

2022

Trade Analysis

Pakistan Surgical Instruments Sector



Turn Potential into Profit!



Small and Medium Enterprises Development Authority (SMEDA)

Ministry of Industries and Production

Government of Pakistan

www.smeda.org.pk

2. Product Description

Surgical Instruments (Including both Medical and Dental) can be defined as the equipment and instruments that are specially designed tools or devices to perform specific actions and carrying out desired effects in medical sciences or surgery.

The Harmonized Commodity Description and Coding System (referred as HS Codes) designated for trade of Surgical Instruments (including both Medical and Dental) is 9018 described as “Instruments and appliances used in medical, surgical, dental or veterinary sciences, incl. scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments”. The brief description of sub categories falling with-in product category of HS 9018 is provided in the following table:

Table 1: Surgical Instruments (including both Medical and Dental) Product Details

Product Category HS Code	Product Description
901890	Instruments and Appliances For Medical, Surgical Or Veterinary Sciences
901839	Needles, Catheters, Cannulae Etc.
901819	Electro-Diagnostic Apparatus
901831	Syringes, with or without Needles
901849	Instruments and Appliances for Dental Sciences
901812	Ultrasonic Scanning Apparatus
901813	Magnetic Resonance Imaging Apparatus
901850	Ophthalmic Instruments and Appliances
901832	Tubular Metal Needles and Needles for Sutures
901811	Electro-Cardiographs
901841	Dental Drill Engines
901820	Ultraviolet Or Infra-Red Ray Apparatus
901814	Scintigraphic Apparatus
901890	Instruments and Appliances for Medical, Surgical Or Veterinary Sciences
901839	Needles, Catheters, Cannulae etc.
901819	Electro-Diagnostic Apparatus
901831	Syringes, with or without needles
901849	Instruments and Appliances for Dental Sciences
901812	Ultrasonic Scanning Apparatus
901813	Magnetic Resonance Imaging Apparatus
901850	Ophthalmic Instruments and Appliances
901832	Tubular Metal Needles and Needles for Sutures



901811

Electro-Cardiographs

3. Global Trade of Surgical Instruments (including both Medical and Dental)

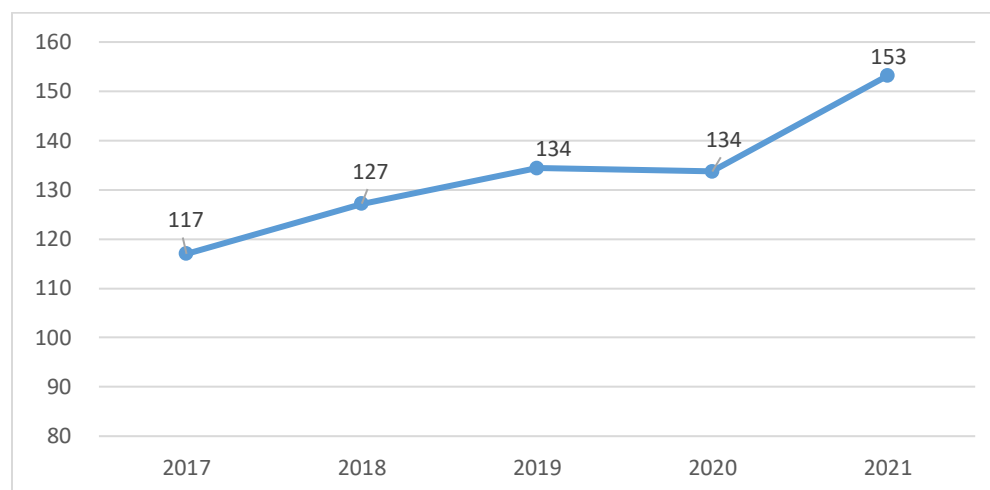
Surgical Instruments are one of the most valuable and important commodities in international trade. During the year 2021, the international trade value of Surgical Instruments was USD 153 Billion. The exports have shown a mixed growth trend with an average growth rate of 7 % from the year 2017 ~ 21. The last five years exports of Surgical Instruments in global trade are as follows:

Table 2: Global Exports of Surgical Instruments (including both Medical and Dental) - Last 5 Years

Description	2017	2018	2019	2020	2021
World Exports (Value in US \$ Billion)	117	127	134	134	153
Growth %age	5%	9%	6%	-1%	15%

Source: Trade Map

**Figure 1: Growth Trend of world export of Surgical Instruments (including both Medical and Dental)
Exports (Value US \$ Billion)**



Major Exporting Countries

During the last 5 years, the exports of Surgical Instruments have been dominated by USA followed by Germany. The percentage share of the five major exporting countries is given in the following table:

Table 3: Major Exporters in 2021

Country	Exports (Value in US \$ Billion)	% Share in Exports in World	Avg. % Growth in Last 5 Years
United States of America	31	20%	4%
Germany	19	12%	8%
Netherlands	15	10%	13%



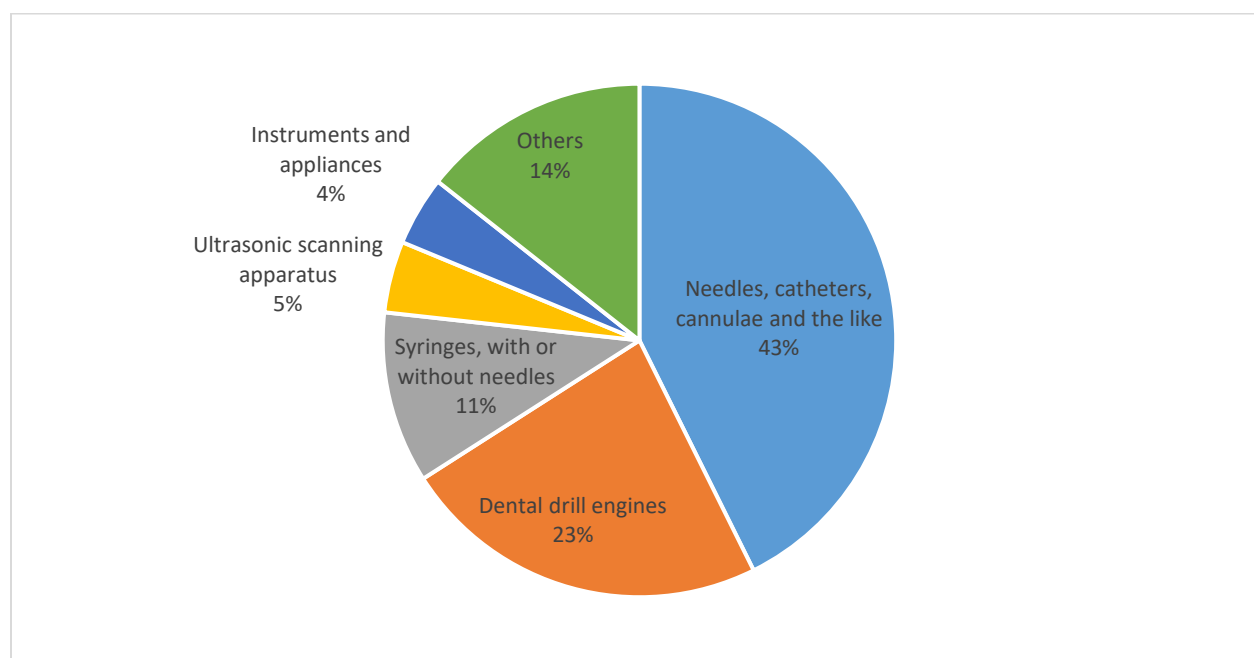
China	10	7%	14%
Mexico	9	6%	7%

Source: Trade Map

Product Mix - Share in Exports

Needles, Catheters and Cannulae are the highest export item of Surgical Instruments in terms of global trade followed by Dental drill engines etc. This is quite evident from the percentage share of different product categories in exports, as exhibited below:

Figure 2: Product Mix of Surgical Instruments Export



Source: Trade Map

4. Pakistan's Exports

Pakistan is one of the major exporting countries of Surgical Instruments as the country enjoys specialized skills especially when it comes to medical surgical and dental instruments. Over the years, export figures have shown reasonable growth, showing a predominantly positive growth trend in last 5 years with an average growth rate of 4% from the year 2017 ~ 21. During the year 2021, the exports value of Surgical Instruments was US \$421 Million. Pakistan's last five years export figures of Surgical Instruments are as follows:

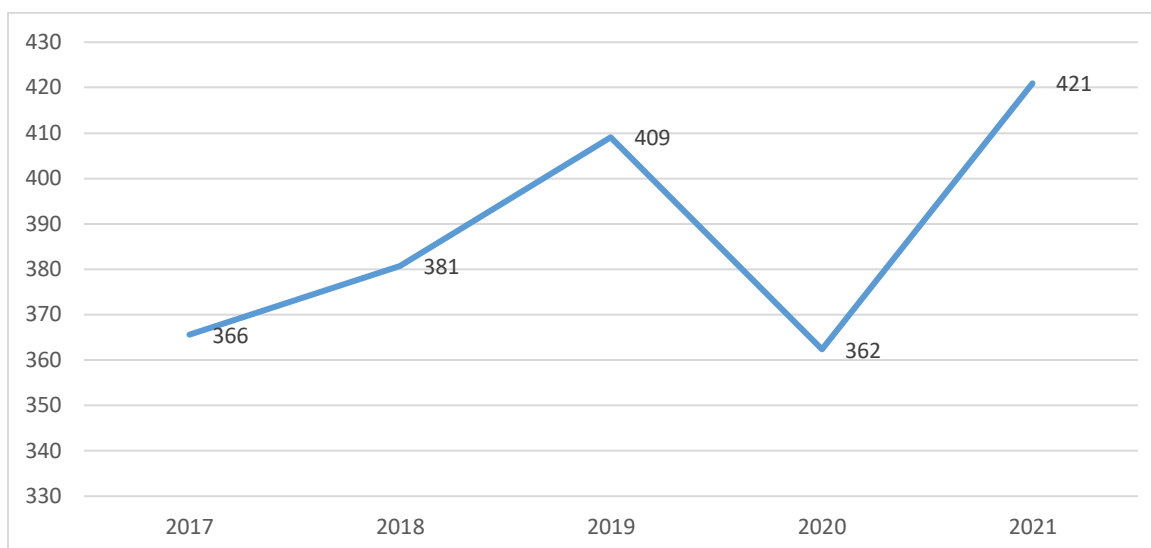
Table 4: Pakistan Exports Surgical Instruments - Last 5 Years

Description	2017	2018	2019	2020	2021
Exports (Value in US \$ Million)	366	381	409	362	421
Growth %age	5%	4%	7%	-11%	16%



Source: Trade Map

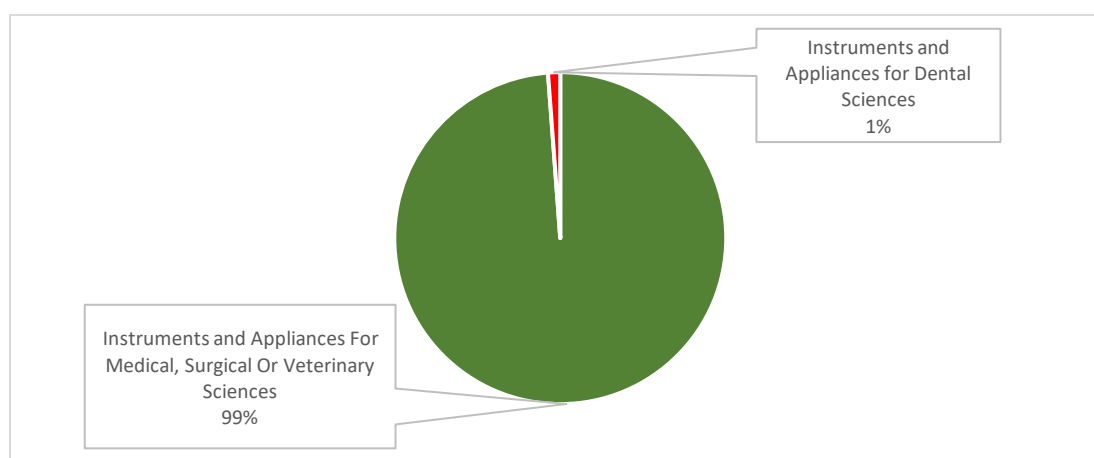
Figure 3: Growth Trend of Pakistan's Exports (Value in US \$ Million)



Pakistan's Major Product Mix

Instruments and Appliances For Medical, Surgical Or Veterinary Sciences (901890) are overwhelmingly the highest exported items of HS Code 9018 in Pakistan's exports followed by Instruments and Appliances for Dental Sciences (901849) with just 1 % share. This is quite evident from the percentage share of different product categories in Pakistan's exports, as exhibited below:

Figure 4: Pakistan's Product Mix - Surgical Instruments



Source: Trade Map



Pakistan's Exports Destinations

In last five years, Pakistan's major export partner for Surgical Instruments was United States of America, followed by Germany. The percentage share of top five importing countries of this commodity from Pakistan is given in the following table:

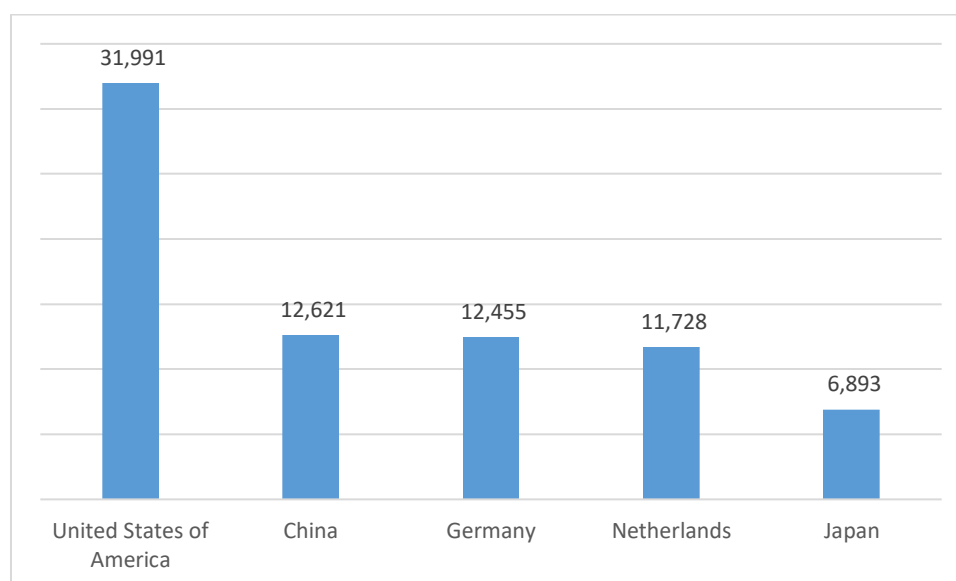
Table 5: Pakistan's Top Five Export Partners – Last 5 Years (Value in US \$ Million)

Country	2017	2018	2019	2020	2021
United States of America	96	101	125	99	113
Germany	49	52	54	55	62
United Kingdom	34	35	36	30	37
China	16	22	19	22	20
United Arab Emirates	11	11	12	12	18

5. Import Destinations of Surgical Instruments Global Trade

The major importing country of Surgical Instruments globally is USA, followed by China and Germany. The figures of five major importing countries are given below;

Figure 5: World Top 5 Importers (Trade Value in US \$ Million)



Source: Trade Map

Partner Countries of Top 3 Importers

The trade partners of the world's top 3 importing countries of Surgical Instruments (including both Medical and Dental) are given in the following section. The average percentage share of exported value of Surgical Instruments to top 3 importing countries is evaluated and presented in the form of graphs.

Figure 6: Trade Partners of USA (Avg. % Share in Export Value – Last 5 Years)

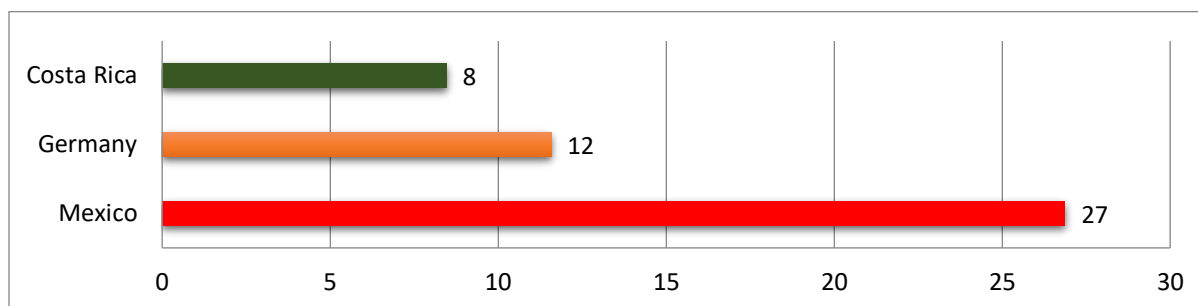
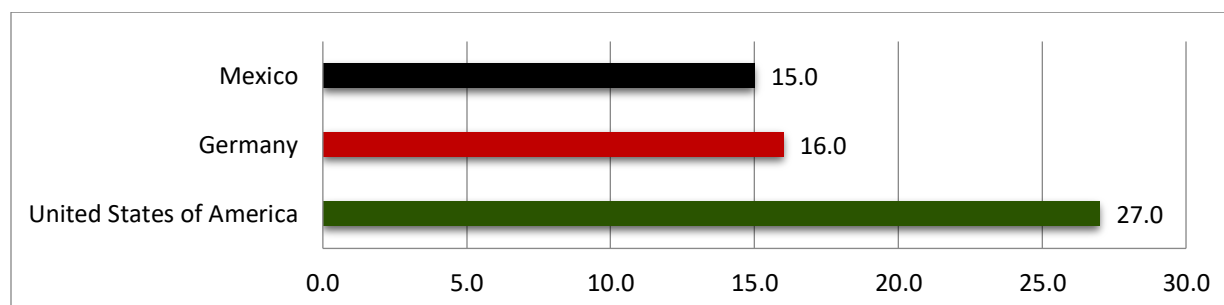
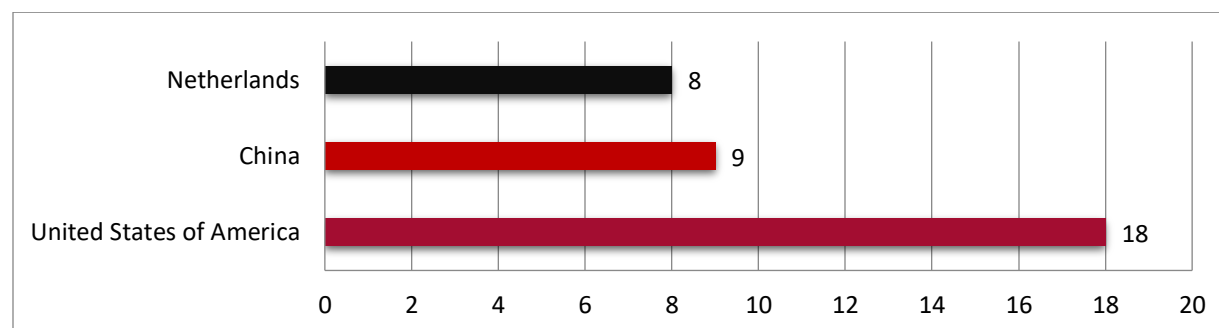


Figure 7: Trade Partners of China (Avg. % Share in Export Value – Last 5 Years)



Source: Trade Map

Figure 8: Trade Partners of Germany (Avg. % Share in Export Value – Last 5 Years)



From the above graphical descriptions, it is clear that Pakistan is not among the top exporters of Surgical Instruments (including both Medical and Dental). In fact, Pakistan's share in exports to these high potential markets is miserably low i.e 26th in the world for USA with negligible share, 30th in the world for

Germany with share of 1 percent. Therefore, Pakistani exporters should target the biggest markets with huge export potential by offering high value products.

Price Comparisons

The following price comparisons of Surgical Instruments show the prices charged by exporting countries for major product mix.

Figure 9: Price Comparison for Instruments and Appliances for Medical, Surgical or Veterinary Sciences (HS 901890, US \$ / Ton)

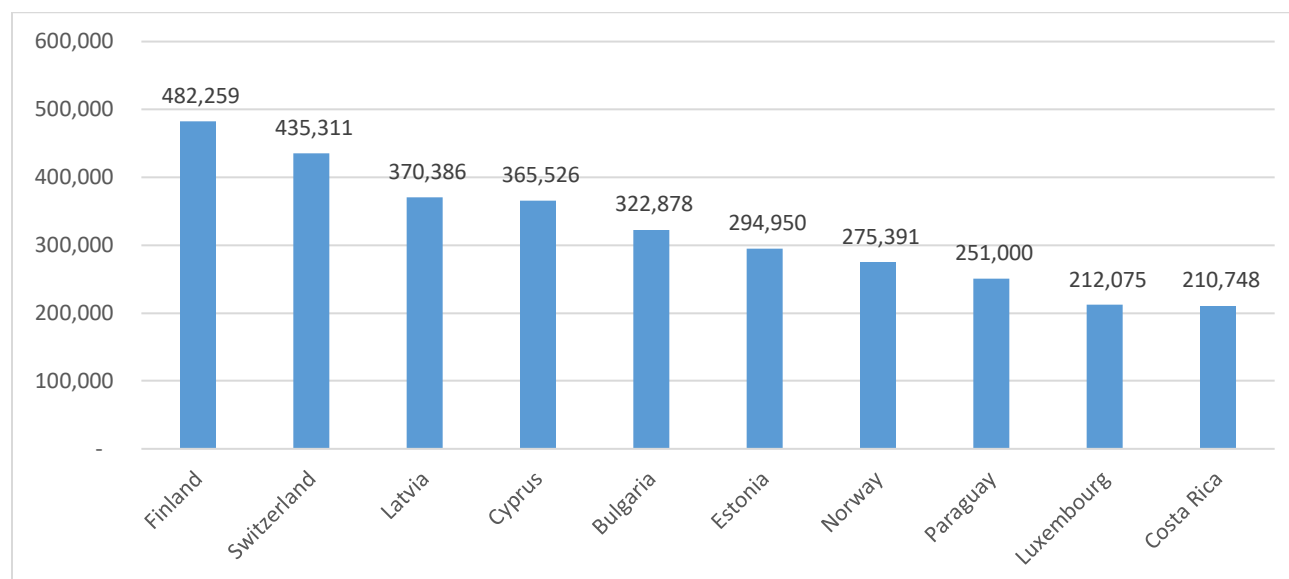
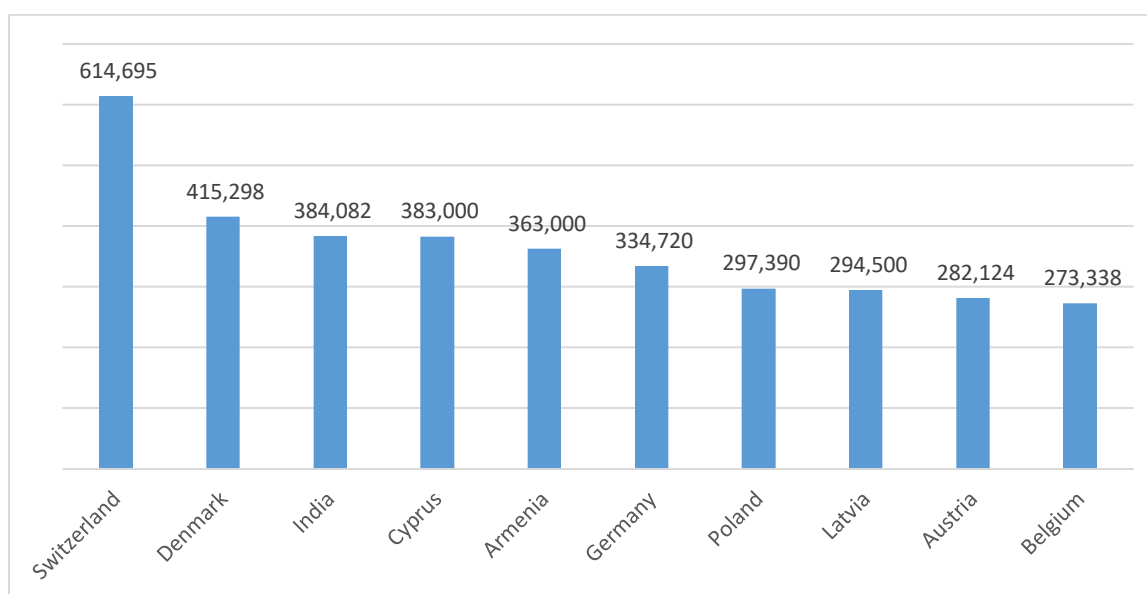
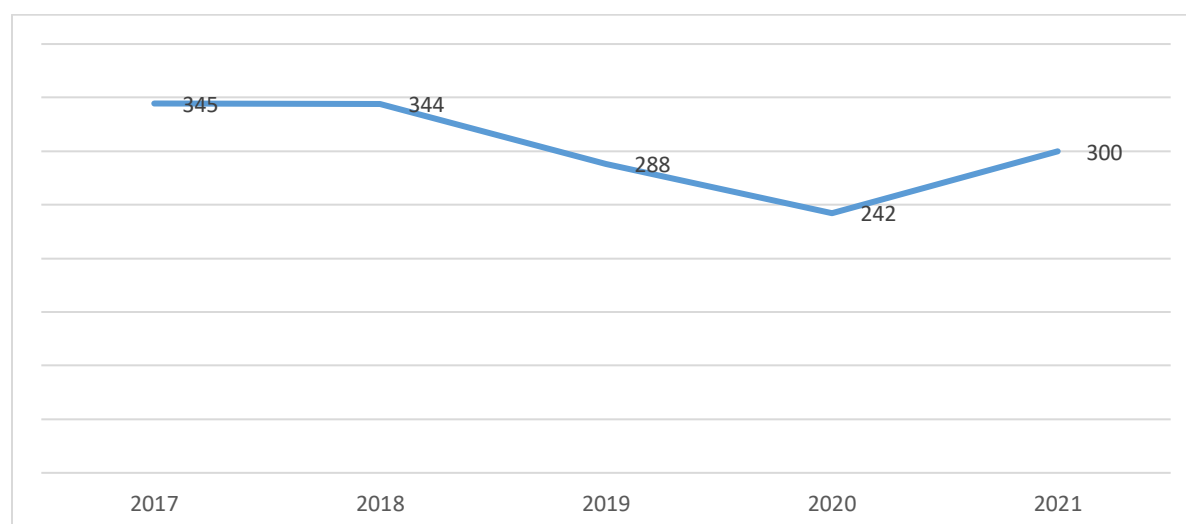


Figure 10: Price Comparison for Instruments and Appliances for Dental Sciences (HS 901849, US \$ / Ton)



6. Pakistan's Import Scenario

Pakistan's Imports of surgical instruments in last five years in US \$ Million



The data above shows that there is huge potential of import substitution for the manufacturers of surgical instruments in Pakistan

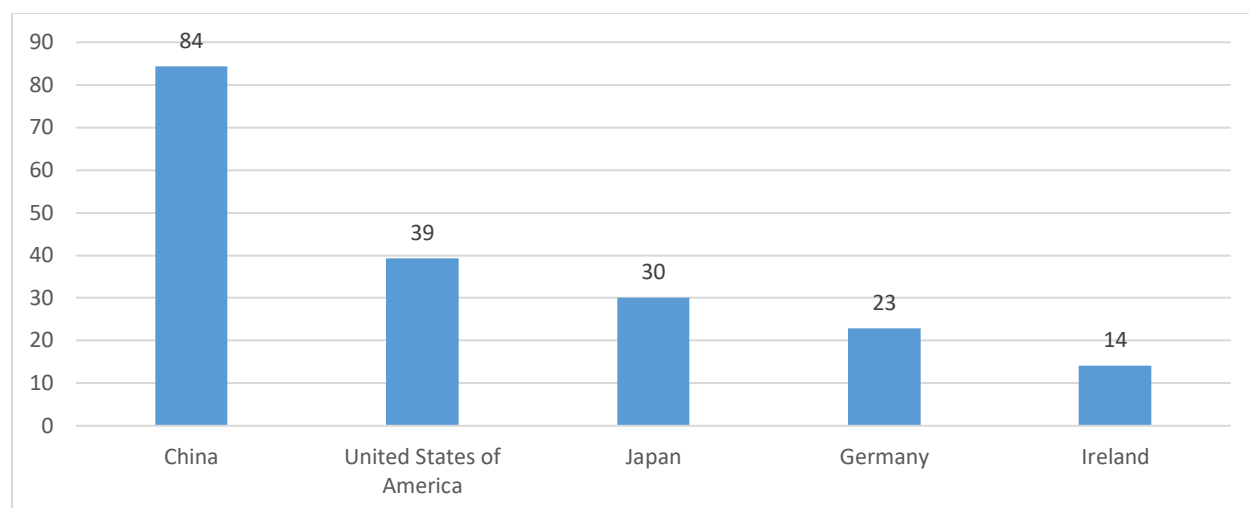
List of Items imported by Pakistan

HS Code	Product label	Imported value in 2021 (USD Million)
'901839	Needles, catheters, cannulae and the like, used in medical, surgical, dental or veterinary ...	120.271
'901890	Instruments and appliances used in medical, surgical or veterinary sciences, n.e.s.	79.92
'901819	Electro-diagnostic apparatus, incl. apparatus for functional exploratory examination or for ...	35.151
'901831	Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences	20.357
'901813	Magnetic resonance imaging apparatus	14.645
'901812	Ultrasonic scanning apparatus	8.169
'901850	Ophthalmic instruments and appliances, n.e.s.	6.363
'901832	Tubular metal needles and needles for sutures, used in medical, surgical, dental or veterinary ...	5.314
'901811	Electro-cardiographs	4.573
'901814	Scintigraphic apparatus	3.142
'901849	Instruments and appliances used in dental sciences, n.e.s.	1.107
'901820	Ultraviolet or infra-red ray apparatus used in medical, surgical, dental or veterinary sciences	0.671
'901841	Dental drill engines, whether or not combined on a single base with other dental equipment	0.068



Pakistan's Import Partner

Import values in US \$ Million.



7. Pakistan's Export Trade and Tariff

Customs Tariffs/Duties

Knowing customs duties (or tariffs) are important to take decision of choosing a product or service for importation or exportation economically feasible or not. In the same manner to claim refund or rebate again knowing custom duty is essential. Whole circle of import and export depends upon knowing and using the custom tariffs/duties or exemptions. Determining which customs duty is applicable to a product is a complex exercise and expert advice may be sought. Customs Act, 1969, Customs Rules 2001 are the relevant law and Pakistan Customs under FBR is the only authority to deal with custom tariffs and rules. Government often change duty structure and rules due to which these are not stagnant. Following is the link to check the customs tariffs/duties applicable in which Pakistan Customs is the final authority to the extent of Pakistan.

<https://www.fbr.gov.pk/categ/customs-tariff/51149/70853/131188>

8. Prominent International Trade Fairs

Name of Trade Shows	Location	Frequency	Web Links
Arab Health	Dubai International Convention and Exhibition Centre, UAE	Annual	https://www.arabhealthonline.com/en/Home.html
KIMES	COEX, Seoul, Korea	Annual	http://www.kimes.kr/eng/
IWA Outdoor Classics	Exhibition Centre 90471 Nürnberg, Germany	Annual	https://www.iwa.info/en
Medicare Taiwan	Taipei World Trade Center, Taipei City, Taiwan	Annual	https://www.medicaretaiwan.com/
Vietnam Medi-Pharm Expo	Medi-Pharm Expo, Ho Chi Minh City, Vietnam	Annual	http://hcm.medipharmexpo.com/en
Quality Expo	Jacob K. Javits Convention Center, New York, USA	Annual	https://advancedmanufacturingnewyork.com/quality