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Exploring Potential, Achievements and Problems in Pakistan's Sports Sector

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ABSTRACT

Objective: The objective of this study is to assess the potential, performance, and achievements of the sports sector of Pakistan

Research Gap: Although attention is paid to sports industry and sports activities internationally but there is a notable research gap in the facilitation and development of the in-house sports industry, particularly in terms of industrial growth and academic research.

Design/Methodology/Approach: This study uses mixed methods to assess sectoral export potential, focusing on intensive and extensive margins. Employing the Amiti and Freund (2008) technique, it delivers a dynamic analysis of export market changes, supported by key informant responses and secondary data.

The Main Findings: Findings show that the export growth of Pakistan's sports goods industry from 2010 to 2020 has been highly volatile, marked by periods of increase and decline. Despite a few strong growth years, the overall export value showed a decrease, largely due to a reliance on existing products, indicating a lack of innovation in goods. The COVID-19 pandemic caused significant losses in 2020. However, the sector's potential for revival remains strong, supported by its reputation for quality products. The growth is witnessed from intensive margins in the industry while the sports industrial cluster/EPZ needs due attention.

Theoretical / Practical Implications of the Findings: Pakistan's sports goods industry must focus on innovation and product diversification to boost exports. Developing industrial clusters and Export Processing Zones (EPZs) can enhance growth, while improving supply chain resilience is essential for industrial management. Capacity building of the workforce is essential for supporting competitiveness. Influencing the sector's strong reputation through effective branding and marketing can help capture new markets.

Originality/Value: This research is original and finds decomposed margins in sports sector in Pakistan and realizes the potential, need for innovation, investment and robust policy support.

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1. Background

Industrial development plays a role in the economic development while providing employment opportunities ensuring improved utilization of domestic skills & resources. It is not a question of innovation and R & D, but recognition that something being exported should be produced competitively at domestic level. Industrial export growth is always in focus for a country to achieve some competitive levels in international trade but a thought-provoking issue for developing countries is the need to reduce their reliance on customary export products while increasing export of new products.

Export diversification becomes important for developing countries and Pakistan is no exception to it, as it develops export competitiveness by widening the of export products, thus reducing dependence on customary exports that have an inclination of decreasing terms of trade (Ekman- Ozcelik and Erlat, 2013). Therefore, export diversification can be accomplished by altering the share of prevailing products (intensive margins) and moving towards new products in the export portfolio (extensive margins) to meet competition needs internationally.

Overall clusters enhance operational efficiency through specialization, enhance technology spillovers, bring innovation (Arif and Asadi, 2011), build synergies across firms & associated institutions, bring better marketing coordination opportunities (Sonobe and Otsuka, 2006), diffusion of best practices through human skills & better technology, increase productivity through employment generation, encourage value added exports, facilitate market internationalization (Sonobe and Otsuka , 2006) and profit margins thus promote exports. Many industrial clusters exist in Pakistan contributing to its trading sector.

In Pakistan the recent industrial policies i:e Strategic Trade Policy Framework: STPF 2015-2018; STPF 2020-2025 have shown special focus on export diversification. It is seen, in number of small countries having flexible economic policies, clusters or export processing zones have contributed to boost exports (Hone, 1971). Industrial clusters in various countries, merged with special economic zones, have seen to contribute meaningfully to gross domestic product, employment, exports enhancement, and attracting foreign investment. As according to Zeng (2011) the special economic zones have brought in novel expertise and adopted up-to-date management practices. Pakistan is now moving towards digitalization, technology adoption, and innovation in all sectors where coordination of clusters and export processing zones is important. Presently, there exist several industrial clusters relating to various industries in Pakistan. Amongst which there exist sports goods cluster in Sialkot which is of our interest in this study.

The central objective of the study is to discover the Pakistan's sports sector performance (sports goods industry, sports industrial cluster/EPZ) while assessing its export potential, current performance, and achievements. The "sports goods industry" is chosen because the sports goods sector is extremely resourceful and export oriented but appears to be working in a slower mode (in terms of export growth). The "sports industrial cluster/EPZ" is considered to assess performance of public-private partnership. The study will find the intensive margin of trade (growth of exports in already exported goods¹) and the extensive margin (growth of exports in new goods)to get insights for future sports goods exports.

Despite of adopting some technology in sports goods industry, the performance of the "sports sector" remained sluggish. The novelty has been built in the study by provoking thoughts about paying attention to the sport twins i:e sports goods industry and sports activities/games in Pakistan.

The study is organized as follows: Section two shows present outlook of sports industry: section three highlights the literature review; section four sets out conceptual framework, data and methodology, section five presents Key results, and section six then proceeds to conclude & develop recommendations on strengthening the sports sector.

2. Sports Goods Industry Outlook- Share, Volume and Potential

Pakistan's sports goods industry, plays a dynamic part in international sports trading. Although the industry is based on small industrial cluster, but exporting its products to different countries all over the world. In spite of having potential, the sports goods industry in Pakistan confirms a decline (negative growth of 9.04 percent) in terms of exports (Pakistan, 2018-19). Recently the sports goods again showed a drop both in volume and value by 29.7 and 23.2 percent, respectively (Pakistan, 2020-21).

The sports industry contributes in economy in multiple ways and almost 95 percent of total industry's production takes place in Sialkot. Firms in this industry are largely the small to medium sized enterprises which include about 360 formal and 10, 000 informal units (IGC, 2013). Being a sports goods production hub since years, this cluster is

¹ Old products

an example of agglomeration economies². “The cluster is located in 20 Kilometer radius of city of Sialkot while having several production plants in surrounding areas³ (TDAP Report, 2020). It is highly labor-intensive industry with basic infrastructure facilities, a dry port, and an international airport, it has become a major export center for the manufactured sports goods.

Pakistan’s sports goods have gained worldwide recognition over time; however, the industry has not been successful in gaining a justifiable rising share in global sports exports. Pakistan’s share in global world sports exports is less than 1 % as compared to a significant share owned by leading competitors in this industry like China, Taiwan, USA and Germany. China’s share in global sport goods export is 56 % which make it the leading exporter in this sector followed by Taiwan and USA with a share of 6 and 3 percent (SMEDA, 2021). Currently the Export Promotion Zone Authority (EPZA) in Pakistan listed active EPZ and the Sialkot Export Processing Zone is focused mostly due to sports goods. The product wise sports goods at Sialkot EPZ are manufactured to fulfil international sports goods demand. Because of the good quality of sports goods Pakistan’s sports articles have gained international reputation solely and have become a good source of earning foreign exchange. In the past, Pakistan’s sports goods industry contributed 1.51% in total exports, with the major export of footballs, almost achieving 43% of the sector's total export (Zafar et al., 2017).

Table 1: Exports with Top Five Export Destinations of Pakistan’s Sport Goods

Destination	Exports 2015(US\$ million)	Exports 2016(in US\$ million)	Exports 2017(in US\$ million)	Exports 2018(in US\$ million)	Exports 2019(in US\$ million)	Exports 2020(in US\$ million)
Germany	47.693	50.099	44.959	47.168	40.680	26.846
USA	51.645	40.403	42.913	58.223	55.601	46.530
U. K	36.031	31.386	28.361	32.044	28.426	19.645
Netherlands	16.469	18.059	16.914	19.015	18.984	20.058
Spain	14.582	12.786	12.345	14.053	15.004	12.342

Source: UN Comtrade

Top Five Destinations of Pakistan’s Sport Goods are shown in table 1. The Sports goods are mainly exported to Germany, USA, UK, Netherland and Spain. The exports in US dollar million is shown for the years 2015-2020.

Table 2: Shares of Sports Goods Exports in Total Exports of Pakistan

Year	Total Exports(\$Million)	Sports Goods Exports (\$Million)	Share of Sports Goods in Total Export (%)
2015	21837.32	339.40	1.55
2016	21487.20	320.61	1.49
2017	21349.17	306.95	1.44
2018	24056.12	338.04	1.40
2019	27542.76	308.01	1.12
2020	27979.20	241.31	0.86

Source: UN Comtrade & WDI

Table 2 displays shares of Sports goods exports in total exports of Pakistan. A clear decline in share can be observed from 1.55 to 0.86 from 2015-20. Similarly, table 3.4 below depicts sports sector product wise value & volume in 2018-2020.

Pakistan’s export performance in this sector has been dreary during the recent past, as on average during the last five years, the country has witnessed negative growth trends with the exception of only two years (2016-2020).

² Local economy where a large number of industries and services are present in close proximity to one another and benefit from the cost reductions and efficiency gains.

³ Wazirabad Road, Marala road, Daska road Pasrur road and Small Industrial Estate, Sialkot

The exports have also declined by 13.7 % during 2020-2021 (Pakistan Economic Survey, 2021). The category of sports goods in Pakistan which constitute major share in total sport’s goods export is “inflatable balls” and Pakistan is also one of the major exporting countries of this category in the world’s exports. The sport industry presently caters to almost 60 % of world demand of “hand stitched inflatable balls” which constitute a production of almost 39 million balls annually. Pakistan has been the largest exporter of footballs for various mega events and supplied “Telstar 18 footballs” in FIFA World cup 2018, and “Brazuca for the Soccer” World Cup of 2014. However, this category/product of inflatable balls has also witnessed a decline both in terms of quantity and value by 29.7 and 23.2 percent, respectively during 2020-2021 (Pakistan, 2020-21). Besides this, Pakistan’s export performance in other key sports goods like “articles of gymnastics/athletics, fishing apparatus, and funfair tokens” are lackluster and far behind its competitors (SMEDA,2021). In addition, some other constraints faced by the industry are: absence of better managerial skills, absence of succession plans, lack of policy initiatives and general policy ambiguity stemming from Government decisions (SMEDA,2021). For a resilient and sustainable sport goods industry, there is a need to resolve these issues so that industry can pick up its lost growth momentum and become a competitive global export industry.

Table 3: Product Wise Value & Volume of Sports Goods

Commodity Code	Commodity	2018 Trade Value (US\$)	2019 Trade Value (US\$)	2020 Trade Value (US\$)
89471	Fishing-rods, fishhooks & other line tackle; fish-landing nets, butterfly nets & similar nets; decoy birds (further than those of heading 896.5/898.29) & alike hunting/shooting requisites, n.e.s.	376971	223662	349298
89472	Ice-skates & roller-skates (embraces skating boots with skates)	1253	94269	603924
89473	Snow-skis & other snow-ski tools	301773	137849	433875
89474	Water-skis, surfboards, sailboards & other water sport tools	12602	10165	27234
89475	Golf tools	199887	222585	671585
89476	Tennis, badminton/similar rackets, whether/not strung	3958914	5565168	8110483
89477	Gloves, mittens & mitts, particularly designed for sports use	121220727	84137701	63303314
89478	Objects & tools for general physical exercise, gymnastics/athletics.	4285825	4281098	8027838
89479	Sports goods, n.e.s.	207687573	213338823	159786641

Source: UN Comtrade & WDI

Overall performance of sports industry shows marginal improvements and hence bear a decline in its export share. These facts from secondary data clearly indicates that Pakistan’s sport goods have world-wide repute and firms have worked individually on expansion and market internationalization.

2.1 Regulatory Structure of Sports Good Industry Management

The presence of several bodies, authorities and associations for sports industry is a big support for sports goods industry. Trade Development Authority of Pakistan (TDAP), Sports Industries Development Centre (SIDC), Regional Business Center (RBC) – Small & Medium Enterprises Development Authority (SMEDA), Sialkot Chamber of Commerce & Industry (SCCI), Pakistan Sports Goods Manufactures & Exporters Association (PSGMEA). As the Sports good industry is mainly targeting its exports without much facilitation by the government. Presence of such authorities are mainly the reason of keeping this industry moving for exporting goods but there is a need to move for extensive margins and export diversification.

Sialkot Export Processing Zone⁴ is an important body established through a MoU between Export Processing Zone Authority (EPZA) and Punjab Small Industries Corporation (PSIC). It started working in 2005 and is established

⁴ Located at Sialkot EPZ at Sambrial on Sialkot Wazirabad Road. 37 operational units.

on area of 238 acres. All operational facilities are provided by EPZA adopting formal rules / procedures. Utilities (Electricity, Gas & Telecommunication) are being provided to SMEs in that area. Value of exports from this cluster is US \$ 21.030 million in 2019-20, and cumulative export is US \$ 58.278 million⁵. The EPZ helps in attracting investments in sports industry along with other industries⁶ present in that area (EPZA website, 2021)⁷. The important sports goods produced in Pakistan are reported in (Anex). These goods are famous exports and enjoy market recognition all over the world. With time, the Sialkot cluster enjoys connection with major world level brands (Adidas, Nike, Puma, Select, Lotto, Umbro, Wilsons) and supply sporting goods to these international icons (IGC, 2013).

3. Literature Review

This section is designed to highlight prospects of sports sector of Pakistan. The availability of literature on the sports sector, its performance, and achievements across the world mentioned by Afraz et al. (2014), IGC (2013), Zafar et al., (2017), SMEDA report (2021) shows that some attention is paid to sports industry and sports activities internationally, but in-house problems exist which shows the industry needs some serious facilitation.

3.1 Sports Goods Industry in Sialkot

The history of the sports industry in Sialkot dates back 200 years. For the first time, the foundation of an industry was laid to produce sports goods for the British army. Gradually, the factory expanded its production from cricket bats, polo and hockey sticks to more sophisticated products like sportswear and improved sports items. Sialkot is now considered as the hub of sports goods production in Pakistan, having formed a cluster consisting of small and then medium-sized firms with 360 or more formal and 10,000 or more informal units, and approximately 95% of sports goods production takes place in the city of Sialkot (Zafar et al., 2017).

Moreover, the sports industry experienced a transition at the time of independence and then successfully expanded its production of (sports) goods, while major product manufacturing technological shifts in the sport industry occurred during the 1980's, which discouraged Pakistan's exporters of sports goods. Due to this technological change, Pakistani exporters fully relied on the imports of the composites, and hence the manufacturers were unable to survive at that time. As a result, they had to shut down their setups and left the industry (Khan and Khalique, 2014). After that the remaining exporters made efforts to excel at their own. Currently, there are five major categories of sports goods manufactured in Pakistan composed of "articles and equipment for physical exercise, gymnastics, and athletics; articles and equipment for fishing; sports gloves; articles and accessories for billiards; and articles for funfairs". The sports industry is a vital source for the economy of Pakistan by providing employment opportunities directly and indirectly. A total of about USD 177 million in total sports products were exported during 2020. Of these, 70% of the contribution towards the sport goods exported was from inflatable balls (SMEDA, 2021).

The sports industry is confronting with a myriad of issues and challenges which restrain the growth of these firms. Not only that, but these firms are also unable to change their status from small and medium-sized to large sized manufacturing firms. The issues include a shortage of energy/power, technological issues, and skilled labor issues. Moreover, the effect of COVID-19 on the export of sports goods was witnessed due to meagre industrial production during 2020-21, as the export of sports goods dropped from \$222.7 Billion in 2019-20 to \$192.2 Billion, which shows a negative change of about 13.7% (Pakistan, 2020-21)⁸.

Pakistan's government is focusing on the development and growth of industries to achieve sustainable economic growth. Unfortunately, they ignored the sports industry, which is a much more competitive industry and has the potential to contribute more to economic growth. Globally, the sports industry of Pakistan is a well-reputed and has achieved good fame, but this industry is unable to convert this opportunity into long-term and sustainable growth for the country. Although the sports industry is playing a very important role in the economic growth of Pakistan through its major contribution to export growth, but yet its own flourishing remains contracted. A survey by

⁵ Other industries also included.

⁶ Surgical goods, leather products & garments, furniture, imitation jewelry

⁷ <https://epza.gov.pk/>

⁸ Pakistan Economic Survey

Zafar et al.(2017) pinpointed that in the sports sector, the main constraint to the growth of small firms is their inability to bring innovation and diversification to their product lines. Moreover, firms that have produced a variety of products and changed themselves in accordance with global demand have achieved higher growth. Diversification of products into new and existing products spurs export growth.

Furthermore (Zafar et al., 2017) found the issues and challenges facing the sports industry in Pakistan. They also focused on the contribution of the sports goods industry to the growth of economy. According to the study, the sports sector, despite being an important base of economic growth in Pakistan, is facing a number of challenges, including a lack of skilled labor, technology, infrastructure, waning government interest, and a power shortage. If the government really wants to improve the performance of this sector, then it should focus on the aforementioned constraints along with ensuring subsidy and credit facilities to the exporting firms in the sports industry at least.

On the other hand, (Khan and Khalique., 2014) conducted several interviews with stakeholders from small and medium manufacturing firms of sport goods. They identified the constraints faced by these firms. During the interviews, it was revealed that these small and medium-sized businesses are not borrowing from commercial banks due to the high interest rates. The management practices, specifically in small and medium firms, are dispensed by the possessor, which is another obstacle to the growth of that specific firm. The chief but inefficient labor force contributes to the firms' low productivity. To add to this, innovation and investment in R&D are lacking in Pakistan's sports industries and their inability to diversify their products according to the global demand pattern. The most serious problem which affects firm efficiency and productivity is the shortage of energy. The study done by Afraz et al. (2014) considered the engineering sector which also undertakes sports goods industry.

Concluding the review of literature, it is observed that Pakistan's share of sports goods exports has deteriorated. The sector has also recorded the high negative annual growth of exports as compared to its entrants specially noted for articles of gymnastics/athletics, articles /equipment for fishing, and funfair items.

3.2 Industrial Clusters & Export Processing Zones

As the industrial clusters in Pakistan share traits of networking by establishing links between local enterprises (public, private), as well as supporting organizations (e.g., local governments, research institutions NGOs, export processing zones). Industrial clusters enhance access to markets and help to improve information flows. The rapid advances in communication technologies can be expected adding to more profit margins. It is important to assess the linkages among industrial cluster and EPZ.

3.2.1 Performance of Export Processing Zones

There is some literature which provides evidence of decreasing degree of export intensity in developed or developing economies (Crespo and Worz,2005). Some studies focus on increasing industrial specialization (Aiginger and Davis, 2004; and Brulhart, 1998). According to Madini (1998) export processing zones are suitable to promote export promotion and frames the general structures of these zones. Having some shared common features, export zones are also distinguished by public/private ownership, by management, facilities, and services they offer. Zones can play an active role if properly managed with new amendments, and liberalization agendas.

Export Processing Zones (EPZs) tend to exert a positive effect on the welfare in the host country through higher wages offered to the local workers (Akhtar, 2003). Additionally, (Sivalingam, 1994) and (Warden, 1999) provide credible evidence using various case studies in explaining the advantageous effects of EPZs. After following a strict Import Substitution Strategy (ISS), Pakistan moved towards export promotion in the 1980s and the first EPZ was established in Karachi in 1989. Seven Special Economic Zones (SEZ) were established between the period 1983 to 2005 (Naeem, et al., 2020). Later in the SEZ Act in 2012, Pakistan encouraged six industrial estates and offered them the prominence as SEZs (Khan, 2019)⁹.

Another key research critically analyzes Pakistan's sports policy, focusing on its design, development, delivery, and public evaluation. Evaluating the period 2019–2021, the research highlights key trends and challenges faced by

⁹ Industrial Estates (Bhalwal, Multan (Phase-II), Rahim Yar Khan and Mianwali , Rawalpindi and Dera Ghazi Khan).

sports organizations in a politically unstable setup. The study finds that administrative inefficiencies and the devolution of the Pakistan Sports Board, following the 18th constitutional amendment, have hindered effective policy implementation. Moreover, a lack of public and private investment, along with inequitable fund distribution, has limited the role of sports in socio-economic development. The authors concluded that Pakistan's sports policy and structures fall short of international standards and require significant reforms (Ali et al., 2023).

In addition to this, Ahmad et al. (2023) estimated Pakistan's export potential for both new and existing products, along with potential destination markets, using a nonparametric approach based on demand, supply, and some ease factors. Their findings reveal a significant number of new export products (extensive margin) and existing products (intensive margin) with untapped export potential. They estimate the unrealized export potential to be \$2 billion at the extensive margin and \$5 billion at the intensive margin. The identified new products span a range of value-added, semi-finished, and intermediate goods.

This study adds value by addressing the underexplored margins in-house sports industry, providing insights into its challenges and new prospects. It encourages policy agendas to support industrial growth, enhance competitiveness, and promote R&D options within the sector. The study aims to encourage sustainable practices for SMEs to improve productivity and market access. By filling a gap in literature, it also contributes to the wide-ranging understanding of the sports industry's potential for country's development.

4 Theoretical Framework

Export diversification is evident for economic growth, however customary trade theories mostly emphasize specialization. Adam Smith & David Ricardo advocate for specialization in areas of comparative advantage, while the Heckscher-Ohlin theory suggests focusing on factor intensity. However, modern trade theories now emphasize the part of export diversification in driving economic progress. Various studies offer ways to decompose trade growth (e.g. Hummels and Klenow, 2005; Felbermayr and Kohler, 2006; Prusa and Besedes, 2007). This study aims to see the decomposition of fluctuations in export market and its decomposition will be compatible with the technique used by Amiti and Freund (2008) and draws dynamic analysis over the period of study. Modern literature has emphasized the part of export diversification and market internationalization in economic progress. Thus the concept of diversification can be studied in more detail with intensive and extensive margins of sports good industry. These margins explore how importantly they are contributing for economic growth. Keeping in the scenario built on Pakistan's sports sector, this study looks for intensive and extensive margins in products exports. Feenstra's (1994) innovative work on measuring import prices by accounting for the introduction of new goods resulted in an index of variety growth, which has been extensively utilized in subsequent research. Based on this work, the technique has also been used to find China's export growth (Amity and Freund, 2008).

As discussed, the objective of the study is to discover the sports sector (sports goods industry, sports industrial cluster/EPZ, sports activities/games) of Pakistan while assessing its export potential, performance, and achievements.

4.1 Mixed Methods Approach

The overall methodology is designed as initiating with quantitative part for the assessment of intensive and extensive margins of sports sector makes this study unique so as to get to know how much old & new products are producing margins. Second part is conducting few qualitative interviews with exporters, chamber of commerce, and exploring secondary data facts from webinars, and reports.

4.1.1 Quantitative Assessment:

For the quantitative analysis, (Amity and Freund, 2008) decomposition methodology is used, focusing on the value¹⁰ of exports. This approach is ideal for analyzing a country's export growth over time, as it breaks down growth into three components from one year to the next, rather than comparing countries. Following (Amity and Freund, 2008), we have applied this decomposition to assess year-to-year export growth in three ways:

¹⁰ It does not consider the shares in the import market.

- Intensive Margins shows increase in the export of existing product¹¹
- Disappearing goods shows the decrease in the export growth ¹²
- Extensive Margins shows the new goods ¹³

Formally writing in equation form we have

$$\frac{\sum_j x_{t,j} - \sum_j x_{t-1,j}}{\sum_j x_{t-1,j}} = \frac{\sum_{j \in I_t} x_{t,j} - \sum_{j \in I} x_{t-1,j}}{\sum_j x_{t-1,j}} + \frac{\sum_{j \in I_t^N} x_{t,j}}{\sum_j x_{t-1,j}} - \frac{\sum_{j \in I_t^D} x_{t-1,j}}{\sum_j x_{t-1,j}} \tag{1}$$

(Export Growth) (Intensive margin) (Extensive margin)
 Extensive margins as demarcated by (Freund, 2008) are the modification of “the New Goods component and the Disappearing Goods component.”

Whereas, IN_t is the goods exported by the country in the current time period t (excludes previous year goods and considers new products); ID_t refers to goods that were exported in the previous year but are not exported in the current year (disappearing products); I refers to the products exported in both the years (current and previous); X_{t,j}, X_{t-1,j} refers to the values of the exports of “product j” in the current year t and the previous time period t-1, respectively.

The product exports data in terms of values is taken for sports industry of Pakistan. Data are taken from UN Comtrade. However, the study has done decomposition of export values from 2010-2020. Data for all product exports at 5-digit level of SITC Rev4¹⁴ classification are collected.

4.1.2 Qualitative and Secondary Data Assessment

For the qualitative assessment, the study moved towards having few interviews from key stakeholders of Sports industry. Purposive sampling has been done. We also searched secondary sources including data sources, local and international media sources, PIDE¹⁵ webinar discussions to get accurate knowledge of the issue.

4.2 Empirical & Quantitative Assessment

Another objective of this study is to analyze the extensive and intensive margins in the export growth of Pakistan's sports goods industry. The quantitative method is adopted to address this aim.

4.2.1 Extensive and Intensive Margins

This section presents some note-worthy results for sports goods. Decomposition of the export growth of sports goods (SITC 5- Digit), is adopted, to find margins (extensive and intensive margins) for 2010-2020. With effective export diversification, Pakistan can have improvement in its global terms of trade for sports goods and develop a more dynamic export sector.

Table 4: Intensive-Extensive Margins of Export Growth- Sports Goods

Division 89, Sports Goods(5-digit)					
Share of export growth					
Year	Export growth (%)	Intensive (%)	Extensive (%)	New (%)	Disappearing (%)
2011	5.67	5.68	-0.0004	0	0.0004
2012	1.69	1.68	0.0110	0.0111	0
2013	-2.77	-2.77	0.0005	0.0005	0
2014	10.42	10.42	0	0	0

¹¹ The increase in product export growth in both years.

¹² Products exported in the base year but not in the final year.

¹³ Increase in export because of the export of the new products.

¹⁴ SITC classification gives more meaningful results in product data.

¹⁵ PIDE is a think tank producing research material on several economic and policy issues.

2015	-7.31	-7.31	0	0	0
2016	-5.53	-5.53	-0.0028	0	0.0028
2017	-4.25	-4.25	0.0008	0.0008	0
2018	10.12	10.12	0	0	0
2019	-8.88	-8.88	0	0	0
2020	-21.65	-21.65	0	0	0
2010-2020	-23.95	-23.96	0.0070	0.0070	0

Note: All the values are in the percentage form.

Source: Author’s contributions

Table 4 shows that export growth of sports goods increased by 5.67 percent in 2011. In 2012, the percentage increase in the export growth of sports goods was only 1.6 percent compared to the previous year. Export growth was negative during 2013, but it showed high growth of up to 10.42 percent during the year 2014. Again, a decline was observed as it was -7.31, -5.53, and -4.25 percent during 2015, 2016, and 2017 respectively. During 2018, once again, the growth of exports increased by 10.12 percent as compared to the previous year but decreased during 2019 (-8.88%) and 2020 (-21.65%). The finding of negative growth rate in 2020 is consistent with the figure mentioned by SMEDA (2021). The export growth rate showed several ups and downs in Pakistan’s sports goods industry.

If we consider the export growth of sports goods during the period from 2010 to 2020, it is evident (from the table 5) that the growth of exports decreased to -23.95 percent (in value terms). It is also indicated that the contribution to the export growth of sports goods is mainly from intensive margin while a little contribution is from extensive margins. Looking at the “new” and “disappeared” goods, it appeared they have very little contribution in margins from new goods. This addition of new goods to the sports goods remained negligible. In particular, Pakistan’s export of sports goods is moving around these 10-12 goods only, confirming the growth was basically from intensive margins. For the period 2010-2020, the export of sports goods (in value terms) increased because of the increase in the existing goods, not because of the new goods. This shows lack of investment, innovation, and lack of policy support in the industry.

The decline in the export growth of sports goods during 2020 is the effect of COVID-19 which have badly affected the business in sports industry. The repercussion of COVID-19 on the sports industry was severe and it also halted the sport events in the whole world for a while. The industry is running in losses as shown in results and consistent with the findings of Manzoor et al., (2021). There is a decrease of about 23 percent in the exports of Pakistan’s existing sport goods and products.

The “sports goods industry” has shown fluctuations in export growth since 2010 as this industry is forward looking, and entrepreneurial as indicated by Afraz et al., (2014). In 2011, the export growth is witnessed as 5.6, in 2014 export growth is 10.4, while in 2018 the sector again showed growth in exports reported as 10.12. This shows that the sector has potential to revive its export growth rate due to its fame, quality products and presence of raw material in the same cluster.

5 Key Findings

5.1 Qualitative Aspect- Evidence for Sports Goods Industry

This section targets to spotlight the position of the sports goods industry (Sialkot cluster) by analyzing content through secondary sources. Despite of having potential in sports sector, the performance remained mixed in terms of export growth. As seen in section 3 (table 3) the export growth is declining, so this leads us to discover the key reasons that causes slow growth in this industry. The qualitative part of the study and secondary evidence has identified the causes behind the decrease in export growth. Sialkot's sports industry, as discussed in PIDE, (2021) despite being the hub of sports goods manufacturing for decades, Sialkot's sports industry has not evolved into a significant conglomerate. There are several issues that prevent the process of growth as also identified by Ali et al. (2023). Despite being famous internationally, the in-house performance of industry is not very impressive.

Infrastructure and energy shortages: Major problems are the unavailability of sufficient physical infrastructure, and energy shortages. These factors force the existing firms to use their resources in an arranging necessary

infrastructure and energy needs. In fact, this prevents them to focus on their products, and invest much in sports related products (PIDE, 2021).

Lack of human resource development: The industry is more labour intensive; hence the labour needs to learn skills. Shortage of training associations for technical training of labor is another constraining factor. Some institutes exist under public sector but lacks quality training which doesn't produce skilled labor. Another constraint is that some government bodies harass the businesses (as reported by businesses) through discriminatory regulations and heavy taxation (PIDE, 2021).

In-country regional discrimination: Another concern is the regional discrimination as the entrepreneurs of big cities (Lahore, Karachi, Faisalabad etc) enjoys special grants from public sector while Sialkot the sports hub has not been privileged. The SMEs in Sialkot needs public sector attention so that small entrepreneurs can get equal chances to grow (PIDE, 2021). They need loans, investments, or ease of doing business.

Issues of allied industries: There are some issues of allied industries, for example, the relocation of tanneries (industrial base) to safe industrial sites due to environmental considerations. Relocation of the industry takes 2-3 years due to the shift of heavy machinery. When due facilitation is not provided from the public bodies, the process may become difficult for entrepreneurs, and may harm the exports of sports sector (PIDE, 2021).

No domestic market and no prominent branding: The view of industrialist captured from a secondary source leads us to think there is no domestic market for sports, and no prominent branding for sports. When it comes to exports, lesser product diversification exists.

High production cost & freight charges: The industry faces very high freight charges for both air and sea freight shipments along with lack of availability of containers. Decrease in flight operations and increase in transit time is an added challenge. Due to high courier, sea freight and air freight rates, the exports of small industries are suffering. High production costs due to increase in prices of raw materials, electricity and gas bills. Congestion at destination airport and seaports, considerable increase in air and sea freight prices, and shipping schedules are not being followed by the shipping lines. Problems are faced in importing raw materials (like artificial leather, latex, inks, foams, fabrics and garment accessories) as too much transit time is taken by the shipping line as well as the airlines.

Policy measures expected from government: Policy measures are expected from government to boost sports industry such as provision of incentives on electricity and gas bills to export oriented companies of Sialkot; timely execution of DLTL (drawback of local taxes and levies) and launch of one window operation to resolves the issues faced by the industry.

Employability is affected due to high failure rate in establishing new business: The sport goods industry being an intrinsic part of Pakistan's economy and a good source of employment to 300,000 to 350,000 skilled and unskilled laborers. Additionally, the sector signifies roughly 1.42 percent of the country's total export base (Afraz et al., 2014). Despite of being important sector for Pakistan's economy, it is encountered with complications due to inadequate growth prospects. For instance, as mentioned by Afraz et al. (2014) establishments in Sialkot are working as commercial exporters' facing high failure rates due to lack of direction.

Concluding this section, goods produced in Sialkot are mainly cricket bats, footballs and other accessories, lawn tennis, table tennis balls, various types of tennis rackets, squash and badminton and other sports goods. The industry faces problems as there are energy and infra structure shortages, high production costs, lack of new policy measures which affect the sector's performance and competitiveness. The businesses are in direct contact with international firms, even the cost saving technologies are available and applied in manufacturing of these goods. Still the industry needs a push from the government and domestically this market needs to be established. The industry needs, for the exportation of sports goods, are decrease in airfreight & sea freight rates, easy availability of containers, provision of incentives on electricity and gas bills for export-oriented companies.

5.2 Achievements of Sports goods/ products

Despite being at neglect, some products of Pakistan gained international fame and the following are the key achievements and international media highlights.

Box 1-Achievements by Pakistan: International Media Highlights

- ◆ Russia used Pakistan’s famous thermo-bonded footballs in 2018 world cup. (reported by Al-Jazeera)
- ◆ Russian Ambassador (Alexey Dedov) to Pakistan in 2018 confirmed the use of Pakistan-made footballs for the World Cup contests.
- ◆ In 1982, Forward Sports (sport equipment company) received first order and Pakistani firm will be making the World Cup footballs. hosted by Spain. (Reported by Saudi Gazette)
- ◆ Forward Sports makes footballs and remained the official footballs provider during World Cup (2014- Brazil).
- ◆ “When millions of football lovers cheer on their favorite teams at the 2018 FIFA World Cup to be held in Russia, Pakistanis will have a special reason to rejoice, although the 198th-ranked football nation will not be participating in the mega event”. (Reported by Aljazeera before FIFA 2008)
- ◆ “Pakistan’s famous footballs used in the World Cup matches, making over 200 million Pakistanis feel their presence in the event”. (Reported by Aljazeera)
- ◆ “All the major giant international sports brands like Adidas, Nike, Puma, Select, Lotto, Umbro, Wilsons etc. are sourcing their supply of footballs from this (Sialkot) export-oriented city and hub of sports goods production. Most of the sports goods are exported to foreign countries and a reasonable amount of foreign exchange is earned in addition to provision of jobs to thousands of workers in the country”. (Reported by Saudi Gazette)
- ◆ Sialkot produces almost 40 percent of the world's soccer balls. Sialkot-produced balls were a part of World Cup competitions till 1982. (Reported by Joe Pinsker - The Atlantic)
- ◆ In past, Pakistan remained supplier of hand-stitched soccer balls for nearly all the world cups (1990s to 2010).

Source: August 14, 2018 <https://saudigazette.com.sa/article/541091>
 February 3, 2018-<https://www.aljazeera.com/sports/2018/2/3/russia-to-use-pakistans-footballs-in-2018world-cup>
<https://www.theatlantic.com/business/archive/2014/07/one-city-in-pakistan-produces-nearly-half-of-the-worlds-soccer-balls/373802/> July 2, 2014
<https://www.aa.com.tr/en/asia-pacific/pakistani-footballs-to-shine-again-in-2018-world-cup/1053180>

5.3 Potential of Pakistan’s Sports Goods Industry

Traditionally, Pakistan produced hand stitched footballs. In 2013 Forward Sports transferred to producing thermo-bonded footballs, where the panels are fused together using heat instead of traditional stitching (Box 2). The local manufacturers from Pakistani companies worked hard and exported 42 million footballs ahead of FIFA world cup 2014. Now Pakistani manufacturers compete with their Chinese counterparts on the basis of high-quality end products. Forward Sports company was given the task of making footballs for the mega event- tournament FIFA World Cup 2018. Pakistan has witnessed potential in sports industry and developed some infrastructure. At one time the need of airport was also felt there and it is a reality today (see table 5).

Box 2-Moving Towards High Quality, Sophisticated Technology & Achievements

- ◆ Pakistan initially produced hand stitched footballs. Latter switched to thermo bonded balls in 2013.
- ◆ Local manufacturers from Pakistani companies compete with their Chinese equivalents due to their quality finished products.
- ◆ "Huge football production business is being transferred from China to Pakistan because of the quality we are providing to the world," view of Pakistan Readymade Garments Manufacturers and Exporters Association, reported in Al Jazeera.
- ◆ Masood's Sports company remained contracting manufacturer of global sports apparel giant Adidas. The company worked for Adidas and provided large stuff for the World Cup. The company’s a capacity is to make approximately 700,000 footballs on monthly basis.
- ◆ Forward Sports company was given the task of making footballs for the mega event- tournament - Fifa World Cup 2018.
- ◆ Previously, thermo-bonded balls made in Pakistan attached the panels through heat - the up-to-date technology embraced by Adidas and transmitted to Forward Sports in 2013. (Reported by AA- Asia Pacific).

Table 5: Export Potential in Pakistan’s Sports Industry

Measures taken by Industry	Potential in Sports Industry	Impact
Good quality products	❖ Compete with other counterparts	❖ Reached worldwide fame ❖ Demand of football in FIFA World cup ❖ Industry earned profits ❖ Employment opportunities provided to skilled workers
Innovative	❖ Thermo bonded balls ❖ Moved to high quality	❖ Earned profits ❖ Earned fame worldwide

❖ Technology improvement

Customer satisfaction	❖ Capacity to produce and deliver	❖ Time to time getting orders from foreign countries
Good quality, durable & safe products	❖ Skilled workers producing good quality products	❖ Durable and safe goods, hence foreign companies prefer to buy with sports market in Pakistan
		❖ Earning foreign exchange
Developed supply chains & export market access	❖ Several SMEs exist in Sialkot	❖ Market is performing well internationally rather than domestic market
	❖ Skilled labor available	❖ Earning foreign exchange
	❖ Availability of Airport	❖ Source of employment of people
	❖ Timely delivery of products	

Source: Author’s analysis (drawn on the basis of qualitative information)

In a nutshell, the above analysis shows the export growth of Pakistan's sports goods industry from 2010 to 2020 has been highly volatile, marked by periods of increase and decline. Despite a few strong growth years, the overall export value decreased by -23.95%. This fluctuation is largely due to a reliance on existing products, indicating a lack of innovation and investment in new goods. The COVID-19 pandemic further exacerbated the industry's struggles, causing significant losses in 2020. However, the sector's potential for revival remains strong, supported by its reputation for quality products and the availability of raw materials. To realize this potential, increased investment and robust policy support are essential.

6. Conclusion

The aim of the study is to assess the potential, performance, and achievements of the sports sector (Sports goods industry, sports industrial cluster/EPZ) in Pakistan. Mixed methods technique is adopted to explore useful information.

The “sports goods industry” is chosen because of the forward looking, inventive and export destined nature but appears to be working in a mixed and slower mode. Even though, adopting technology in sports goods industry, the performance of the “sports sector” remained mixed in terms of growth. The “sports industrial cluster/EPZ” is considered to assess performance public private partnership which is missing. Many industrial clusters exist in Pakistan contributing to its trading sector. Although the industrial cluster is small, but this industry is managing to export its products to various countries worldwide. Pakistan’s sports stuff has gained recognition due to better quality and have become a good source of earning foreign exchange. Football is one of the major products of this industry. At times, the sports goods industry contributed to total exports of Pakistan, with the major export of footballs. In recent years, the sports goods again showed decline both in quantity and value. This mixed performance was the motivation behind designing this study to find out sports industry prospects.

The study also evaluated the intensive and extensive margins of the sports goods industry. By adopting a decomposition technique, it has shown the appearing and disappearing goods in current years. Findings show the presence of goods in particular year and enable the policy makers to adopt suitable policy measures for new appearing goods. Similarly, in case of disappearing goods, findings give us a clear indication of goods for which government can carry on further strategies and investments. The presence of sports cluster highlights the importance of sports sector but due to lack of coordination among public-private and regulatory bodies this sector is lagging behind.

The study concludes that Pakistan government didn’t focus export opportunities of sports goods industry which has an adverse impact on market internationalization, regional integration and employment. In fact, domestically it appears as a neglected sector and needs to get boosted. Firms are integrating individually and due facilitation is direly needed for the sports industry.

6.1 Recommendations

In the sports goods industry, it is recommended to build more capacity, expansion of the industrial base, provision of energy & infrastructure to make sports products competitive worldwide. The government should facilitate the industry by providing ease of doing business, smooth production operations and introduce new technology. As the sector is labor intensive, hence a clear policy guideline for inducting or training human resource is required.

In fact, domestically, Sports goods industry remained neglected and needs to get boosted through well thought initiatives, provision of export financing, ease of doing business and building supply chain resilience. By adopting suitable steps at domestic level, the industry will be able to improve its performance as this industry has a hidden potential.

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