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Export Trade Potential: Handbags

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Abstract

The study was conducted to understand the present and future situation of the leather industry with respect to the exportation of handbags. However, it has been observed that the overall exports of Pakistan have increased from 858 million dollars in 2020 to more than \$1 billion in 2021. But, the exports with respect to Chapter 41 have decreased. However, a little increase has been found in Chapters 42 and 64. Moreover, the exports of Chapter 41 have decreased from 467 million dollars to 187 million dollars, the exports of Chapter 42 have increased from 681 million dollars in 2011 to 697 million dollars, and the exports of Chapter 64 have shown a slight increase of 23 million dollars, as they were 112 million dollars in 2011 and reached 141 million dollars in 2021. But, the exports of handbags have remained stagnant at 4 million during the whole period. However, the imports have increased from 2 to 4 million. The researcher then developed a self-administrated survey to collect data from the relevant exporters. Hence, he found at the end that cotton is the most commonly used fabric in the manufacturing of handbags in Pakistan, Cambodia, and Vietnam. However, Cambodia and Vietnam don't produce a significant amount of cotton, while Pakistan produces 60% of the total domestic cotton consumption inside the country. It was further found that the acquisition of semi-finished leather is cheaper in Vietnam and Cambodia as compared to Pakistan because it costs 20-30% in both countries, while Pakistan invests 40-50% in the process. It was then found that Vietnam's costs of tariff and custom duties were the lowest when compared to Pakistan and Cambodia. Pakistan imposes almost a 20% tariff on accessories made of leather, while Cambodia charges 13% and Vietnam 0% because of bilateral and regional trade agreements with China and Singapore. Pakistan imposes a 22-35% corporate tax rate based on the nature and size of the organization and Vietnam charges a progressive 35%. However, the corporate tax charged by Cambodia is 20%. However, it was noted that a major share of handbags are exported by Vietnam and Cambodia to the USA and China, but Pakistan exports most of its handbags to Italy, Germany, and Australia. While asked why Pakistan is not exporting more to those countries, they responded that they don't have much knowledge about Chinese customers and high freight costs are also an issue. They added that if Pakistan signs more trade agreements and builds supportive infrastructure while increasing export rebates as well, then the export of handbags can be increased.

Moreover, the manufacturing sectors of Cambodia and Vietnam are heavily driven by inward FDI; hence, Pakistan also needs to make efforts in this regard. The exporters suggested that Pakistan needs \$100-200 million dollars in foreign investment to reach \$2 billion in exports in the near future. While it was asked how the government could support increasing the overall exports of the leather industry, the exporters suggested that if the government reduces customs duty on the imports of inputs used as raw materials in the manufacturing of handbags, the exports may increase by up to 10%. Similarly, if the government reduced the corporate tax rate of leather manufacturers and increased their export rebate to 10%, the impact on exports would be up to 40%. In addition to that, the researcher conducted interviews with the representatives of three key associations related to the leather industry of Pakistan, including PFMA (Pakistan footwear manufacturing association), PTA (Pakistan Tanners Association) and PLGMEA (Pakistan Leather Garments Manufacturers & Exporters Association). They mentioned some issues need to be addressed in order to increase exports of leather, including providing formal degrees in technical education like bachelor or master's degrees in leather or textile, facilitating access to the latest technology like 3D or digital fabrication, training a skilled workforce by reopening institutions like NILT (National Institute of Leather Technology), encouraging local suppliers, investing in general infrastructure, building slaughter houses and farm houses, and creating functional institutions

to support leather stakeholders. Moreover, the maximum impact on exports can be observed by addressing major supply chain issues related to the leather industry in Pakistan.

Chapter-1

Introduction

The leather industry contributes around 5% of the total exports of Pakistan, and the exports are divided into three HS chapters, including Chapters 41 (Semi-finished leather), 42 (Leather Garments and Apparels) and 64 (Footwear). However, the world exports of Chapter 41 have decreased from 32 billion dollars in 2011 to 18 billion dollars in 2021. But, the world's exports of 42 have increased from 68 billion dollars to 86 billion dollars in 2021. Interestingly, the greatest increase has been observed in Chapter 64, as it increased from 96 billion dollars to 152 billion dollars. However, it has been noticed that the exports of Pakistan has decreased with respect to Chapters 41, but it showed little increase in Chapter 42 and 64. The exports of Chapter 41 have decreased from 467 million dollars to 187 million dollars in 2021. However, the exports of Chapter 42 has increased from 681 million dollars in 2011 to 697 million dollars in 2021. Similarly, the exports of handbags has remained stagnant at 4 million during the whole period, however, the imports has increased from 2 to 4 million. Subsequently, the exports of 64 have shown a slight increase of 23 million dollars, as it was 112 million dollars in 2011 and reached 141 million dollars in 2021. Hence, this research will focus primarily on one chapter and that is Chapter 42. That is why, it is going to compare the statistics of Chapter 42 with two regional competitors Vietnam and Cambodia. Therefore, it can be observed that the exports of Vietnam has increased from 1.1 billion dollars in 2011 to 2.8 billion dollars in 2021. Similarly, the exports of Cambodia has tremendously increased from just around 3 million dollars in 2011 to more than 1.5 billion dollars in 2021 (Trade Statistics, 2021). As a result, Nguyen (2021) stated that Vietnam's leather industry exports have increased primarily as a result of two factors: attracting a large amount of FDI (foreign direct investment) in the sector and a government initiative to sign FTAs with multiple regional and inter-regional bodies such as TTP (Trans-Pacific Partnership) and EUFTA (European Union FTA). VO and Ho (2021) mentioned that Cambodia, Vietnam, and other ASEAN countries have greatly benefited from FTAs and a great amount of FDI in the region.

However, the European countries also exhibited a great increase in the exports of Chapter 42, as Italy has increased its exports from more than 6 billion dollars in the year 2011 to more than 12 billion dollars in 2021. Similarly, France has also increased its share of more than 6 billion dollars to almost 12 billion dollars in 2021. Hence, it is quite significant to understand how those countries have increased their exports and why Pakistan's exports under Chapter 42 has still remained stagnant in that period. Similarly, Bangladesh's exports has also excelled from around 65 million dollars in 2011 to more than 400 million dollars in 2021 (Trade statistics, 2020). Therefore, this study is conducted in order to understand the reasons and policies implemented that contributed to the enormous increase in exports of two countries Vietnam Cambodia and how Pakistan can also take the same path in order to increase its exports of Chapter 42.

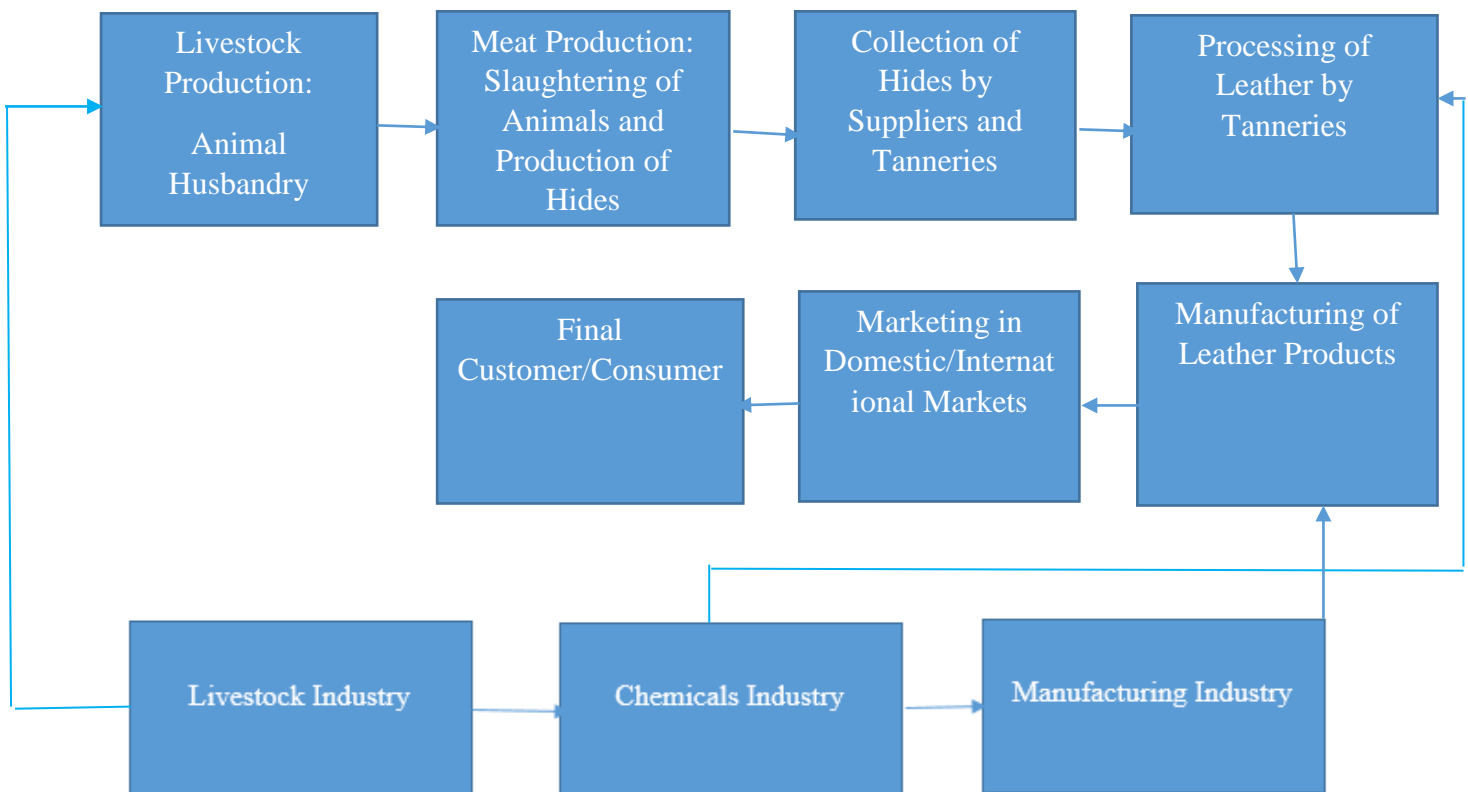
Moreover, the researcher of this study has interviewed representatives of relevant associations including PFMA (Pakistan footwear manufacturing association), PTA (Pakistan Tanners Association) and PLGMA (Pakistan Leather Garments Manufacturers & Exporters Association), and he has also analyzed the latest STPF policy (2020-2025), Pakistan Exports Strategy, Leather and Leather goods (2022-2026) and then finalized the two products that can be researched in order to increase the exports of Chapter 42 and Chapter 64.

Objectives of the Study

- 1- To investigate the supply chain of a handbag and identify problems in that supply chain
- 2- To determine the government's general and sectorial policies in order to determine their impact on the overall supply chain
- 3- To compare government sectorial policies with the policies of regional and international competitors.

Supply chain of Leather Industry

Figure 1: Supply Chain of leather industry



Supply chain Description

In the first stage, the livestock is raised domestically especially in the rural areas of Pakistan. Afterwards, the livestock is either slaughtered for meat production in rural areas or transported to urban areas of Pakistan. When the livestock is slaughtered, two by-products are produced, meat and hides/skins. Those skins are either collected by the tanneries themselves or the middle agent. The middle agent then sell those hides/skins to tanneries at the bid price in the market. Then, the tanneries transform those hides/skins into wet blue leather or any

other form required by the manufacturers for the different kind of products. Afterwards, the manufacturers of leather produce different kind of products from those hides/skins like handbags, jackets, wallets and etc. Those products are then sold to either domestic or international market and then finally, it is purchased by the final customer/consumer either nationally or internationally.

Chapter-2

Leather Industry of Cambodia

Cambodia current exports of leather products has almost reached to \$3 billion including the chapters of 41, 42 and 64(Trade statistics, 2021). After the end of Civil war in Cambodia in 1970, the economic transformation started in 1989 and the Cambodian government then prioritized three key industries including garments, footwear and light assembly manufacturing in order to transform their economy from agriculture to industrialization. As a result of it, the GDP of Cambodia increased 8% as an average from 1994-2006(Cambodia Industrial Development Policy 2015-2025). Meanwhile, livestock also remained at par with local demand through the sufficient number of cattle, buffaloes and crocodiles. They all play a key role in manufacturing of leather products including footwear as, hides/skins of those especially crocodile remained the key ingredient of manufacturing and exporting leather products. However, currently the leather products are mostly made by crocodile skins in Cambodia and remaining demand is fulfilled by importing leather from multiple countries including South Korea, China, Vietnam and Thailand (GBN, 2020). Moreover, Cambodia has initiated to implement Industry 4.0 in its GTF (garments, textiles and footwear) sector through which, automation would be done in hand-made processes hence, digital dyeing and printing has been introduced already. Moreover, Cambodia is using technologies like block chain and artificial intelligence in order to compete with the regional partners like Vietnam and Thailand (UNDP report, 2021). However, government of Cambodia in its latest plan for the year 2019-2023 has mentioned some obstacles in future economic growth of the country including weak legal system, insufficient skillful workforce and modernizing economic infrastructure (National Strategic Development Plan, 2019-2023).

Leather Industry of Vietnam

Vietnam leather industry is one of the most vibrant industries of Vietnam and it also plays a significant role in the global trade of leather products. Hence, exports of Vietnam has almost reached to \$30 billion of three HS chapters including 41, 42 and 64(Trade Statistics, 2021). Vietnam has grabbed the second position in the exports of footwear recently after China. After the war with US in 1974, Vietnam economy was devastated and faced quite grim challenges in that era. However, the situation changed when, DoiMoi reforms were introduced in 1979, the country started to switch from planned economy to market economy. As a result of that, the real per capita GDP tripled between 1990 and 2015, per-capita GDP increased 10-fold, and the poverty rate decreased from more than 60 percent in the 1980s to below 5 percent in 2015. Vietnam primarily focused on two main industries, textile/apparel and leather/footwear and hence enjoyed great progress and growth as, both industries contributed 43.342 billion in 2015, rising by an average growth rate of 16.9 per cent from 2010 to 2015(Baum, 2020). Leather products accounts for 40% of total industrial production of Vietnam and contribute 10% in the total GDP of the country and it mainly based on the competitiveness of labor costs as, most of the Chinese firms have transferred their production facilities to Vietnam recently(UNIDO, 2020). It can also be seen in the exports of Chapter 42

as, its exports has been doubled in last 8 years(2011-2019).Moreover, FDI played a great role in enhancing the leather exports of Vietnam as their share is 77% in the total exports of leather/footwear of Vietnam. EU and USA are two key markets where footwear and handbags are exported by Vietnam (Thi Tue Anh et al., 2014).The leather industry of Vietnam is also a source of great employment in the country as, nearly 2 million people are employed by the industry directly or indirectly(UNIDO, 2020). However, if the Vietnam has an intention to reach developed country status, then it has to grow by average 7% for the next 25 years until 2045(Fukuoka, 2021). Subsequently, According to recent statistics by LEAFSO (Vietnam Leather and Footwear Association), exports of footwear and handbags will be increased by 10-15% in 2022(Nguyen, 2021).

Leather Industry of Pakistan

Leather industry of Pakistan is mainly divided into three chapters including 41, 42 and 64 and contributes more than \$1 billion dollars in the total exports of Pakistan (Trade statistics, 2021). Leather goods are produced from the semi-finished leather that is eventually made through processing hides/skins of livestock. Livestock contributes 56% in the agricultural sector of Pakistan and 11% in the GDP of the country (Rehman et al., 2017). The leather production is mainly done through the hides/skins of four main animals including buffaloes, cows, sheep and goats, however, the skins of cows and buffaloes are used mostly in the production of semi-finished leather in Pakistan (Theuws&Adriaans, 2021). But, the livestock industry mostly faces considerable challenges due to sudden floods, water scarcity, viral diseases and etc. However, Tanneries are the main source of leather production and there are around 800 tanneries in Pakistan and 461 industrial units producing leather garments and 524 producing footwear in Pakistan (Hashmi et al., 2017). Although, the most of the industrial units are located in five cities including Kasur, Lahore, Multan, Karachi and Sialkot. However, 90% of production is done in Karachi and Sialkot. The major share in the exports of leather is taken by tanned leather that is 35%, the second position held by leather garments (31%), third position is held by Leather gloves (23%) and the last is taken by footwear (10%)(PBIT report, 2002). Although, the leather industry faces good number of challenges on the environmental and technological front as, the tanneries are not using the latest technology to produce semi-finished leather and only 14 tanneries have established effluent treatment plants (ETPs) in order to reduce the chemical water drainage in the local drainage system of the country. According to recent policy document on leather (2022-2026), there are ten major competitiveness constraints faced by the leather industry recently including insufficient supply of quality of raw hides/skins, lack of technical skills at pre-slaughtering, during slaughtering and post-slaughtering stages, lack of modern technology and tools, lack of skilled workforce, heaving import duties on chemicals and dyes, low value chain, lack of proper certifications, lack of environmental compliance, gender equality and ineffective supply chain. Moreover, most of the challenges are caused at the downstream of supply chain than the upstream like animal welfare, proper animal nourishment, mechanized slaughtering and the preservation of hides/skins before being used for the further processing in the tanneries. According to the policy document(2022-2026), Pakistan can increase its leather exports to more than \$2 billion dollars in the future if the above constraints are addressed especially compliance with the auditing protocols of LWG.

Comparison of Cambodia and Vietnam with Pakistan

As can be seen in the case of Cambodia, where the government attracted FDI, particularly in the garments and footwear sectors, from western investors primarily by promising to handle

labor and related union issues, as well as providing a competitive corporate tax regime (20% and 100% exemptions from taxes on inputs of exported items (Ghazanchyan et al., 2018). Similarly, the government of Cambodia has helped foreign investors like those who invested in garments and footwear by creating institutions like the Council for the Development of Cambodia (CDC), qualified investment law, and the Cambodia Footwear Association (CFA) (Ministry of Commerce Report, 2014). This all supported the local footwear manufacturers to become competitive in the international market and, hence, gain a considerable share in the last 7 years (2012–2019). The government of Vietnam also created similar sorts of policies by creating a master plan called "National Socio-economic Development Strategy (SEDS)" in 2011 that aimed to focus on 11 industries for the economic development of the country, including electronics, garment materials, footwear, construction materials, mineral processing (coal, bauxite, titan, apatite, lead, and zinc), beverages, dairy, pulp, and paper (Chi, 2017). Baum (2020) goes on to say that the success story of Vietnam is best understood by focusing on two processes: how Vietnam changed its educational policies and used education as a tool for the country's economic development, and how it used its institutions like the Ministry of Labor, Invalids, and Social Affairs (MOLISA); the Vietnam General Confederation of Labor (VGCL); and the Vietnam Chamber of Commerce and Industry (VCCI) to implement economic development policies. This all helped the footwear industry in Vietnam to grow more than double in just 7 years' time. Similarly, in order to promote the leather industry in their respective countries, Vietnam and Cambodia focused on the livestock and chemical industries.

As compared to Vietnam and Cambodia, Pakistan has a corporate rate of 29% with a 17% VAT. However, the government of Pakistan supports the leather industry with an export rebate of around 5%. Pakistan doesn't have any strong policies for developing strong livestock and chemical industries as compared to Cambodia. Similarly, Vietnam has also managed to focus on its livestock and create an extensive agro-business industry. However, Pakistan created three strategic policies (STPF-2009–12, 2015–18, and 2020–25) in the last 10–12 years but, with a gap of two to three years, consistency is not observed in Pakistan's long-term strategic planning. Moreover, the registration in the leather working group (LWG) also influenced leather exports as only 10+ tanners were registered, as compared to 60+ by India and 55 by Italy. This, along with political uncertainty, also led to changing export-related policies in Pakistan. Hence, as a consequence of all these factors, etc., Pakistan's exports of leather has not been increased in the last 7 years.

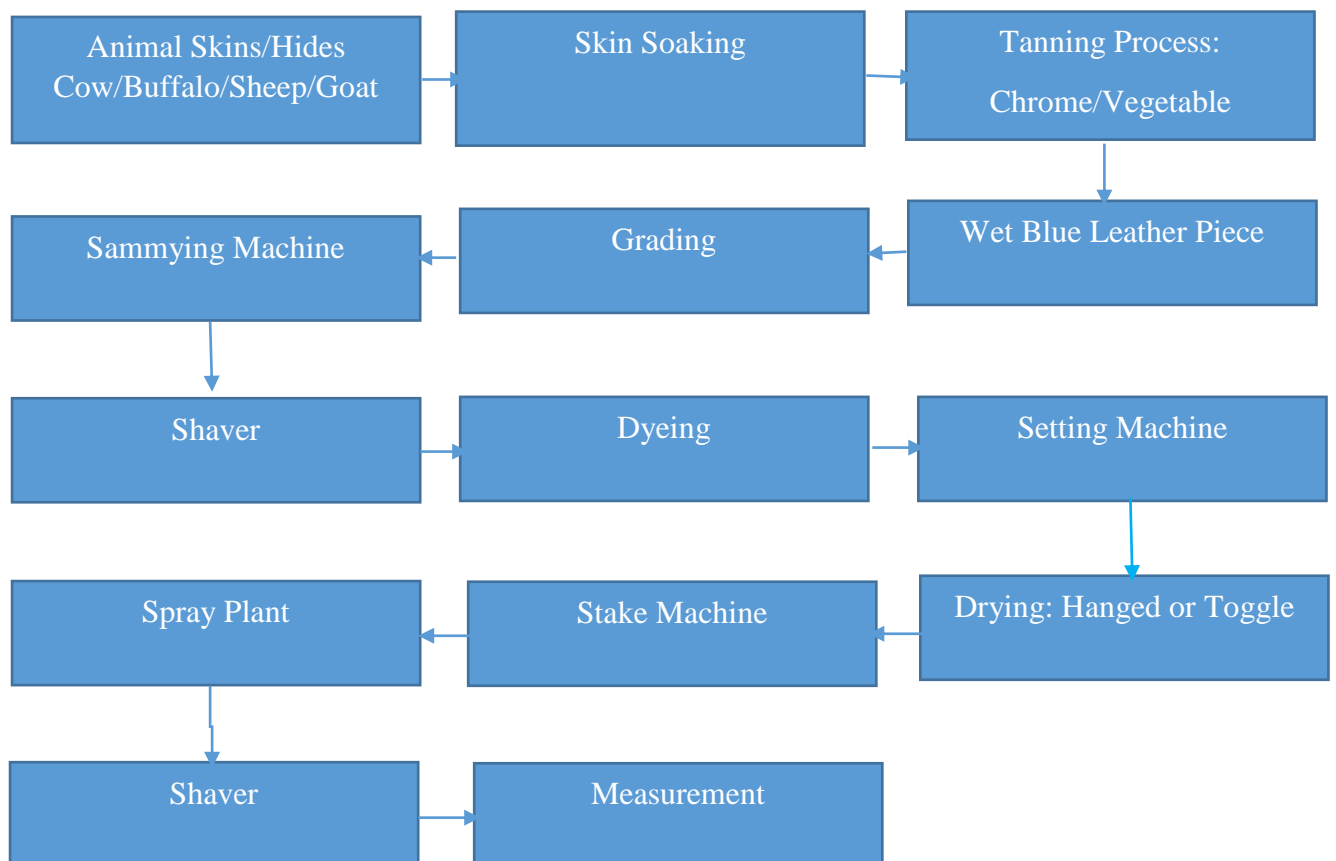
Chapter 3

Research Methodology

The research is based upon mixed methods strategy through which quantitative and qualitative data is analyzed together in order to achieve the objectives of the study and provide comprehensive analysis of the product under consideration. The quantitative data has been collected from 14 exporters by sending online email to all PLGMEA members and qualitative data has been collected from the interviews conducted from three association respective officers and the exporters as well.

Value chain of Finished Leather

Figure 2: Value Chain of finished industry



Source: Dowlath et al. (2021)

Animal Hides/Soaking



Tanning Process



Wet Blue



Grading



Sammying Machine



Dyeing Process



Shaver Machine



Spray Plant



Macro Cost Analysis

Figure 3: Macro cost analysis



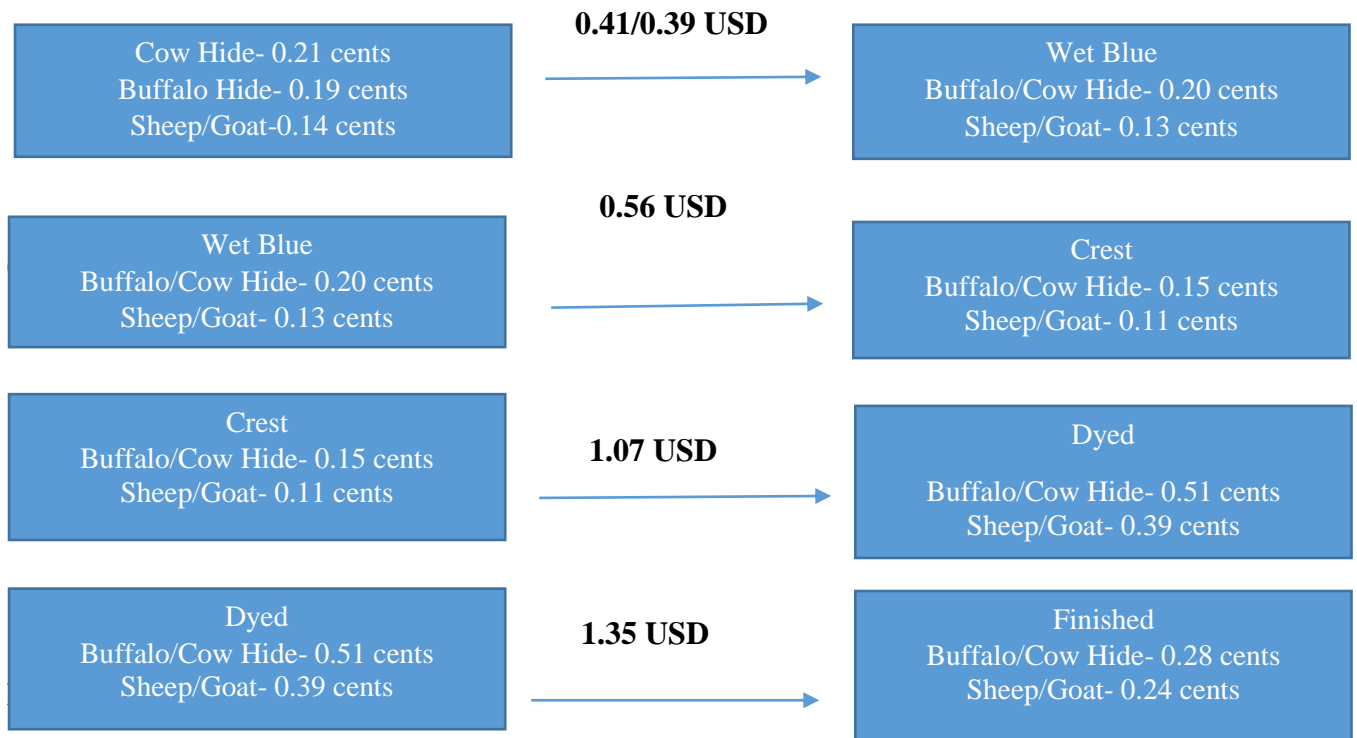
Description:

It is found through the observation that, there are at least fourteen stages through which, skin/hide is processed in order to transform it into finished leather. Firstly, the hide/skin is soaked and then processed through chrome or vegetable tanning in order to get wet blue or white piece of leather. Afterwards, it is graded in order to analyze the quality of wet blue leather. Later on, it is processed through sammying machine in order to absorb grease from the wet blue leather. Then, it is included in the shaver in order to adjust the thickness of the piece of leather. Afterwards, it is gone into dyeing process as per requirement of the specific customers. Later on, it is processed through setting machine in order to make the leather piece flat or smoother. Then, it is either toggled or hanged in order to dry the piece of leather. Then, it is processed through stake machine in order to remove the fat and adjust the thickness of the piece of leather. Finally, it is finished through spray plant and then shaved and measured again in order to produce the ready to use finished leather.

However, the cost incurred in the process is divided into four main parts, utility, raw materials, chemicals and overhead. It can be observed that, chemicals' cost is heaviest cost paid by the manufacturer in the process.

Value Addition Cost (per square feet-USD)

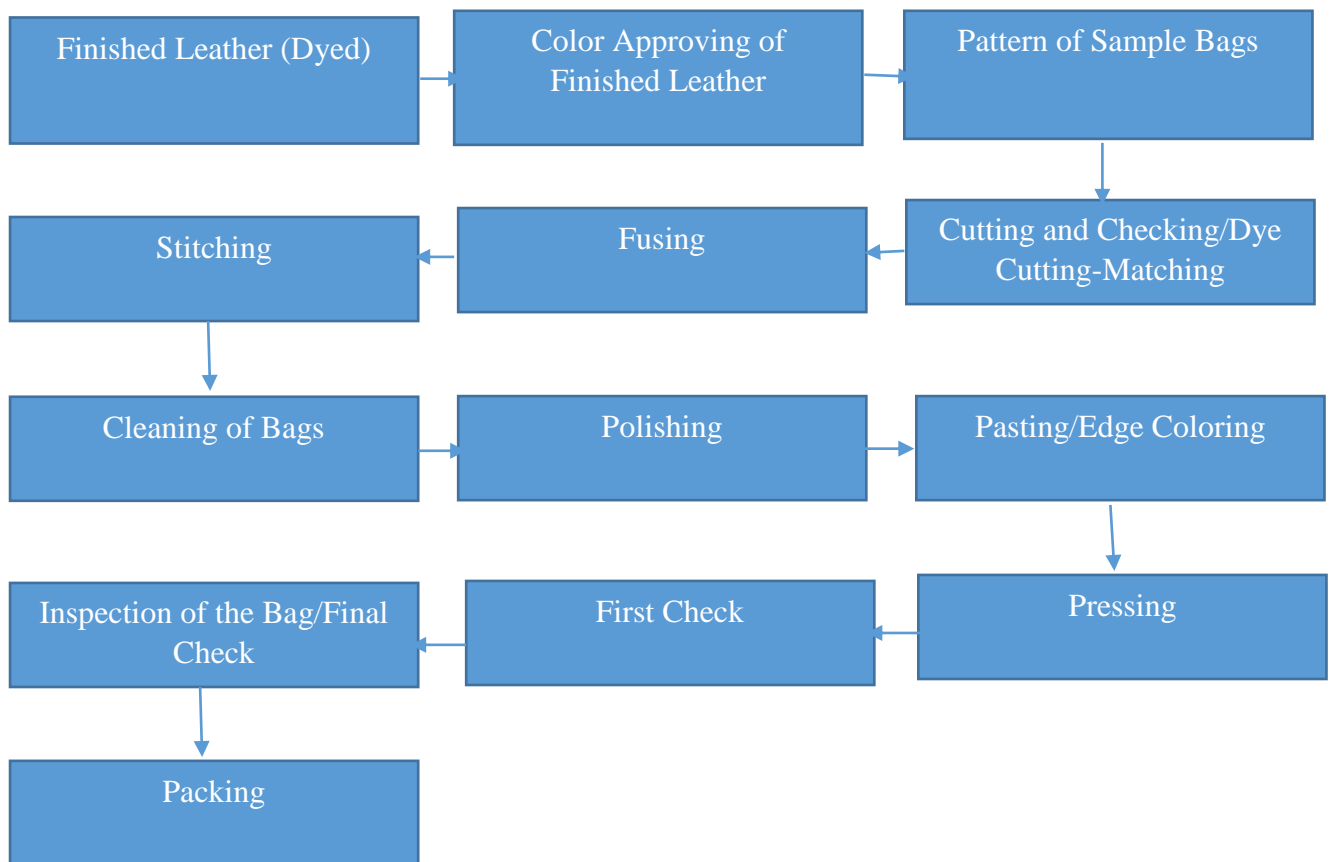
Figure 4: Value addition cost (USD 210PKR)



It is found that, the cow hide is the most expensive hide bought by the tanneries after Buffalo hide and sheep or goat skin. The normal cow hide size is 45-50 square feet while buffalo hide size is 40-45 square feet and sheep hide size is 18-30 square feet. However, the cost of wet blue can be differentiated through 70 to 30 ratio. The cost of wet blue leather of cow hide is 0.41 cents as compared to 0.27 cents of sheep or goat skin. Moreover, when the wet blue is processed and become crest then, it costs 0.56 cents for cow hide and 0.38 cents for the sheep skin. Afterwards, the cow hide is dyed and reaches to the cost of 1.07 dollars as compared to 0.77 cents for the sheep skin. Then in the last stage, the dyed hide is finished with the incurring cost of 0.28 cents for the cow hide and 0.24 cents for the sheep skin. Hence, the final finished leather of cow hide per square feet becomes 1.35 dollars as compared to 1.01 cents for the sheep skin.

Value chain of Handbags

Figure 5: Value Chain of Handbags



Finished Leather (Dyed)



Color Approving of Finished Leather



Pattern of Sample Bags



Cutting and Checking/Dye Cutting



Fusing



Stitching





Cleaning of Handbags



Pressing



Packing

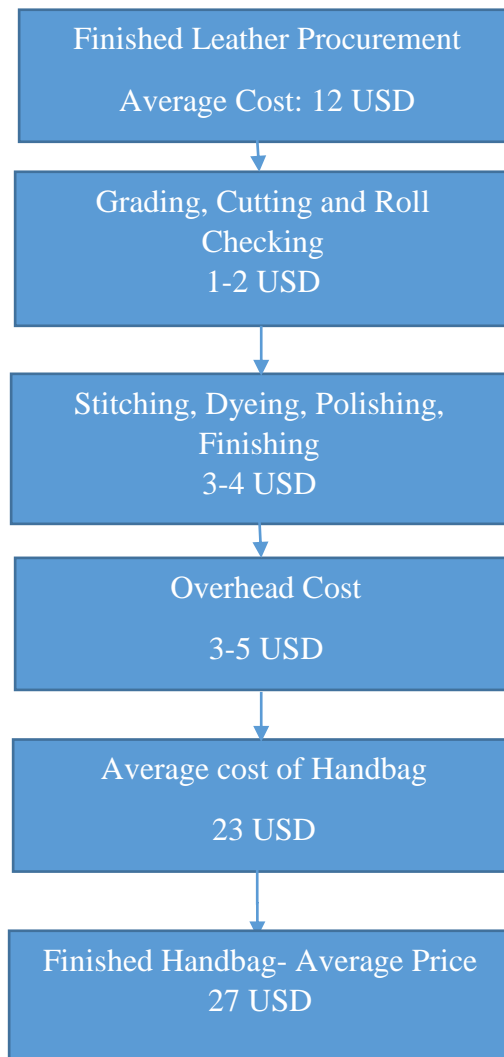


Description:

It has been observed in the value chain of handbags that, after acquiring the finished leather either from open market or tanneries, then it is further processed. In the first stage, the color of finished leather is checked and approved, afterwards, it is gone through pattern making, cutting and dye making. In the second stage, it is gone for fusing and stitching by collecting multiple accessories from the factory store. Once, the stitching is done, the cleaning of bag is done manually, afterwards, the handbag is polished either manually or through machines and its edges are colored through an edge coloring machine. In the final stage, the handbag is pressed, the first check is done, if any defect is found, it is returned back, otherwise, it is delivered for the final inspection and packing.

Value Addition Process in Handbags: Pakistan

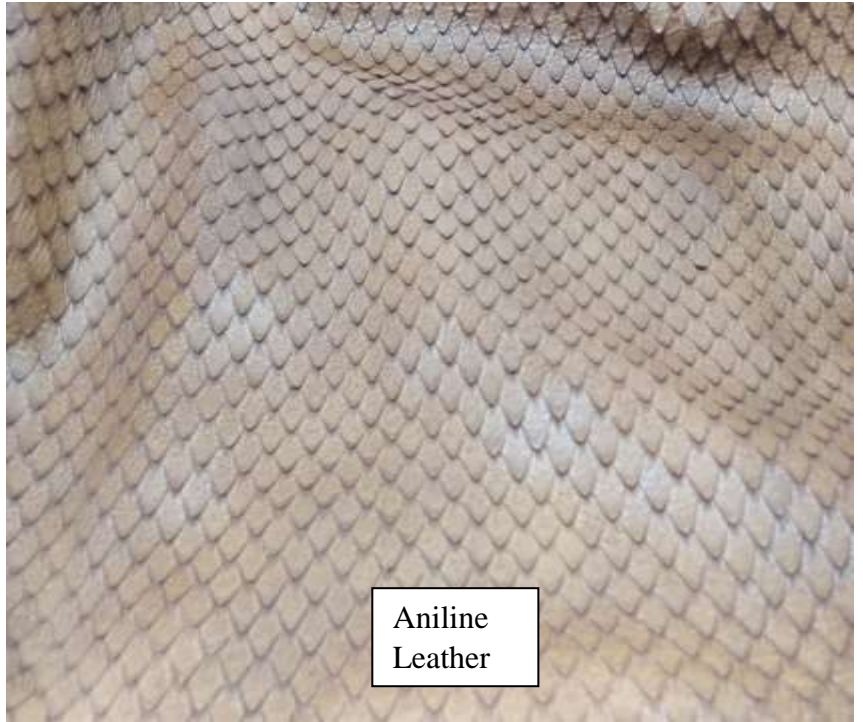
Figure 6: Value addition process in Handbags



Source: Ideal Leather Pvt. Ltd.

Description

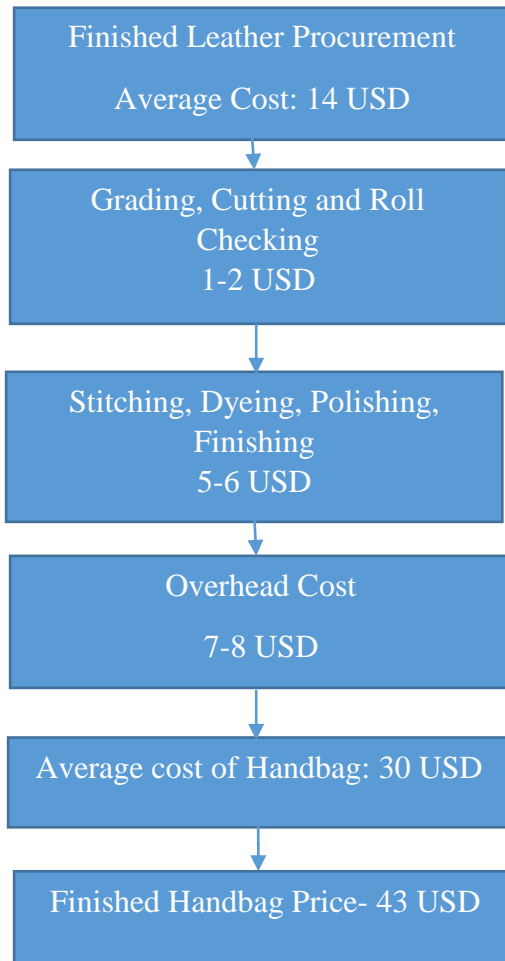
In the first stage of value addition process, the finished leather is procured with the per square feet measurement. It is estimated that, one square feet of finished leather of cow costs approximately \$1 dollar. Hence, if the 12 square feet of handbag is manufactured, the cost of finished leather is around \$12 dollars in Pakistan. In the second stage, the finished leather is graded as per requirement of the customer and then cutting is done in order to make a roll for the stitching. That stage costs around 1-2 USD. In the third stage, the stitching and dyeing is done and then gone for the finishing department. It is then polished, checked, inspected and finally packed. This stage costs 3-4 USD. The overhead cost includes the cost of electricity and other maintenance and administration charges. The overhead cost estimated for one handbag is 3-5 USD in Pakistan. Hence, the overall cost of handbag is averaged \$23 dollars that is priced around \$27 dollars in Pakistan.



Aniline
Leather

Value Addition Process in Handbags: Cambodia

Figure 6: Value addition process in Handbags

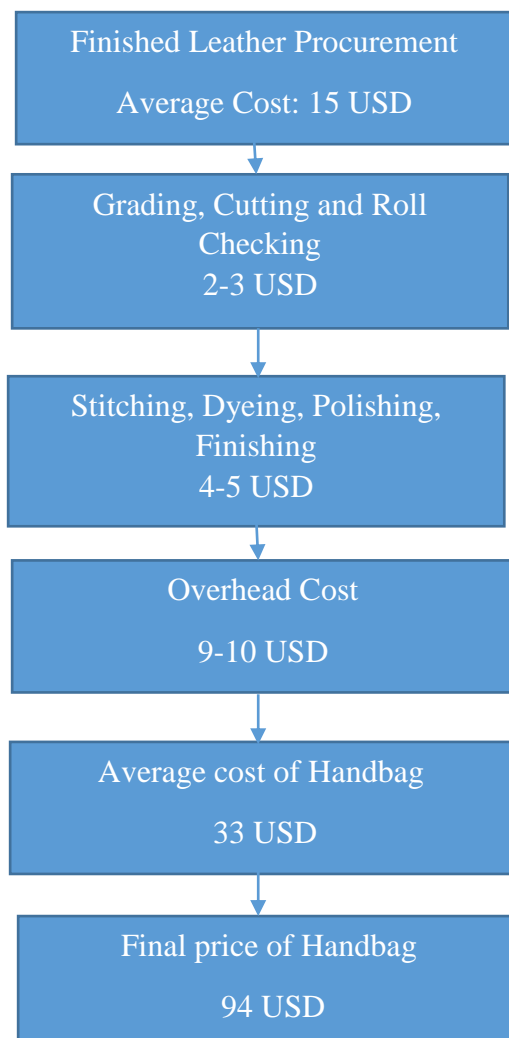


Description

In the first stage of value addition process, the finished leather is procured with the per square feet measurement. It is estimated that, one square feet of finished leather of cow costs approximately \$1 dollar in Pakistan. Hence, if the 14 square feet of handbag is manufactured, the cost of finished leather is around \$14 dollars in Cambodia. In the second stage, the finished leather is graded as per requirement of the customer and then cutting is done in order to make a roll for the stitching. That stage costs around 1-2 USD. In the third stage, the stitching and dyeing is done and then gone for the finishing department. It is then polished, checked, inspected and finally packed. This stage costs 5-6 USD. The overhead cost includes the cost of electricity and other maintenance and administration charges. The overhead cost estimated for one handbag is 7-8 USD in Cambodia. Hence, the overall cost of handbag is averaged \$30 dollars that is priced at \$43 dollars in Cambodia.

Value Addition Process in Handbags: Vietnam

Figure 6: Value addition process in Handbags





Description

In the first stage of value addition process, the finished leather is procured with the per square feet measurement. It is estimated that, one square feet of finished leather of cow costs approximately \$1 dollar in Vietnam. Hence, if the 15 square feet of handbag is manufactured, the cost of finished leather is around \$15 dollars. In the second stage, the finished leather is graded as per requirement of the customer and then cutting is done in order to make a roll for the stitching. That stage costs around 2-3 USD. In the third stage, the stitching and dyeing is done and then gone for the finishing department. It is then polished, checked, inspected and finally packed. This stage costs 4-5 USD. The overhead cost includes the cost of electricity and other maintenance and administration charges. The overhead cost estimated for one handbag is 9-10 USD. Hence, the overall cost of handbag is averaged \$33 dollars, which is priced at \$94 dollars in Vietnam.

Costing

Total Exports of Handbags: \$17 Billion

Table 1: Total Exports

Vietnam	Cambodia	Pakistan
3.3	1.1	0.023%

Total Production of Handbags

Table 2: Total Production of Handbags

Total Customers	Domestic Production	Exports	Total
64 million	51 million	4 million	55 million

Source: Pakistan labor force survey 2020-21

Total Consumption of Handbags

Table 3: Total Consumption of Handbags

Total Production	Imports	Total
55 million	5 million	60 million

Source: Pakistan labor force survey 2020-21

Labor cost Comparison (GDP per hour worked)

Labor productivity represents the total volume of output (measured in terms of Gross Domestic Product, GDP) produced per unit of labor (measured in terms of the number of employed persons or hours worked).

Table 4: Labor cost comparison

Country	Hours per week	Minimum Wage per month	Wage per hour	Labor Productivity
Pakistan	52	122 USD	2.34 USD	\$6.3
Vietnam	48	190 USD	3.95 USD	\$7.3
Cambodia	48	194 USD	4.041 USD	\$3.6

Source: National Wage and Productivity Commission, ILO, Pakistan National Labor Survey 2020-21, ILOSTAT.

Electricity Cost Comparison

Table 5: Electricity cost comparison

Country	Per KWH/USD	Subsidized Rates KWH/USD
Pakistan	0.12	0.09
Vietnam	0.06	
Cambodia	0.15	

NEPRA notification (2021, 2022), Vietnam Electricity, Electricity authority of Cambodia

Water Cost Comparison

Table 6: Water cost comparison

Country	1 Cubic Meter	
Pakistan	0.28 USD(Documented)	0.62 USD(Actual)
Vietnam	0.41 USD	
Cambodia	0.23 USD	

Source: KWSB, Asian Development Report, Open development Cambodia

Gas Cost Comparison

Table 7: Gas cost comparison

Country	RLNG(USD)		
Pakistan	SNGPL- 20.76/MMBTU	SSGC-22.60/MMBTU	\$6.5/MMBTU
Vietnam	24.71/MMBTU-9.16b		
Cambodia	11/MMBTU		

OGRA notification, June 2022, Vietnam energy, S & P Global

Average Tariff Comparison

Table 8: Average Tariff Comparison

Accessories				
	Pakistan(CD+ACD)	Cambodia	Vietnam	Comparison with two Countries
Bag Linings- HS 590390	20%	10.9%	6.7%	High
Bag handles HS 392690	20%(7.7% for china)	23.9%(4.7% for China)	11.7%(0.5% for China)	High
Bag studs HS 73181500	19.3%(17% for china)	5% for China, Vietnam, Thailand (15%)	6%(China)-20%	High
Bag Fasteners HS 39264049	20%(16% for china)	35%(5% for China)	18.5%(0% for China)	High
Bag bases HS 48193000	20%	7%(5% for China)	18.4%(0% for china and Malaysia)	High
Bag Patterns HS 39269070	20%	24.5%(5% for China)	9.3%(0.5% for China)	Low
Chemicals				
	Pakistan	Cambodia	Vietnam	Comparison with two countries
Chromium Sulphate(cr2(SO4)3) HS.320290	15.5%(12.5% for China)	5%	0%	High
Formic Acid HS291511	20%	7%(5% for china)	0%	High
Sodium Sulphide	2%(0% for China)	7%	0%	High

HS.28301000				
Sodium Bicarbonate HS.283630	20%	7%(5% for china)	0%	High
Syntans HS.380993	16%(12% for china)	7%(5% for China)	0%	High
Biocides HS.381190	3%	7%(5% for china)	0%	High
Degreasers HS.340290	20%(11% for china)	7%(5% for china)	8.4%(0% for china)	High
Flat Liquor HS.340391	14.2	7%(5% for china and Thailand)	5%(0% for china)	High

Comparison of Tax Structure

Chromium Sulphate- HS-320290

Table 9: Chromium Sulphate

Country	Custom Duty	Sales Tax	Corporate Income Tax	Total Tax
Pakistan	20	17	35	72
Cambodia	5	10	20	35
Vietnam	0	10	35	45

Formic Acid- HS-291511

Table 10: Formic Acid

Country	Custom Duty	Sales Tax	Corporate Income Tax	Total Tax
Pakistan	20	17	35	72
Cambodia	7-5	10	20	37- 35©
Vietnam	0	10	35	45

Sodium Sulphide- HS-283010

Table 11: Sodium Sulphide

Country	Custom Duty	Sales Tax	Income Tax	Total Tax
Pakistan	2- 0(c)	17	35	54- 52(c)
Cambodia	7	10	20	37
Vietnam	0	10	35	45

Sodium Bicarbonate- HS-283630

Table 12: Sodium Bicarbonate

Country	Custom Duty	Sales Tax	Corporate Income Tax	Total Tax
Pakistan	26	17	35	78
Cambodia	7-5	10	20	37-35©
Vietnam	0	10	35	45

Finishing Agent- HS-380993

Table 13: Finishing Agent

Country	Custom Duty	Sales Tax	Corporate	Total Tax
---------	-------------	-----------	-----------	-----------

			Income Tax	
Pakistan	20	17	35	72
Cambodia	7-5	10	20	37-35©
Vietnam	0	10	35	45

Biocides- HS-381190

Table 14: Biocides

Country	Custom Duty	Sales Tax	Corporate Income Tax	Total Tax
Pakistan	2	17	35	54
Cambodia	7-5	10	20	37-35©
Vietnam	0	10	35	45

Degreasers- HS-340290

Table 15: Degreasers

Country	Custom Duty	Sales Tax	Corporate Income Tax	Total Tax
Pakistan	41-32	17	35	93-84
Cambodia	7-5	10	20	37-35©
Vietnam	8.4	10	35	53.4

Flat Liquor- HS-340391

Table 16: Flat Liquor

Country	Custom Duty	Sales Tax	Corporate Income Tax	Total Tax
Pakistan	14.2	17	35	66.2
Cambodia	7-5	10	20	37-35©
Vietnam	5-0	10	35	50-45©

Description:

It has been observed from the above data that, minimum wage per month of Pakistan is quite lower than Vietnam and Pakistan but, at the same time, its labor productivity is also lesser than Vietnam. Similarly, the cost of electricity of Pakistan is higher than Vietnam but, lower than Cambodia in the case of leather industry. However, the tariff on accessories used in the leather industry is zero in Pakistan, however, Cambodia and Vietnam charges some tariff on the accessories. But, the tariff on the importation of chemicals is highest in Pakistan as compared to Vietnam and Cambodia. Pakistan charges 20-26% custom duty as compared to maximum 7% by Cambodia and 8.4% by Vietnam. However, Vietnam charges 0% custom duty on most of the chemicals. Hence, the cost of chemicals is the major differentiator among the three countries.

Pakistan Tax Structure on Leather Chemicals

Table 17: Pakistan Tax Structure

HS.Code	Customs Duty	Additional Duty	Regulatory Duty	Sales Tax	Income Tax
HS.320290	16%	4%	0%	17%	11%
HS.291511	16%	4%	0%	17%	11%
HS.283010	0%	2%	0%	17%	11%
HS.283630	20%	6%	0%	17%	11%
HS.380993	16%	4%	0%	17%	11%
HS.381190	0%	2%	0%	17%	11%
HS.340290	20%	6%	15%	17%	11%
HS.340391	20%	6%	0%	17%	11%

Chapter-4

Discussion

Interestingly, the exports of leather in 2021 have increased by 20% as compared to figures in 2020 and have crossed the landmark of \$1 billion recently. However, the exports of Vietnam in one calendar year have increased from \$20 to \$29 billion, and Cambodian exports have also increased from \$2 billion to \$3 billion in the same period. Moreover, a major increase has been observed in chapters 42 and 41 with respect to Pakistan. However, the exports of handbags have remained stagnant at 4 million, but their imports have increased from 3 to 4 million from the year 2020 to 2021. Although the overall exports of leather have increased in three countries, including Pakistan, Cambodia, and Vietnam, the exports of handbags have been tremendous in Cambodia, as they increased from \$134 million in 2020 to \$181 million in 2021. However, Vietnam has experienced an increase in exports of handbags from \$311 million to \$554 million. It has also been observed that the minimum wage per month in Pakistan is quite lower than in Vietnam and Cambodia but, at the same time, Pakistan's labor productivity is also lower than Vietnam but higher than Cambodia. Similarly, the cost of electricity in Pakistan is higher than in Vietnam but lower than in Cambodia in the case of the leather industry. However, the tariff on accessories used in the leather industry is zero in Pakistan. However, Cambodia and Vietnam charge some tariff on the accessories. But, the tariff on the importation of chemicals is the highest in Pakistan as compared to Vietnam and Cambodia. Pakistan charges 20-26% custom duty as compared to a maximum of 7% by Cambodia and 8.4% by Vietnam. However, Vietnam charges 0% customs duty on most chemicals (Table 8). Hence, the cost of chemicals is the major differentiator among the three countries.

The researcher used a close-ended survey to collect data and, hence, when it was asked regarding the raw materials used in manufacturing handbags, it was found that cotton is mostly used in the manufacturing of the inner parts of handbags in Pakistan, Cambodia, and Vietnam. However, Cambodia and Vietnam don't produce a significant amount of cotton, while Pakistan produces 60% of the total domestic cotton consumption inside the country (Fig 7, Annex). Moreover, full-grain and top-grain leather are mostly used to manufacture handbags in Cambodia. Vietnam and Pakistan also utilize the same grade of leather. However, Cambodia and Vietnam import most of the hides and skins used in manufacturing handbags. While asking regarding the cost of handbags, it was found that acquiring semi-finished leather is actually cheaper in Vietnam and Cambodia as compared to Pakistan because it costs 20-30% in both countries, while Pakistan invests 40-50% in the process (Fig 4, 13, Annex). However, Pakistan's cost of acquiring and processing the semi-finished leather is also 70-80 % (Fig 14, Annex). But, Pakistan's taxation and tariff costs are higher than Cambodia and Vietnam's. Pakistan's energy costs are also higher than Vietnam's and almost similar to Cambodia's. Similarly, when asked about the tariff, it was found that Vietnam's costs of tariff and customs were the lowest as compared to Pakistan and Cambodia. Pakistan imposes almost a 20% tariff on accessories made of leather, while Cambodia charges 13% and Vietnam 0% because of bilateral and regional trade agreements with China and Singapore. Pakistan imposes a 22-35% corporate tax rate based on the nature and size of the organization and Vietnam charges a progressive 35%. However, the corporate tax charged by Cambodia is 20%. The individual tax rates of Pakistan and Vietnam are progressive at 35%, while Cambodia is progressive at 20 % (Fig 19, Annex). Moreover, Cambodia and Vietnam actually impose a 10% tax, while Pakistan charges a 17% sales tax on commodities (Table 9-16). However, when inquired about the international certification and potential market

regarding the handbags, it was found that most of the exporters in Pakistan, Cambodia, and Vietnam are certified with either BSCI, ISO, or LWG (Fig 20). However, while Vietnam and Cambodia export the majority of their handbags to the United States and China, Pakistan exports the majority of its handbags to Italy, Germany, and Australia. While asked why Pakistan is not exporting more to those countries, they responded that they don't have much knowledge about Chinese customers and high freight costs are also an issue. They added that if Pakistan signs more trade agreements and builds supportive infrastructure while increasing export rebates as well, then the export of handbags can be increased.

While asking about FDI, it is already observed in the case of Cambodia, where the government attracted FDI, particularly in the garments and footwear sectors, from western investors primarily by promising to handle labor and related union issues, as well as providing a competitive corporate tax regime (20%) and 100% exemptions from taxes on inputs of exported items (Ghazanchyan et al., 2018). Leather products account for 40% of the total industrial production of Vietnam and contribute 10% of the total GDP of the country. It is mainly based on the competitiveness of labor costs as most of the Chinese firms have transferred their production facilities to Vietnam recently (UNIDO, 2020). Moreover, FDI played a great role in enhancing the leather exports of Vietnam as their share was 77% of the total exports of leather and footwear of Vietnam and 43% of the leather industry of Cambodia. The inward FDI in the manufacturing sector of Cambodia is \$8.5 billion, Vietnam \$17 billion, and Pakistan's total FDI is \$1.4 billion in 2020-21. The manufacturing sectors of Cambodia and Vietnam are heavily driven by inward FDI; hence, Pakistan also needs to make efforts in this regard. The exporters suggested that Pakistan needs \$100-200 million dollars in foreign investment in order to reach \$2 billion in exports in the near future. While it was asked how the government could support increasing the overall exports of the leather industry, the exporters suggested that if the government reduces customs duty on the imports of inputs used as raw materials in the manufacturing of handbags, the exports may increase by up to 10% (Fig 28, Annex). Similarly, if the government reduced the corporate tax rate of leather manufacturers and increased their export rebate to 10%, the impact on exports would be up to 40% (Fig 29, Annex). Moreover, the maximum impact on exports can be observed through addressing major supply chain issues related to the leather industry in Pakistan.

In addition to that, the researcher conducted interviews with the representatives of three key associations related to the leather industry of Pakistan, including PFMA (Pakistan footwear manufacturing association), PTA (Pakistan Tanners Association) and PLGMEA (Pakistan Leather Garments Manufacturers & Exporters Association). They mentioned that there are some issues that need to be addressed in order to increase exports of leather, including providing formal degrees in technical education like bachelor or master's degrees in leather or textile, facilitating access to the latest technology like 3D or digital fabrication, training a skilled workforce by reopening institutions like NILT (National Institute of Leather Technology), encouraging local suppliers, investing in general infrastructure, building slaughter houses and farm houses, and creating functional institutions to support leather stakeholders. Although similar sorts of challenges are also included in the recent policy document on leather (2022-2026), it added that there are mainly ten major competitiveness constraints faced by the leather industry, including insufficient supply of quality raw hides and skins; lack of technical skills at pre-slaughtering, during slaughtering and post-slaughtering stages; lack of modern technology and tools; lack of a skilled workforce; high import duties on chemicals and dyes; low value chain; lack of proper certifications; lack of environmental compliance; gender equality; and ineffective supply chain. Moreover, most of the challenges are caused at the downstream of the supply chain rather than the upstream, like animal welfare, proper animal nourishment, mechanized slaughtering, and the preservation of hides and skins before being used for further processing in the tanneries. According to the

policy document (2022–2026), Pakistan can increase its leather exports to more than \$2 billion dollars in the future if the above constraints are addressed, especially compliance with the auditing protocols of LWG.

Conclusion

The study was conducted in order to understand how the variables, including raw materials, taxation and tariff, costing, market potential, FDI, and government potential policy, can influence the exportation of handbags in Pakistan. The study then compared the policies of Pakistan with those of Vietnam and Cambodia and then developed a close-ended survey in order to explain the relationship between independent and dependent variables. The researcher then collected the data from the most relevant exporters. It has also been observed at the same time that the monthly minimum wage in Pakistan is quite lower than in Vietnam and Cambodia, but at the same time, Pakistan's labor productivity is also lower than Vietnam but higher than Cambodia. Similarly, the cost of electricity in Pakistan is higher than in Vietnam but, lower than in Cambodia, especially in the case of the leather industry. However, the tariff on accessories used in the leather industry is zero in Pakistan. However, Cambodia and Vietnam charge some tariff on the accessories. But, the tariff on the importation of chemicals is the highest in Pakistan as compared to Vietnam and Cambodia. Pakistan charges 20-26% custom duty as compared to a maximum of 7% by Cambodia and 8.4% by Vietnam. However, Vietnam charges 0% customs duty on most chemicals. Hence, the cost of chemicals is the major differentiator among the three countries.

Moreover, the study found through conducting the survey that cotton is the most commonly used fabric in the manufacturing of the inner parts of handbags in Pakistan, Cambodia, and Vietnam. However, Cambodia and Vietnam don't produce a significant amount of cotton, while Pakistan produces 60% of the total domestic cotton consumption inside the country. It was further found that the acquisition of semi-finished leather is actually cheaper in Vietnam and Cambodia as compared to Pakistan because it costs 20-30% in both countries, while Pakistan invests 40-50% in the process. It was then found that Vietnam's costs of tariff and customs were the lowest as compared to Pakistan and Cambodia. Pakistan imposes almost a 20% tariff on accessories made of leather, while Cambodia charges 13% and Vietnam 0% because of bilateral and regional trade agreements with China and Singapore. Pakistan imposes a 22-35% corporate tax rate based on the nature and size of the organization and Vietnam charges a progressive 35%. However, the corporate tax charged by Cambodia is 20%. However, it was noted that a major share of handbags are exported by Vietnam and Cambodia to the USA and China, but Pakistan exports most of its handbags to Italy, Germany, and Australia. While asked why Pakistan is not exporting more to those countries, they responded that they don't have much knowledge about Chinese customers and high freight costs are also an issue. They added that if Pakistan signs more trade agreements and builds supportive infrastructure while increasing export rebates as well, then the export of handbags can be increased.

Moreover, the manufacturing sectors of Cambodia and Vietnam are heavily driven by inward FDI; hence, Pakistan also needs to make efforts in this regard. The exporters suggested that Pakistan needs \$100-200 million dollars in foreign investment in order to reach \$2 billion in exports in the near future. While it was asked how the government could support increasing the overall exports of the leather industry, the exporters suggested that if the government reduces customs duty on the imports of inputs used as raw materials in the manufacturing of

handbags, the exports may increase by up to 10%. Similarly, if the government reduced the corporate tax rate of leather manufacturers and increased their export rebate to 10%, the impact on exports would be up to 40%. Moreover, the maximum impact on exports can be observed through addressing major supply chain issues related to the leather industry in Pakistan.

Recommendations

- 1- Pakistan can increase its overall exports of leather if the structural issues of the supply chain are addressed in the short, medium, and long term.
- 2- It was suggested by stakeholders that the export of handbags can be increased if the cost of the downstream chain is reduced.
- 3- The cost of downstream can be reduced by offering DTRE(Duty and Tax Remission for Exports) scheme to the leather exporters of Pakistan
- 4- The exporters suggested that the cost of chemicals is quite higher; hence, the 50% reduction in the customs duty can make the difference.
- 5- The exporters also suggested that there should be no tariff on the importation of samples, and a freight subsidy could be given on the exportation of samples.
- 6- It was also suggested by stakeholders that the latest technology, skilled workforce, and functional institutions are key hurdles that must be addressed in the short and medium term.
- 7- It was also suggested that Pakistan can increase its exports of leather to \$2 billion if the government increases the rebate up to 10% and addresses structural issues as well.
- 8- It was finally suggested that the government of Pakistan must focus on getting more FDI in the leather sector and also reduce tariffs and taxation collectively.

Annex

Results Analysis

This research will include two kinds of analysis descriptive and inferential analysis

Descriptive Analysis

Raw Materials

Figure 7: Fabric used in Handbags

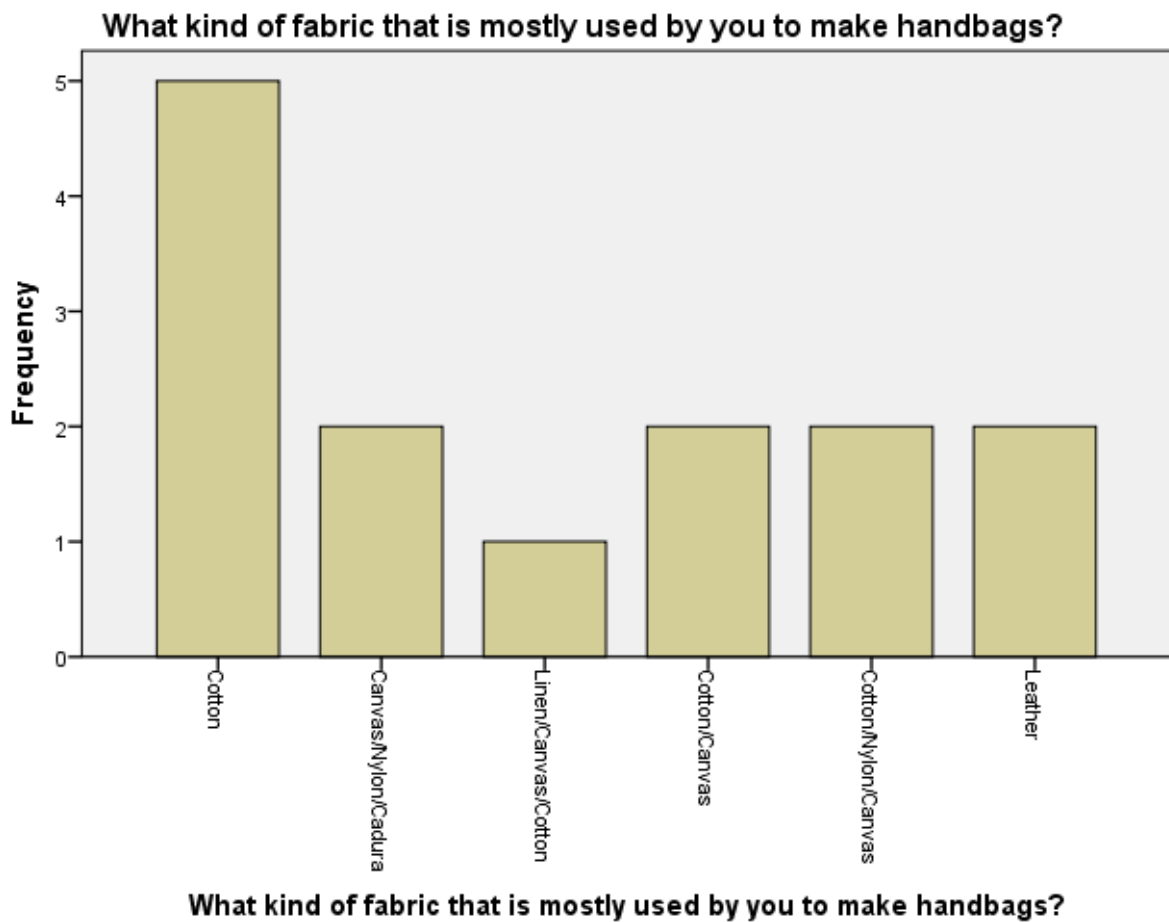
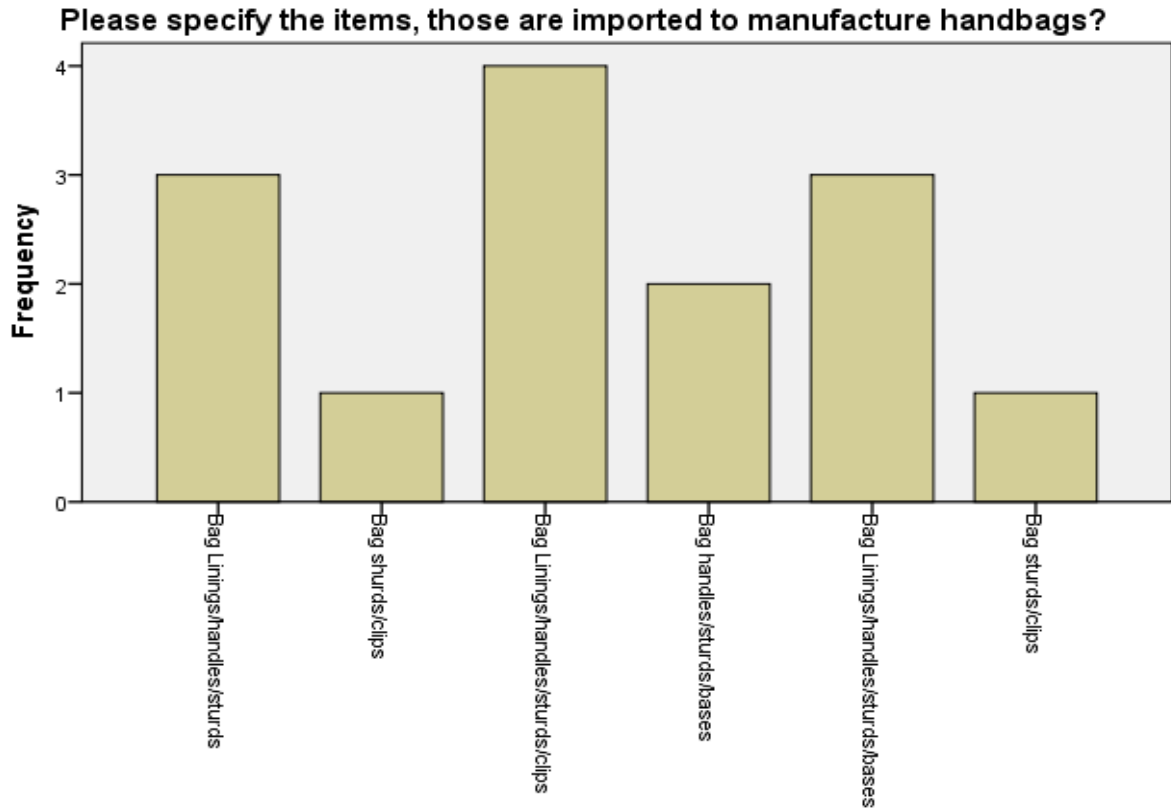
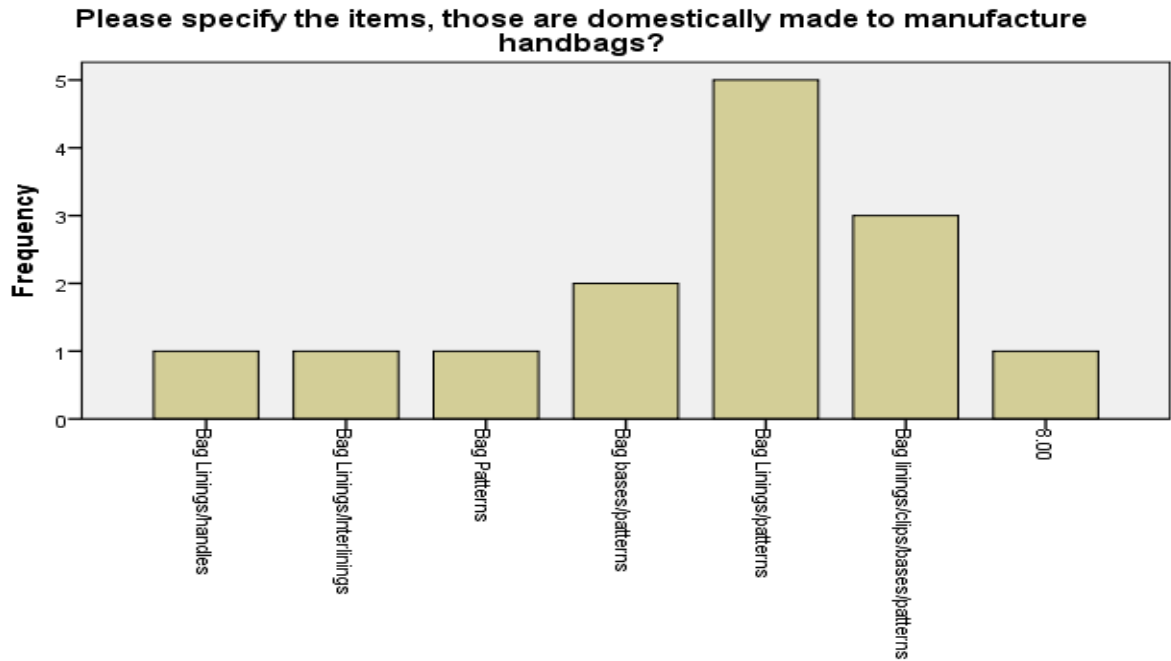


Figure 8: Imported items used in Handbags



Please specify the items, those are imported to manufacture handbags?

Figure 9: Domestic items used in Handbags



Please specify the items, those are domestically made to manufacture handbags?

Figure 10: Technology used in Handbags

Do you use 3D technology or digital fabrication or any other latest technology to manufacture handbags?

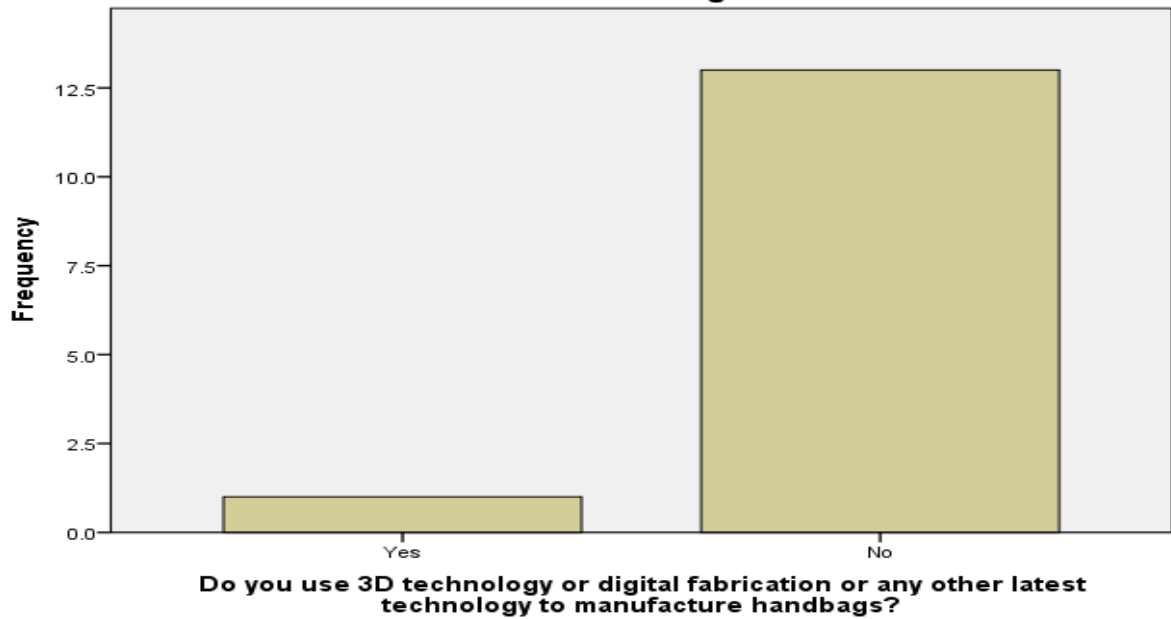
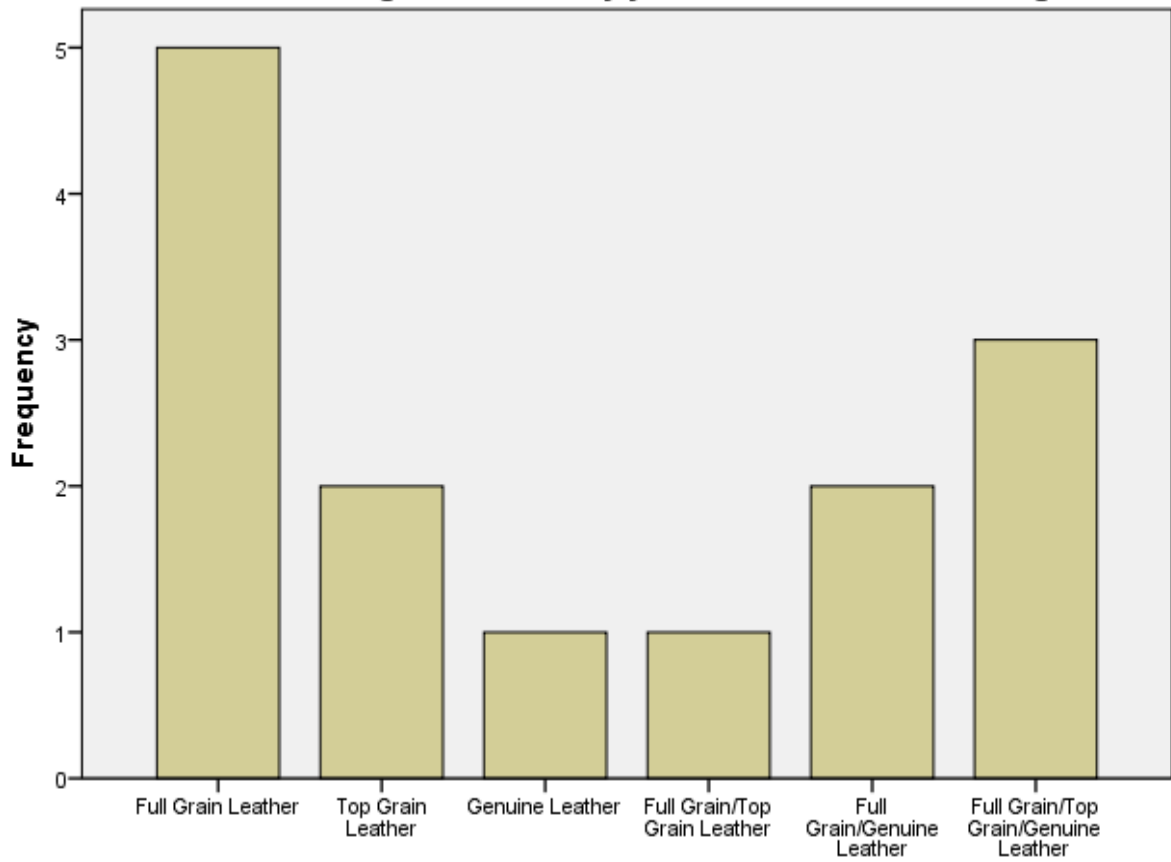


Figure 11: Leather grade used in Handbags

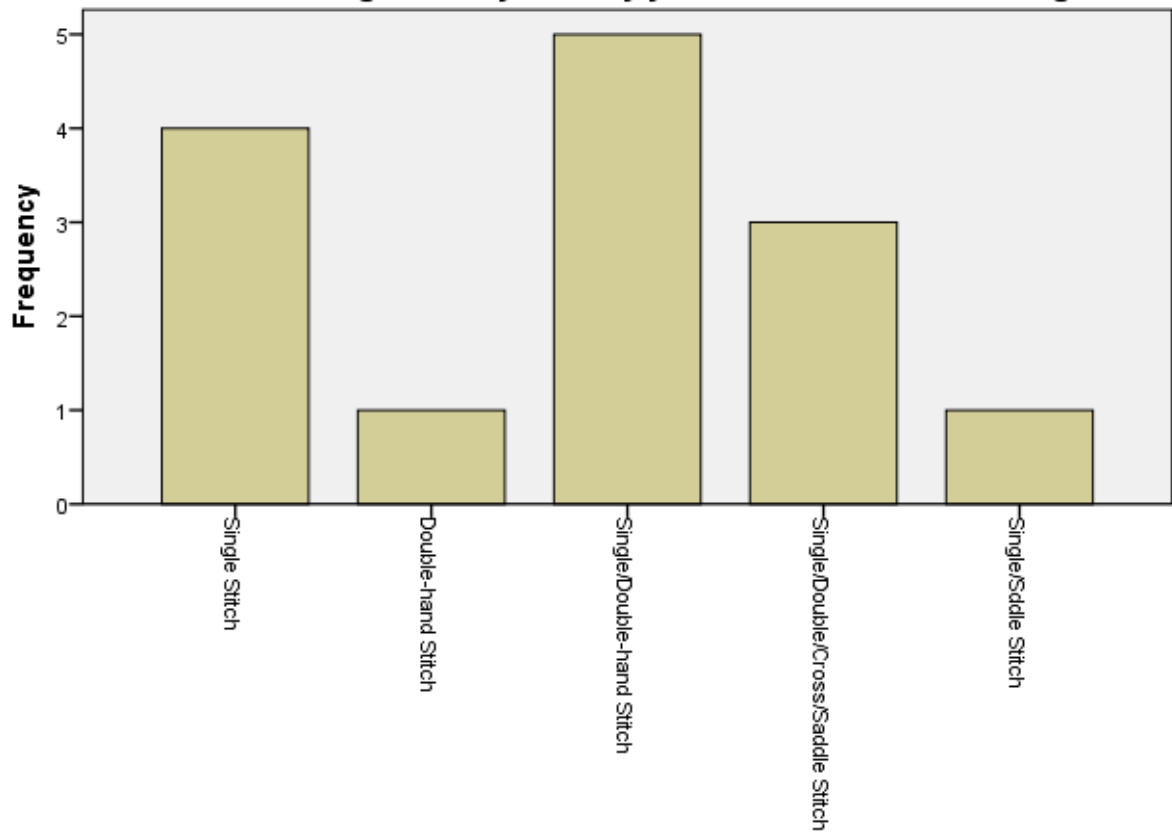
What kind of leather grade is used by you to manufacture handbags?



What kind of leather grade is used by you to manufacture handbags?

Figure 12: Stitching used in Handbags

What kind of stitching is mostly used by you to manufacture handbags?



What kind of stitching is mostly used by you to manufacture handbags?

Costing

Figure 13: Cost of Semi-finished leather

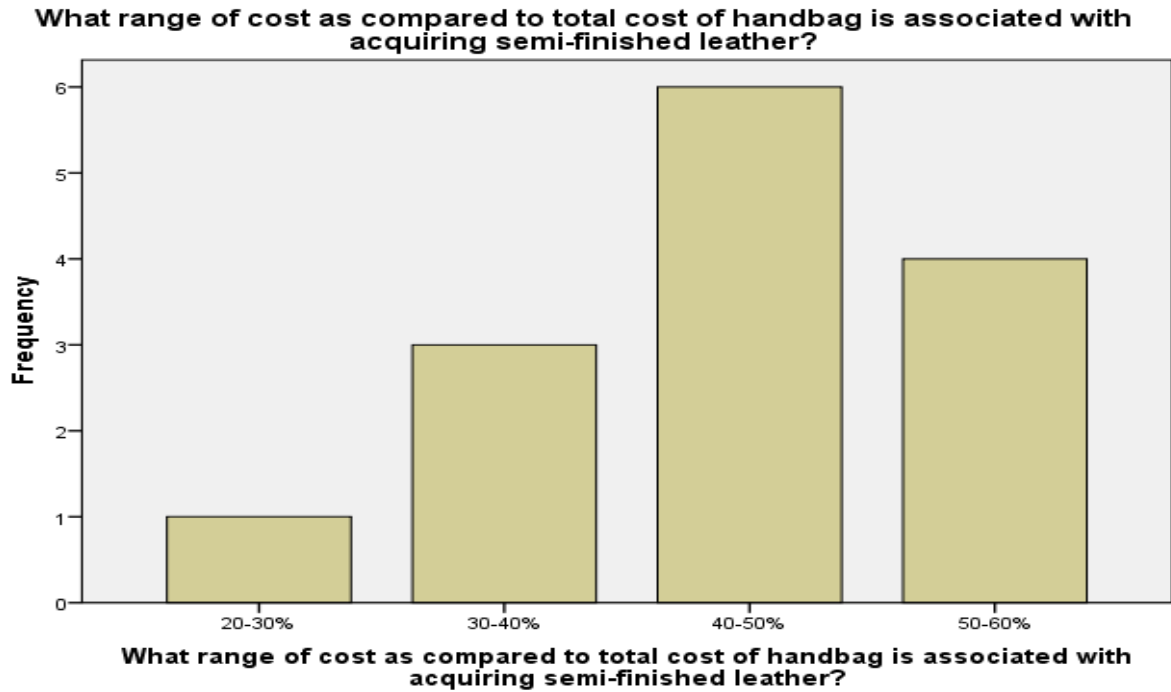


Figure 14: Cost of processing Semi-finished leather

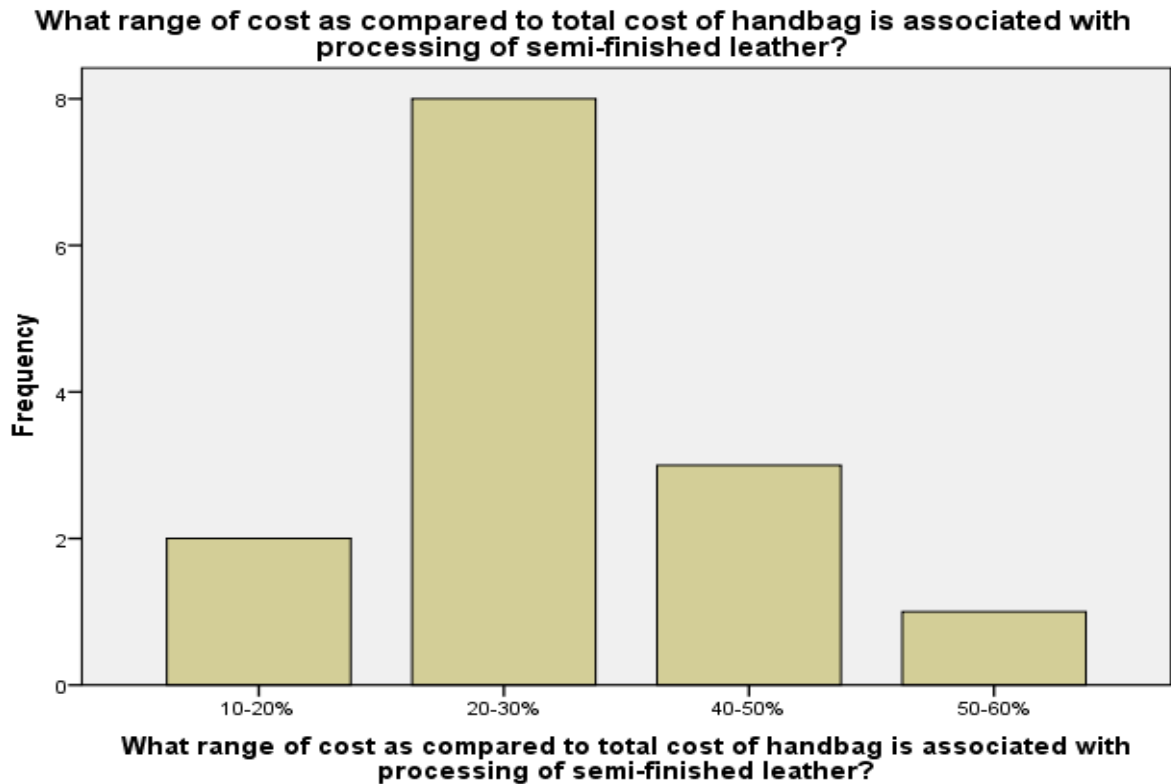


Figure 15: Cost of Taxation and Tariff

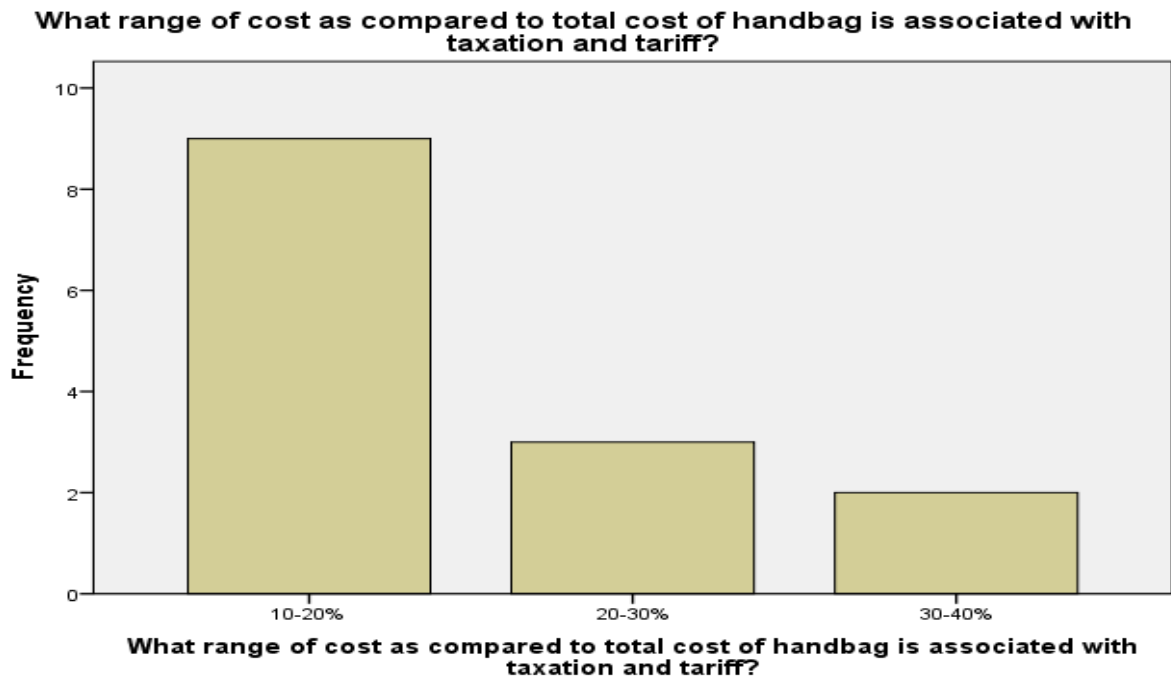
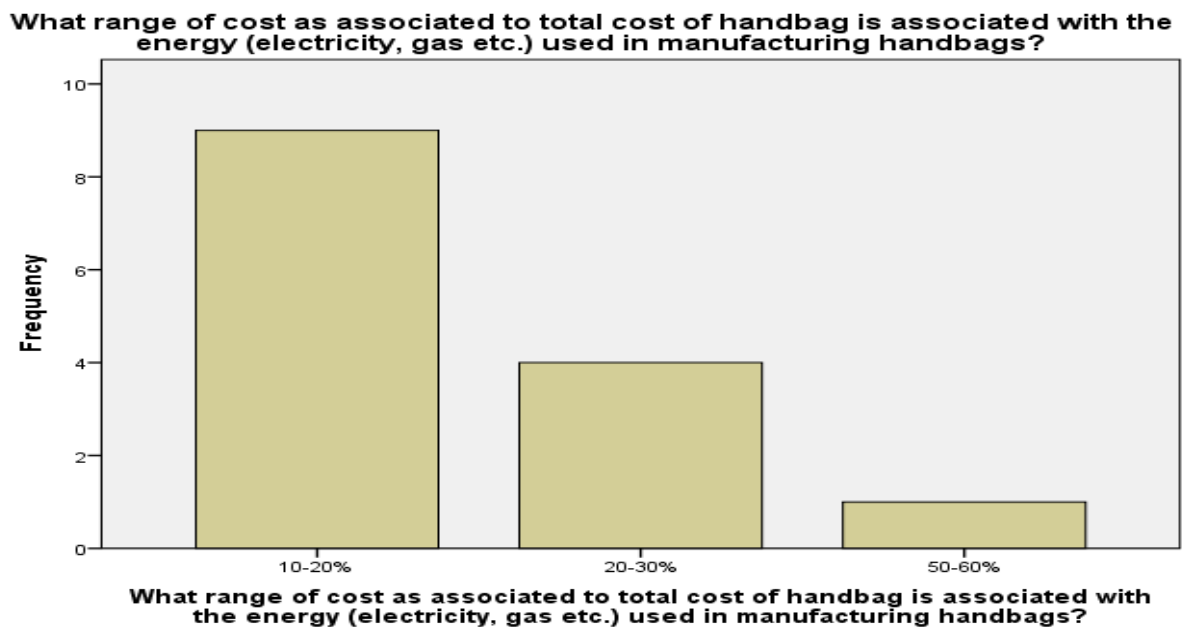


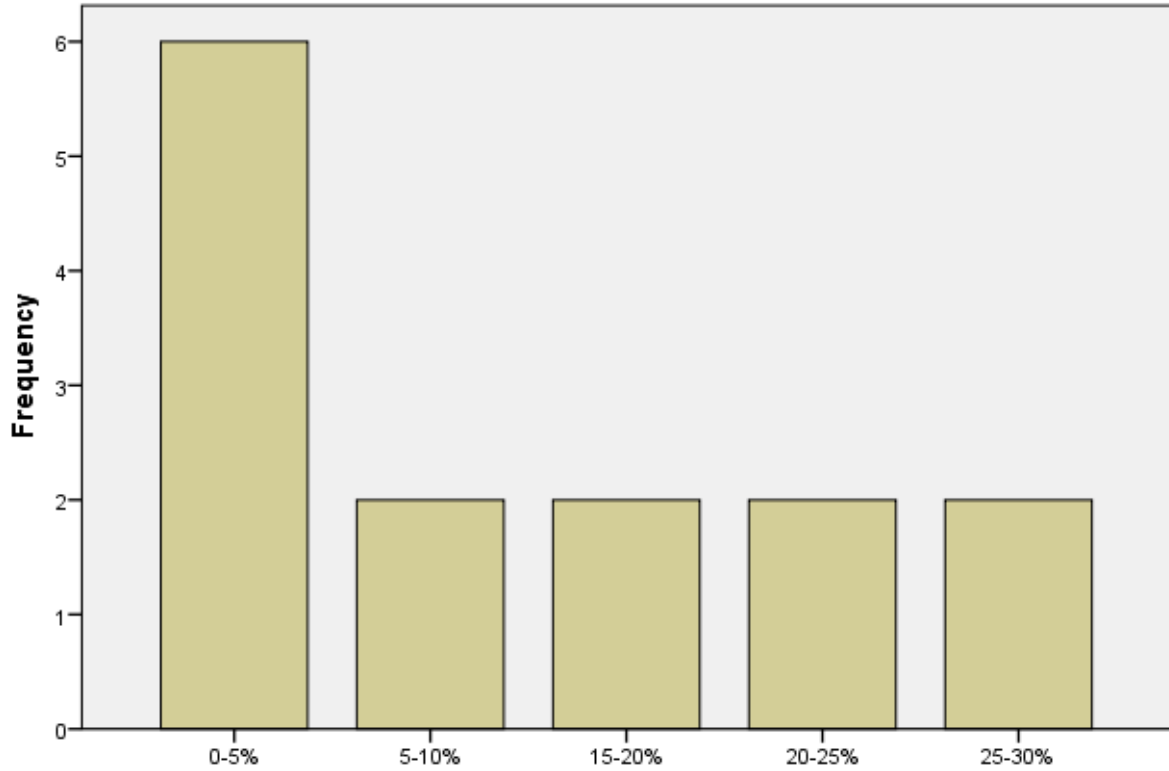
Figure 16: Cost of Energy in manufacturing Handbags



Taxation and Tariff

Figure 17: Cost of tariff on input materials of Handbags

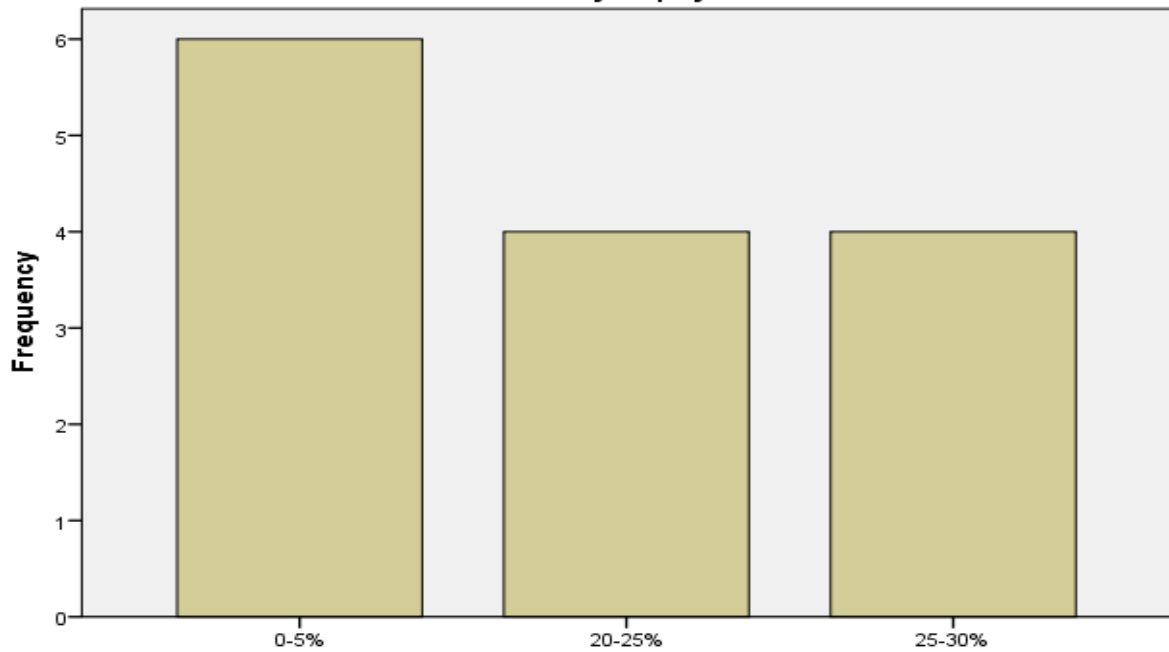
What range of tariff (custom duty, regulatory duty, ACD, etc.) do you pay while importing the input materials for manufacture handbags? (Tick one option)



What range of tariff (custom duty, regulatory duty, ACD, etc.) do you pay while importing the input materials for manufacture handbags? (Tick one option)

Figure 18: Cost of tariff on importation of machinery to manufacture Handbags

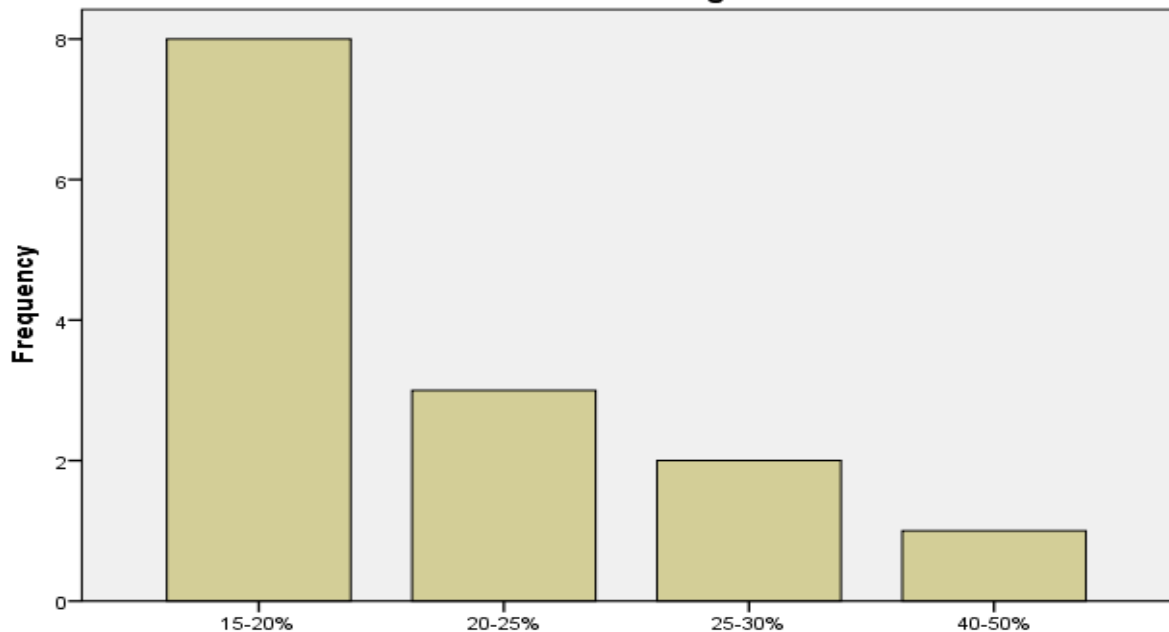
If you import the machinery or equipment to manufacture handbags, what range of tariff do you pay?



If you import the machinery or equipment to manufacture handbags, what range of tariff do you pay?

Figure 19: Cost of total taxation on manufacturing of Handbags

What range of taxation (corporate tax, sales tax and etc.) is applied to manufacture handbags?



What range of taxation (corporate tax, sales tax and etc.) is applied to manufacture handbags?

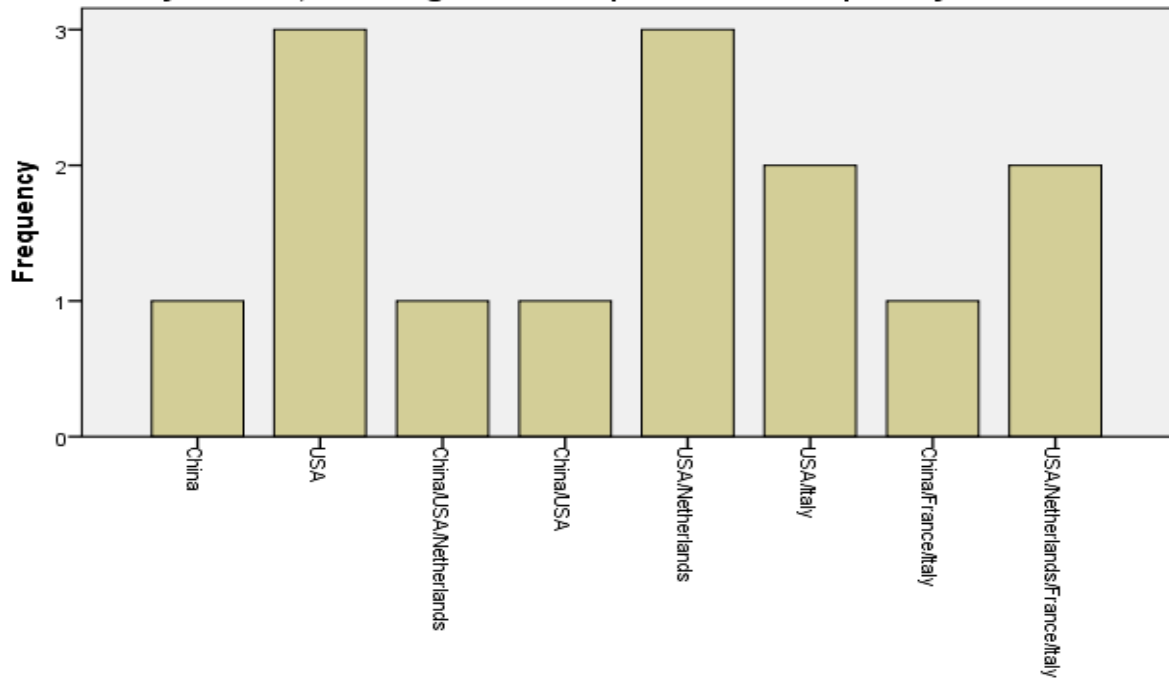
Market Potential

Figure 20: International Certification to export Handbags



Figure 21: Future market of Handbags

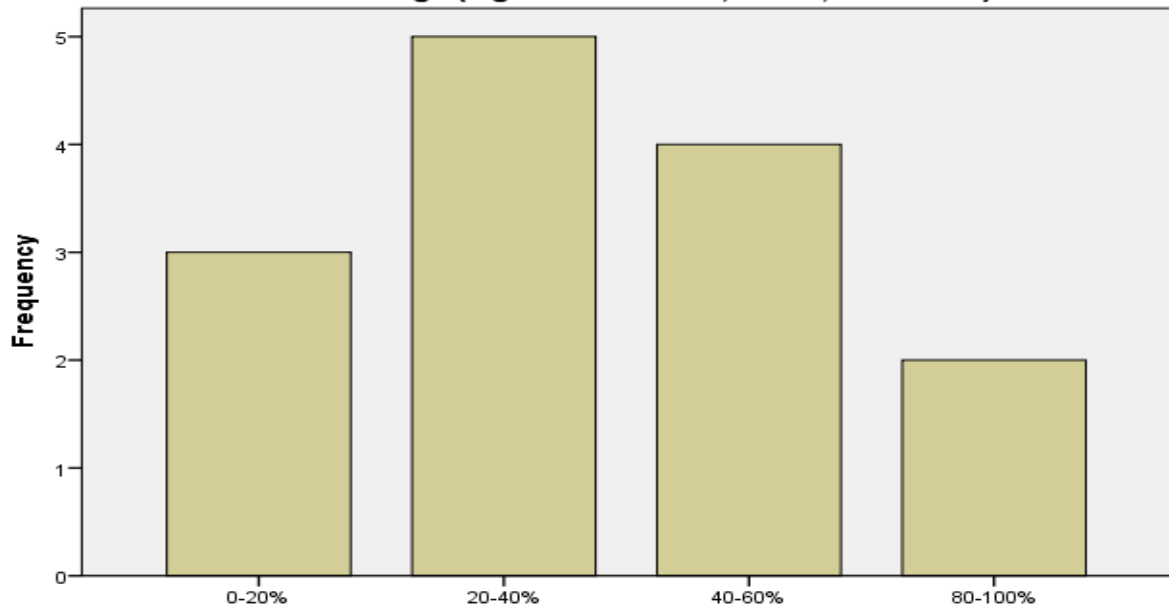
Where do you think, handbags can be exported more in quantity in the future?



Where do you think, handbags can be exported more in quantity in the future?

Figure 22: Knowledge regarding famous brands

How far do you know regarding the branding and designing of international brands of handbags (e.g. Louis Vuitton, Gucci, Prada etc.)?



How far do you know regarding the branding and designing of international brands of handbags (e.g. Louis Vuitton, Gucci, Prada etc.)?

Foreign Direct Investment (FDI)

Figure 23: Impact of FDI on exports of Leather

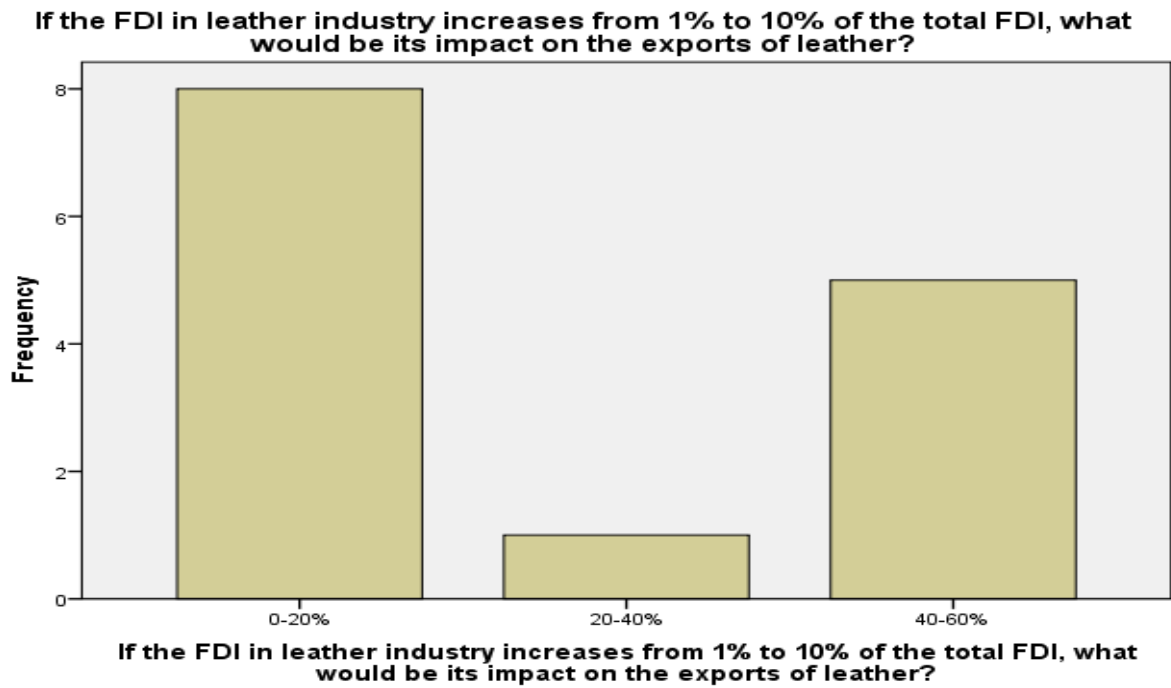
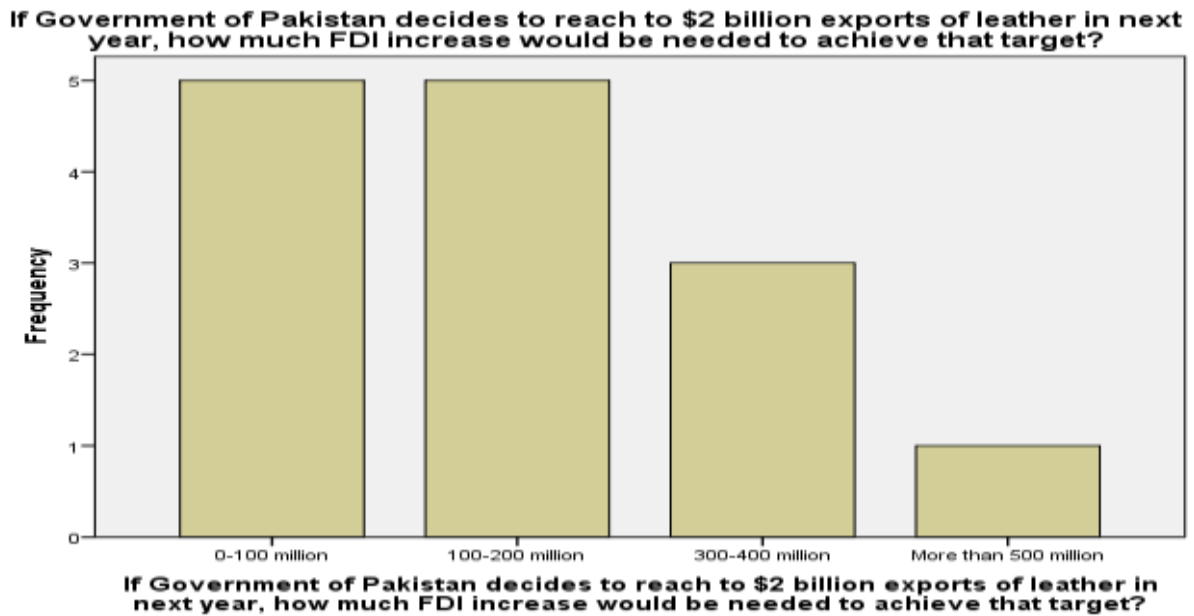


Figure 24: Future FDI expectation to increase exports of Leather



Government Potential Policy

Figure 25: Impact of Custom duty on total cost of Handbags

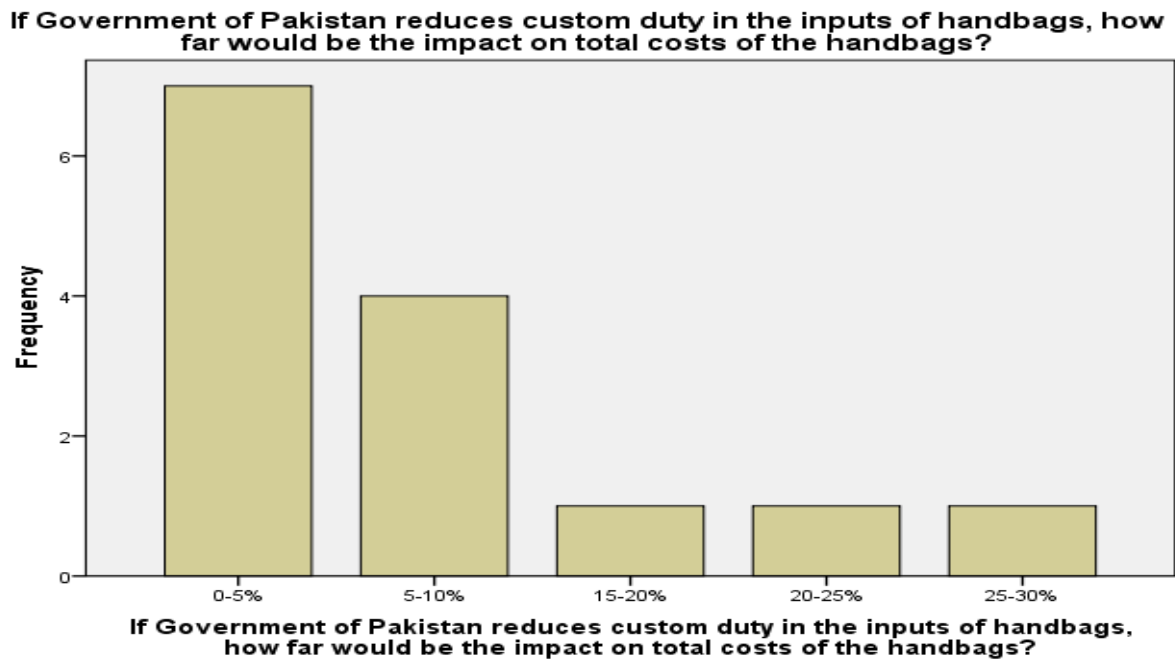
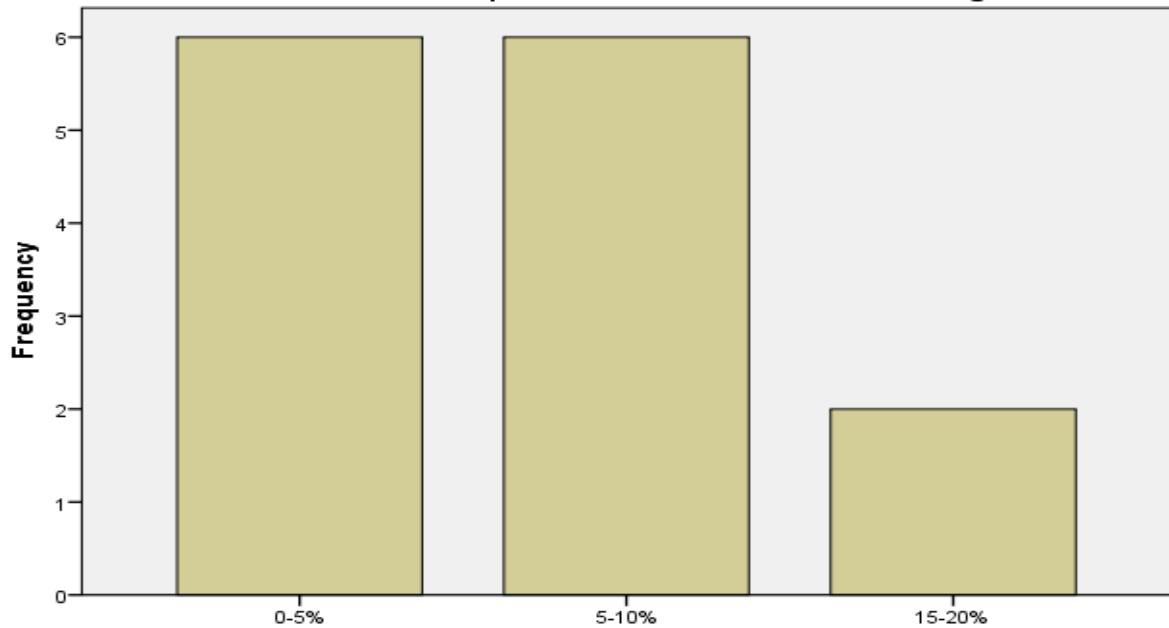


Figure 26: Impact of corporate tax on manufacturing Handbags

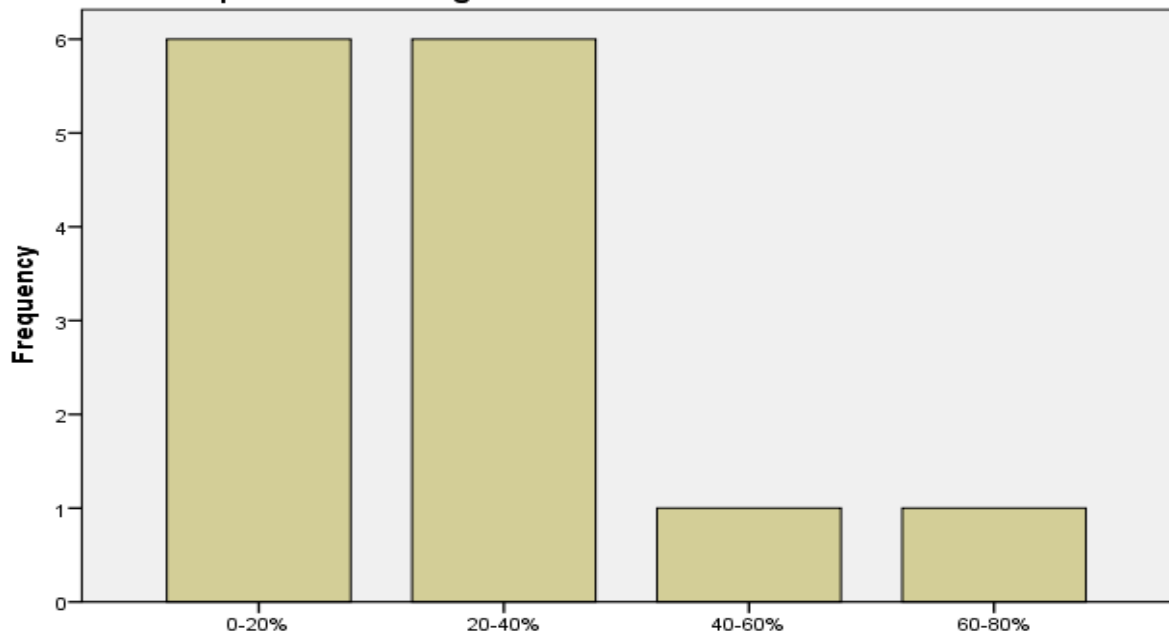
If Government of Pakistan reduces corporate tax on manufacturing handbags, how far would be the impact on total costs of the handbags?



If Government of Pakistan reduces corporate tax on manufacturing handbags, how far would be the impact on total costs of the handbags?

Figure 27: Impact of export rebate on exports of Handbags

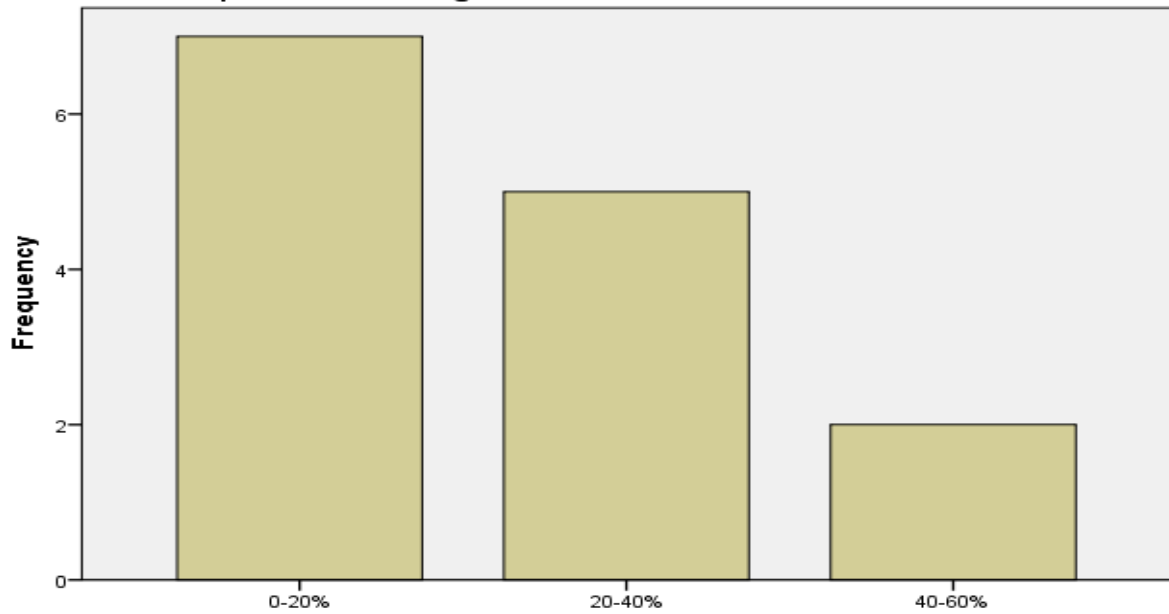
If Government of Pakistan increases export rebate and make it 10%, how much exports of handbags will be increased as a result of it?



If Government of Pakistan increases export rebate and make it 10%, how much exports of handbags will be increased as a result of it?

Figure 28: Impact of reduction of tariff on exports of Handbags

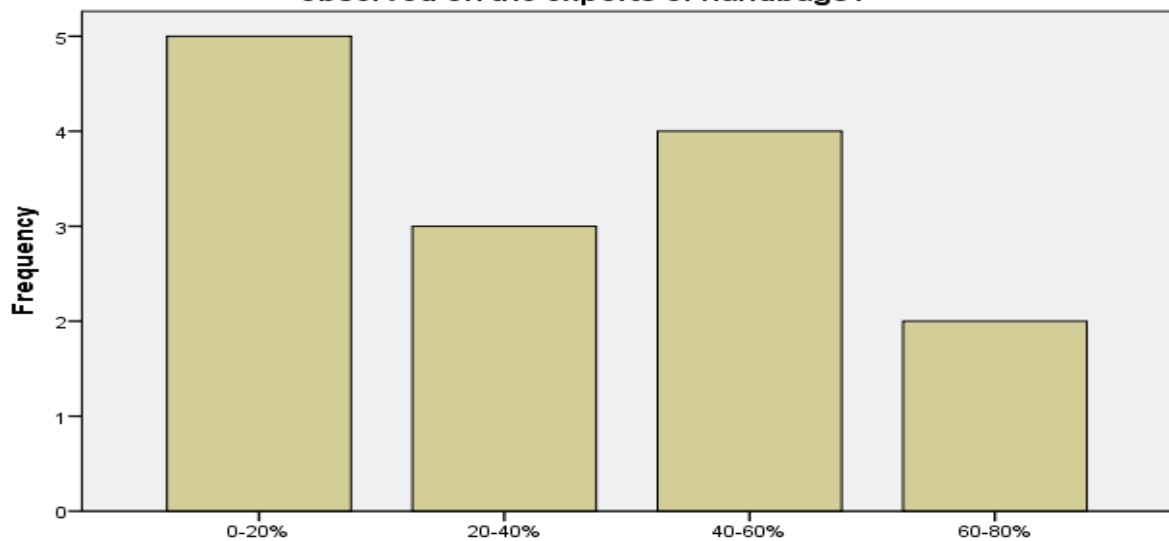
If Government of Pakistan decreases tariffs on inputs and technology, how much exports of handbags will be increased as a result of it?



If Government of Pakistan decreases tariffs on inputs and technology, how much exports of handbags will be increased as a result of it?

Figure 29: Impact of supply chain issues on exports of Handbags

If Government of Pakistan address supply chain issues including the establishment of slaughter houses and others, how much impact would be observed on the exports of handbags?



If Government of Pakistan address supply chain issues including the establishment of slaughter houses and others, how much impact would be observed on the exports of handbags?

References

- Chi (2017). *The missing link in the chain?* [Pdf]. Retrieved from <file:///D:/Project%20TDAP/Leather%20Division/Chi%202017.pdf>
- Cambodia Development Strategy (2014-18). National Strategic Development Plan 2014-2018[Pdf]. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/genericdocument/wcms_364549.pdf
- Dowlath, M. J. H., Karuppanan, S. K., Rajan, P., Khalith, S. M., Rajadesingu, S., & Arunachalam, K. D. (2021). Application of advanced technologies in managing wastes produced by leather industries—An approach toward zero waste technology. In *Concepts of Advanced Zero Waste Tools* (pp. 143-179). Elsevier.
- Ghazanchyan, M. M., Klemm, M. A. D., & Zhou, Y. S. (2018). *Tax Incentives in Cambodia*[Pdf]. Retrieved from <https://www.elibrary.imf.org/view/journals/001/2018/071/article-A001-en.xml>
- Nguyen, Thuan (2021). *Opportunities for Vietnam's Footwear Industry after the 2019-2020 Pandemic to Achieve Competitive Advantage*. University Honors Theses. Paper 1079. <https://doi.org/10.15760/honors.1106>
- Trade Map (2020). *Exports Chapter 41*. Retrieved from https://www.trademap.org/Country_SelProduct.aspx?nvpm=1%7c%7c%7c%7c%7c41%7c%7c%7c2%7c1%7c1%7c2%7c1%7c%7c2%7c1%7c%7c1
- Trade Map (2020). *Exports Chapter 42*. Retrieved from https://www.trademap.org/Country_SelProduct.aspx?nvpm=1%7c%7c%7c%7c%7c42%7c%7c%7c2%7c1%7c1%7c2%7c1%7c%7c2%7c1%7c%7c1
- Trade Map (2020). *Exports Chapter 64*. Retrieved from https://www.trademap.org/Country_SelProduct.aspx?nvpm=1%7c%7c%7c%7c%7c64%7c%7c%7c2%7c1%7c1%7c2%7c1%7c%7c2%7c1%7c%7c1
- VO, T. Q., & HO, H. T. (2021). The Relationship between Foreign Direct Investment Inflows and Trade Openness: Evidence from ASEAN and Related Countries. *The Journal of Asian Finance, Economics and Business*, 8(6), 587-595.
- UNIDO. (2010). *Future trends in the world leather and leather products industry and trade* [Pdf]. Retrieved from [file:///D:/Project%20TDAP/Leather%20Division/Leather/Literature%20Review/future_trends_in_the_world_leather_and_leather_products_industry_and_trade%20\(1\).pdf](file:///D:/Project%20TDAP/Leather%20Division/Leather/Literature%20Review/future_trends_in_the_world_leather_and_leather_products_industry_and_trade%20(1).pdf)

Memedovic, O., & Mattila, H. (2008). The global leather value chain: the industries, the main actors and prospects for upgrading in LDCs. *International Journal of Technological Learning, Innovation and Development*, 1(4), 482-519.

Market Report (2015). *Exports drive Italian tanners* [Pdf]. Retrieved from

<https://www.gruppodani.com/content/uploads/downloads/ILM.pdf>

Anh, N. T. T., Duc, L. M., & Chieu, T. D. (2014). The evolution of Vietnamese industry. *Manufacturing Transformation*, 235.

CSR (2020). A Dynamic Reality within the French Leather Industry [Pdf]. Retrieved from

<file:///D:/Project%20TDAP/Leather%20Division/Leather/Literature%20Review/CSR%202020.pdf>

Hashmi, G. J., Dastageer, G., Sajid, M. S., Ali, Z., Malik, M. F., & Liaqat, I. (2017). Leather industry and environment: Pakistan scenario. *International Journal of Applied Biology and Forensics*, 1(2), 20-25.

Karinga, K. M. (2019). *Analysis of value chain and performance of leather companies in Kenya* (Doctoral dissertation). Retrieved from

<file:///D:/Project%20TDAP/Leather%20Division/Leather/Literature%20Review/Mwari,%202019.pdf>

Money, C. A. (2010). Leather Working Group Audit Considerations. *Journal of the Society of Leather Technologists and Chemists*, 94(5), 185-189.

Shegani, G. (2014). Study on some pollutants in the leather industry: a case study in Albania. *Int. J. Sci.: Basic and Appl. Res*, 14, 115-124.

Cambodia Policy (2015-2025). *Cambodia Industrial Development Policy (2015-2025)* [Pdf].

Retrieved from <https://kh.rajahtannasia.com/media/2286/cambodia-industrial-development-policyv3.pdf>

GBN (2020). *Partnership Ready Cambodia: Agriculture and Food Processing* [Pdf].

Retrieved

from

file:///D:/Project%20TDAP/Leather%20Division/Leather/Cambodia/GBN_Sector%20Brief_Kambodscha_Agriculture_E_WEB.pdf

UNDP report (2021). How Industry 4.0 can boost Cambodia's economy after COVID-19[Pdf]. Retrieved from

<file:///D:/Project%20TDAP/Leather%20Division/Leather/Cambodia/875b1-how-industry-4.0-can-boost-cambodia%E2%80%99s-economy-after-covid-19.pdf>

Cambodia National Plan (2021-2023). *National Strategic Development Plan, 2019-2023*[Pdf]. Retrieved from

https://data.opendevlopmentmekong.net/dataset/087e8a03-f09d-4eb2-94f2-00d8d237b342/resource/bb62a621-8616-4728-842f-33ce7e199ef3/download/nsdp-2019-2023_en.pdf

Fukuoka, Y. (2021). Vietnam's quest to become "a developed country by 2045": Challenges of sustaining growth and expectations for foreign capital. *Mitsui & Co. Global Strategic Studies Institute*. Retrieved November, 4, 2021.

Baum, M. A. (2020). *Vietnam's development success story and the unfinished SDG agenda* [Pdf]. International Monetary Fund. Retrieved from

[file:///C:/Users/DELL/Downloads/wpica2020031-print-pdf%20\(2\).pdf](file:///C:/Users/DELL/Downloads/wpica2020031-print-pdf%20(2).pdf)

UNIDO (2020). Viet Nam Industry White Paper 2019[Pdf]. Retrieved from

<file:///D:/Project%20TDAP/Leather%20Division/Leather/Vietnam/UNIDO,%202020.pdf>

Nguyen, T.(2021). *Opportunities for Vietnam's Footwear Industry After the 2019-2020 Pandemic to Achieve Competitive Advantage*. University Honors Theses. Paper 1079. <https://doi.org/10.15760/honors.1106>

Anh, N. T. T., Duc, L. M., &Chieu, T. D. (2014). The evolution of Vietnamese industry. *Manufacturing Transformation*, 235.

Rehman, A., Jingdong, L., Chandio, A. A., & Hussain, I. (2017). Livestock production and population census in Pakistan: Determining their relationship with agricultural GDP using econometric analysis. *Information Processing in Agriculture*, 4(2), 168-177.

PBIT (2019). *Spotlighting the leather industry of Pakistan* [Pdf]. Retrieved from

<file:///D:/Project%20TDAP/Leather%20Division/Leather/Pakistan/Spotlighting%20The%20Leather%20Industry%20of%20Pakistan.pdf>

Thews, M., Adriaans, I (2021). *Leather Products from Pakistan* [Pdf]. Retrieved from <https://www.somo.nl/nl/wp-content/uploads/sites/2/2021/04/Leather-products-from-Pakistan-mapping-paper.pdf>

Pakistan Exports Strategy (2022-2026). *Leather and Leather Goods* [Pdf]. Retrieved from <file:///D:/Project%20TDAP/Leather%20Division/NATIONAL%20PRIORITY%20SECTOR%20%20EXPORT%20STRATEGY.pdf>

Pradeep, S., Sundaramoorthy, S., Sathish, M., Jayakumar, G. C., Rathinam, A., Madhan, B., ...& Rao, J. R. (2021). Chromium-free and waterless vegetable-aluminium tanning system for sustainable leather manufacture. *Chemical Engineering Journal Advances*, 7, 100108.