables of the Pakistan economy, inflation, aggregate production, money supply, and short-run and long-run interest rates, are also added in the study. The textile industry output data is from the monthly publication of the Quantum Index of Manufacturing (QIM). The QIM data is like a year-to-year monthly average data, so to make the interpretation meaningful, we have converted the data of all the other variables using the methodology of QIM. We have used monthly wholesale price data as the proxy for producer price. We have done a graphical analysis to understand the textile output and price data.

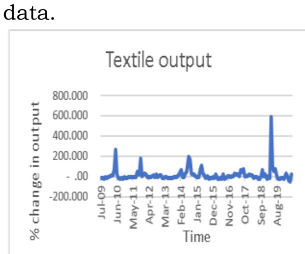

Figure 1: Textile industry output

Figure 2: Textile industry price

Figure 1 shows that the textile industry reached its highest output level in June 2019. However, it experienced a decline after April 2019 due to the COVID-19 pandemic. Figure 2 shows that textile PPI increased after Jan 2011 due to high cotton and yarn prices, domestic floods badly affecting cotton crops, international demand for textiles, and increased global cotton prices. Further, a massive decline in textile PPI was observed in September 2015 compared to September 2014. This decline was mainly due to a decrease in fuel prices and a reduction in international commodity prices. The graphical analysis of textile output and price data shows that COVID-19 adversely affects almost all industries. So, to account for the impact of covid 19 shocks, we will add the dummy of COVID-19 from April 2019. We employed the SVAR model for our analysis as the SVAR model is the most suitable model for studying structural shocks. Researchers also use VAR and simultaneous equation models; however, VAR models cannot perform well with underlying economic theory and correlation. At the same time, simultaneous models are best suited for policy simulation.

The standard form of SVAR model can be written as;

$Z_0 y_t = Z_1 y_{t-1} + \cdots + Z_p y_{t-p} + A u_t$ -----1

Where y_t is a vector of all the variables we have used in the study, and u_tis a vector of the structural shocks. The u_t is white noise with zero mean and variance-covariance matrix Ω. The model of equation 1 can be written more compactly as;

$Y(L) y_t = A u_t$ ----2

Where Y (L) = $Y_0 - Y_1(L) - Y_2 L^2 - \cdots - Y_p L^p$ and Y_i is matrix of coefficient with lag length i=0…p. L shows the lag operator. Moreover, for estimation, we obtain the SVAR model in reduced form by pre-multiply the SVAR model of equation (1) by Y_0^(-1) by both sides.

$Y_0^{-1} Y_0 y_t = Y_0^{-1} Y_1 y_{t-1} + \cdots + Y_0^{-1} Y_p y_{t-p} + Y_0^{-1} A\, u_t$ ----3

So, the equation 3 can be written as;

$y_t = c_1 y_{t-1} + \cdots + c_p y_{t-p} + \varepsilon_t$ ----4

Where, c_i= 〖Y_0^(-1) Y〗 _i and i=1…p and ε_t=c_0^(-1) A u_t . Reliably, the model of equation 4 compactly can be written as:

$B(L) y_t = \varepsilon_t$-----5

Where B (L) = I-B_1 (L)-B_2 L^2-…-B_p L^p and B_iis the coefficient matrix with lag length i=1…p, and L is the lag operator. The reduced form parameters of our SVAR model, along with their reduced form structural residuals ε_t, and covariance matrix Σ can be obtained through standard OLS methods. Further, we can recover the structural shock of all the variables by imposing the identified efficient restrictions.

We will use the stationary variables for our analysis and perform the Augmented Dickey-Fuller (ADF) test to check the data's stationarity. The hypothesis for the unit root test can be written as;

$Z_t = B_1 Z_{t-1} + u_t$-----6

The hypothesis is;

H_0:B_1=0 stationary

H_1:B_1≠0 non-stationary

We estimated our SVAR model separately for each type of cost of living to avoid the issue of multicollinearity.

The Identification of the SVAR model

The aggregate equation for our textile output and price is as follows;

$$Ptex_{it} = \beta_1 Ptex_{it-p} + \beta_2 inf_{t-p} + \beta_3 ce_{t-p} + \beta_{24} ip_{t-p} + \beta_5 m_{t-p} + \beta_6 ir_{t-p} + \beta_7 lr_{t-p} + \beta_8 ytex_{it-p} + \mu_p \text{---------}7$$

$$\text{Ytex}_{it} = \beta_9 \text{Ytex}_{it-p} + \beta_{10}\text{lb}_{t-p} + \beta_{11}\text{m}_{t-p} + \beta_{12}\text{r}_{t-p} + \beta_{13}\text{cpoil}_{t-p} + \beta_{14}\text{inf}_{t-p} + \beta_{15}\text{ip}_{t-p} + \beta_{16}\text{Ptex}_{it-p} + \mu_y \text{-------}8$$

Ptex is textile industry price, inf is aggregate inflation, ce is energy cost, ip is aggregate output, ir is the short-run interest rate, lr is the long-run interest rate, Ytex is textile output. The same equations can be written for each type of cost of living. The main aim of our study is to examine the impact of different kinds of cost of living on textile industry demand and supply. Therefore, it is crucial to isolate these responses from other macro-economic shocks to get an accurate response to industrial demand and supply. Consequently, we will first treat the macro variables as exogenous and identify our textile industry demand and supply.

$$Ytex_{it} = a + \sum_{i=1}^{p} \delta_{1i}\, Ytex_{it-p} + \sum_{i=0}^{p} \delta_{2i}\, Ptex_{it-p} + \mu_Y \text{------}9$$

$$Ptex_{it} = a + \sum_{i=1}^{p} \delta_{3i}\, Ptex_{it-p} + \sum_{i=0}^{p} \delta_{4i}\, Ytex_{it-p} + \mu_P \text{----}10$$

The maximum number of parameters in our matrix of equations 9 and 10 are N^2=4, and the maximum number of independent movements is N(N+1)/2=3. Therefore, the SVAR model for identifying textile industry demand and supply requires at least one restriction. We imposed this restriction in different steps. Following Jo et al. (2019), we will first estimate the VAR model for equations 9 and 10. Second, we have retrieved the standard deviations of our textile output and price data and scaled them with their respective standard deviations. Third, we have re-estimated the SVAR model for our scaled data; the process of scaling makes the parameters δ_1i and δ_3i approximately equal to one, and following Lee and Ni (2002) we assume that δ_2i=-θδ_4i, where θ is the speed of adjustment and is equal to 2 . The identification of demand and supply of the textile industry depends on the signs of δ_2^^ and δ_4^^ as the coefficents of δ_1^^ and δ_3^^ are positive by construction. Therfore, if δ_4^^ has a negative sign, equation 10 will be textile industry supply while equation 9 will be demand, and if δ_4^^ has a positive sign, equation 10 will be textile industry demand while equation 9 will be supply. Once we have identified our textile demand and supply equation, we can estimate the SVAR model to examine the impact of different living costs on them. The SVAR model now has N=3, and the maximum number of independent movements equals 9. We required at least 3 restrictions for the full identification of our model. Two restrictions are imposed on equation 11 as we assume that the cost of living equation is independent of the movement of textile output and price. The third restriction has been imposed on the textile output equation, similar to the restriction pattern on equation 9.

$$ce_t = \beta_1 ceoil_{t-p} + \mu_{oilt} \text{-----}11$$

$$Ytex_{it} = \beta_2 Ytex_{it-p} + \beta_3 ce_{t-p} - \theta\beta_4 Ptex_{it-p} + \mu_{yt} \text{-----}12$$

$$Ptex_{it} = \beta_5 Ptex_{it-p} + \beta_6 ce_{t-p} + \beta_7 Ytex_{it-p} + \mu_{pt} \text{---}13$$

The above SVAR model with restrictions can be written as;

$$\begin{bmatrix} \mu ce_t \\ \mu ytex_{it} \\ \mu ptex_{it} \end{bmatrix} = \begin{bmatrix} a_{11} & 0 & 0 \\ a_{21} & a_{22} & -\theta a_{32} \\ a_{31} & a_{32} & a_{33} \end{bmatrix} \begin{bmatrix} \varepsilon ce_t \\ \varepsilon ytex_{it} \\ \varepsilon ptex_{it} \end{bmatrix} \quad \text{-----}14$$

Where ce is the cost of energy, ytex is the textile industry output, and ptex is the price of the textile industry. We will estimate seven SVAR models following the above steps for each cost of living type .

4. RESULTS

The results of ADF tests are presented in Table 1 below. The SVAR model is estimated in both forms with stationary and non-stationary data in studies. However, we have preferred to go with the stationary data.

Table 1
Unit root test results

Variables	ADF Test at Level		ADF Test at First Diff		Oder of Integration
	T Statistics	P Values	T Statistics	P Values	
sy_auto	-2.69*	0.04	-	-	I (0)
sp_auto	-1.33	0. 571	-9.23**	0	I (1)
Cost of energy	-2.56	0.09	-11.73**	0	I (1)
Cost of food	-1.75	0.67	-3.35**	0	I (1)
Cost of edu	-2.87	0.21	-12.51**	0	I (1)
Cost of health	-1.45	0.34	-10.39**	0	I (1)
Cost of housing	-2.76	0.54	-4.23**	0	I (1)
Cost of trans	-2.89	0.21	-7.68**	0	I (1)
Cost of clothing	-1.54	0.43	-6.98**	0	I (1)
Output	-3.65*	0.02	-	-	I (0)
Inflation	-1.76	0.44	-10.01**	0	I (1)
Money	-3.67*	0.002	-	-	I (0)
Short run r	-2.78	0.24	-4.54**	0	I (1)
Long run r	-2.89	0.14	-3.69**	0	I (1)

Note: CV at 5% level with intercept=-2.88 and CV at 1% level with intercept=-3.48. ** shows significance at 1% * shows significance at 5% level.

Identifying the textile industrial demand and supply is the first objective of our analysis. We have estimated the SVAR model of equations 9 and 10. The results of our model are presented in Table 2 below. The results show that δ_4^^ is positive for all industries; thus equation 9 is the textile industry supply equation, while equation 10 is the textile industry demand equation.

Table 2
Identification of industrial demand and supply for the textile industry

Variables	Value of 8^4 of equation 10	Identification of Demand and Supply
Energy cost	0.166	Eq 9 (Y) Supply
	(1 1)	Eq 10 (P) Demand
Food cost	0.155	Eq 9 (Y) Supply
	(1 1)	Eq 10 (P) Demand
Education cost	0.085	Eq 9 (Y) Supply
	(1 3)	Eq 10 (P) Demand
Health cost	0.153	Eq 9 (Y) Supply
	(1 1)	Eq 10 (P) Demand
Housing cost	0.155	Eq 9 (y) Supply
	(1 2)	Eq 10 (P) Demand
Transportation cost	0.154	Eq 9 (Y) Supply
	(1 1)	Eq 10 (P) Demand
Clothing cost	0.15	Eq 9 (Y) Supply
	(1 2)	Eq 10 (P) Demand

Note: The lag length of each scaled SVAR model has been mentioned in brackets of column 2.

The impact of commodity price shocks on textile industry demand and supply is estimated through the SVAR model of equations 11 to 13. The impulse responses of all types of cost of living on textile industry output and price are presented in Figure 3 to make the comparison easy. Where SY_DS_Ytex is the textile output (for scaled and stationary data), SP_DS_Ptex is the textile price (for scaled and stationary data), DCPOIL is cost of energy, DCPF is cost of food, DCPEDU is the cost of education, DCPH is cost of housing, DCPT is cost of transport, DCPCF is cost of clothing and footwear, DCPHEL is cost of health. Table 3 describes the peak responses to the shocks in cost of living shocks and the contemporaneous structural coefficients.

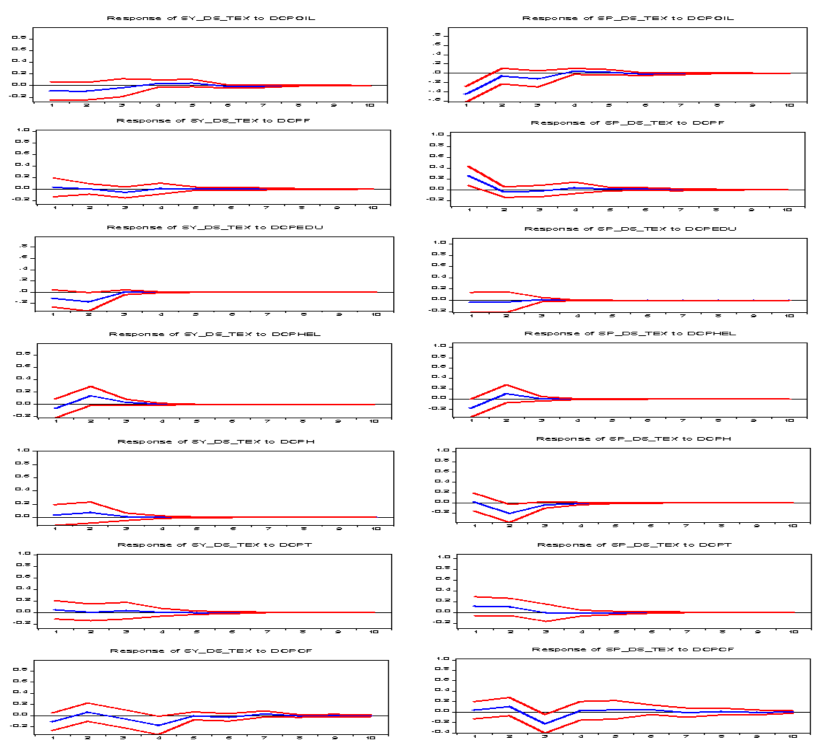

Figure 3. Impulse responses of textile industry demand and supply

Table 3
Pattern of IR of textile industry demand and supply

In the SVAR Model	Coefficient (p-value) in equation 12	Coefficient (p-value) in equation 13	Peak effect on output	Peak effect on price	Commodity price shocks effects
Energy cost	-0.156(0.42)	-0.576(0.00)	Insignificant	-*	Reduction in demand
Food cost	-0.013(0.44)	0.230(0.00)	Insignificant	+*	Increase in demand
Edu cost	-0.288(0.00)	-0.052(0.00)	-*	Insignificant	Reduction in supply
Health cost	0.119(0.00)	-0.063(0.00)	+*	-*	Increase in supply
Housing cost	0.121(0.00)	-0.253(0.00)	Insignificant	-*	Reduction in demand
Transport cost	0.075(0.97)	0.190(0.18)	Insignificant	Insignificant	Insignificant
Clothing and footwear cost	-0.152(0.10)	-0.40(0.83)	-*	-*	Reduction in demand

Note: The * is used if the peak responses are significant based on two standard error confidence interval for at least one time period of the study. "+" and "-" is for positive and negative responses, respectively. Mixed shows that both+ and - responses are of the same magnitude

The shocks in energy costs cause a reduction in demand for the textile industry and do not affect the industry supply significantly. The increase in energy costs has a significant impact on the purchasing power of consumers. It is commonly believed that the high energy cost leads to aggregate inflation (Hanif et al., 2017). Our study's results are inconsistent with the findings of Nizamani's study, which found a significant impact of energy cost on the production of the textile industry of Pakitan. The results of our study showed that the impact of energy cost is dominant through the demand side. The shocks in food costs also work through the demand side, increasing the PPI; however, in the short run, there is an increase in demand for textiles. Food is an essential element in the total consumption bundle; they spend much of their income on food costs (Khan & Ahmed, 2011). Therefore, the shocks in food costs work through the demand side. These results provide an unusual and exciting view that an increase in food prices leads to an increase in PPI, discouraging the export of the textile industry.

The shocks in education cost significantly decrease production in the second month with a lag of one month. Education is an essential investment in human capital, and the increase in education prices significantly impacts production. This finding also revealed the change in the supply decision in emerging economies like Pakistan. The shocks in cost, like education, play a vital role in the sustainability and development of the country (Raweh et al., 2023). It also shows the change in the pattern of consumption in the economy. Moreover, the health cost shocks increase the supply with a positive impact on output and a negative on prices. Housing cost shocks lead to a significant reduction in the demand of the textile industry in the short run. At the same time, transportation cost has no significant impact on output and price. The results of transportation costs are inconsistent with the study of Redding et al., 2015 which found a significant negative relationship between transportation cost and industrial production. The shocks in the clothing and footwear costs with a two-month lag decreased production and prices, ultimately reducing demand.

The above discussion shows that the textile industry is negatively affected by shocks in the cost of living, as most of the shocks lead to reduced demand or supply. Further, the demand-side impact is dominating the supply-side effect. The pattern of results also suggests that all cost of living impacts are for the short run, possibly due to the data's nature. Considering the importance of the textile industry in the domestic economy and international trade, the study's results provide valuable information to policymakers. The shocks in energy costs reduce the domestic demand for textiles and the PPI, whereas education price shocks reduce supply. Therefore, if the objective of the policy maker is to reduce the trade deficit, then the shocks in energy cost are not harmful as it produces PPI that can make domestic textile products cheaper in the international market and increase exports. The study provides valuable knowledge on the impact of different living costs on textile industry demand and supply. It show that high living costs affect the performance of the textile industry of Pakistan. However, our study used a limited data set. In the future, more studies can be done on extended data with variables like exchange rate and export of the textile industry to examine the impact of living costs on the industry's international competencies.

5. CONCLUSION

The high cost of living is unrestful for all economic agents. The textile industry of Pakistan, despite a comparative advantage in production, is still unable to perform at total capacity. This study provides a novel analysis of the effect of the high cost of living on the textile industry's demand and supply. The study added to the literature and differentiated between different types of costs. It uses monthly data from July 2008 to June 2020 and examines the impact of seven types of living costs. The study results suggest that energy, housing, clothing, and footwear costs reduce the demand for the textile industry. Whereas education cost reduces the supply, transportation cost's effects are insignificant. The results of our study provide valuable information to policymakers; it adds to the knowledge of which type of cost of living is harmful to the textile industry and which can lead to improvement. It provides a unique idea that different living costs affect the textile industry's supply and demand decisions. The study goes beyond the traditional estimation of living cost analysis, focusing only on energy costs. It provides a fascinating insight that energy cost does not affect the supply decisions of the textile industry; unlike the common understanding, it works through the demand side. At the same time, costs like education significantly impact supply-side decisions. The study's results can be used to make policies for the sustainability and growth of the textile industry.

Competing Interests

The authors did not declare any competing interest.

References

Ahmad, N., & Kalim, R. (2014). Implications of export competitiveness, and performance of Textile and Clothing Sector of Pakistan: Pre and post quota analysis. Pakistan Journal of Commerce and Social Sciences (PJCSS), 8(3), 696-714. https://doi.org/10.1007/s11069-012-0528-3

Arslan, A., Qayyum, A., Ayubi, S., Khan, S. A., & Asad ULLAH, M. (2022). The Impact of Energy Crisis and Political Instability on Outsourcing: An Analysis of the Textile Industry of Pakistan. The Journal of Asian Finance, Economics and Business, 9(3), 235-243.

Beckerman, W., & Jenkinson, T. (1986). What stopped the inflation? Unemployment or commodity prices? The Economic Journal, 96(381), 39-54. https://doi.org/10.1007/s11069-012-0528-3

Fardous, A. (2011, August 25-26, 2011). Economic effects of oil and food price shocks in Asia and Pacific countries: An application of SVAR Model New Zealand Agricultural and Resource Economics Society Conference, https://doi.org/10.1007/s11069-012-0528-3

Hamilton, J. D. (1983). Oil and the macroeconomy since World War II. Journal of political economy, 91(2), 228-248. https://doi.org/10.1007/s11069-012-0528-3

Hanif, M. N., & Jafri, S. K. (2008). Financial development and textile sector competitiveness: A case study of Pakistan. South Asia Economic Journal, 9(1), 141-158. https://doi.org/10.1007/s11069-012-0528-3

Hanif, M. N., Iqbal, J., & Khan, I. N. (2017). Global commodity prices and domestic inflation: A case study of Pakistan. SBP Research Bulletin, 13(1), 21-51.

Heady, D., & Fan, S. (2008). Anatomy of a Crisis. International Food Policy Research Institute.

Hussain, S. I., Hussain, A., & Alam, M. M. (2020). Determinants of export supply in Pakistan: A sector wise disaggregated analysis. Cogent Economics & Finance, 8(1), 1732072.

Imdad, H. (2023). Access to Finance for Entrepreneurs in MENA Region. CARC Research in Social Sciences, 2(1), 01-07.

Irshad, M. S., & Xin, Q. (2017). Determinants of exports competitiveness: An empirical analysis through revealed comparative advantage of external sector of Pakistan. Asian Economic and Financial Review, 6(3), 623-633. https://doi.org/10.1007/s11069-012-0528-3

Jo, S., Karnizova, L., & Reza, A. (2019). Industry effects of oil price shocks: A re-examination. Energy Economics, 82, 179-190. https://doi.org/10.1007/s11069-012-0528-3

Khan, M. A., & Ahmed, A. (2011). Macroeconomic effects of global food and oil price shocks to the Pakistan economy: A structural vector autoregressive (SVAR) analysis. The Pakistan Development Review, 491-511. https://doi.org/10.1007/s11069-012-0528-3

Khan, M. A., & Ahmed, A. (2014). Revisiting the macroeconomic effects of oil and food price shocks to P akistan economy: a structural vector autoregressive (SVAR) analysis. OPEC Energy Review, 38(2), 184-215. https://doi.org/10.1007/s11069-012-0528-3

Kilian, L., & Park, C. (2009). The impact of oil price shocks on the US stock market. International economic review, 50(4), 1267-1287. https://doi.org/10.1007/s11069-012-0528-3

Knop, S. J., & Vespignani, J. L. (2014). The sectorial impact of commodity price shocks in Australia. Economic Modelling, 42, 257-271. https://doi.org/10.1007/s11069-012-0528-3

Lee, K., & Ni, S. (2002). On the dynamic effects of oil price shocks: a study using industry level data. Journal of Monetary economics, 49(4), 823-852. https://doi.org/10.1007/s11069-012-0528-3

Maqbool, M. S., ur Rehman, M. A., ur Rehman, H., & ur Rehman, S. (2020). The Economic Analysis of Comparative Advantage and Competitiveness in the Textile Export Industry in Pakistan. Pakistan Journal of Social Sciences, 40(3), 1409-1416. https://doi.org/10.1007/s11069-012-0528-3

Miller, N., Peng, L., & Sklarz, M. (2011). House prices and economic growth. The Journal of Real Estate Finance and Economics, 42, 522-541. https://doi.org/10.1007/s11069-012-0528-3

Papapetrou, E. (2001). Oil price shocks, stock market, economic activity and employment in Greece. Energy Economics, 23(5), 511-532. https://doi.org/10.1007/s11069-012-0528-3

Raweh, B. A. A., Erbao, C., & Aloqab, A. (2023). Impact of Stock Market and Financial Development on Sustainable Development in Kuwait. CARC Research in Social Sciences, 2(1), 18-23.

Siddiqi, W., Ahmad, N., Khan, A. A., & Yousef, K. (2012). Determinants of export demand of textile and clothing sector of Pakistan: An empirical analysis. World Applied Sciences Journal, 16(8), 1171-1175.

Subhani, M. I., Habib, S., & Osman, A. (2007). Determinants of Export Performance in Textile Sector of Pakistan. South Asian Journal of Management, 1(1), 11-15.

Tang, W., Wu, L., & Zhang, Z. (2010). Oil price shocks and their short-and long-term effects on the Chinese economy. Energy Economics, 32, S3-S14. https://doi.org/10.1007/s11069-012-0528-3

Wajid, A., Almashaqbeh, H. A., AL SABI, M. S., & Raza, A. (2023). Factors Effecting On Supply Chain Management Performance in Textile Industries of Pakistan. International Journal of Social Science & Entrepreneurship, 3(2), 163-180. https://doi.org/10.1007/s11069-012-0528-3

Yasmeen, R., Shah, W. U. H., Ivascu, L., Tao, R., & Sarfraz, M. (2022). Energy crisis, firm productivity, political crisis, and sustainable growth of the textile industry: An emerging economy perspective. Sustainability, 14(22), 15112. https://doi.org/10.1007/s11069-012-0528-3