



# Current Development of Japanese Fastener Industry (Part 1) Production & Sales

## Foreword

As Japan's overall economic growth slowed down in 2024, the IMF revised Japan's GDP growth estimate down to 0.3%, mainly due to Japan's weakening domestic consumption and travel demand and the impact of global geopolitical uncertainty on Japanese manufacturing supply chain. As the world's 3rd largest economy, Japan has R&D capabilities, talent pools, and resources in many cutting-edge fields, but its domestic market is still relatively closed. Facing the competition from China, India, Vietnam and other emerging countries in the past 2 decades in the low-end products field, Japan focuses its industrial development on green energy, AI, biotech, aerospace and other fields and has made good achievements, but after all, the demand for high-end fasteners is still less than that for low-end and mid-range fasteners. Therefore, for Japan's traditional fastener industry, although it has a solid technical foundation, its competitors, with the advantage of economic scale and low cost, are gradually eroding the market originally belonging to Japan. In this article, we will review the development of Japanese fastener industry in recent years and put forward development suggestions for Taiwanese fastener industry to respond to the Japanese market.

Table 1. Trends of Japan in the Global Fastener Import Market from 2019 to 2023

Unit: US\$0.1 bn; %

Ranking	Country	2019	2020	2021	2022	2023	Share in 2023	CAGR
1	USA	58.08	50.58	65.70	85.33	67.05	13.4%	3.7%
2	Germany	40.71	35.46	45.37	51.24	48.17	9.6%	4.3%
3	Mexico	30.24	24.88	32.02	36.21	34.56	6.9%	3.4%
4	China	28.39	27.87	32.81	28.58	24.46	4.9%	-3.7%
5	France	17.71	14.86	17.92	19.61	20.01	4.0%	3.1%
6	Canada	16.61	13.82	16.41	19.84	19.81	4.0%	4.5%
7	UK	13.69	10.45	13.70	15.51	14.81	3.0%	2.0%
8	Poland	4.96	9.33	12.41	13.22	13.17	2.6%	27.7%
9	Italy	9.50	8.86	13.33	14.29	13.02	2.6%	8.2%
10	Netherlands	9.50	8.70	11.41	12.81	11.94	2.4%	5.9%
11	Czech	9.70	8.40	10.27	10.70	11.09	2.2%	3.4%
12	India	8.54	6.08	8.70	9.61	10.95	2.2%	6.4%
13	Spain	7.56	6.60	8.17	10.02	10.48	2.1%	8.5%
14	Thailand	10.39	8.86	11.42	11.06	10.28	2.1%	-0.3%
15	Austria	7.79	7.15	9.38	9.78	9.47	1.9%	5.0%
16	Brazil	5.91	6.52	8.84	9.98	9.21	1.8%	11.8%
17	Japan	9.62	7.84	8.94	10.06	8.67	1.7%	-2.6%
18	Belgium	6.22	5.60	7.00	7.40	7.31	1.5%	4.1%
19	Turkey	4.93	4.54	5.39	6.24	7.01	1.4%	9.2%
20	Vietnam	5.76	6.23	7.56	7.31	6.92	1.4%	4.7%
Subtotal of Top 20 Importers		305.82	272.64	346.75	388.78	358.40	71.5%	4.0%
Subtotal of Other Importers		121.64	110.82	136.77	145.36	142.71	28.5%	4.1%
Total		427.46	383.46	483.52	534.14	501.10	100.0%	4.1%

Source: ITC

## Trend Analysis of Japan in the Global Fastener Import Market Ranking

### a. Changes of Japan in the Global Fastener Import Market

Table 1 shows the trend of Japan in the global fastener import market from 2019 to 2023. The total value of global fastener imports was US\$50.11 billion, and the import value of the world's top 20 importing countries was US\$35.84 billion (with an average growth rate of 4.0% over the past five years and accounting for 71.5% of the global import value, a concentrated market structure); The import values and proportions of the top 5 importing countries were respectively: the U.S. (US\$6,705



Table 2. Trend of Japan in the Global Fastener Export Market in 2019-2023

Unit: US\$0.1 bn; %

Ranking	Country	2019	2020	2021	2022	2023	Share in 2023	CAGR
1	China	64.19	69.60	93.05	111.79	91.85	19.0%	9.4%
2	Germany	65.47	60.87	73.59	72.38	76.98	15.9%	4.1%
3	USA	44.00	36.24	41.37	47.65	54.47	11.3%	5.5%
4	Taiwan	43.21	39.88	53.33	61.22	45.94	9.5%	1.5%
5	Italy	19.36	17.15	22.09	22.83	24.54	5.1%	6.1%
6	Japan	27.69	23.80	29.25	25.79	23.86	4.9%	-3.7%
7	France	15.87	13.06	14.36	14.85	16.98	3.5%	1.7%
8	UK	9.18	7.63	8.81	9.51	10.54	2.2%	3.5%
9	S. Korea	8.80	7.89	9.10	10.10	10.36	2.1%	4.2%
10	Netherlands	7.88	7.30	8.96	8.57	9.54	2.0%	4.9%
11	Switzerland	8.67	8.01	9.41	9.29	9.37	1.9%	2.0%
12	Turkey	4.87	4.46	6.46	8.04	8.03	1.7%	13.3%
13	India	5.88	4.69	7.20	8.33	8.02	1.7%	8.0%
14	Spain	5.91	5.04	6.19	6.32	7.32	1.5%	5.5%
15	Poland	2.28	2.34	2.88	6.64	7.20	1.5%	33.3%
16	Czech	5.67	4.93	6.04	6.55	7.20	1.5%	6.1%
17	Canada	5.04	4.27	5.22	6.25	6.44	1.3%	6.4%
18	Thailand	5.46	4.36	5.97	6.67	6.00	1.2%	2.4%
19	Austria	4.23	4.18	5.06	5.50	5.67	1.2%	7.6%
20	Belgium	4.79	4.26	5.45	5.69	5.54	1.1%	3.7%
Subtotal of Top 20 Exporters		358.46	329.97	413.79	453.96	435.84	90.1%	5.0%
Subtotal of Other Exporters		1.12	1.12	1.12	1.11	1.11	0.2%	-0.2%
Total		400.55	368.69	461.72	504.45	483.92	100.0%	4.8%

Source: ITC/compiled by MIRDC

Table 3. Japan's Major Fastener Import Sources and Trends in 2019-2023

Unit: US\$0.1 bn; %

Ranking	Country	2019	2020	2021	2022	2023	Share in 2023	CAGR
1	China	3.15	2.58	3.27	3.72	3.13	36.1%	-0.1%
2	Taiwan	2.52	2.21	2.54	3.00	2.18	25.2%	-3.5%
3	USA	1.66	1.25	1.06	1.13	1.31	15.2%	-5.7%
4	S. Korea	0.69	0.41	0.52	0.49	0.41	4.7%	-12.4%
5	Vietnam	0.30	0.29	0.34	0.36	0.36	4.2%	5.0%
6	Germany	0.25	0.22	0.25	0.30	0.25	2.9%	0.2%
7	Thailand	0.27	0.23	0.26	0.27	0.23	2.7%	-3.7%
8	UK	0.10	0.12	0.11	0.13	0.12	1.4%	5.1%
9	Italy	0.05	0.05	0.05	0.06	0.09	1.0%	13.6%
10	Malaysia	0.15	0.10	0.08	0.10	0.08	0.9%	-15.7%
11	Sweden	0.07	0.05	0.08	0.06	0.08	0.9%	4.0%
12	France	0.05	0.05	0.06	0.06	0.07	0.8%	7.7%
13	Switzerland	0.07	0.05	0.06	0.06	0.06	0.7%	-3.1%
14	Indonesia	0.06	0.04	0.06	0.05	0.04	0.4%	-9.1%
15	India	0.03	0.02	0.03	0.03	0.04	0.4%	10.4%
16	Mexico	0.06	0.03	0.02	0.02	0.03	0.3%	-14.8%
17	Spain	0.02	0.02	0.02	0.04	0.03	0.3%	7.7%
18	Myanmar	0.02	0.01	0.01	0.03	0.02	0.2%	6.3%
19	Canada	0.02	0.01	0.01	0.01	0.01	0.2%	-9.4%
20	Turkey	0.01	0.00	0.01	0.01	0.01	0.2%	23.2%
Subtotal of Top 20 Import Sources		9.54	7.76	8.85	9.92	8.56	98.8%	-2.7%
Subtotal of Other Import Sources		0.08	0.08	0.10	0.14	0.11	1.2%	6.3%
Total		9.62	7.84	8.94	10.06	8.67	100.0%	-2.6%

Source: ITC

million/13.4%), Germany (US\$4,817 million/9.6%), Mexico (US\$3,456 million/6.9%), China (US\$2,446 million/4.9%), and France (US\$2,001 million/4.0%), of which Japan was the 17th largest importing country (with an import value of about US\$867 million and a CAGR of -2.6% over the past 5 years). Overall, the world's top three importing countries (the U.S., Germany, and Mexico) all maintained positive CAGRs, while China's decline may be attributed to the increase in self-sufficiency rate of various fasteners for China's domestic demand, which has gradually reduced the dependence on other countries.

### b. Changes of Japan in the Global Fastener Export Market:

Table 2 shows the trend of Japan in the global fastener export market from 2019 to 2023. The total value of global fastener exports was US\$48.392 billion, and the value of the world's top 20 exporting countries was US\$43.584 billion (accounting for 90.1% of the global export value, a concentrated export market structure); the top 5 exporting countries in order of value and share were: China (US\$9.185 billion / 19.0%), Germany (US\$7.698 billion / 15.9%), the U.S. (US\$5.447 billion / 11.3%), Taiwan (US\$4.594 billion / 9.5%), and Italy (US\$2.454 billion / 5.1%). **Among the top 10 global fastener exporters, the country with the highest CAGR was China (9.4%). Although Japan was ranked as the sixth largest exporter, with an export value of about US\$2.386 billion, it was the only country among the top ten exporters to show negative growth, and it is estimated that its market is being gradually replaced by competitors, which is a warning sign for the Japanese fastener industry to be concerned about.**



# Trend Analysis of Japan's Major Fastener Import Sources and Export Destinations

## a. Analysis of Japan's Major Fastener Import Sources:

Table 3 shows the major fastener import sources and development trend of Japan from 2019 to 2023. The fastener import value of Japan in 2023 was about US\$ 867 million, and the import value of Japan's top 20 import sources was US\$ 856 million (accounting for 98.8% of its total fastener import from the world), making it a highly concentrated market structure; **Japan's top 5 fastener import sources in order of value and share were: China (US\$ 313 million / 36.1%), Taiwan (US\$ 218 million / 25.2%), the U.S. (US\$ 131 million / 15.2%), S. Korea (US\$ 51 million / 4.7%), and Vietnam (US\$ 36 million / 4.2%).** The CAGR of Japan's top 20 largest fastener import sources in the past five years averaged -2.7% and China and Taiwan were still the main sources of Japan's fastener import (totaling 61.3%). **Among the top 20, Italy, the UK, and Vietnam all showed 5-13% of CAGR growth, which by speculation might be due to the gradual shift of Japan's reliance away from Chinese fasteners of all grades.**

Table 4. Major Fastener Export Destinations and Development Trend of Japan from 2019 to 2023

Unit: US\$0.1 bn; %

Ranking	Country	2019	2020	2021	2022	2023	Share in 2023	CAGR
1	USA	6.72	5.74	6.99	5.96	6.09	25.5%	-2.4%
2	China	6.48	6.91	7.68	6.10	4.52	18.9%	-8.6%
3	Thailand	3.61	2.69	3.64	3.27	2.92	12.2%	-5.1%
4	Indonesia	1.92	1.02	1.71	1.92	1.66	7.0%	-3.6%
5	Mexico	1.14	0.99	1.16	0.97	1.31	5.5%	3.4%
6	India	0.85	0.73	1.03	1.04	1.14	4.8%	7.5%
7	Brazil	0.57	0.43	0.66	0.71	0.65	2.7%	3.6%
8	Malaysia	0.47	0.38	0.44	0.45	0.48	2.0%	0.6%
9	Canada	0.27	0.23	0.22	0.29	0.40	1.7%	9.9%
10	UK	0.58	0.41	0.42	0.34	0.39	1.6%	-9.7%
11	Philippines	0.44	0.33	0.43	0.36	0.37	1.5%	-4.2%
12	Vietnam	0.41	0.39	0.46	0.45	0.36	1.5%	-2.8%
13	Taiwan	0.42	0.42	0.47	0.43	0.34	1.4%	-4.8%
14	Turkey	0.40	0.36	0.38	0.33	0.34	1.4%	-4.3%
15	Germany	0.26	0.20	0.31	0.29	0.27	1.1%	0.7%
16	France	0.24	0.20	0.24	0.25	0.25	1.0%	0.7%
17	Czech	0.26	0.22	0.24	0.26	0.24	1.0%	-2.1%
18	Hong Kong	0.28	0.26	0.31	0.24	0.20	0.9%	-7.4%
19	Singapore	0.18	0.14	0.20	0.22	0.18	0.8%	-0.1%
20	Poland	0.14	0.16	0.22	0.20	0.18	0.7%	5.8%
Subtotal of Top 20 Export Destinations		25.64	22.19	27.21	24.07	22.28	93.4%	-3.4%
Subtotal of Other Export Destinations		2.05	1.61	2.04	1.72	1.57	6.6%	-6.4%
Total		27.69	23.80	29.25	25.79	23.86	100.0%	-3.7%

Source: ITC

## b. Analysis of Japan's Major Export Destinations:

Table 4 shows the major fastener export destinations and development trend of Japan from 2019 to 2023. The value of Japan's fastener export was about US\$ 2,386 million in 2023, and the value of Japan's top 20 export destinations was US\$ 2,228 million (accounting for 93.4% of its global total export value), making it a highly concentrated market structure. **The top 5 export destinations in order of value and share were: the U.S. (US\$ 609 million / 25.5%), China (US\$ 452 million / 18.9%), Thailand (US\$ 2.92 billion / 12.2%), Indonesia (US\$ 166 million / 7.0%), and Mexico (US\$ 131 million / 5.5%).** The CAGRs of Japan's top four fastener export destinations in the past five years all went down, only Mexico showed a CAGR of 3.4%; as for other potential export destinations such as India and Canada, their CAGRs in the past five years were also significant.

# Analysis of Japan's Global Fastener Imports and Exports by Product Type

## a. Analysis of Japan's Imports of Various Types of Fasteners in Recent Years

Table 5 shows Japan's imports of various types of fasteners from 2019 to 2023; **the major imported products in order of value and share were: Other iron and steel screws and bolts (US\$ 374 million / 43.1%), iron and steel nuts (US\$ 202 million / 23.3%), and other iron and steel threaded articles (US\$ 54 million / 6.2%).** The CAGR of Japan's third largest imported item, other iron and steel threaded articles, in the past five years, was 5.2%, the highest of all product categories, reflecting the trend of demand for fasteners in Japan. Most of the other fasteners demanded in Japan were showing a decline or a slow growth trend.



Table 5. Japan's Imports of Various Types of Fasteners from 2019 to 2023

Unit: US\$0.1 bn; %

Category	HS Code	2019	2020	2021	2022	2023	Share in 2023	CAGR
Other Iron and Steel Screws and Bolts	731815	4.33	3.53	3.96	4.42	3.74	43.1%	-3.6%
Iron and Steel Nuts	731816	2.15	1.66	1.88	2.25	2.02	23.3%	-1.6%
Other Iron and Steel Threaded Articles	731819	0.44	0.43	0.55	0.62	0.54	6.2%	5.2%
Iron and Steel Non-threaded Articles	731829	0.56	0.44	0.51	0.57	0.51	5.8%	-2.7%
Other Iron and Steel Washers	731822	0.61	0.49	0.50	0.52	0.49	5.7%	-5.3%
Other Iron and Steel Wood Screws	731812	0.57	0.48	0.59	0.68	0.48	5.6%	-4.2%
Iron and Steel Self-tapping Screws	731814	0.44	0.39	0.46	0.56	0.45	5.2%	0.4%
Iron and Steel Springs & Lock Washers	731821	0.18	0.16	0.20	0.19	0.18	2.1%	-0.2%
Iron and Steel Pins & Cotter Pins	731824	0.16	0.13	0.15	0.12	0.12	1.4%	-7.8%
Iron and Steel Rivets	731823	0.11	0.08	0.10	0.08	0.10	1.2%	-0.4%
Iron and Steel Screw Hooks & Screw Rings	731813	0.03	0.03	0.03	0.02	0.02	0.2%	-11.4%
Iron and Steel Coach Screws	731811	0.02	0.01	0.02	0.02	0.01	0.2%	-8.8%
Total of Import Value		9.62	7.84	8.94	10.06	8.67	100.0%	-2.6%

Source: Customs' Import & Export Statistics

Table 6. Japan's Exports of Various Types of Fasteners from 2019 to 2023

Unit: US\$0.1 bn; %

Category	HS Code	2019	2020	2021	2022	2023	Share in 2023	CAGR
Other Iron and Steel Screws and Bolts	731815	15.13	13.03	15.77	13.84	12.87	54.0%	-4.0%
Iron and Steel Nuts	731816	6.70	5.66	7.11	6.26	5.87	24.6%	-3.2%
Other Iron and Steel Washers	731822	2.32	2.06	2.49	2.24	1.97	8.3%	-4.0%
Other Iron and Steel Non-threaded Articles	731829	1.35	1.12	1.49	1.35	1.21	5.1%	-2.7%
Iron and Steel Self-tapping Screws	731814	0.94	0.84	1.01	0.93	0.83	3.5%	-3.0%
Iron and Steel Rivets	731823	0.40	0.34	0.44	0.38	0.36	1.5%	-3.0%
Iron and Steel Springs & Lock Washers	731821	0.24	0.20	0.28	0.28	0.28	1.2%	4.3%
Iron and Steel Pins and Cotter Pins	731824	0.37	0.34	0.43	0.31	0.27	1.1%	-7.4%
Other Iron and Steel Threaded Articles	731819	0.20	0.18	0.22	0.19	0.18	0.8%	-2.7%
Other Iron and Steel Wood Screws	731812	0.03	0.02	0.01	0.01	0.01	0.0%	-24.5%
Iron and Steel Coach Screws	731811	0.00	0.00	0.00	0.00	0.00	0.0%	-17.9%
Iron and Steel Screws & Screw Rings	731813	0.01	0.00	0.00	0.00	0.00	0.0%	-49.8%
Total of Export Value		27.69	23.80	29.25	25.79	23.86	100.0%	-3.7%

Source: Customs' Import & Export Statistics

**b. Analysis of Japan's Exports of Various Types of Fasteners in Recent Years**

Table 6 shows Japan's exports of various types of fasteners from 2019 to 2023; the major exported products in order of value and share were: other iron and steel screws and bolts (US\$ 1,287 million / 54.0%), iron and steel nuts (US\$ 587 million / 24.6%), other iron and steel washers (US\$ 197 million / 8.3%). In the past five years, the CAGRs of most Japan's exports of various types of fasteners, except for iron and steel springs & lock washers (with a CAGR of 4.3%), have shown a downward trend, indicating that Japan's iron and steel fasteners in the global export market faced fierce competition from other competing countries.

**Next Article: Analysis of Unit Price and Operation Strategy of Japanese Fastener Industry**

Faced with the challenges of rising material costs, operating costs, and intensified competition in the international market, Japanese fastener industry has continued to adjust the industry's high value-added strategy in order to increase average unit price and competitiveness, especially in the areas of corrosion resistance, high precision, and lightweight products with special specifications. Even though iron and steel fasteners account for the bulk of orders, seeking high added value is still a must for Japanese fastener industry. In the next article, we will continue to analyze the change of unit prices of Japan's import and export in recent years, and compare its unit prices with those of its global competitors as a starting point to explore the operation mode and future strategy of Japanese fastener industry. ■

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