

2024

ECONOMIC OVERVIEW OF TOHOKU REGION



**Get the information
you want about
Tohoku at a glance!**

The latest data for your business!

Concise

&

Visual



Ministry of Economy, Trade and Industry
Tohoku Bureau of Economy, Trade and Industry

Table of Contents

1. Overview of the Tohoku Region

(1) Overview of the Tohoku Region	2
(2) Positioning of Tohoku Shown in Major Economic Indicators	3

2. Economic Structure and Trends in the Tohoku Region

(1) Gross Product	4
(2) Real Economic Growth Rate	5
(3) Population	6
(4) Demographics	7
(5) Number of Business Establishments (Private)	8
(6) Industrial Production	9
(7) Retail Trade	11
(8) Private Sector Capital Spending	12
(9) Acquisition of Plant Locations	13
(10) Labor Force Population	14
(11) Employment	15
(12) Business Entry and Exit Rates	16
(13) Internationalization	
(i) Trade	17
(ii) Internationalization of Corporate Activities	19
(iii) International Arrivals/Departures and Foreign Residents	20
(14) Tourism	
(i) Domestic Tourism	21
(ii) International Inbound Tourism	22
(15) Reconstruction-Related Trends	23

3. Industrial Structure of the Tohoku Region

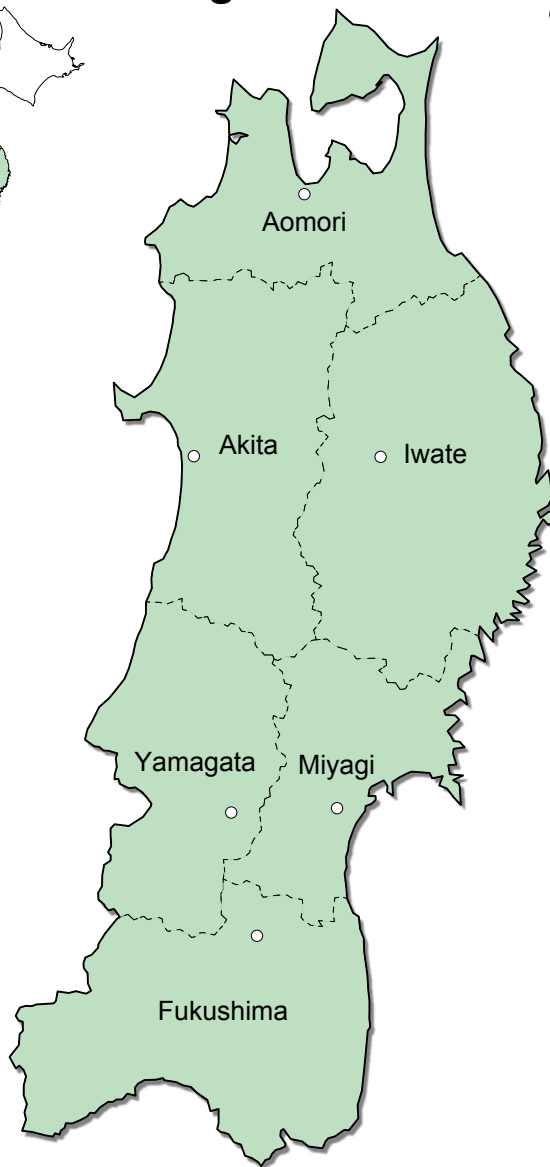
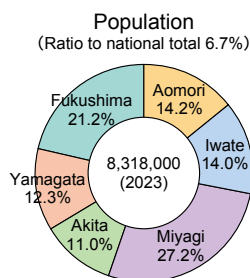
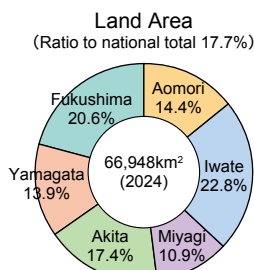
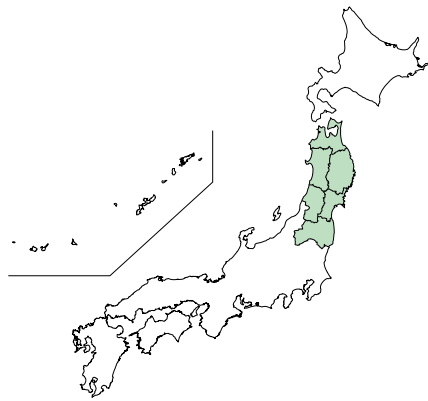
(1) Manufacturing	
(i) Overview	25
(ii) National Share by Industry Sector	26
(iii) Shares of Industry Sectors by Year and Prefecture	27
(iv) Value-Added Productivity	28
(v) Manufacturing Companies Headquartered in the Tohoku Region	29
(vi) Industrial Property Rights	31
(2) Commerce	
(i) Overview	32
(3) Service Industry	33
(4) Agriculture, Forestry and Fisheries	34

* Years in text and graphs throughout this document are displayed according to the Western calendar. In addition, when the name of the source material follows the Japanese calendar, the Western calendar is written in parentheses except for some parts.

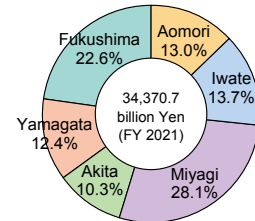
* Due to rounding up/off, not all totals equal the sum of separate figures in tables and graphs throughout this document.

(1) Overview of the Tohoku Region

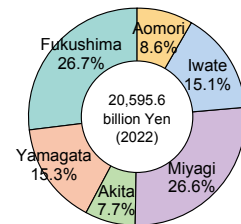
(1) Overview of the Tohoku Region



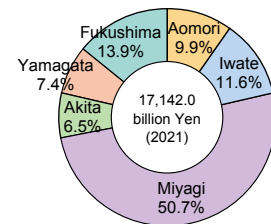
Gross Regional Domestic Product (GRDP)
(Ratio to national total 6.3%) ^{Note 4}



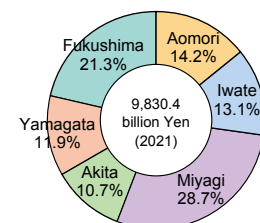
Shipment Value of Manufactured Goods
(Ratio to national total 5.7%)



Wholesale Annual Sales
(Ratio to national total 4.2%)



Retail Annual Sales
(Ratio to national total 7.1%)



Economic Indicators for the Tohoku Region

Item	Tohoku	Data and source	Item	Tohoku	Data and source
Major economic indicators			Major economic indicators		
Land area (km ²) As of April 1, 2024 ^{Note 1}	66,948	2024 National Land Area Survey of Prefectures and Municipalities (Geospatial Information Authority of Japan)	Prefectural income per capita (Thousand yen) (FY 2021)	2,831	2021 Annual Report on Prefectural Accounts (Cabinet Office, data published by each prefecture)
Population (Thousand persons) As of October 1, 2023	8,318	Population Estimates (Ministry of Internal Affairs and Communications)	No. of business establishments (Establishments) (As of June 1, 2021) ^{Note 3}	407,488	2021 Economic Census for Business Activity (Ministry of Internal Affairs and Communications and Ministry of Economy, Trade and Industry)
No. of households (Thousands) As of October 1, 2020	3,501	Population Census 2020 (Ministry of Internal Affairs and Communications)	No. of employees (Thousand persons) (As of June 1, 2021)	3,715	
GRDP (Nominal) (Hundred million yen) (FY 2021)	344,882	2021 Annual Report on Prefectural Accounts (Cabinet Office, data published by each prefecture)	Shipment value of manufactured goods (Hundred million yen) (2022)	205,956	2023 Census of Economic Structure (Ministry of Economy, Trade and Industry)
Primary industry ^{Note 2}	7,327		Wholesale sales value (Hundred million yen) (2021)	171,420	2022 Census of Economic Structure (Cross-industry Survey) (Ministry of Internal Affairs and Communications and Ministry of Economy, Trade and Industry)
Secondary industry ^{Note 2}	95,533				
Tertiary industry ^{Note 2}	241,194				
No. of municipalities As of August 1, 2024	77 cities 116 towns 34 villages	Number of Municipalities by Prefecture (Ministry of Internal Affairs and Communications)	Retail sales value (Hundred million yen) (2021)	98,304	

Note 1: For the areas of prefectures with undefined boundaries, reference values recorded in the *National Land Area Survey of Prefectures and Municipalities* (Geospatial Information Authority of Japan) are used.

Note 2: The values by industry are before the addition and deduction of duties, customs and so forth on imported goods.

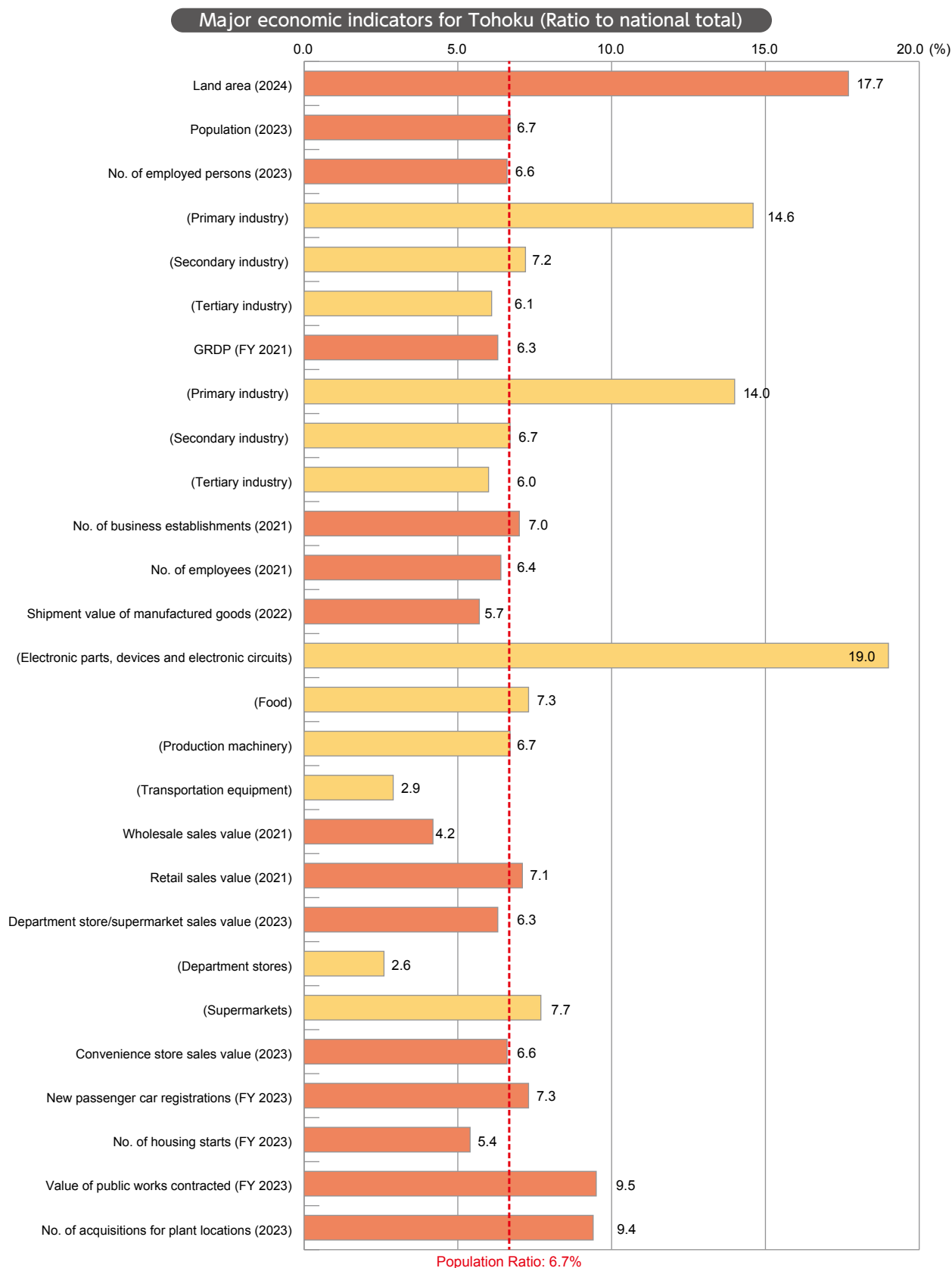
Note 3: The number of business establishments includes only the number of private business establishments.

Note 4: The national figures for calculating the national ratio of gross regional domestic product (GRDP) were calculated based on the Gross Domestic Product by Economic Activities (calendar year) of the System of National Accounts (SNA).

(2) Positioning of Tohoku Shown in Major Economic Indicators

(2) Positioning of Tohoku Shown in Major Economic Indicators

- In comparison to the national level, gross regional domestic product (GRDP) and shipment value of manufactured goods are at a low level compared to the population ratio of 6.7%.
- Electronic parts, devices and circuits are at a high level in the manufacturing sector.

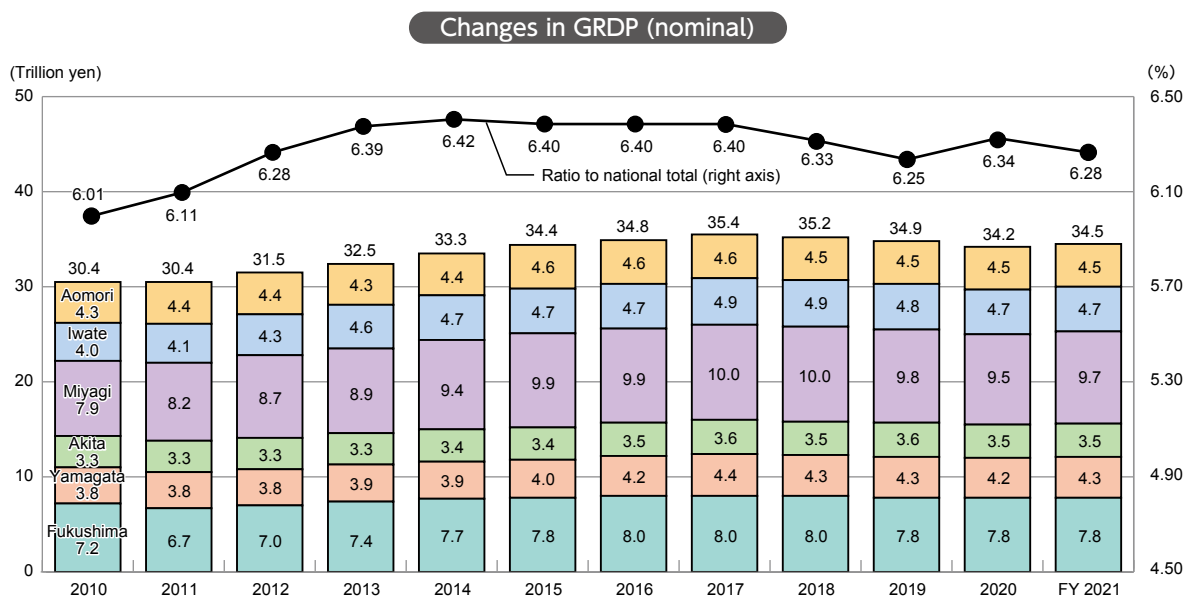


Note: The number of employees is based on the Labor Force Survey 2023 (Ministry of Internal Affairs and Communications)

(1) Gross Product

The Gross Regional Domestic Product (GRDP) is 34.5 trillion yen, or 6.28% of the national total.

- In the fiscal year 2021, the Tohoku region's nominal GRDP was 34,488.1 billion yen, up 1.0% compared to the previous fiscal year, and 6.28% of the national total. In terms of Gross Product by prefecture, Aomori, Iwate, Akita and Fukushima prefectures remained unchanged from the previous year, while Miyagi and Yamagata prefectures increase from the previous year.



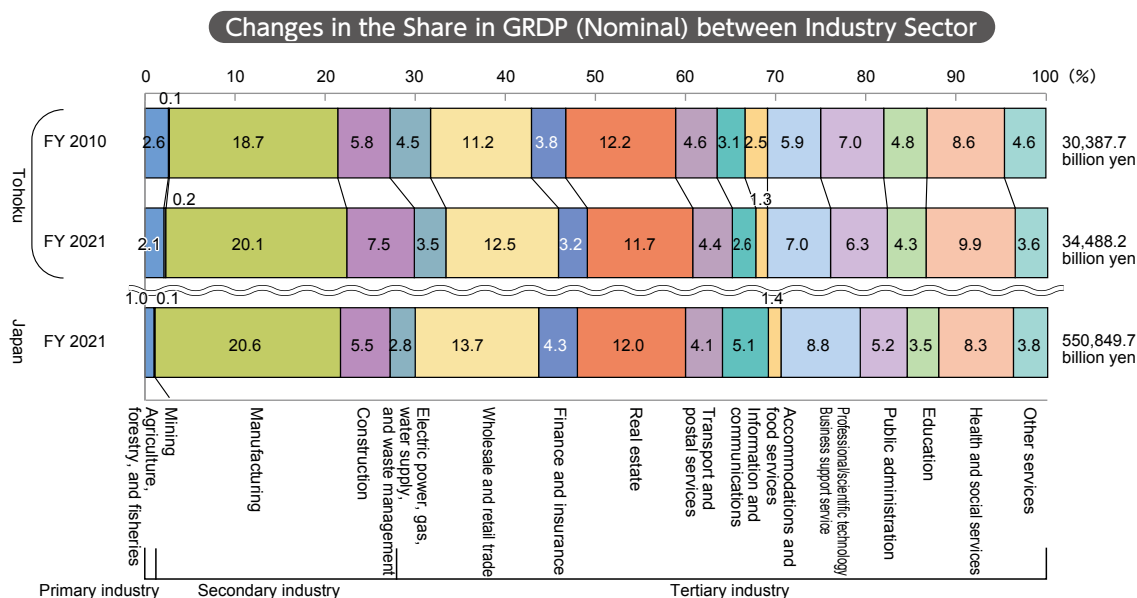
Note 1: With the System of Prefectural Accounts, the figures are retroactively revised for each previous fiscal year in conjunction with the latest fiscal year's estimates.

Note 2: The national figures used to calculate the prefecture-national ratio are based on the FY 2021 National Accounts.

Note 3: 2011 base coefficients for FY 2010 and earlier, and 2015 base coefficients for FY 2011 and later.

Source: Annual Report on Prefectural Accounts and Annual Report on National Accounts, Cabinet Office

- According to the breakdown of shares in fiscal year 2021 by industry classification, primary industries accounted for 2.1%, secondary industries for 27.8%, and tertiary industries for 70.1%. Share of the construction industry rose to 7.5%, up 1.7 percentage points compared to that of fiscal year 2010 before the Great East Japan Earthquake, which was due to recovery-related projects after the disaster.



Note 1: The figures for Japan were calculated based on the Gross Domestic Product by Economic Activities (calendar year) from the System of National Accounts of Japan for FY 2021.

Note 2: The shares are before the addition and deduction of duties, customs and so forth on imported goods.

Note 3: 2011 base coefficients for FY 2010 and earlier, and 2015 base coefficients for FY 2011 and later.

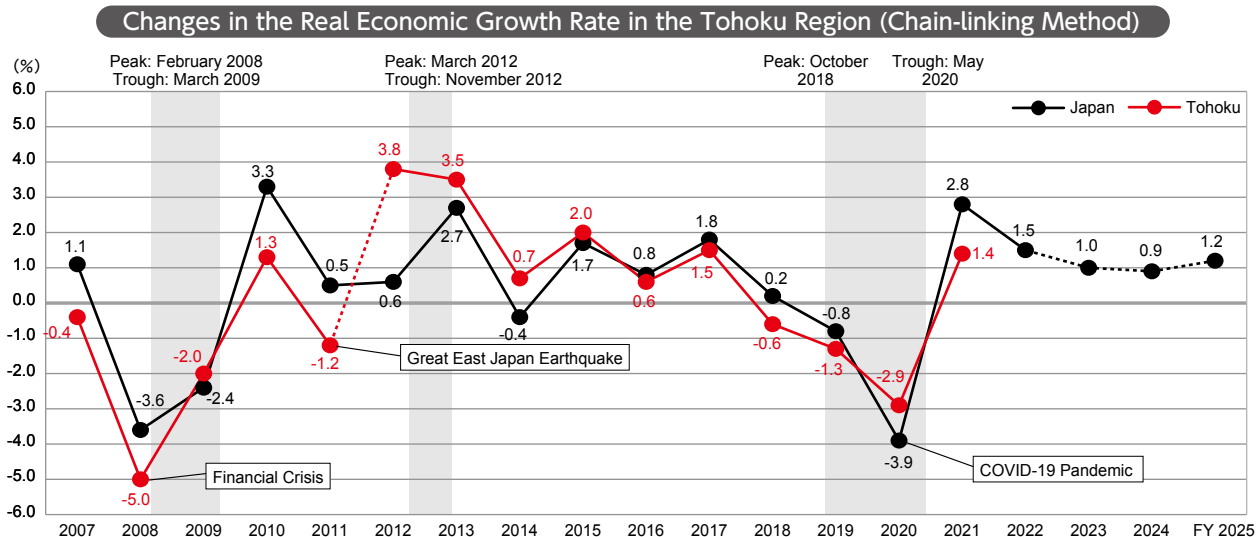
Source: Annual Report on Prefectural Accounts and Annual Report on National Accounts, Cabinet Office

(2) Real Economic Growth Rate

(2) Real Economic Growth Rate

The real economic growth rate was 1.4% and has been positive for the first time in four years.

- The Tohoku region's real economic growth rate in the fiscal year 2021 was 1.4% (cf. 2.8% for Japan), positive growth for the first time in four years. However, this was below the national growth rate.



Note 1: The above figures for Japan are taken from the System of National Accounts of Japan for FY 2020 (benchmark year = 2015, 2008 SNA).

Note 2: Japan's figures for fiscal years 2023, 2024 and 2025 are taken from the Mid-Year Economic Projection for FY 2024 released by the Cabinet Office on July 19, 2024.

Note 3: Figures for Tohoku are not directly connected because they are based on the 2011 standard and chain-linking method (2011 calendar year chain prices) for FY 2011 and earlier, and the 2015 standard and chain-linking method (2015 calendar year chain prices) for FY 2012 and later.

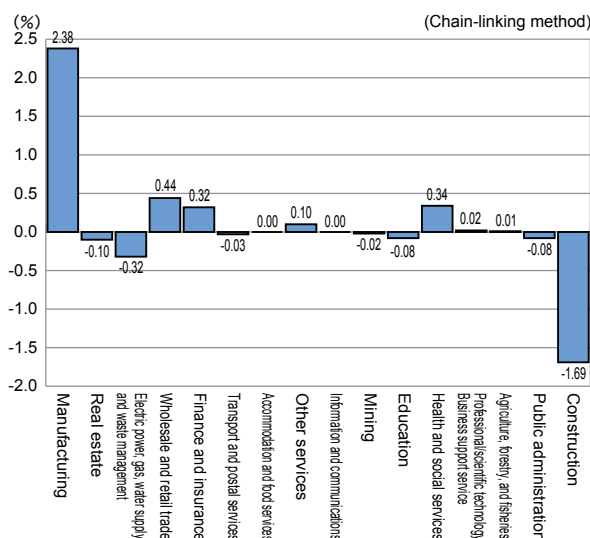
Note 4: The figures for the Tohoku region from FY 2022 onward are not indicated because the six Tohoku prefectures have not yet released their datasets publicly.

Note 5: Business-cycle peaks and troughs are based on the Cabinet Office's reference dates of the business cycle.

Source: Annual Report on Prefectural Accounts and Annual Report on National Accounts, Cabinet Office

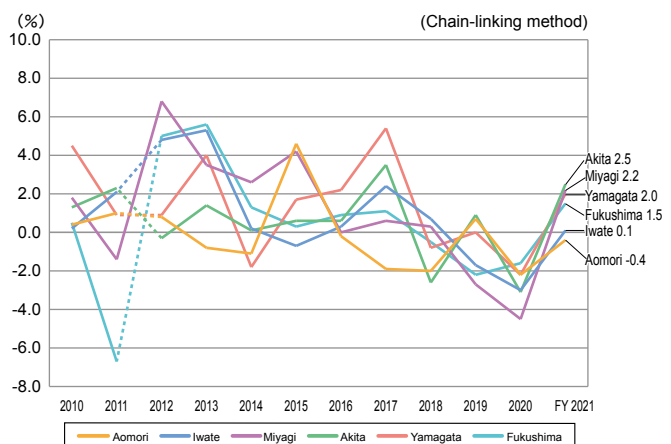
- In terms of the contribution to real economic growth in FY 2021 by economic activity (by industry), the "manufacturing" and "wholesale and retail trade" sectors made positive contributions of 2.38% and 0.44%, respectively, while the "construction" sector made a negative contribution of 1.69%.
- Looking at the real economic growth rate by prefectures in the Tohoku region, all six prefectures in the Tohoku region posted negative growth rates in FY 2020. Whereas the growth rate in Iwate, Miyagi, Akita, Yamagata, and Fukushima prefectures turned to positive in FY 2021.

Contribution to the Real Economic Growth Rate in FY 2021 by Economic Activity



Source: Annual Report on Prefectural Accounts

Changes in Real Economic Growth Rate by Prefecture



Note: Figures for Tohoku are not directly connected because they are based on the 2011 standard and chain-linking method (2011 calendar year chain prices) for FY 2011 and earlier, and the 2015 standard and chain-linking method (2015 calendar year chain prices) for FY 2012 and later.

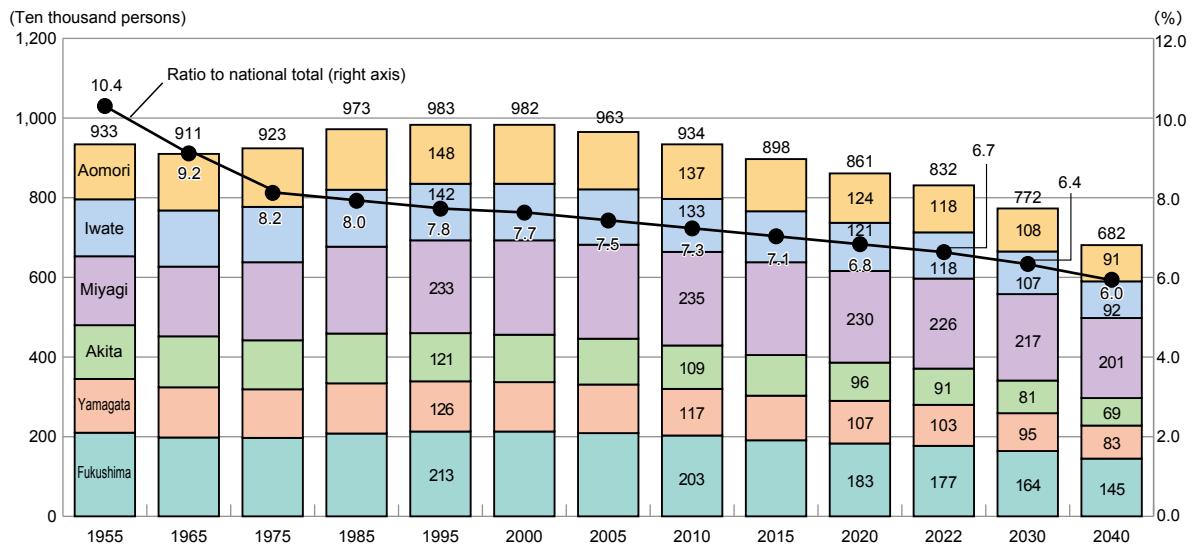
Source: Annual Report on Prefectural Accounts

(3) Population

The productive-age population in the Tohoku region is projected to shrink by 25.0% in 2040 compared to 2022.

- In 2022, the Tohoku region had a population of 8.32 million, accounting for 6.7% of the national population (124.35 million). Tohoku's population is projected to decrease 18.1% to 6.82 million in 2040 compared to 2022, accounting for 6.0% of the national population.

Changes in the Population of the Tohoku Region



Note: The above estimates are based on medium assumptions of births and deaths.

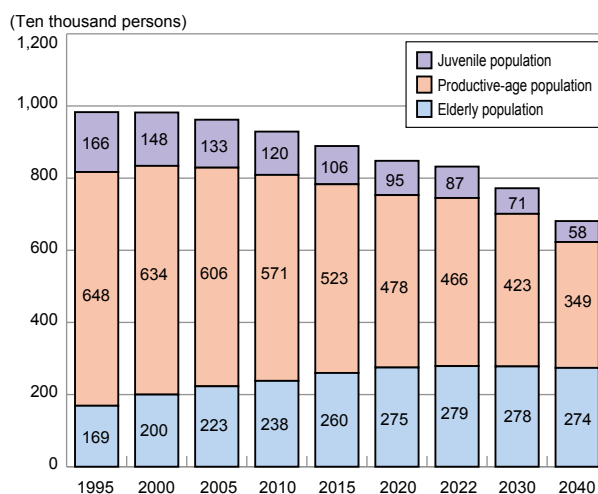
Source: 1955-2020: Population Census of Statistics Bureau of Japan

2022: Population Estimates, Ministry of Internal Affairs and Communications

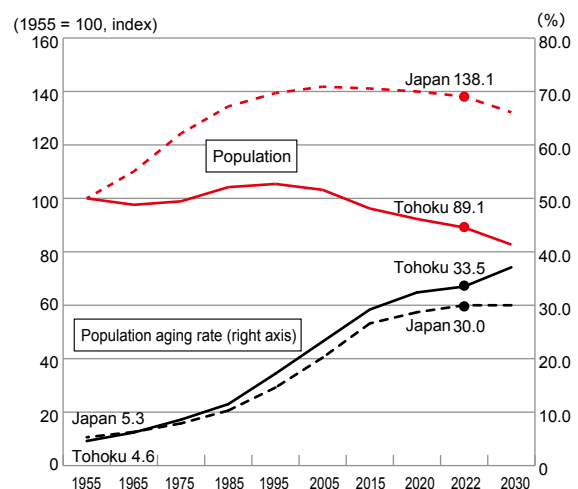
2030 and beyond: Population Projections by Prefecture, the National Institute of Population and Social Security Research (Projection from 2023)

- In terms of population changes in three age groups, in 2040, the productive-age population (aged 15- 64) is projected to be 3.49 million, down 25.0% from 2022, the juvenile population (aged 0-14) is projected to be 580,000, down 33.1%, and the elderly population (aged 65 or older) is projected to be 2.74 million, down 1.8%. The population is declining and aging ahead of the rest of the country.

Population Trends in Three Age Groups



Changes in the Population and the Population Aging Rate



Note: The people whose age is unknown are distributed proportionally in 2019 and beyond.

Source: 1955-2020 Population Census, Statistics Bureau of Japan

2022: Population Estimates, Ministry of Internal Affairs and Communications

2030 and beyond: Population Projections by Prefecture, the National Institute of Population and Social Security Research (Projection from 2023)

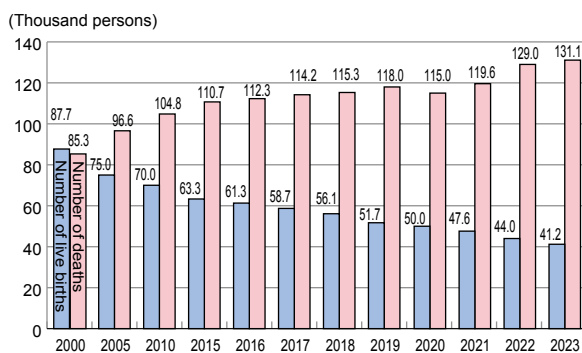
(4) Demographics

(4) Demographics

Tohoku's natural population decline and social decline rise to 89,900 and 25,700, respectively.

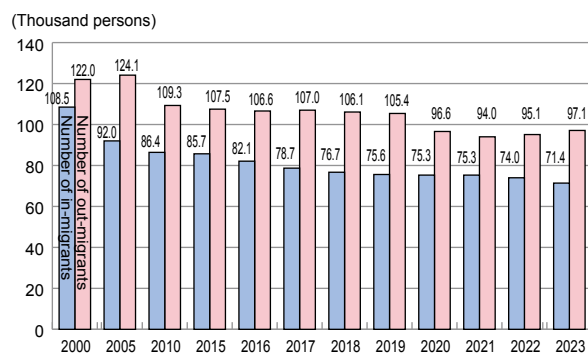
- In 2023, the number of births in the Tohoku region was 41,200, down 2,800 from the previous year, and the number of deaths was 131,100, up 2,100 from the previous year, resulting in a natural decline (births - deaths) of 89,900, up from 85,000 in the previous year.
- In 2023, the number of people moving in from outside the Tohoku region was 71,400, down 2,600 from the previous year, and the number of people moving out of the Tohoku region was 97,100, up 1,900 from the previous year, resulting in a social decline (moving in - moving out) from 21,200 in the previous year to 25,700.
- Looking at the 141,700 out-migrants from Tohoku prefectures by destination, 44,700 moved within the Tohoku region and 97,100 moved out of the Tohoku region, showing that about 70% of the people moving left the Tohoku region. Among the out-migrants within the Tohoku region, many moved to Miyagi Prefecture.

Changes in the Number of Live Births and Deaths



Source: Annual Report of Vital Statistics, Ministry of Health, Labor and Welfare

Changes in In-migrants and Out-migrants



Note: The number of in-migrants/out-migrants does not include people who moved within the Tohoku region.

Source: Annual Report on the Internal Migration in Japan Derived from the Basic Resident Registration, Ministry of Internal Affairs and Communications

Number of Migrants within and into/out of the Tohoku Region (2023)

		Prefecture/region (migration destination)								(Persons)	
		Aomori	Iwate	Miyagi	Akita	Yamagata	Fukushima	Inside Tohoku total	Outside Tohoku total	Of which, Tokyo area	Out-migrants total
Prefecture/region (migration origin)	Aomori		1,580	3,243	793	353	541	6,510	14,282	8,196	20,792
	Iwate	1,453		4,701	837	420	673	8,084	11,606	6,887	19,690
	Miyagi	1,925	3,255		1,386	2,534	3,482	12,582	31,375	19,009	43,957
	Akita	769	1,026	2,304		467	446	5,012	8,165	5,031	13,177
	Yamagata	281	427	3,511	457		943	5,619	10,007	5,829	15,626
	Fukushima	431	608	4,568	359	884		6,850	21,630	12,766	28,480
	Inside Tohoku total	4,859	6,896	18,327	3,832	4,658	6,085	44,657	97,065	57,718	141,722
	Outside Tohoku total	10,367	8,007	24,613	6,170	6,778	15,469	71,404			
Of which, Tokyo area		5,414	4,542	12,970	3,448	3,625	8,166	38,165			
In-migrants total		15,226	14,903	42,940	10,002	11,436	21,554	116,061			

Source: Annual Report on the Internal Migration in Japan Derived from the Basic Resident Registration, Ministry of Internal Affairs and Communications

(5) Number of Business Establishments (Private)

Private business establishments in the Tohoku region represent 7.0% of the national total, while the number of employees accounts for 6.4% of the national total.

- In 2021, the Tohoku region had 407,488 private business establishments, or 7.0% of the national total of 5,844,088 business establishments (7.4% in 2016). The number of the establishments decreased 1.7% from the previous 2016 survey. Akita, Yamagata and Iwate, in particular, saw significant decreases of 5.2%, 4.9% and 4.4% respectively.
- In 2021, the number of employees in the Tohoku region was 3,714,603, accounting for 6.4% of the national total of 57,949,915 (6.6% in the previous survey). This is a 0.3% decrease from the previous survey (2016), with a particularly large decrease in Akita (3.6%).

Numbers of Private Business Establishments and Employees by Prefecture

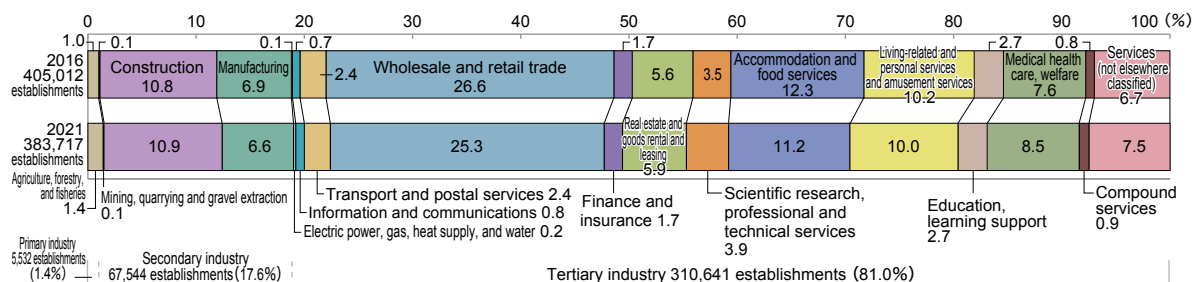
	No. of establishments				No. of employees			
	2016	2021	Ratio to the previous census (%)	Ratio to national total (%)	2016	2021	Ratio to the previous census (%)	Ratio to national total (%)
Aomori	59,069	57,973	- 1.9	1.0	498,988	498,418	- 0.1	0.9
Iwate	59,451	56,850	- 4.4	1.0	525,264	518,167	- 1.4	0.9
Miyagi	102,026	104,258	2.2	1.8	1,006,886	1,031,186	2.4	1.8
Akita	49,432	46,884	- 5.2	0.8	413,719	398,671	- 3.6	0.7
Yamagata	56,551	53,779	- 4.9	0.9	475,435	465,796	- 2.0	0.8
Fukushima	88,128	87,744	- 0.4	1.5	806,130	802,365	- 0.5	1.4
Tohoku	414,657	407,488	- 1.7	7.0	3,726,422	3,714,603	- 0.3	6.4
Japan	5,578,975	5,844,088	4.8	100.0	56,872,826	57,949,915	1.9	100.0

Note: The number of establishments includes those whose business details are unclear.

Source: 2016 Economic Census for Business Activity and 2021 of Economic Census for Business Activity

- Looking at the breakdown of private business establishments by industry (major group category), “wholesale and retail trade” had the largest share at 25.3%, followed by “accommodation and food services” at 11.2% and “construction” at 10.9%. The tertiary industry occupied a significant share at 81.0%. In comparison to 2016, “medical health care, welfare” rose its share by 0.9 percentage points, while “wholesale and retail trade” shrank its share by 1.3 percentage points.

Changes in the Breakdown of Private Business Establishments by Japan Standard Industrial Classification (Major Group Category)

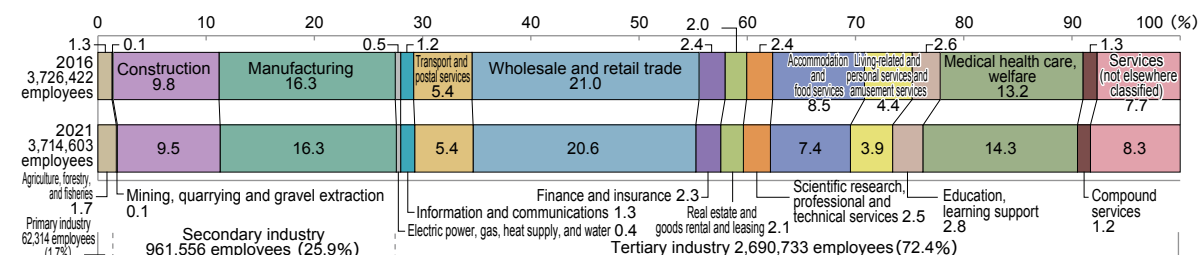


Note: The number of business establishments by industry includes only those for which numerical data for necessary items were obtained.

Source: 2016 Economic Census for Business Activity and 2021 Economic Census for Business Activity

- The number of employees in private establishments by industry (major category) shows that primary industries accounted for 1.7%, secondary industries for 25.9%, and tertiary industries for 72.4%. Compared to 2016, “medical care and welfare” rose by 1.1 percentage points, while “accommodation and food services” fell by 1.1 percentage points.

Changes in the Breakdown of Employees by Japan Standard Industrial Classification (Major Group Category)



Note: 2016 figures are as of June 1, 2016; 2021 figures are as of June 1, 2021.

Source: 2016 Economic Census for Business Activity and 2021 Economic Census for Business Activity

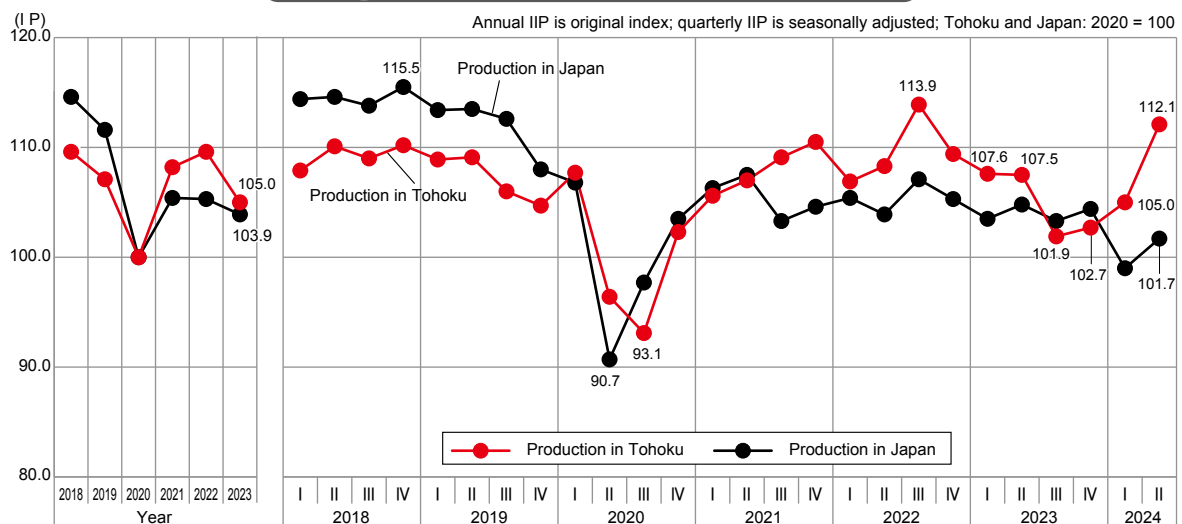
(6) Industrial Production

(6) Industrial Production

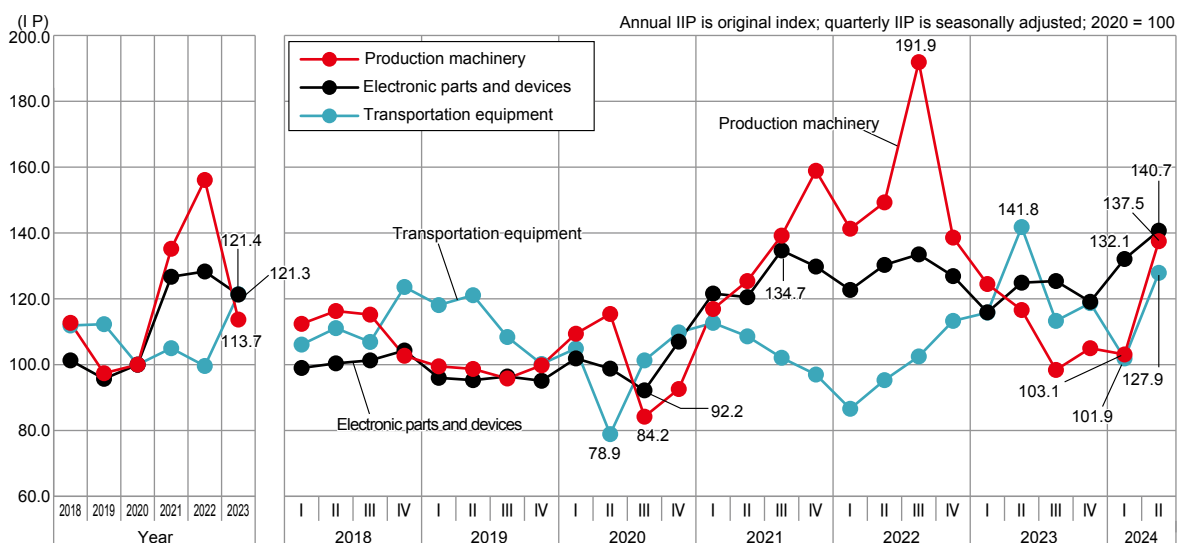
The Index of Industrial production decreased for the first time in three years.

- The Index of Industrial Production (IIP) for the Tohoku region in 2023 (2020=100) decreased 4.2% from the previous year to 105.0.
- Looking at the quarterly production index (seasonally adjusted index: 2020=100) for 2023, the first quarter declined 1.6% from the previous quarter to 107.6. Contributors to this decline included electronic parts and devices, food, and production machinery industries. In the second quarter, it declined 0.1% to 107.5. The chemical/petroleum products, production machinery, and information and communications machinery industries contributed to this decline. In the third quarter, it declined 5.2% to 101.9. The transportation equipment, production machinery, and chemical/petroleum products industries contributed to this decline. In the fourth quarter, it rose 0.8% to 102.7. The chemical/petroleum products, production machinery, transportation equipment industries contributed to this rise.
- The production index for the first quarter of 2024 rose 2.2% from the previous quarter to 105.0. The electronic parts and devices, chemical/petroleum products and food industries contributed to this rise. The second quarter rose 6.8% to 112.1. The production machinery, chemical/petroleum products and transportation equipment industries contributed to this rise.

Changes in the Indices of Industrial Production (IIP)



Changes in the IIP by Industry Sector



Note 1: Production indices for Japan was prepared by the Ministry of Economy, Trade and Industry, while production indices for Tohoku was prepared by the Tohoku Bureau of Economy, Trade and Industry

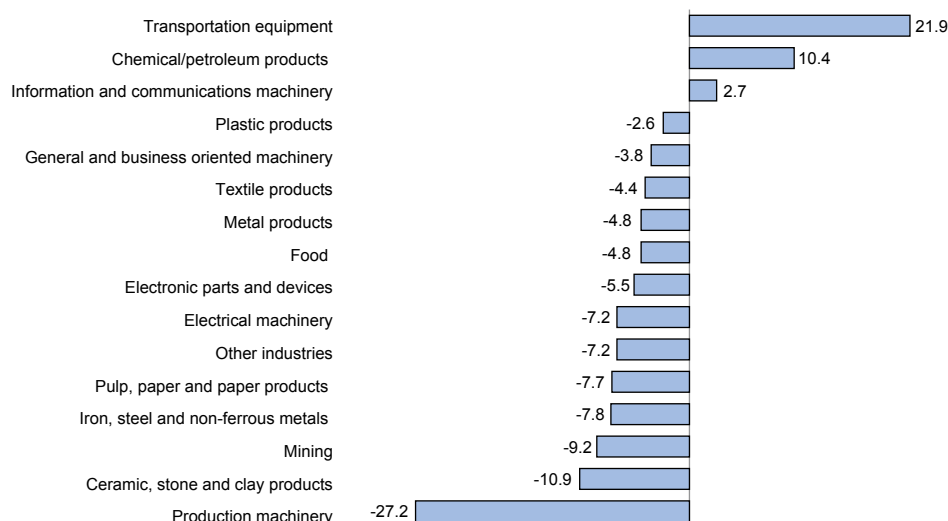
Note 2: The 2020 standard is used for Japan and Tohoku. Tohoku is annually adjusted for 2022.

Source: *Indices of Industrial Production*, METI/*Indices of Industrial Production*, Tohoku Bureau of Economy, Trade and Industry

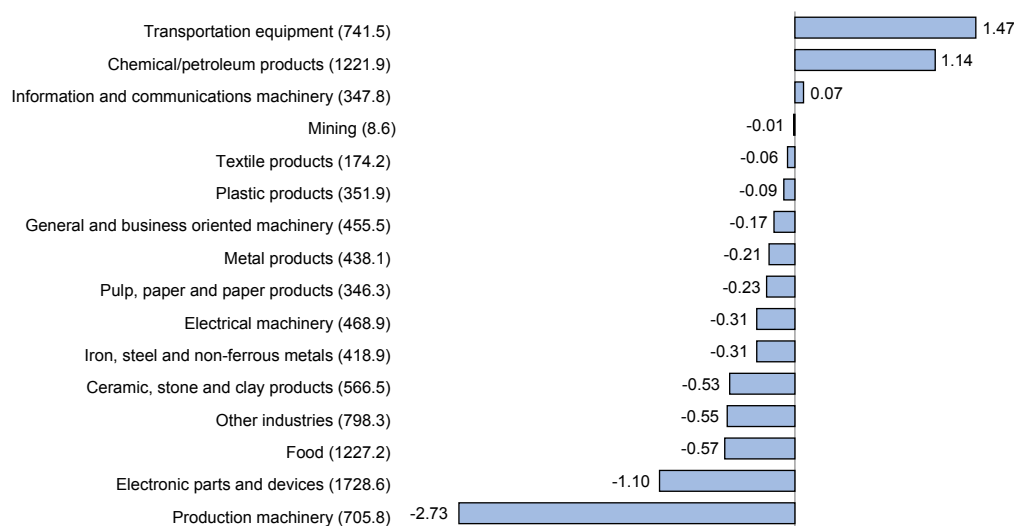
(6) Industrial Production

- Looking at the year-on-year growth rate of the production index in 2023 by industry sector, industries that increased include the transportation equipment (+21.9%) and chemical/petroleum products (+10.4%) industries. The industries that experienced declines included the production machinery (-27.2%) and ceramic, stone and clay products (-10.9%) industries.
- Looking at the contribution of each industry sector to the year-on-year growth rate (-4.2%) of the production index in 2023, the transportation equipment (1.47) and the chemical/petroleum products (1.14) industries contributed to the overall increase. On the other hand, the production machinery (-2.73) and the electronic parts and devices (-1.10) industries negatively contributed.

2023 YoY Growth Rate (%) in IIP



Contribution (% point) by Industry Sector to 2023 YoY Production Growth Rate (-4.2%)



The figures in parentheses represent the weight of the relevant industry sector.

Note: Weight: Composition of each industry as a percentage of the total (total industrial production = 10000)

Contribution: Breakdown by industry of the percentage increase or decrease in overall production. It indicates how much the increase or decrease in the industry had an impact on the total production.

Source: *Indices of Industrial Production*, Tohoku Bureau of Economy, Trade and Industry

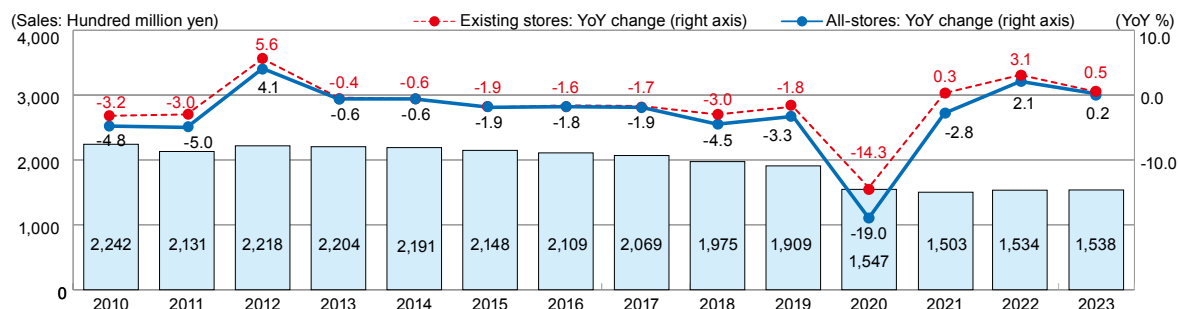
(7) Retail Trade

(7) Retail Trade

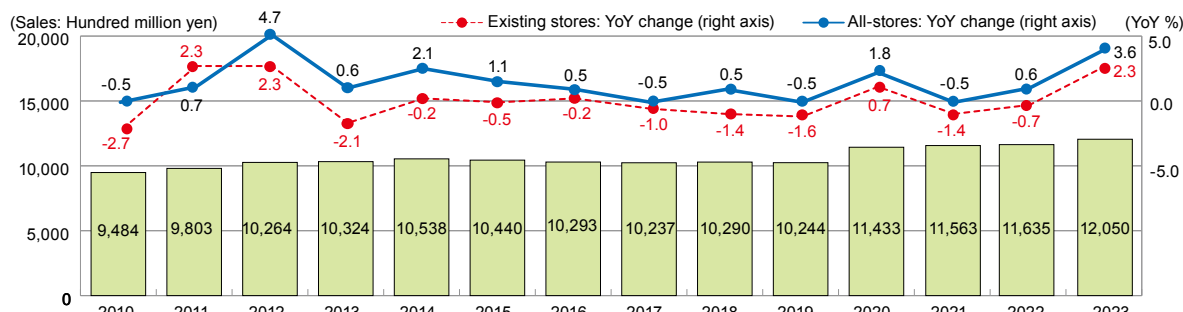
Retail trade is showing signs of recovery.

- In 2023, the sales of all the department stores and supermarkets in the Tohoku region totaled 1,358.8 billion yen (6.3% of the national ratio), 3.2% higher than the previous year, marking the second consecutive year of year-on-year growth. Sales at existing stores also increased 2.1% year-on-year, outstripping for the first time in 11 years.
- By store type, department store sales recorded 153.8 billion yen (2.6% of the national total), a 0.2% increase from the previous year. The total sales for supermarkets increased to 1,205.0 billion yen (7.7% of the national total), a 3.6% increase from the previous year. Both of the sales grew for two consecutive years.

Department Store Sales and Year-on-Year Trends



Supermarket Sales and Year-on-Year Trends

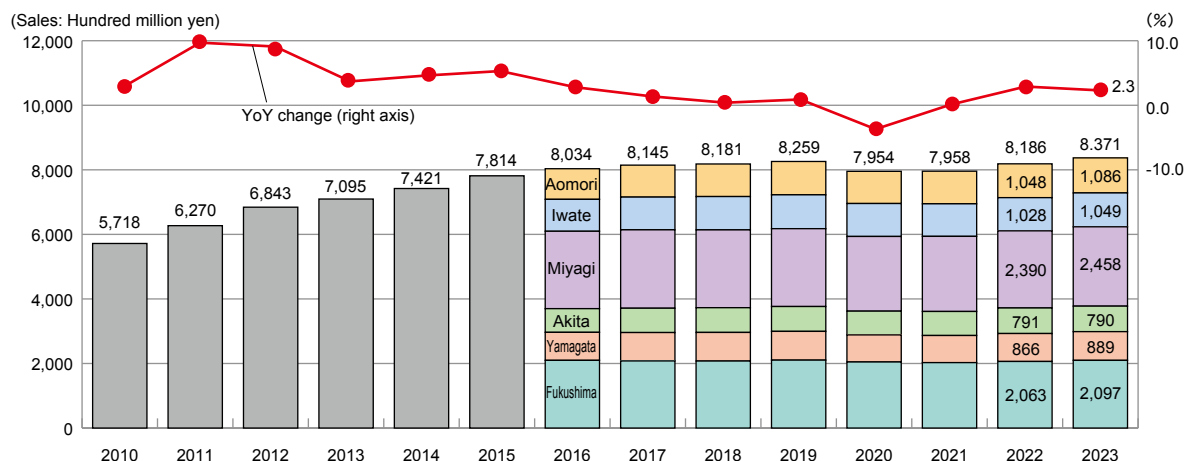


Note: The year-on-year rate of increase and/or decrease in supermarkets is calculated using the numerical value processed by the link coefficient. (prior to February 2020)

Source: *The Current Survey of Commerce*, Ministry of Economy, Trade and Industry

- In 2023, convenience store sales in the Tohoku region (all stores) totaled 837.1 billion yen (6.6% of the Japan total), 2.3% up from the previous year, marking the third consecutive year of year-on-year growth.

Convenience Store Sales and Year-on-Year Trends



Note 1: Since July 2015, the sales by prefecture have been disclosed.

Note 2: Sales figures are partially adjusted for linkage factors (prior to December 2011).

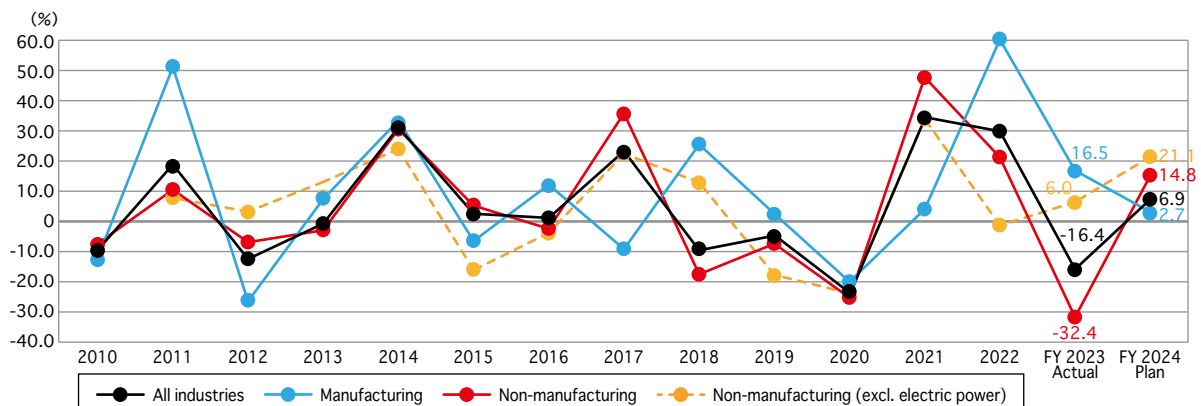
Source: *The Current Survey of Commerce* by the Ministry of Economy, Trade and Industry

(8) Private Sector Capital Spending

Capital spending plans see an increase in both manufacturing and non-manufacturing industries.

- The capital investment plan for the Tohoku region in FY 2024 (survey in June 2024) is 469.6 billion yen, an increase of 6.9% year-on-year. The manufacturing industry plans to increase by 2.7%, and the non-manufacturing industry plans to increase by 14.8% (non-manufacturing industry excluding electric power is plans to increase by 21.1%).
- Capital investment in FY 2023 declined by 16.4% in all industries. The manufacturing sector grew 16.5% over the previous year due to an increase in electrical machinery and chemicals. The non-manufacturing sector decreased 32.4% from the previous year due to factors like a decrease in electric power (the non-manufacturing sector, excluding electric power, increased 6.0% from the previous year), despite a rise in construction and transport.

YoY Changes in Capital Spending in the Tohoku Region



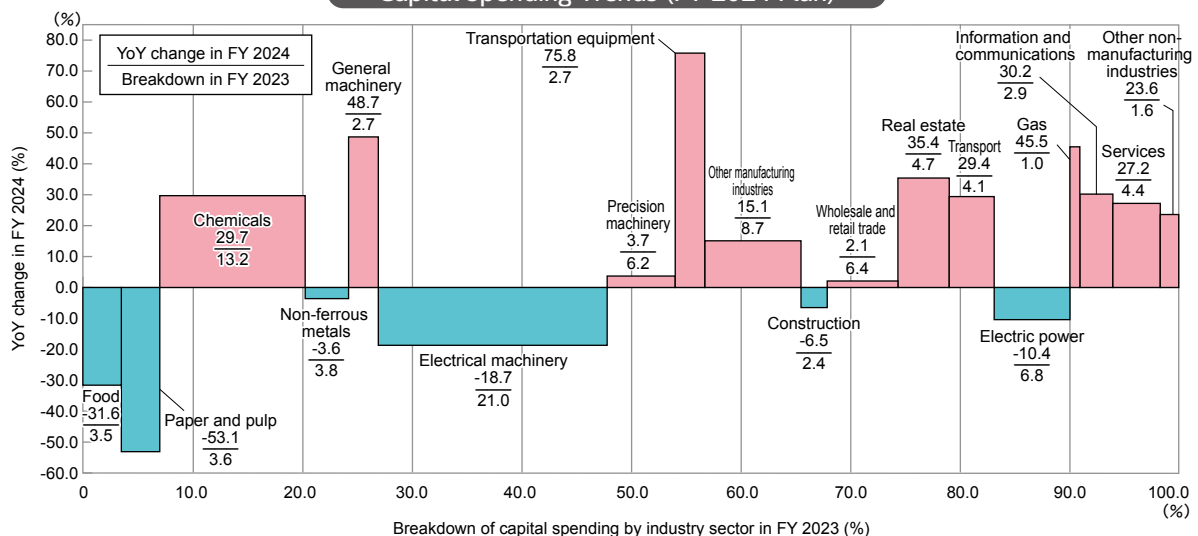
Note 1: The publicly released data (for the seven Tohoku prefectures including Niigata Prefecture) were recalculated for the six Tohoku prefectures. The same shall apply hereinafter.

Note 2: In FY 2010, actual investment by industry category for the seven prefectures in the Tohoku region was not disclosed.

Source: Survey on Planned Capital Spending (by Region), Development Bank of Japan

- Looking at the year-on-year change in FY 2024 capital investment plans by industry sector, in the manufacturing sector there will be declines in electrical machinery for which investment to electric vehicles (EVs) industry has been stabilized. However, demand is expected to increase for chemicals to bolster facilities for EVs and medical products. The non-manufacturing sector plans to grow in real estate due to redevelopment and renovation.

Capital Spending Trends (FY 2024 Plan)



Source: Survey on Planned Capital Spending (by Region) for Fiscal Year 2024, Development Bank of Japan

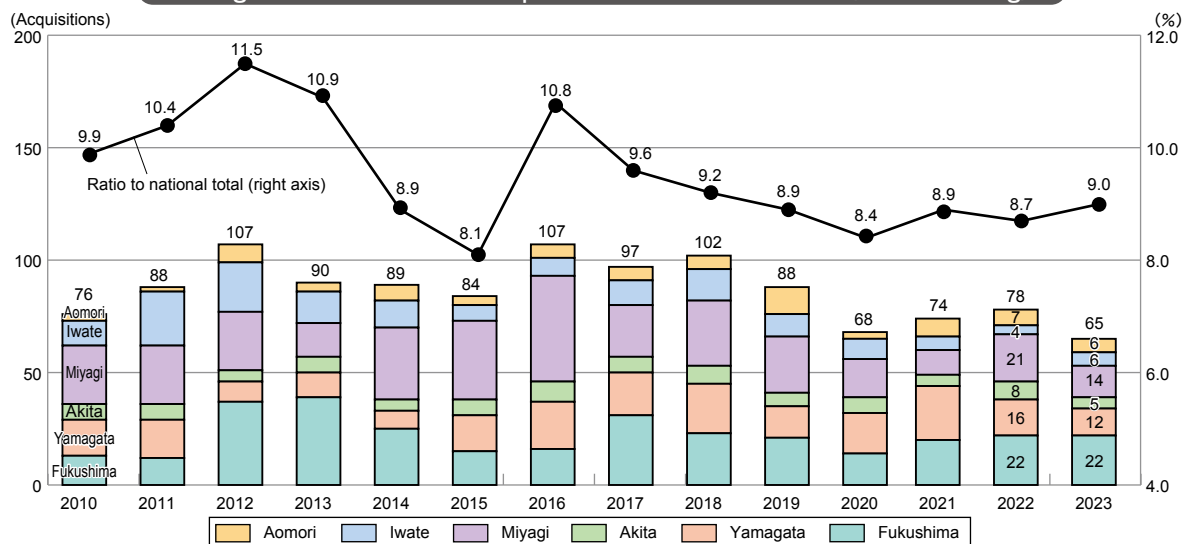
(9) Acquisition of Plant Locations

(9) Acquisition of Plant Locations

Number of acquisition for plant locations decreased for the first time in three years. The fewest since the survey started in 1967.

- In 2023, the acquisition for plant locations (manufacturing) in the Tohoku region decreased for the first time in three years, down 13 (16.7%) from the previous year to 65. The national ratio rose 0.3 points from the previous year to 9.0%.
- By prefecture, in descending order of number of locations, 22 were in Fukushima (22 in the previous year), 14 in Miyagi (21 in the previous year), 12 in Yamagata (16 in the previous year), 6 in Aomori (7 in the previous year), 6 in Iwate (4 in the previous year), and 5 in Akita (8 in the previous year).
- Looking at the changes in the number of acquisitions, the number reached the 70s in 2009, the year after the financial crisis. However, this number, including relocations, increased after the Great East Japan Earthquake in 2011 due to support for disaster-stricken areas. After that, the number dropped in 2020 due to the COVID-19 pandemic, and it has marked the fewest number in 2023 since the first survey (1967).

Changes in the Number of Acquisitions for Plant Locations (manufacturing)



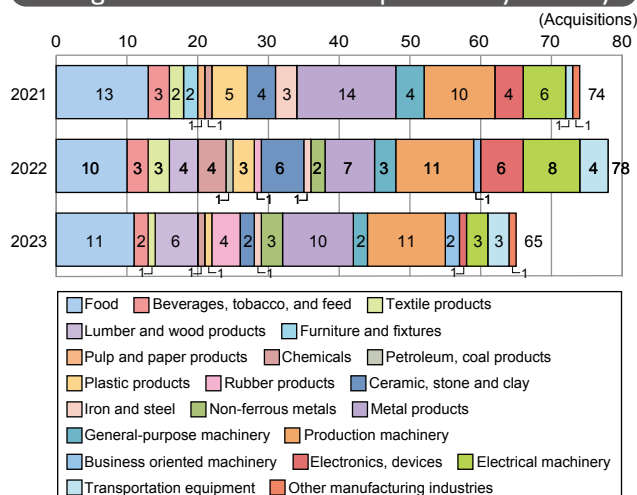
Note 1: Electric power, gas, and heat supply industries and laboratories are excluded.

Note 2: Plant Location Acquisition Trend targets the acquisition (including leasing) of land with a size of 1,000 square meters or larger for use to build a factory, business office or research center for manufacturing, electric power (excluding hydraulic power plants, geothermal power plants and solar power plants,) gas and heat supply.: Solar power plants were excluded from the 2015 survey for the electric power sector.

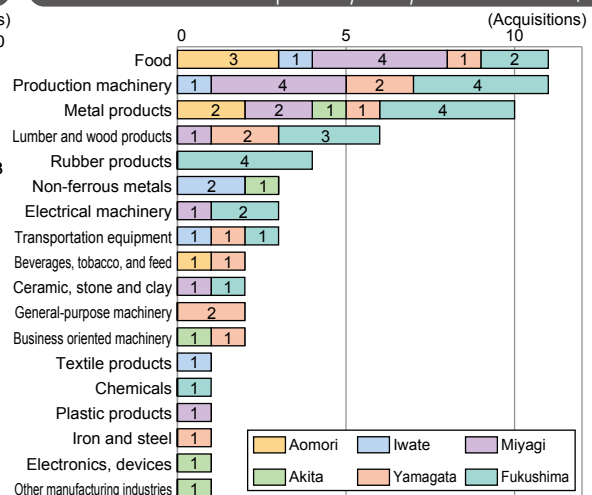
Source: Plant Location Acquisition Trend, Ministry of Economy, Trade and Industry

- By industry, in descending order of the number of acquisitions, food accounted for 11, production machinery for 11, metal products for 10, and lumber and wood products for 6. By prefecture in descending order of the number of acquisitions, Miyagi Prefecture had 4 acquisitions in both food and production machinery, and Fukushima Prefecture had 4 in production machinery, metal products, and rubber products, respectively.

Changes in the Number of Acquisitions by Industry



Distribution of Plant Location Acquisitions by Industry Sector and Prefecture (2023)



Note: Excludes the electric power industry, gas industry, heat supply industry, and research institutes.

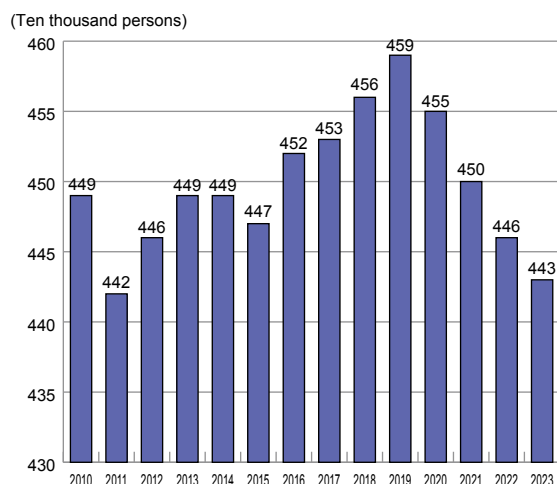
Source: Plant Location Acquisition Trend, Ministry of Economy, Trade and Industry

(10) Labor Force Population

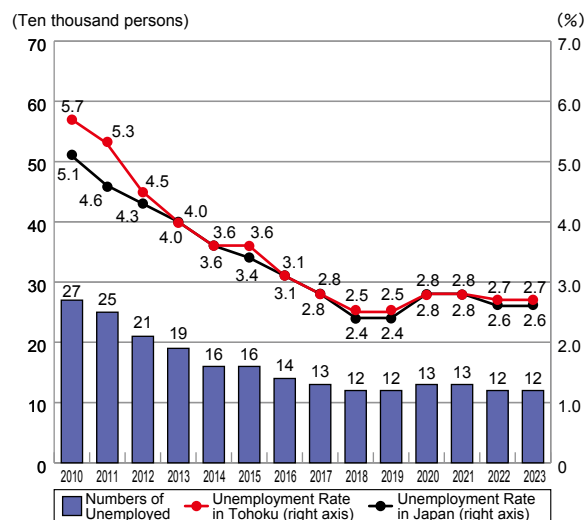
The number of people employed has declined for four consecutive years.

- In 2023, the number of people employed in the Tohoku region was 4.43 million, which had declined for four consecutive years, while the number of totally unemployed persons remained at a low level of 120,000. The unemployment rate was 2.7%, having the same level as that of the previous year.

Number of employed



Changes in the Numbers of Unemployed and the Unemployment Rate



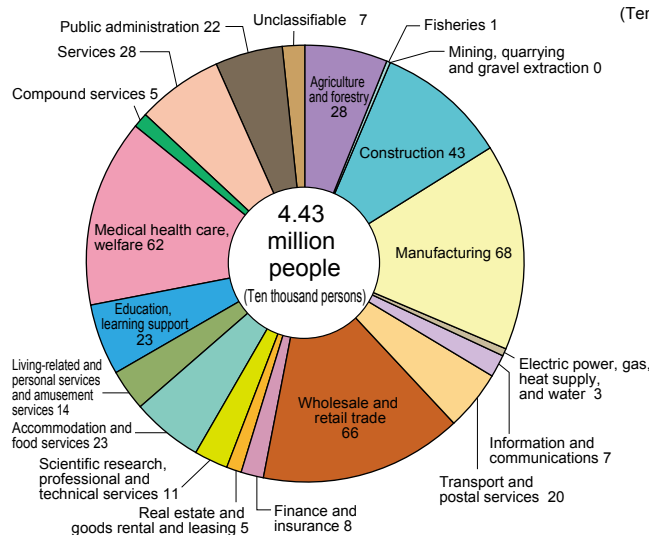
Note: The figure for 2011 is a supplementary estimate made because of the impact of the Great East Japan Earthquake.

Source: Labor Force Survey, Ministry of Internal Affairs and Communications

Source: Labor Force Survey, Ministry of Internal Affairs and Communications

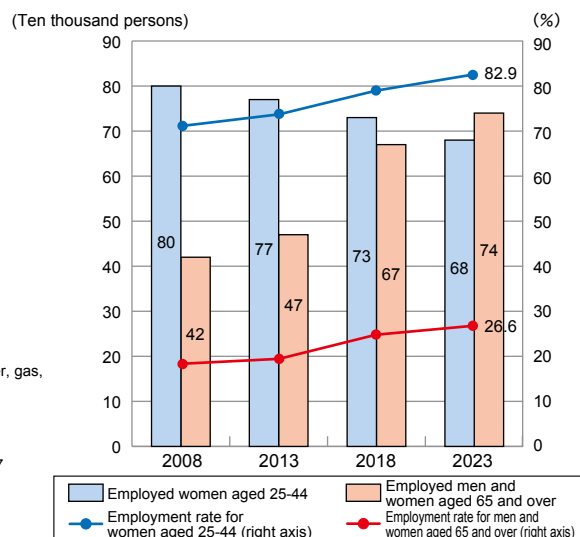
- By industrial sector, the largest number of people employed was seen in “manufacturing” at 680,000 (15.3%), followed by “wholesale and retail trade” at 660,000 (14.9%), “medical health care, welfare” with 620,000 (14.0%), “construction” with 430,000 (9.7%), and then “agriculture and forestry” and “services” with 280,000 (6.3%).
- The population of employed women aged 25-44 years (child-caring age) was decreasing, while the number of people employed (men and women) aged 65 and over was increasing. The employment rate for women aged 25-44 years and that for men and women aged 65 and over showed an upward tendency.

Number of Employed by Industrial Sector (2023)



Source: Labor Force Survey, Ministry of Internal Affairs and Communications

Population of Employed and Employment Rate (Women Aged 25-44 and Men and Women Aged 65 and Over)



Source: Labor Force Survey, Ministry of Internal Affairs and Communications

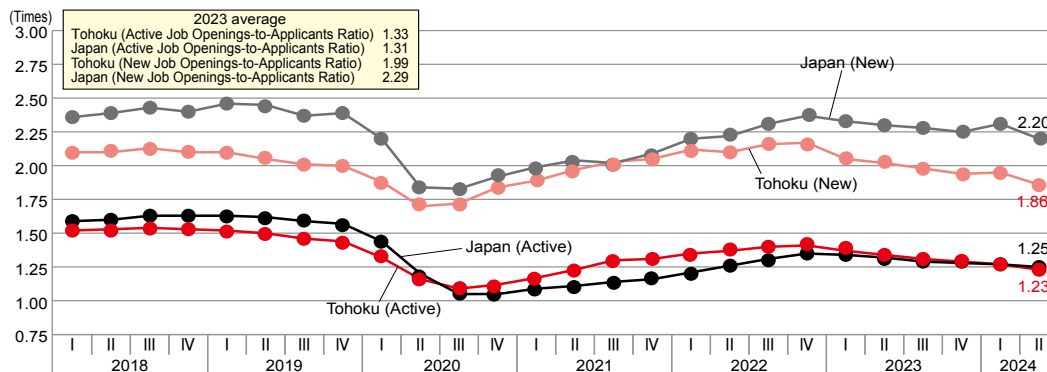
(11) Employment

(11) Employment

Both the 2023 average active job openings-to-applicants and the new job openings-to-applicants ratios have declined from the previous year.

- The 2023 average active job openings-to-applicants ratio for the Tohoku region was 1.33 (1.31 for the nation), and the average new job openings-to-applicants ratio was 1.99 (2.29 for the nation), down from the previous year.

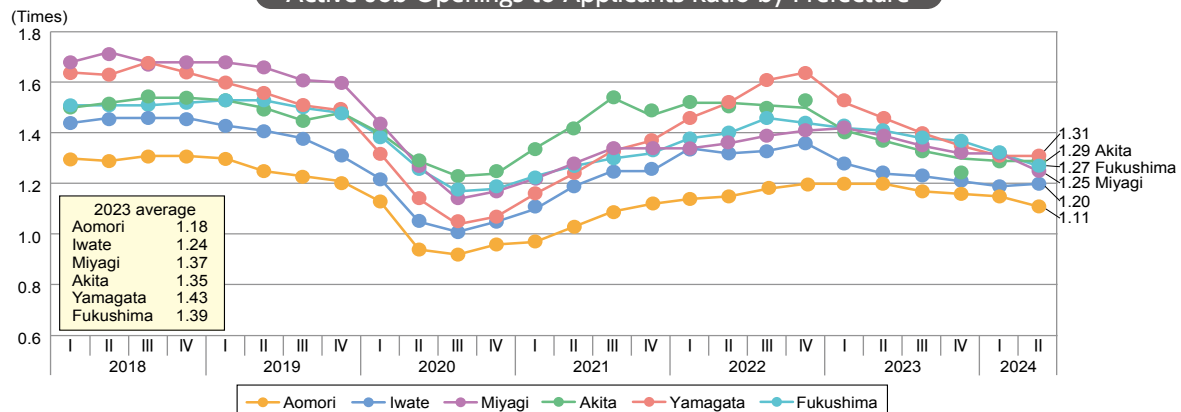
Changes in the Job Openings-to-Applicants Ratio in Japan and Tohoku



Source: *Employment Referrals for General Workers*, Ministry of Health, Labour and Welfare

- By prefecture, the average active job openings-to-applicants ratio in 2023 was 1.18 in Aomori, 1.24 in Iwate, 1.37 in Miyagi, 1.35 in Akita, 1.43 in Yamagata, and 1.39 in Fukushima.

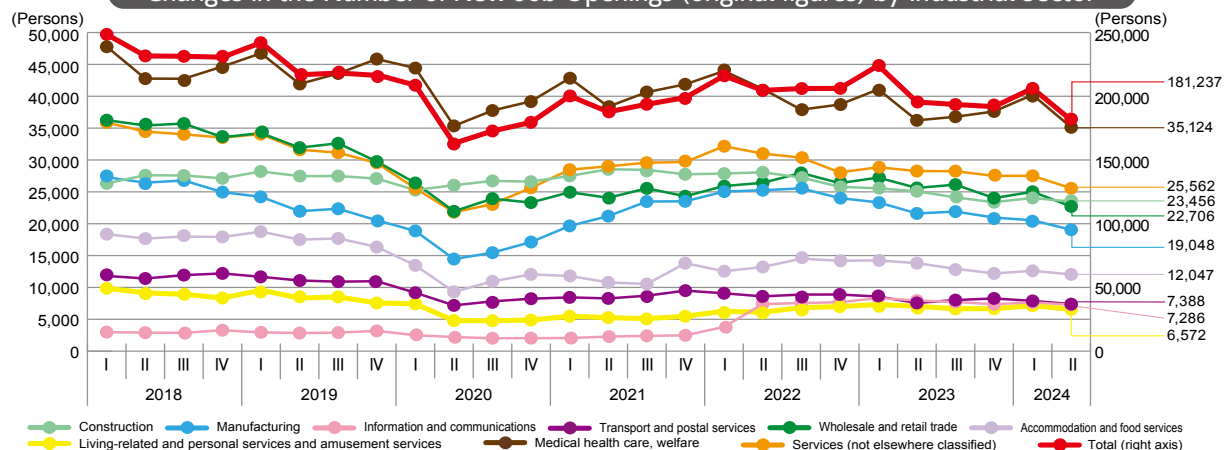
Active Job Openings-to-Applicants Ratio by Prefecture



Source: *Employment Referrals for General Workers*, Ministry of Health, Labour and Welfare

- Looking at the changes in the number of new job openings (original figures) by industrial sector, it has decreased in “manufacturing”, “construction” and “medical health care, welfare” while it has increased in “information and communications” in 2023 compared to those of the previous year.

Changes in the Number of New Job Openings (original figures) by Industrial Sector



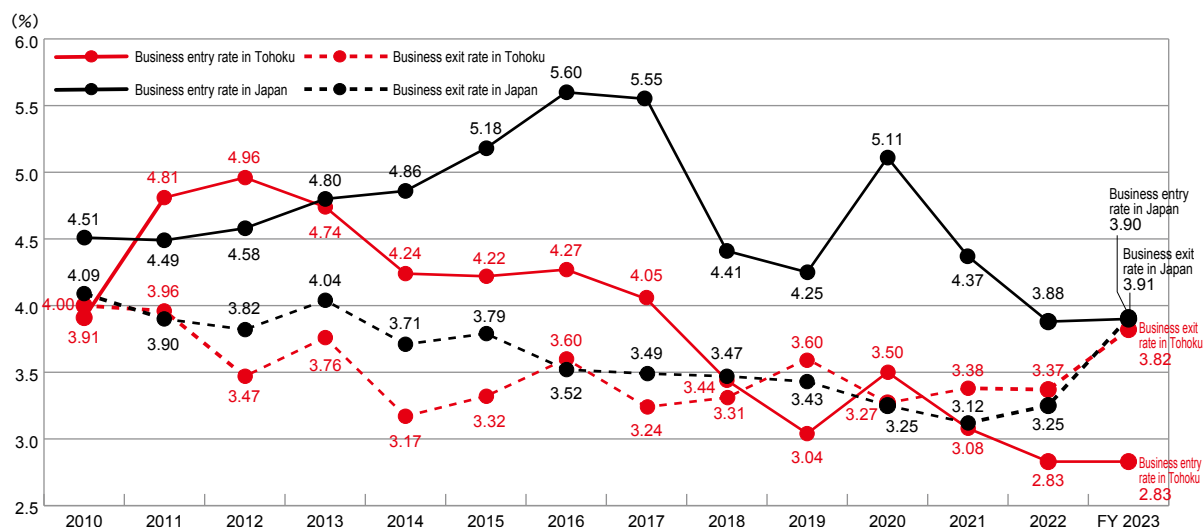
Source: *Employment and Unemployment Situation in Aomori*, Aomori Labor Bureau / *Employment Referrals for General Workers*, Iwate Labor Bureau / *Employment Referrals for General Workers in Miyagi*, Miyagi Labor Bureau / *Employment Situation in Akita*, Akita Labor Bureau / *Latest Employment Situation*, Yamagata Labor Bureau / *Latest Employment and Unemployment Situation*, Fukushima Labor Bureau

(12) Business Entry and Exit Rates

The business exit rate is higher than the entry rate in Tohoku region, and the gap is widening.

- The business entry rate in the Tohoku region in FY 2023 was 2.83%, keeping the same rate as that of the previous year, according to employment insurance statistics. The entry rate, which increased after the Great East Japan Earthquake, peaked in FY 2012 and has been on a downward trend since then. The national rate increased a bit from the previous year to 3.90%.
- The exit rate for the Tohoku region was 3.82% and the national rate was 3.91%, showing an upward trend on both of them.

Changes in Business Entry and Exit Rates in Japan and Tohoku



Note: The business entry and exit rates were calculated using the following formulas based on the data from the *Monthly & Annual Reports on Employment Insurance Services*.

Business entry rate = Number of newly applied establishments in the relevant fiscal year of employment insurance / Number of applicable establishments at the end of the previous fiscal year × 100 (%)

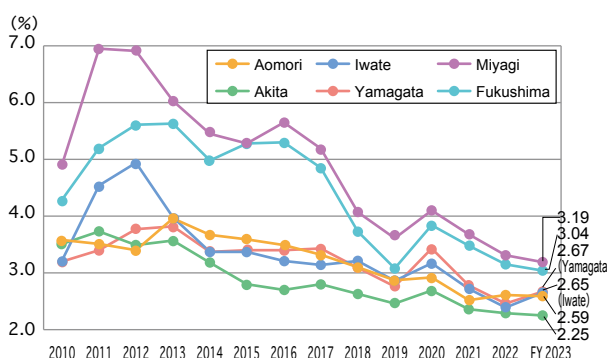
Exit rate = Number of closed establishments in the relevant fiscal year of employment insurance / Number of applicable establishments at the end of the previous fiscal year × 100 (%)

※ Applicable establishments shall mean establishments where the insurance relation of labor insurance pertaining to employment insurance has been established pursuant to the provisions of the Act on Collection of Insurance Premiums of Labor Insurance. Even an existing establishment becomes an applicable establishment when it hires an employee for the first time.

Source: *Monthly & Annual Reports on Employment Insurance Services*, Ministry of Health, Labour and Welfare

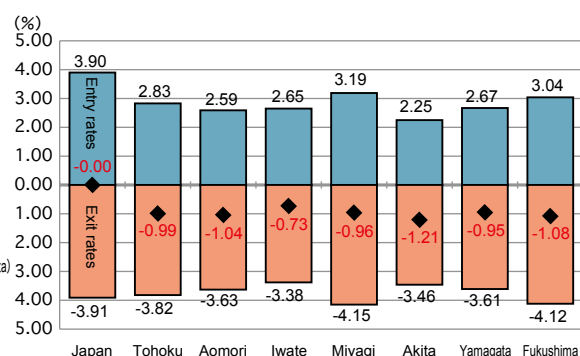
- Looking at the business entry rate in FY 2023 by prefecture, it has gone into decline in four prefectures in Tohoku excluding Iwate and Yamagata. Looking at the difference between the business entry rate and the exit rate, the entry rate and the exit rate are the same levels in Japan while the entry rate is 0.99 points lower in Tohoku. Even in all six prefectures in Tohoku, the entry rate falls short of the exit rate.

Changes in Business Entry Rate in Tohoku by Prefecture



Source: *Monthly & Annual Reports on Employment Insurance Services*, Ministry of Health, Labour and Welfare

Business Entry and Exit Rates in FY 2023



Note: Plotting (◆) on each bar indicates the difference in rate between business entry and exit.

Source: *Monthly & Annual Reports on Employment Insurance Services*, Ministry of Health, Labour and Welfare

(13) Internationalization

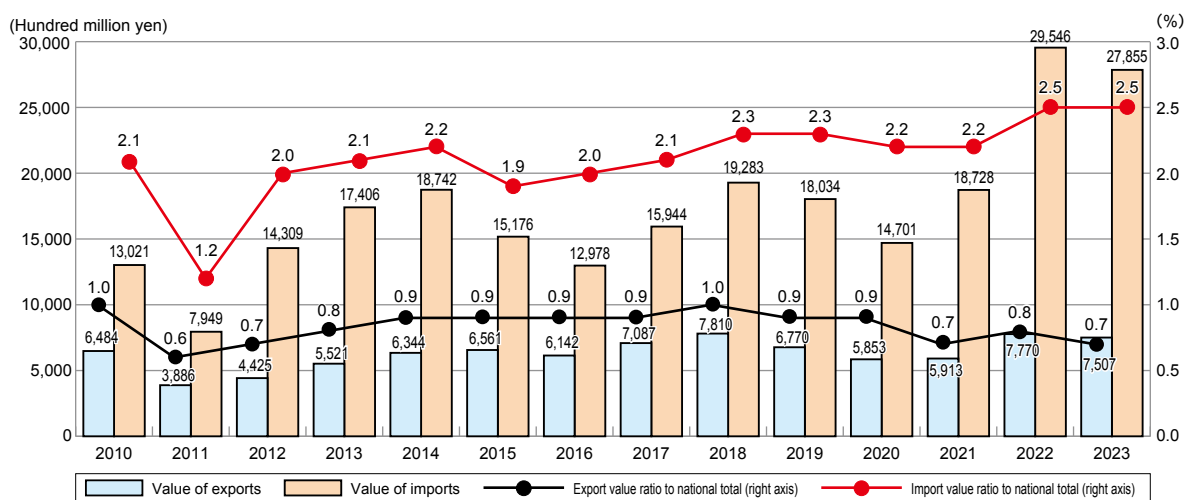
(13) Internationalization

(i) Trade

Exports and imports both down for the first time in 3 years.

- In 2023, exports from the Tohoku region totaled 750.7 billion yen, down 3.4% from the previous year, the first decline in three years, due to a decrease in steel and other products, despite an increase in ships and other products. Imports totaled 2,785.5 billion yen, down 5.7% from the previous year, the first decline in three years, as crude oil and raw oil increased but coal and other products decreased. As a percentage of the national total, exports account for 0.7% (0.8% in 2022) and imports account for 2.5% (2.5% in 2022).

Changes in the Value of Exports and Imports Handled in the Tohoku Region

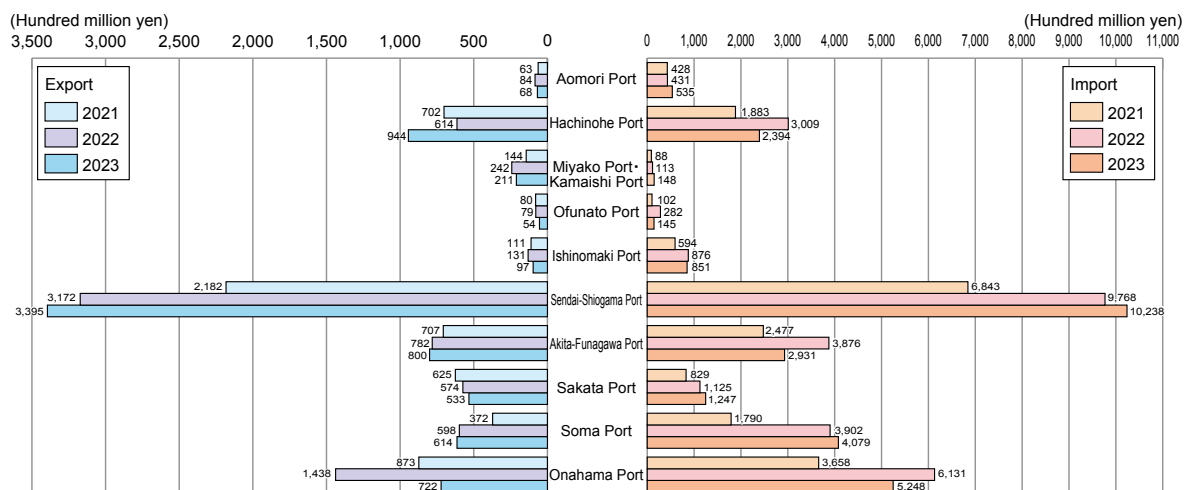


Note: The value of cargo that passed through export and import custom clearances at the custom offices in the six Tohoku prefectures.

Source: Compiled by processing *Overview of Trade in the Tohoku Region*, Yokohama Customs, and *Trade Statistics of Japan*, Ministry of Finance Japan

- In terms of volume handled by major port in the Tohoku region, the top three largest export ports in descending order are Sendai-Shiogama Port, Hachinohe Port, and Akita-Funagawa Port, while the top three import ports in descending order are Sendai-Shiogama Port, Onahama Port, and Soma Port. Compared to the previous year, exports increased at Hachinohe Port, Sendai-Shiogama Port, and other ports, but decreased at Onahama Port, Sakata Port and other ports, while imports increased at Sendai-Shiogama Port, Soma Port and other ports but decreased at Akita-Funagawa Port, Onahama Port and Hachinohe Port and other ports.

2021/2023 Trade Value by Port in the Tohoku Region

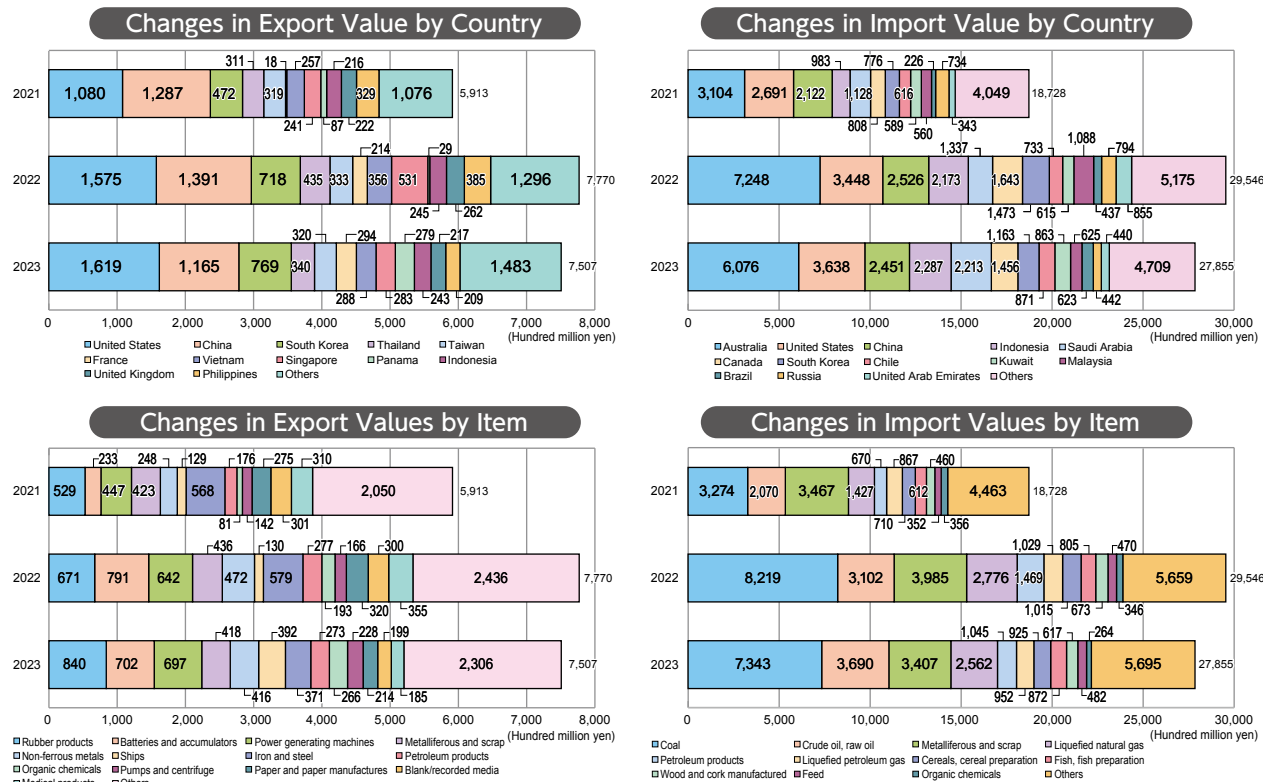


Note: Figures for Aomori Airport, Akita Airport, Sendai Airport, Fukushima Airport, and Kesennuma Port are not included. Figures for Miyako Port and Kamaishi Port are combined.

Due to a revision of the customs administration structure, Miyako Sub-Branch Customs of Kamaishi Branch Customs (formally Miyako Branch Customs) has become non-stationed since July 2021.

Source: Compiled by processing *Overview of Trade in the Tohoku Region*, Yokohama Customs, and *Trade Statistics of Japan*, Ministry of Finance Japan

- As for trading partner countries, the major export destinations from the Tohoku region are the United States, China, and South Korea, while the major origin countries of imports are Australia, the United States and China. Compared to the previous year, exports decreased in Singapore, China, and the Philippines, while imports decreased in Australia, Malaysia, and the United Arab Emirates.
- Looking at the value of exports and imports by item, exports were dominated by rubber products, batteries and accumulators, and power generating machines, while imports were dominated by coal, crude and raw oil and metalliferous and scrap. Compared to the previous year, exports of iron and steel, and medical products decreased and imports of coal, metalliferous and scrap decreased.



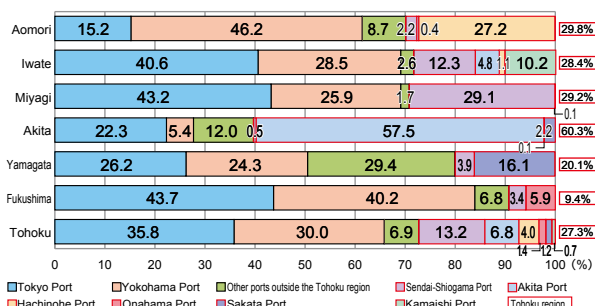
Source: Compiled by processing *Overview of Trade in the Tohoku Region*, Yokohama Customs, and *Trade Statistics of Japan*, Ministry of Finance Japan

- Approximately 35.8% of marine export cargoes, comprised of products produced in the Tohoku region, were loaded at the port of Tokyo, while 30.0% at the Port of Yokohama and 13.2% at Sendai-Shiogama Port. This implies that a large proportion of cargoes were loaded at ports located outside the Tohoku region.

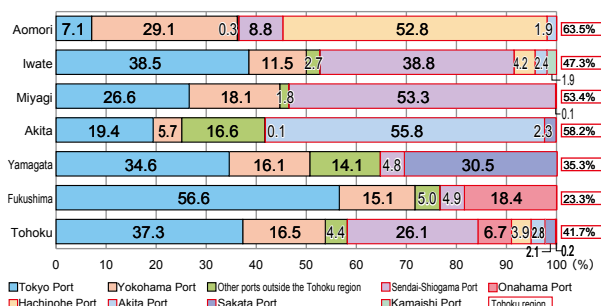
Looking at which ports the cargo consumed in the Tohoku region was unloaded from, Tokyo Port accounted for 37.3%, Sendai-Shiogama Port accounted for 26.1%, and Yokohama Port accounted for 16.5%. About 40% of the imported cargoes were unloaded at ports in the Tohoku region.

By prefecture, ports located outside the Tohoku region were used for a large proportion of both export and import cargoes for Fukushima Prefecture and Yamagata Prefecture. Whereas ports located inside the Tohoku region were used for a large proportion of both export and import cargoes for Akita Prefecture and also for a large proportion of import cargo for Aomori Prefecture.

Component Ratio of Export Cargo Volume (tons) by Shipping Port (November 2023) (Production area: six Tohoku prefectures)



Component Ratio of Import Cargo Volume (tons) by Shipping Port (November 2023) (Consumption area: six Tohoku prefectures)



Note: The survey is conducted once every five years for clarifying the contemporary status of the international maritime container cargo flow and policy making, etc.

Survey period: one month from Wednesday, November 1, 2023 to Thursday, November 30, 2023

Source: FY 2023 Survey Results of Japan's Export and Import Container Cargo Movements, Ports and Harbors Bureau, Ministry of Land, Infrastructure, Transport and Tourism

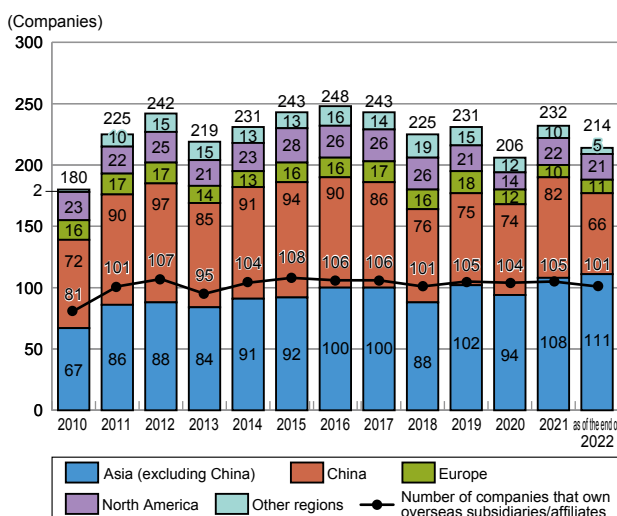
(13) Internationalization

(ii) Internationalization of Corporate Activities

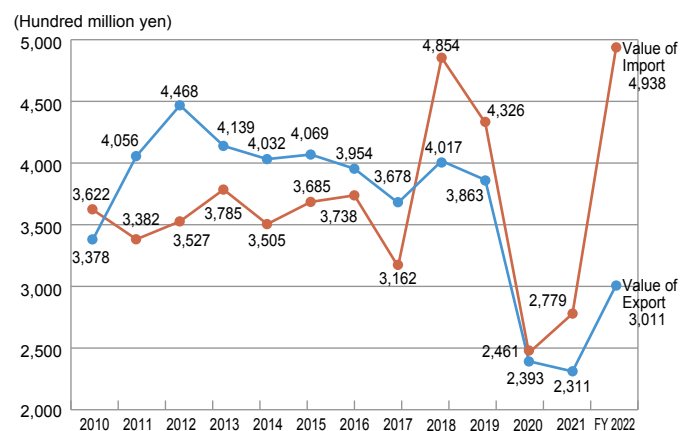
Imports, exports, and the number of foreign workers increased for the firms headquartered in the Tohoku region.

- Of the firms headquartered in Tohoku region in FY 2022 (1,744 responding firms), 101 firms had subsidiaries or affiliates overseas.
- The number of overseas subsidiaries or affiliates of firms headquartered in Tohoku is 214. According to the details by location, the largest number of overseas subsidiaries or affiliates in Asia (excluding China) is 111 (Component Ratio 51.9%), followed by 66 (30.8%) in China, and 21 (9.8%) in North America.
- Looking at overseas transactions by firms headquartered in the Tohoku region, the value of exports of goods (182 firms responded) was 301.1 billion yen. Meanwhile, the value of imports of goods (211 firms responded) was 493.8 billion yen.

Changes in the Number of Overseas Subsidiaries/
Affiliates Owned by Companies Headquartered in the Tohoku Region



Changes in Values of Export and Import Goods by
Companies Headquartered in the Tohoku Region



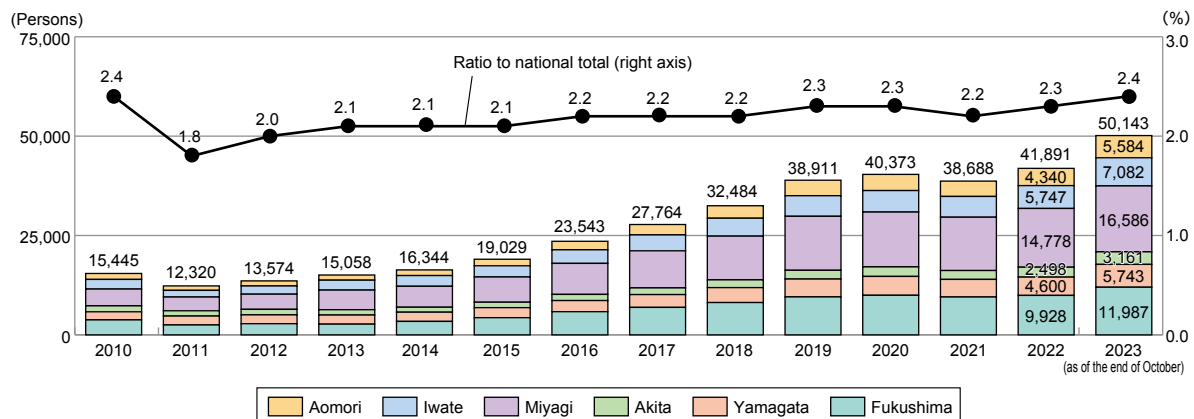
Note 1: The *Basic Survey of Japanese Business Structure and Activities* targets companies that own a business establishment engaging in mining, manufacturing, electric power and gas, wholesale, retail trade, and services with 50 or more employees and a capital or equity investment, amounting to 30 million yen or more.

Note 2: In principle, a parent company shall hold more than 50% of voting rights in its overseas subsidiaries, and between 20-50% of voting rights in its overseas affiliates.

Source: *Basic Survey of Japanese Business Structure and Activities*, Ministry of Economy, Trade and Industry

- The number of foreign workers in the Tohoku region at the end of October 2023 was 50,143 (2.4% of national total), an 19.7 % increase from the same month last year. By prefecture, Miyagi Prefecture had 16,586, followed by Fukushima Prefecture with 11,987.

Changes in the Number of Foreign Workers



Note: The above figures are obtained by totaling the numbers reported in the notifications submitted by employers who are required to notify the status of their employed foreign workers (excluding those who are special permanent residents, and those who hold diplomatic/ official status) as of the end of October every year.

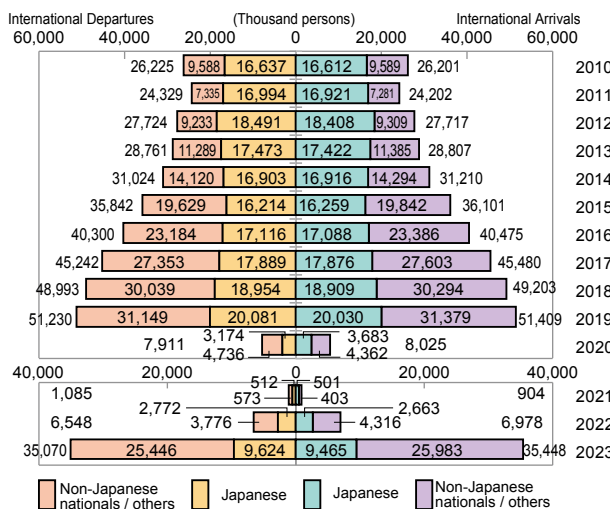
Source: *Table of Notification Status of Foreign Workers' Employment Status*, Ministry of Health, Labour and Welfare

(iii) International Arrivals/Departures and Foreign Residents

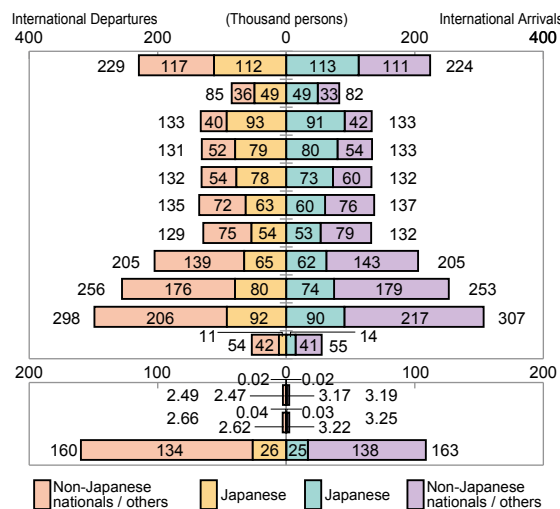
- The number of international arrivals and departures is recovering from a decline due to the impact of the COVID-19 and other factors.
- The number of foreign residents is increasing.

- In 2023, 322,842 people entered and departed from ports and airports in the Tohoku region (0.5% of the national total), up 5,366% from 5,906 in 2022. This is a 46.7% decrease from 605,553 in 2019, which is not back to the level before the spread of the COVID-19.

Changes in the Number of International Arrivals and Departures (All Japan)



Changes in International Arrivals and Departures through Ports and Airports in Tohoku

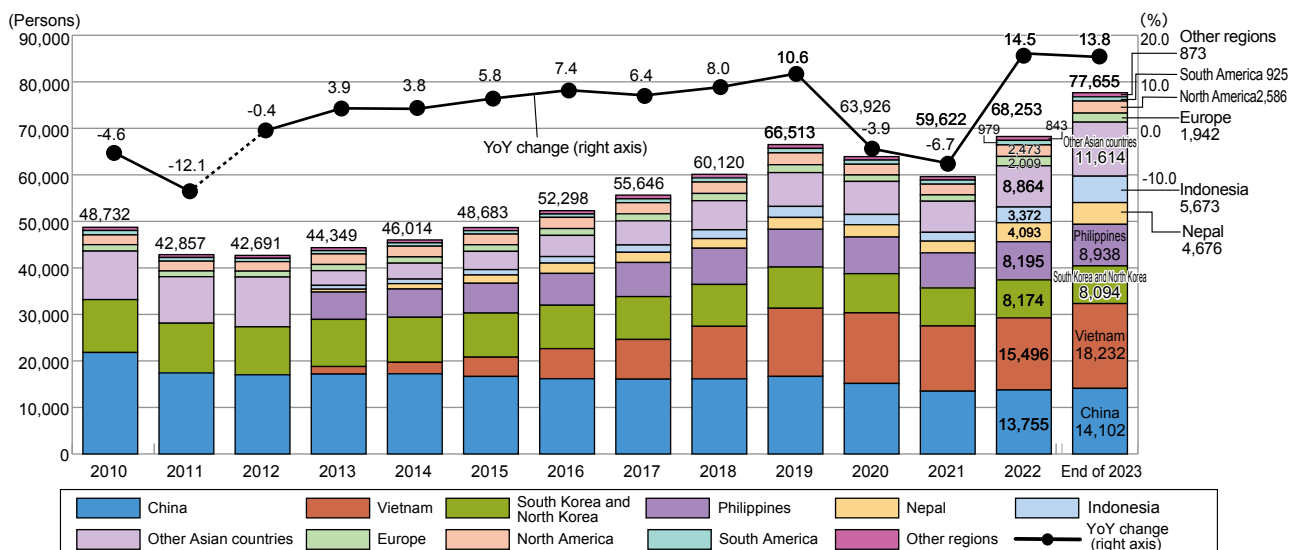


Source: Yearly reports, Immigration Control statistics, Ministry of Justice

- The number of foreigners residing in the Tohoku region at the end of 2023 was 77,655, an increase of 13.8% year-on-year.

By nationality, Vietnam accounted for the largest number of residents with 18,232, or 23.5% of the total. China followed with 14,102 (18.2%), the Philippines with 8,938 (11.5%) and South Korea and North Korea with 8,094 (10.4%).

Changes in the Number of Foreign Residents (Former Alien Registration Card Holders)



Note 1: "Other Asian countries" for 2010, 2011 and 2012 represent Asian countries excluding China, South Korea and North Korea.

Note 2: With the revision of the Immigration Control and Refugee Recognition Act in July 2012 and the introduction of a new residence management system, the Foreign Resident Registration Act was abolished. Thus, statistics have been created for "medium- to long-term residents" and "special permanent residents" (hereinafter collectively referred to as "foreign residents"). As a result of these changes to the system, the figures for foreign residents under the new system and registered aliens under the old system do not match.

Source: Statistics on foreign residents in Japan (formerly, registered alien statistics), Ministry of Justice

(14) Tourism

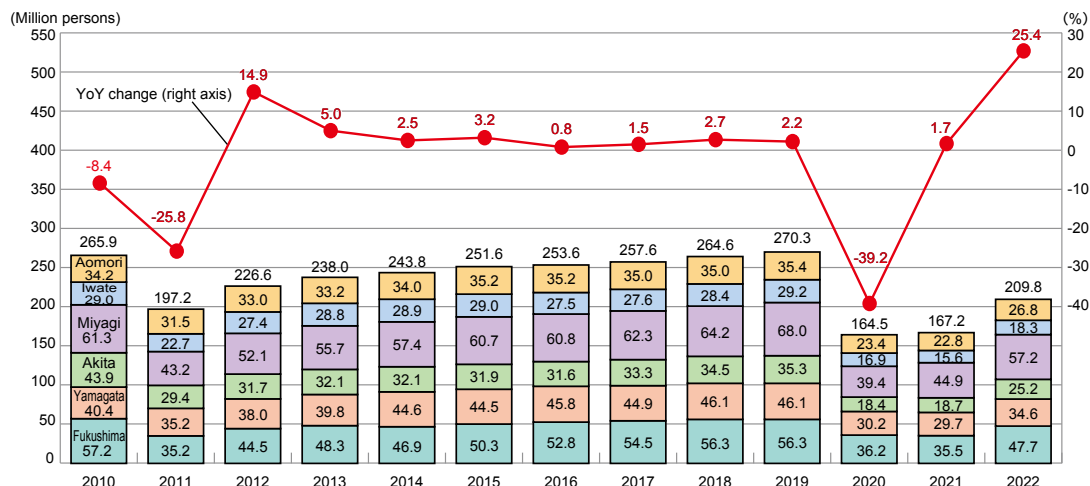
(14) Tourism

(i) Domestic Tourism

The total number of inbound tourists to the Tohoku region was recovering, though not to the level of pre-2019.

- The number of inbound tourists to the Tohoku region declined significantly in 2011 due to the Great East Japan Earthquake, but the number increased for eight consecutive years thereafter. It declined considerably again in 2020 due to the spread of the COVID-19 and other factors, but was on a recovery trend to 209.8 million in 2022 (up 25.4% from the previous year).

Changes in the Number of Inbound Tourists to the Tohoku Region

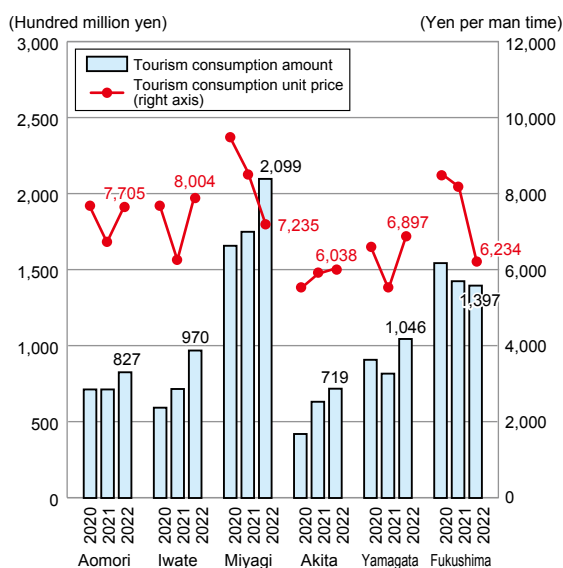


Note: The figures for 2010 are shown for reference purpose only because the survey criteria prior to 2010 differed among prefectures.

Source: Tourism statistics for each prefecture

- Comparing the tourism consumption amount and tourism consumption unit price in 2022 with the previous year, tourism consumption amount decreased only in Fukushima Prefecture, while tourism consumption unit increased in Aomori, Iwate, Akita, and Yamagata Prefectures.
- The total number of overnight stays in each prefecture in 2023 increased in all six prefectures.

Changes in Tourism Consumption Amount by Prefecture (Japanese / Sightseeing purpose)

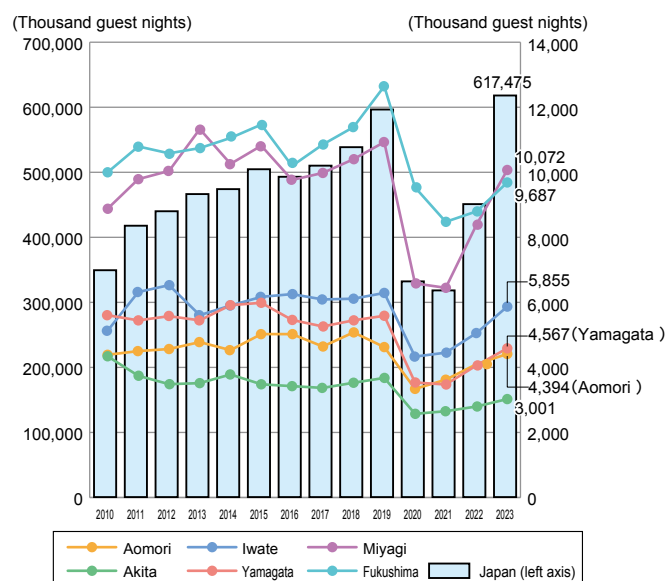


Note 1: Tourism consumption amount refers to the total spent by inbound tourists to the relevant prefecture(s).

Note 2: The tourism consumption unit price refers to tourism consumption per tourist visiting the relevant prefecture(s) during one visit.

Source: Tourist Statistics, Japan Tourism Agency

Changes in the Total Number of Overnight Guests in Each Prefecture



Note 1: Estimated values such as the total number of guests at all accommodation facilities.

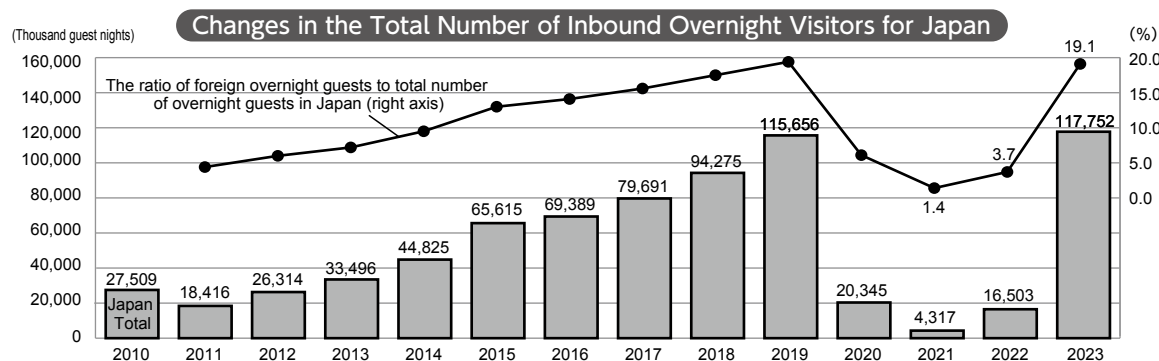
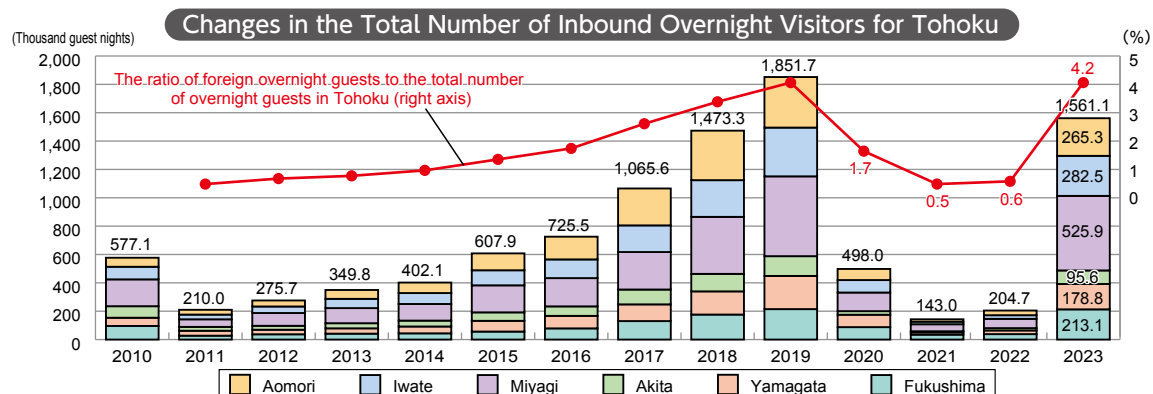
Note 2: For the period from January to March 2010, the number of visitors represents those staying overnight at accommodations with 10 or more employees.

Source: Overnight Travel Statistics, Japan Tourism Agency

(ii) International Inbound Tourism

The number of total foreign overnight stays is recovering from a decline due to the impact of the COVID-19 and other factors.

- In 2023, the total number of foreign overnight stays in the Tohoku region was 1,561,000 up 662.6% from the previous year (a decrease of 15.7% from 2019). The national total was also up 613.5% from the previous year (an increase of 1.8% from 2019).



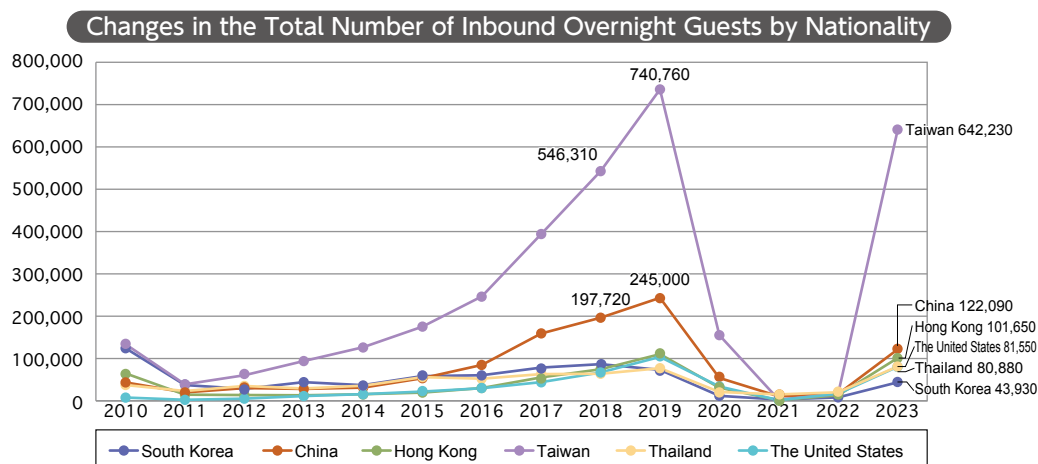
Note 1: Estimated values such as the total number of guests at all accommodation facilities.

Note 2: For the period from January to March 2010, the number of visitors represents those staying overnight at accommodations with 10 or more employees.

Source: *Overnight Travel Statistics*, Japan Tourism Agency

- The number of foreign overnight stays by nationality remained at a low level from 2020 to 2022 due to the impact of the COVID-19 and other factors, but was on a recovery trend in 2023.

In 2023, the number of overnight visitors from Taiwan increased 3,785.2% to 642,230 and the second highest number since 2010, from China increased 650.4% to 122,090, from Hong Kong increased 668.3% to 101,650, from the U.S. increased 301.5% to 81,550, from Thailand increased 377.2% to 80,880, and from South Korea increased 435.7% to 43,930.



Note: Accommodation facilities with 10 or more employees.

Source: *Overnight Travel Statistics*, Japan Tourism Agency

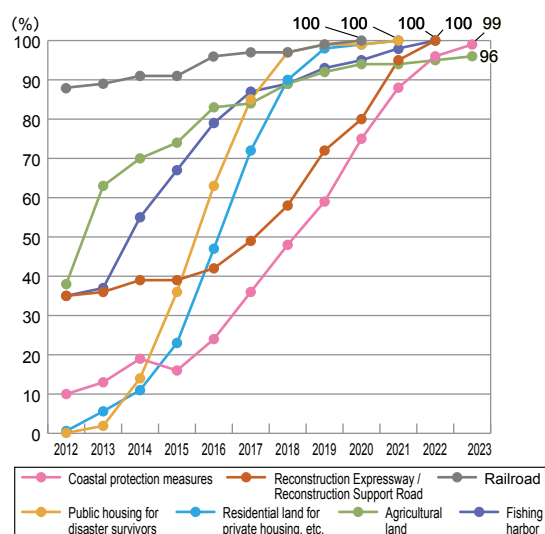
(15) Reconstruction-Related Trends

(15) Reconstruction-Related Trends

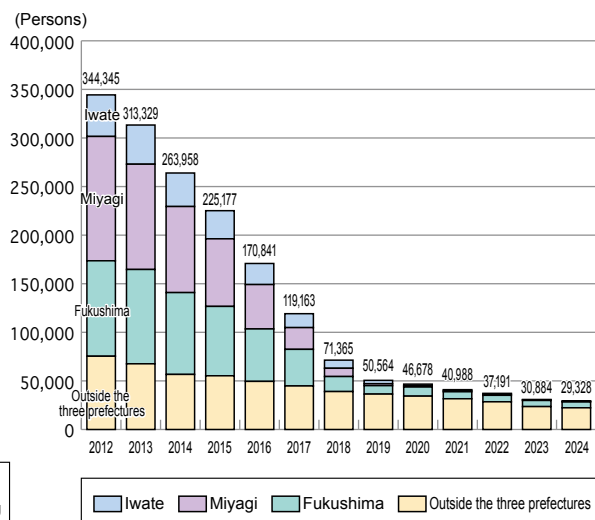
Sea surface fisheries catch and sea surface aquaculture harvest in the three affected prefectures increased significantly from the previous year.

- As of the end of September 2023, the progress of full-scale restoration and reconstruction of public infrastructure was 100% complete for reconstruction expressways/reconstruction support roads, railroads, public housing for disaster survivors, residential land for private housing, and fishing harbors. It was also 95% complete for coastal protection measures and agricultural lands.
- The number of evacuees decreased from more than 340,000 in March 2012 to about 29,000 as of March 2024.

Progress in Full-scale Restoration and Reconstruction of Public Infrastructure



Number of Evacuees in Japan



Note 1: Ratio of the number of completed projects to the number of planned projects (number of extensions and units) for coastal protection measures, reconstruction expressways and reconstruction support roads, public housing for disaster survivors, and residential land for private housing, etc.

Note 2: Railroad is the ratio of the route extension for resumed operation of affected route extension.

Note 3: Agricultural land is the ratio of the area available for resumption of farming to the area of tsunami-affected agricultural land.

Note 4: Fishing harbor is the ratio of the number of fishing harbors that have recovered all functions to the number of affected fishing harbors.

Source: *Reconstruction of Public Infrastructure*, Reconstruction Agency

Source: *The Number of Evacuees Nationwide*, Reconstruction Agency

- In the 2021 survey, the number of business establishments in the 12 coastal municipalities of Iwate Prefecture was 11,758 (20.7% of the prefecture total), down 2.9% from the 2016 survey, and the number of employees was 99,640 (17.3%), up 10.2%. Compared to the 2009 survey, the number of respondents decreased by 24.5% and 10.1%, respectively. Similarly, the number of businesses in the 14 coastal municipalities of Miyagi Prefecture was 23,861 (24.4%), up 1.3% from the 2016 survey, and the number of employees was 239,405 (21.3%), up 11.4%. Compared to the 2009 survey, the number of respondents decreased by 24.5% and 11.0%, respectively.

Changes in the Number of Business Establishments and Employees in the Affected Areas

	Number of establishments								Number of employees							
	2009	2012	2016	2021	Compared to 2009 (%)	Compared to 2012 (%)	Compared to 2016 (%)	In-Prefecture Ratio (%)	2009 (Persons)	2012 (Persons)	2016 (Persons)	2021 (Persons)	Compared to 2009 (%)	Compared to 2012 (%)	Compared to 2016 (%)	In-Prefecture Ratio (%)
Iwate	67,230	57,551	58,415	56,822	-15.5	-1.3	-2.7	—	605,948	509,979	525,264	574,612	-5.2	12.7	9.4	—
Of which 12 municipalities	15,566	10,746	12,112	11,758	-24.5	9.4	-2.9	20.7	110,827	78,410	90,396	99,640	-10.1	27.1	10.2	17.3
Miyagi	110,209	92,769	97,974	97,957	-11.1	5.6	-0.0	—	1,120,793	955,780	1,006,886	1,124,402	0.3	17.6	11.7	—
Of which 14 municipalities	31,598	20,500	23,559	23,861	-24.5	16.4	1.3	24.4	269,109	191,077	214,880	239,405	-11.0	25.3	11.4	21.3
Fukushima	102,063	86,170	85,960	84,633	-17.1	-1.8	-1.5	—	943,465	782,816	806,130	873,877	-7.4	11.6	8.4	—
Tohoku	470,282	404,616	405,012	396,903	-15.6	-1.9	-2.0	—	4,327,070	3,649,919	3,726,422	4,091,558	-5.4	12.1	9.8	—
Japan	6,043,300	5,453,635	5,340,783	5,288,891	-12.5	-3.0	-1.0	—	62,860,514	55,837,252	56,872,826	62,427,908	-0.7	11.8	9.8	—

Note 1: 12 municipalities of Iwate: Miyako City, Ofunato City, Kuji City, Rikuzentakata City, Kamaishi City, Otsuchi Town, Yamada Town, Iwazumi Town, Tanohata Village, Fudai Village, Noda Village, Hiroho Village

Note 2: 14 municipalities of Miyagi: Ishinomaki City, Shiogama City, Kesennuma City, Natori City, Tagajo City, Iwanuma City, Higashimatsushima City, Watari Town, Yamamoto Town, Matsushima Town, Shichigahama Town, Rifu Town, Onagawa Town, Minamisanriku Town

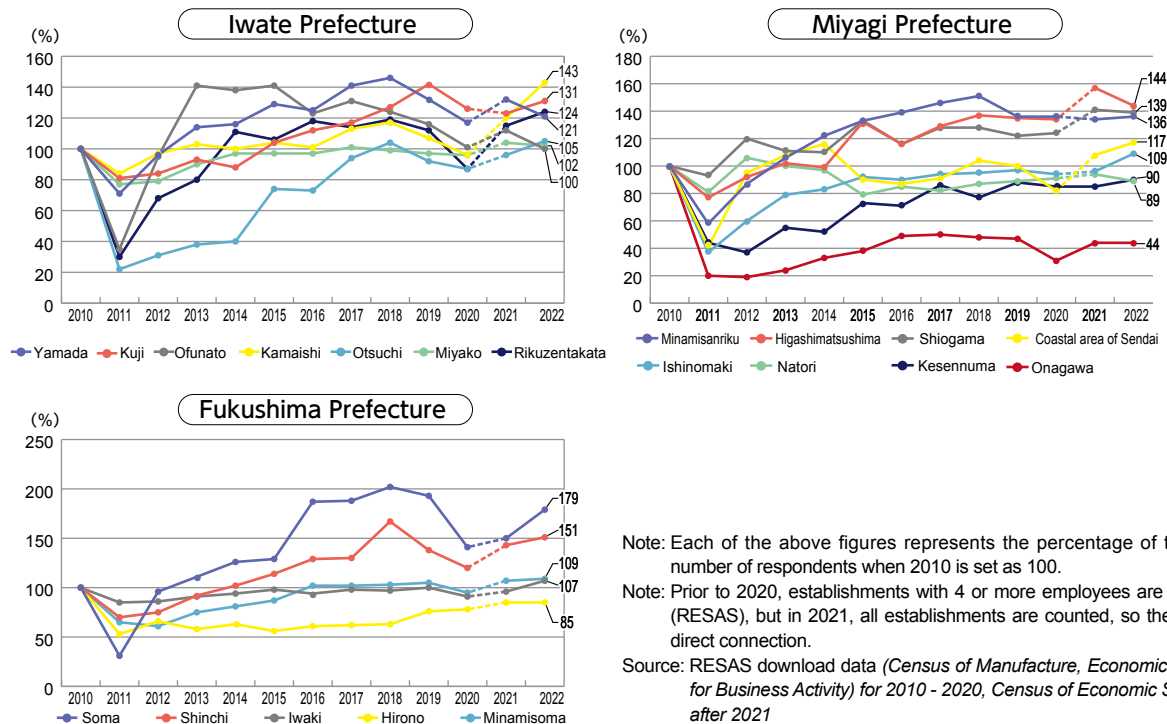
Note 3: In the 2012, 2016, and 2021 surveys, all or part of the areas of Tamura City, Minamisoma City, Kawamata Town, Naraha Town, Tomioka Town, Kawauchi Village, Okuma Town, Futaba Town, Namie Town, Katsurao Village, and Iitate Village in Fukushima Prefecture were excluded from the survey.

Source: *Economic Census for Business Frame for 2009, Economic Census for Business Activity for 2012, 2016 and 2021*

(15) Reconstruction-Related Trends

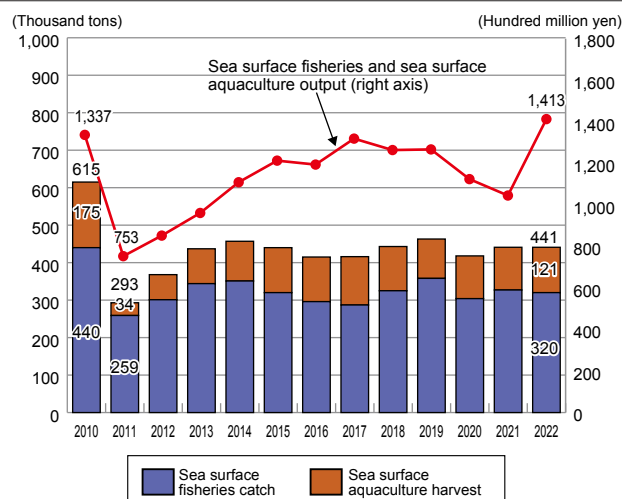
- While the value of manufactured goods shipments in the coastal areas of the three affected prefectures (Iwate, Miyagi and Fukushima Prefectures) is recovering when compared to immediately after the Great East Japan Earthquake.

Changes in the Shipment Value of Manufactured Goods from the Coastal Areas of the Three Affected Prefectures



- In 2022, the sea surface fisheries catch in the three affected prefectures was 320,000 tons, and the sea surface aquaculture harvest in the two affected prefectures of Iwate and Miyagi was 121,000 tons. The value of production increased significantly to 141.3 billion yen.
- In 2023, the production of major processed marine products in the three affected prefectures was 214,000 tons of fresh and frozen marine products, 47,000 tons of frozen foods, 13,000 tons of fish cakes, and 34,000 tons of salted products.

Changes in the Sea Surface Fisheries Catch and Sea Surface Aquaculture Harvest and Output in the Three Affected Prefectures

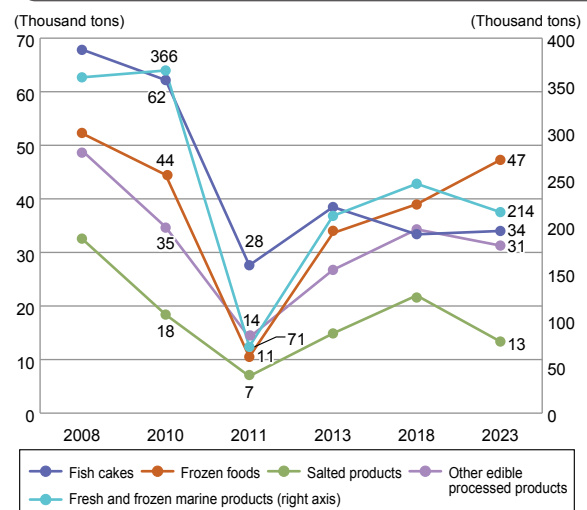


Note 1: The sea surface fisheries catch and output are the total of Iwate, Miyagi, and Fukushima prefectures.

Note 2: The sea surface aquaculture harvest and output are the total of Iwate and Miyagi prefectures.

Source: Annual Statistics on Fisheries and Aquaculture Production, Fishery Output, Ministry of Agriculture, Forestry and Fisheries

Changes in Production of Processed Marine Products in the Three Affected Prefectures



Note 1: Amounts for fish cakes in 2010, 2011, 2013 and 2023 exclude Iwate Prefecture, which is not disclosed.

Note 2: Amounts for salted products in 2010, 2011, and 2013 exclude Fukushima Prefecture, which is not disclosed.

Source: Census of Fisheries for 2008, 2013, 2018 and 2023 (Annual Report on Distribution Statistics of Fishery Products for fresh and frozen marine products in 2008), Fisheries Processing Statistics for 2010, 2011.

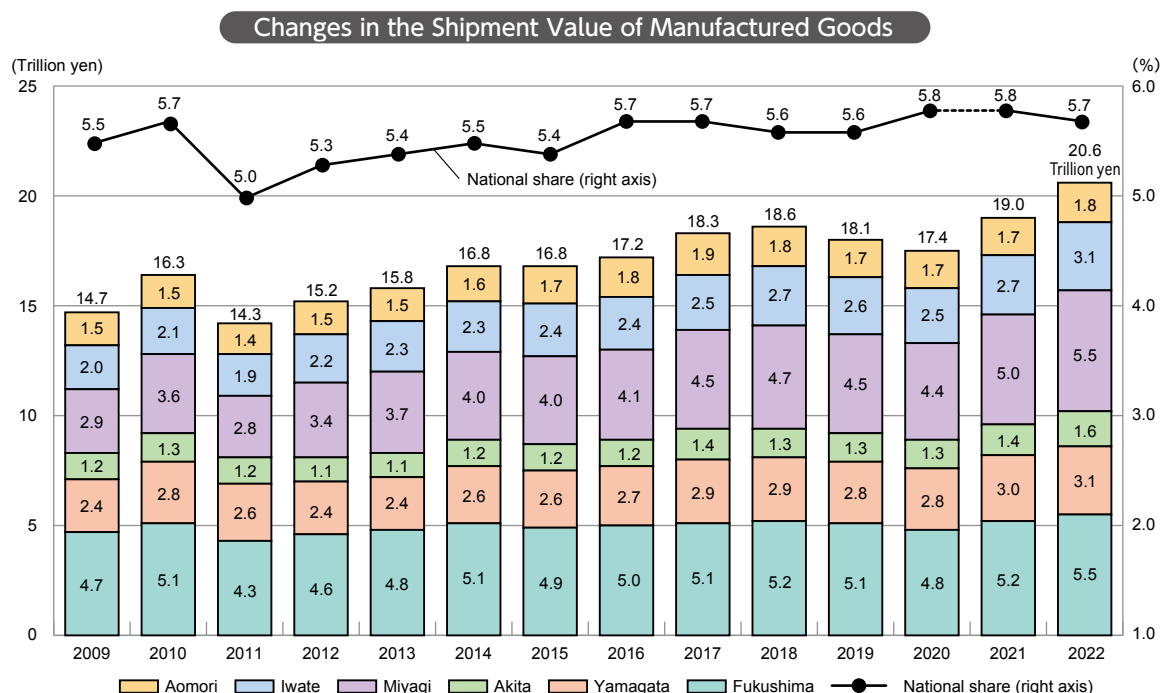
(1) Manufacturing

(1) Manufacturing

(i) Overview

Shipment value of manufactured goods was 20,595.6 billion yen.

- In 2022, the shipment value of manufactured goods, etc. in the Tohoku region (all business establishments) totaled 20,595.6 billion yen. The region's share of the national total was 5.7%.



Note: Prior to 2020, establishments with 4 or more employees are counted, but after 2021, all establishments are counted, so there is no direct connection.

Source: *Economic Census for Business Activity* (business establishments with 4 or more employees) and *Census of Manufacture* (business establishments with 4 or more employees), 2022 and 2023 *Census of Economic Structure* (all business establishments)

- In terms of the number of business establishments and employees in 2023 and Shipment value of manufactured goods, the value added in 2022 ranked by prefecture, Fukushima was top followed by Miyagi, Yamagata, Iwate, and the other prefectures.

Manufacturing Industry Data by Prefecture

	No. of establishments			No. of employees (Persons)			Shipment value of manufactured goods (Million yen)			Value added (Gross value added for business establishments with 29 or fewer employees) (Million yen)		
	2022	2023	YoY change	2022	2023	YoY change	2021	2022	YoY change	2021	2022	YoY change
Aomori	1,500	1,507	0.5	55,145	55,466	0.6	1,694,693	1,779,068	5.0	539,336	536,347	-0.6
Iwate	2,114	2,126	0.6	85,720	86,593	1.0	2,713,266	3,112,393	14.7	827,836	838,297	1.3
Miyagi	3,115	3,116	0.0	116,223	116,346	0.1	5,003,379	5,482,949	9.6	1,429,407	1,290,106	-9.7
Akita	1,775	1,777	0.1	60,648	61,155	0.8	1,405,723	1,576,122	12.1	570,595	698,532	22.4
Yamagata	2,701	2,702	0.0	98,272	97,965	-0.3	3,023,933	3,145,698	4.0	1,117,674	1,143,140	2.3
Fukushima	3,904	3,914	0.3	155,061	154,852	-0.1	5,162,740	5,499,351	6.5	1,861,338	1,876,220	0.8
Tohoku	15,109	15,142	0.2	571,069	572,377	0.2	19,003,734	20,595,581	8.4	6,346,186	6,382,642	0.6
Japan	222,770	223,391	0.3	7,714,495	7,751,935	0.5	330,220,006	361,774,867	9.6	106,614,034	109,231,946	2.5

Note 1: The numbers of business establishments and employees are as of June 1.

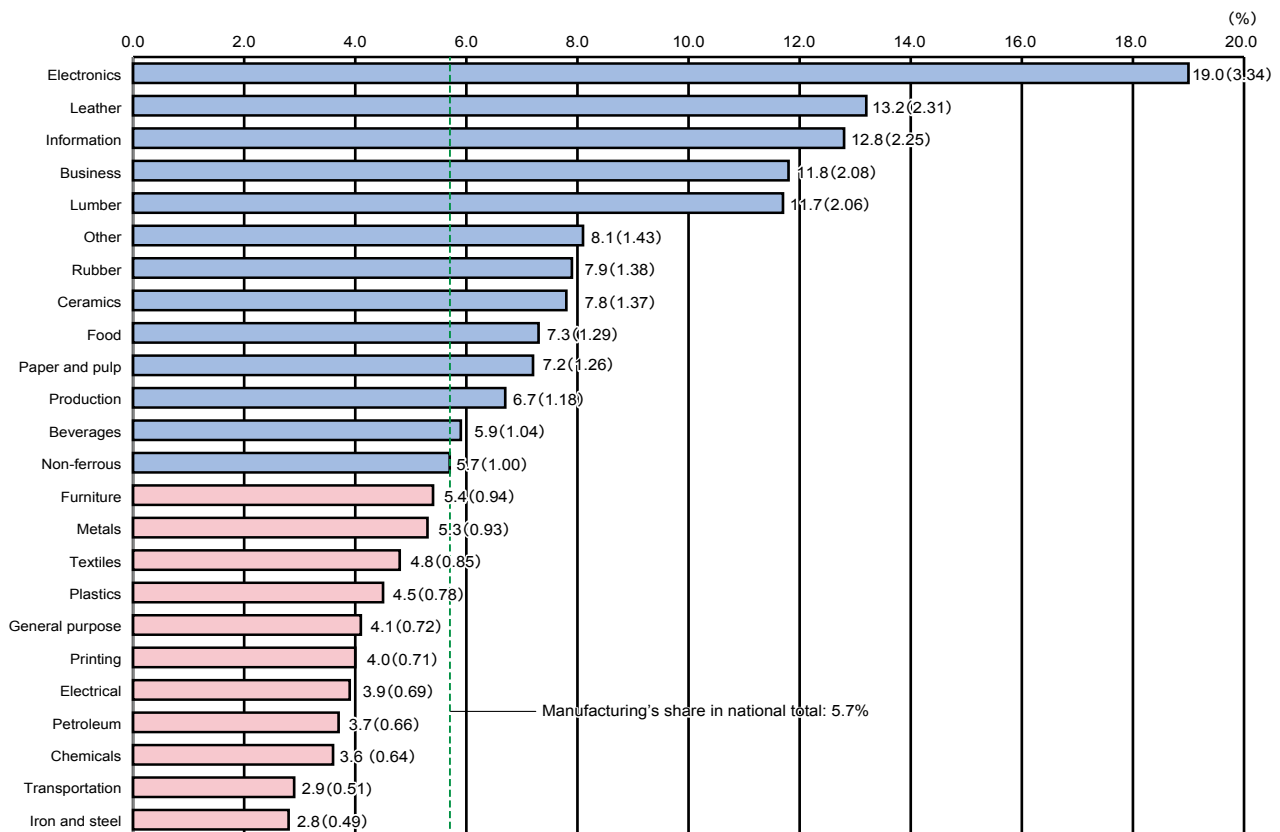
Source: 2022-2023 *Census of Economic Structure* (All business establishments)

(ii) National Share by Industry Sector

Industries with high national market share are electronic parts, devices, electronic circuits, leather tanning, leather products, fur, and information and communication electronics equipment.

- With regard to Tohoku's share of the Japan's shipment value of manufactured goods, etc. in 2022, by industry, 19.0% for electronic parts, devices and electronic circuits, 13.2% for leather tanning, leather products and fur, and 12.8% for information and communication electronics equipment are high, while 2.8% for iron and steel, and 2.9% for transportation equipment are low.

National Share of Shipment Value of Manufactured Goods (2022)



Note: Figures in parentheses are specialization coefficient. Specialization coefficient = component ratio of Tohoku / component ratio of the nation.

Source: 2023 *Census of Economic Structure* (All business establishments)

<Reference> Abbreviations for industry sectors in the above graph refer to the following:

(JSIC= Japan Standard Industrial Classification)

Classified name in JSIC	Abbreviation	Classified name in JSIC	Abbreviation	Classified name in JSIC	Abbreviation
Manufacture of food	Food	Manufacture of petroleum and coal products	Petroleum	Manufacture of general-purpose machinery	General purpose
Manufacture of beverages, tobacco and feed	Beverages	Manufacture of plastic products (except other listing)	Plastics	Manufacture of production machinery	Production
Manufacture of textile products	Textiles	Manufacture of rubber products	Rubber	Manufacture of business oriented machinery	Business
Manufacture of lumber and wood products (except furniture)	Lumber	Manufacture of leather tanning, leather products and fur	Leather	Manufacture of electronic parts, devices, electronic circuits	Electronics
Manufacture of furniture and fixtures	Furniture	Manufacture of ceramic, stone and clay products	Ceramics	Manufacture of electrical machinery, equipment and supplies	Electrical
Manufacture of pulp, paper and paper products	Paper and pulp	Manufacture of iron and steel	Iron and steel	Manufacture of information and communication electronics equipment	Information
Printing and allied industries	Printing	Manufacture of non-ferrous metals and products	Non-ferrous	Manufacture of transportation equipment	Transportation
Manufacture of chemical and allied products	Chemicals	Manufacture of fabricated metal products	Metals	Other manufacturing industries	Other

3. Industrial Structure of the Tohoku Region

(1) Manufacturing

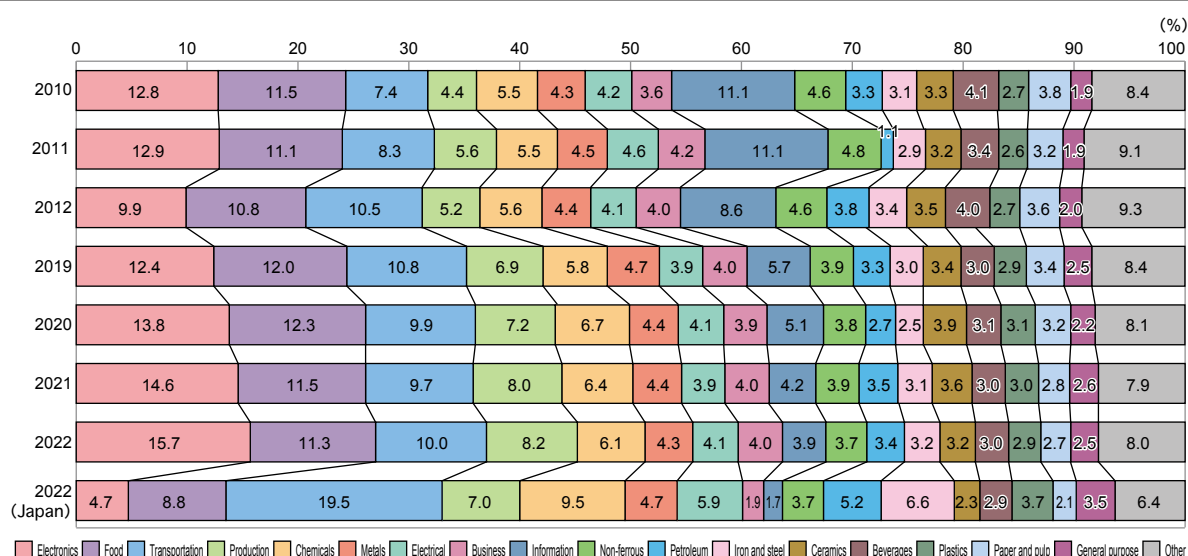
(iii) Shares of Industry Sectors by Year and Prefecture

The top industries in the Tohoku region in terms of value of shipments are electronic parts, devices, and electronic circuits, food, and transportation equipment.

- Looking at the composition of manufactured goods shipments, etc. by industry sector in the Tohoku region in 2022, five of the 24 industries, electronic parts, devices, and electronic circuits, food, transportation equipment, production machinery, chemicals account for about 50% of the total.

While nationally in Japan, the top five industries of transportation equipment, chemicals, food, production machinery, and iron and steel account for about 50% of the total.

Yearly Changes in the Share of Industry Sectors by Shipment value of manufactured goods in the Tohoku Region



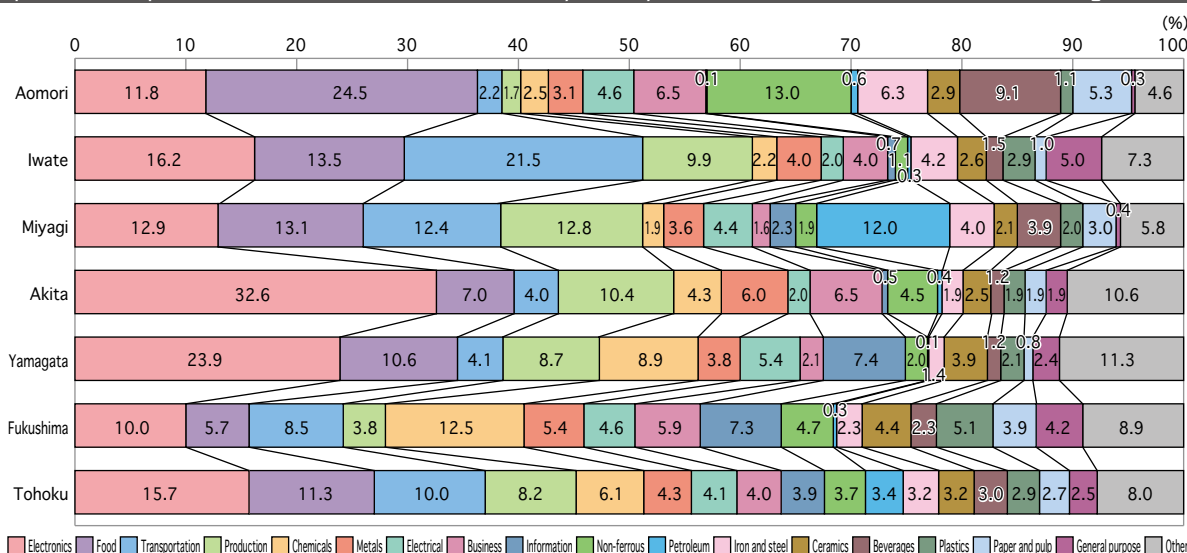
Note 1: The following industry sectors make up only a small percentage in the Tohoku region compared to other sectors and are therefore classified as "Other".

"Manufacture of textile products", "Manufacture of lumber and wood products", "Manufacture of furniture and fixtures", "Printing and allied industries", "Manufacture of rubber products", "Manufacture of leather tanning, leather products and fur", "Other manufacturing industries"

Source: *Economic Census for Business Activity* (business establishments with 4 or more employees), *Census of Manufacture* (business establishments with 4 or more employees) 2022 and 2023 *Census of Economic Structure* (All business establishments)

- By prefecture, the industries with the highest percentages were food products in Aomori, transportation equipment in Iwate, food products in Miyagi, electronic parts, devices, and electronic circuits in Akita and Yamagata, and chemicals in Fukushima.

Composition of Shipment Value of Manufactured Goods, etc. by Industry Sector in the Six Prefectures in the Tohoku Region (2022)



Source: 2023 *Census of Economic Structure* (All business establishments)

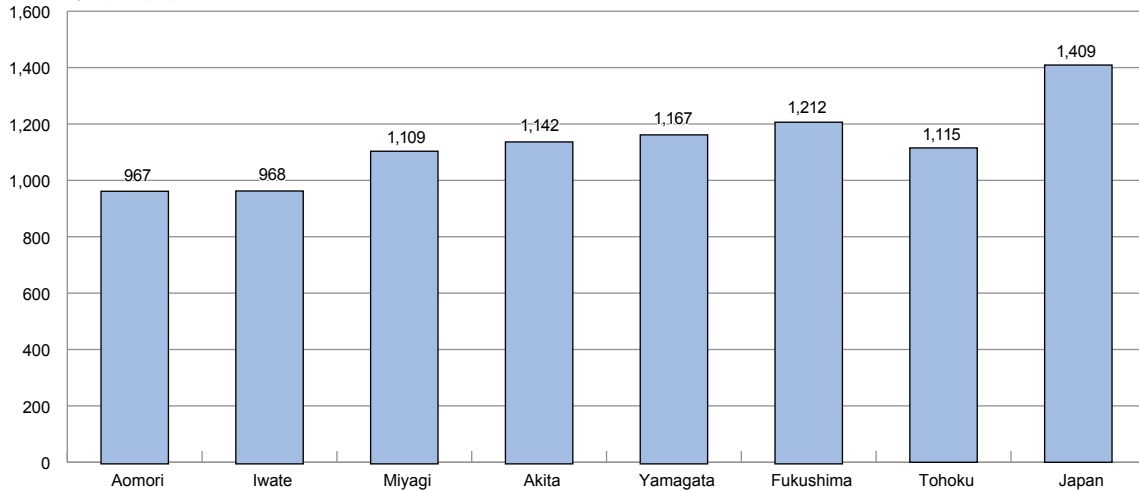
(iv) Value-Added Productivity

Value-added Productivity is at a level of 79.1 relative to the nation as a whole (=100).

- The value-added productivity in the Tohoku region in 2022 is 11.15 million yen per capita, while the national figure is 14.09 million yen per capita.
This is a level of 79.1 relative to the nation as a whole (=100).

Value-added Productivity by Prefecture (Manufacturing Industry Total) (2022)

(Ten thousand yen per capita)



Note: Value-added productivity is the value-added amount per employee (Ten thousands yen per capita).

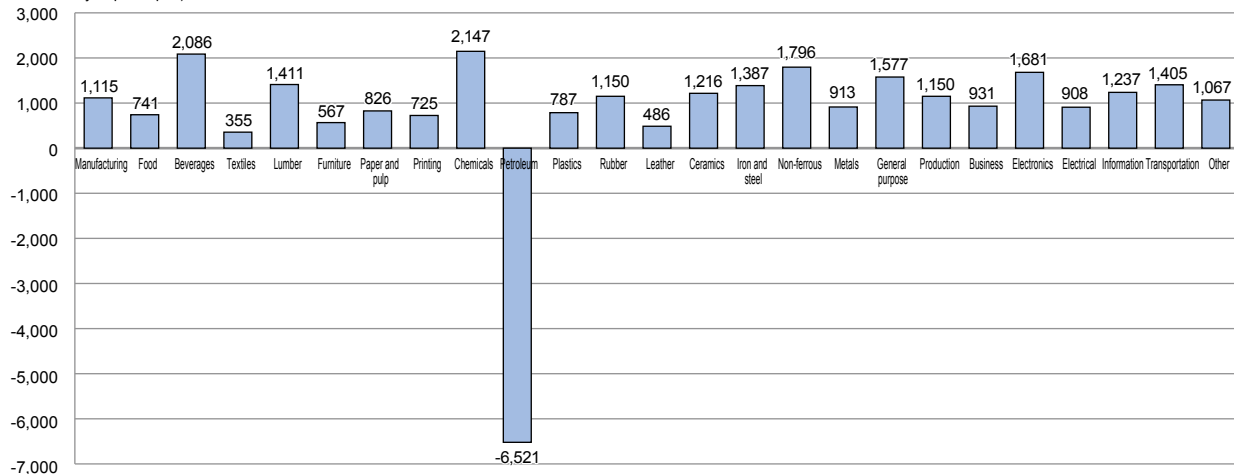
The number of employees for value-added productivity in 2022 is calculated using figures as of June 1, 2023.

Source: 2023 Census of Economic Structure (All business establishments)

- By industry, chemicals are the highest, followed by beverages, tobacco and feed, non-ferrous metals, and electronic parts, devices and electronic circuits.

Value-added Productivity by Industry (2022)

(Ten thousand yen per capita)



Source: 2023 Census of Economic Structure (All business establishments)

(1) Manufacturing

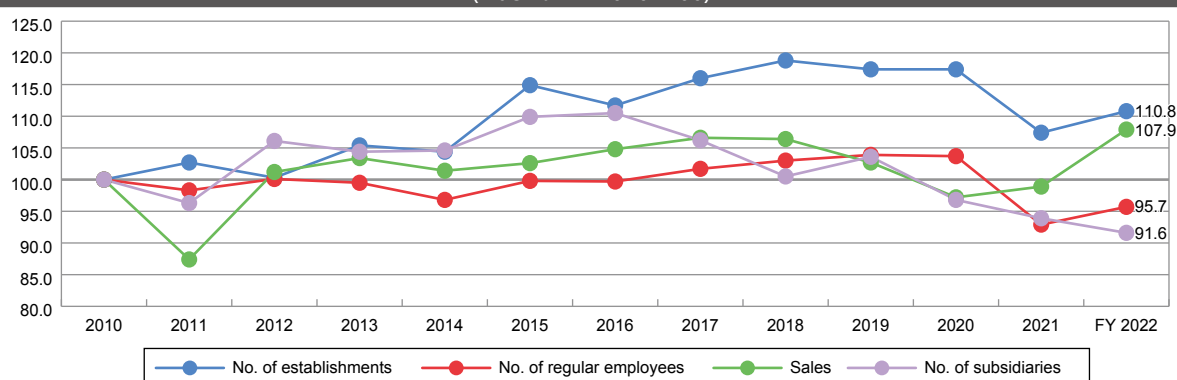
(v) Manufacturing Companies Headquartered in the Tohoku Region

Profitability decreased, total capital per company increased, and the ratio of R&D expenses to net sales increased.

● Number of Business Establishments and Regular Employees per Company

In FY 2022, the number of factories, sales offices, etc. per company in the manufacturing industry (812 companies) headquartered in the Tohoku region was 3.427 (+3.1% YoY), the number of full-time employees was 229.0 (+3.0% YoY), sales were 8.402 billion yen (+9.1% YoY), and the number of owned subsidiary companies was 0.612 (-2.5% YoY).

Changes in the Number of Business Establishments, Regular Employees, Sales, and Subsidiaries per Manufacturing Company (Index of FY 2010=100)



Number of Business Establishments and Other Indicators per Manufacturing Company

	No. of establishments		No. of regular employees (Persons)		Sales (Hundred million yen)		No. of subsidiaries	
	Tohoku	Japan	Tohoku	Japan	Tohoku	Japan	Tohoku	Japan
FY 2020	3.632	5.981	248.2	418.6	75.68	203.99	0.647	3.961
FY 2021	3.323	5.816	222.3	395.9	76.99	207.07	0.628	3.727
FY 2022	3.427	5.911	229.0	398.0	84.02	227.66	0.612	3.709
Fiscal YoY change (%)	3.1	1.6	3.0	0.5	9.1	9.9	- 2.5	- 0.5

Note 1: The Basic Survey of Japanese Business Structure and Activities applies to companies with 50 or more employees and a capital amount or equity investment amount of 30 million yen or more.

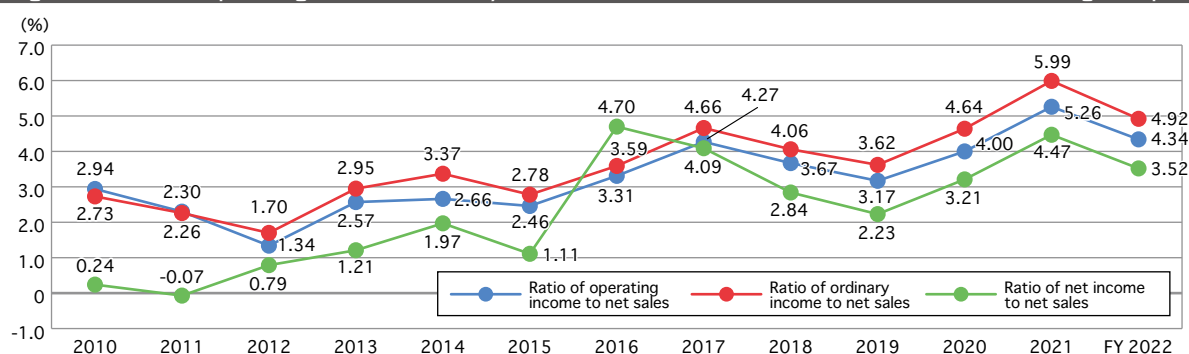
Note 2: The number of owned subsidiaries per company is calculated by the number of subsidiaries/total number of companies.

Source: Basic Survey of Japanese Business Structure and Activities, Ministry of Economy, Trade and Industry

● Ratio of Operating Income to Net Sales, etc.

The ratio of operating income to net sales for manufacturing companies headquartered in the Tohoku region was 4.34% (down 0.92 points from the previous year), ordinary income to net sales was 4.92% (down 1.07 points from the previous year), and net income to net sales was 3.52% (down 0.95 points from the previous year).

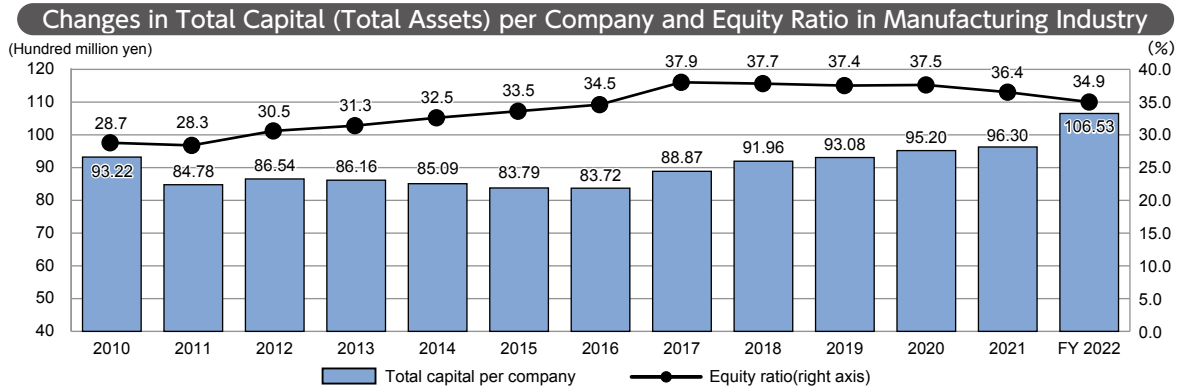
Changes in Ratios of Operating Income, Ordinary Income and Net Income to Net Sales in Manufacturing Companies



Source: Basic Survey of Japanese Business Structure and Activities, Ministry of Economy, Trade and Industry

● Equity Ratio, etc.

Total capital per manufacturing companies headquartered in the Tohoku region was 10.653 billion yen (up 10.6% from the previous year) and net assets were 3.718 billion yen (up 5.9% from the previous year), for an equity ratio of 34.9%, down 1.5% points from the previous year.



Average Ratio of Operating Income to Net Sales and Other Indicators per Company in the Manufacturing Industry

	Ratio of operating income to net sales (%)		Ratio of ordinary income to net sales (%)		Ratio of net income to net sales (%)		Total capital (Hundred million yen)		Net assets (Hundred million yen)		Equity ratio (%)	
	Tohoku	Japan	Tohoku	Japan	Tohoku	Japan	Tohoku	Japan	Tohoku	Japan	Tohoku	Japan
FY 2020	4.00	3.43	4.64	6.53	3.21	4.80	95.20	287.4	35.71	145.3	37.5	50.6
FY 2021	5.26	5.69	5.99	9.00	4.47	7.05	96.30	288.6	35.09	146.4	36.4	50.7
FY 2022	4.34	4.88	4.92	8.66	3.52	6.75	106.53	299.0	37.18	152.0	34.9	50.8
Fiscal YoY change	- 0.92	- 0.80	- 1.07	- 0.34	- 0.95	- 0.29	10.6	3.6	5.9	3.9	- 1.5	0.1

Note 1: Fiscal YoY change for total capital and net assets represents the change from the previous fiscal year (%)

Note 2: Equity ratio = Net assets (Equity)/Total capital. Generally, the higher this ratio, the lower the debt.

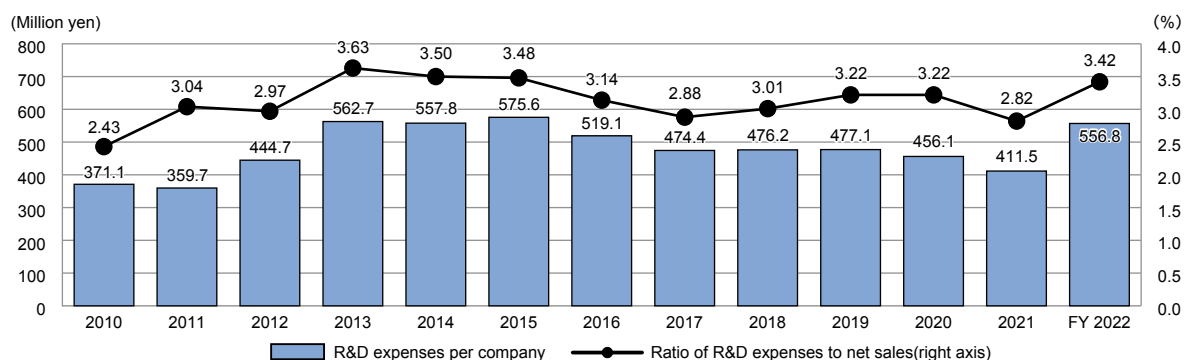
Source: Basic Survey of Japanese Business Structure and Activities, Ministry of Economy, Trade and Industry

● Research and Development (R&D)

Of the 812 manufacturing companies headquartered in the Tohoku region, 196 companies reported R&D expenses, 24.1% of the total (46.8% for the whole country).

The ratio of R&D expenses to net sales was 3.42%, up 0.6 percentage points from the previous year. In addition, R&D expenses per company were 556.8 million yen, up 35.3% from the previous year.

Changes in the Ratio of R&D expenses to net sales and the R&D Expenses per Company in the Manufacturing Industry



Current R&D Expenses in Manufacturing Companies

	No. of companies that reported to the Basic Survey of Japanese Business Structure and Activities		No. of companies that reported their R&D expenses				Ratio of R&D expenses to net sales (%)		R&D expenses per company (million yen)	
	Tohoku	Japan	Tohoku		Japan		Tohoku	Japan	Tohoku	Japan
			No. of companies	Response ratio (%)	No. of companies	Response ratio (%)				
FY 2020	756	12,771	191	25.3	6,133	48.0	3.22	5.48	456.1	1,967.9
FY 2021	827	14,174	216	26.1	6,715	47.4	2.82	5.24	411.5	1,941.3
FY 2022	812	14,075	196	24.1	6,581	46.8	3.42	5.18	556.8	2,142.5
Fiscal YoY change	- 15	- 99	- 20	- 2.0	- 134	- 0.6	0.60	- 0.06	35.3	10.4

Note: Fiscal YoY change in R&D expenses per company represents the change from the previous fiscal year (%)

Source: Basic Survey of Japanese Business Structure and Activities, Ministry of Economy, Trade and Industry

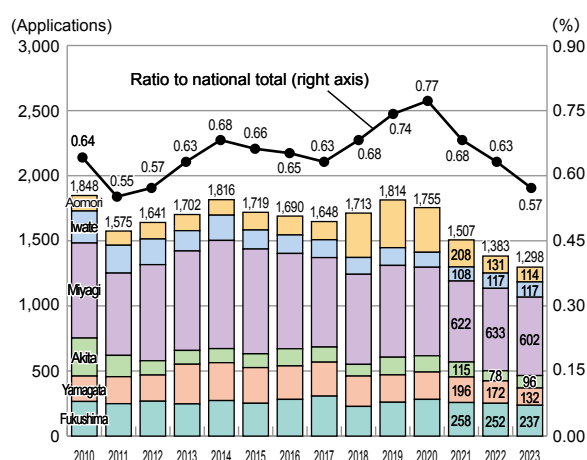
(1) Manufacturing

(vi) Industrial Property Rights

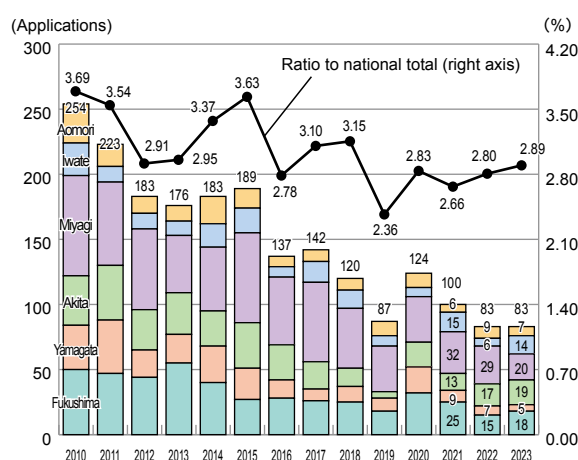
Industrial property applications increased for trademarks and decreased for patents and designs.

- In 2023, the number of applications for industrial property rights in the Tohoku region was 1,298 for patents, 83 for utility models, 341 for designs, and 2,400 for trademarks, showing an increase for trademarks, while unchanged for utility models and decrease for patents and designs compared to the previous year.
- In terms of the national share, the number of utility models, designs and trademarks exceeded that of the previous year, while patents fell below the previous year level.
- Compared to the previous year, the number of applications by prefecture shows an increase for patents in Akita; for utility models in Iwate, Akita and Fukushima; for designs in Aomori, Iwate and Yamagata; and for trademarks in Aomori, Miyagi, Yamagata.

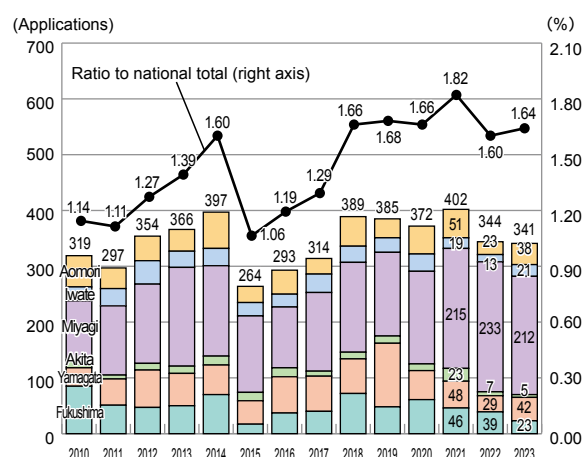
Changes in the Number of Patent Applications



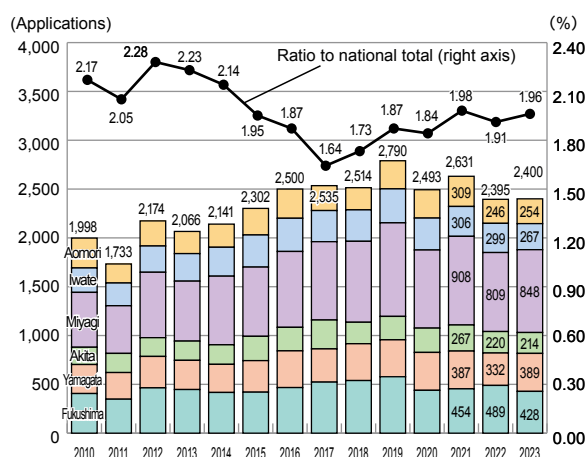
Changes in the Number of Utility Model Applications



Changes in the Number of Design Applications



Changes in the Number of Trademark Applications



Source: Japan Patent Office Annual Report, Japan Patent Office

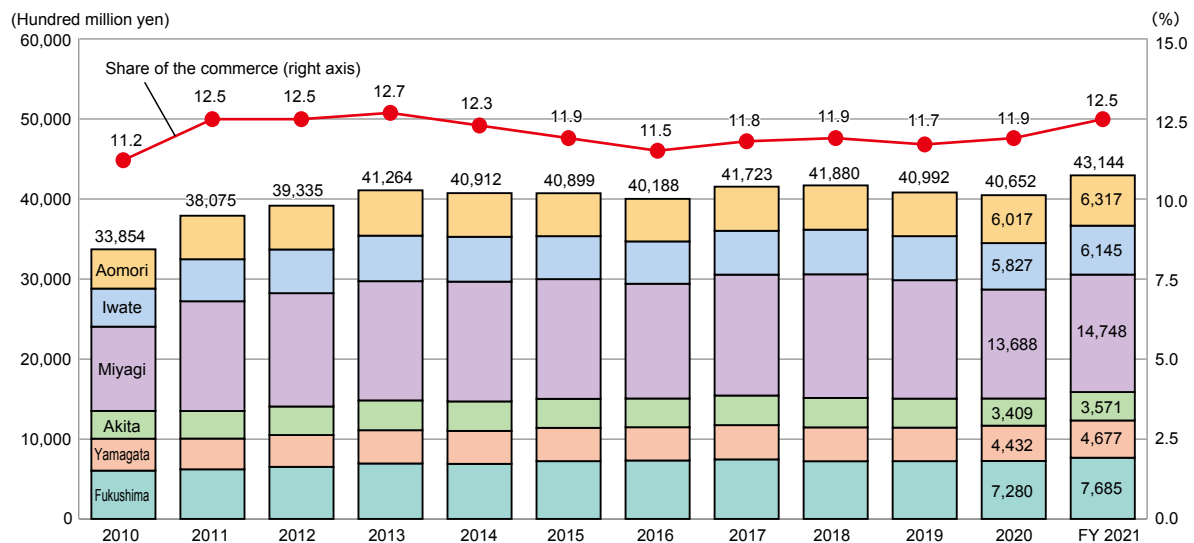
(2) Commerce

(i) Overview

Gross production of commerce in the Tohoku region increased for the first time in three years.

- The GRDP of commerce in the Tohoku region in FY 2021 was 4,314.4 billion yen, up 6.1% from the previous year, the first increase in three years.
- The ratio of GRDP of commerce to total gross industrial product (nominal) in the Tohoku region was up 0.6 percentage points to 12.5%.
- In terms of total production by prefecture, all prefectures saw an increase from the previous year.

Changes in Gross Production (Nominal) of Commerce (Wholesale and retail trade)



Note: 2011 is the base coefficient for FY 2010 and earlier, and 2015 is the base coefficient for FY 2011 and later.

Source: Prefectural Accounts

- In 2022, the total number of establishments in the wholesale and retail industry (excluding privately owned companies) in the Tohoku region was 65,218 (7.5% of the national total, down 3.1% from the previous year). The number of the wholesale establishments was 21,687 (7.0% of the national total, down 2.7% from the previous year). The number of retail trade establishments was 43,531 (7.9% of the national total, down 3.2% from the previous year).

Changes in Number of Establishments, Number of Employees and Annual Sales of Goods

(Business establishments, million yen)

The survey year		No. of business establishments (corporation)				Annual Sales of Goods (*Values for the calendar year prior to the survey year)					
		Tohoku		Japan		Tohoku			Japan		
		Ratio to the previous year (%)	Ratio to national total (%)	Ratio to the previous year (%)	Ratio to the previous year (%)	Ratio to the previous year (%)	Ratio to national total (%)	Ratio to the previous year (%)	Ratio to the previous year (%)	Ratio to the previous year (%)	Ratio to the previous year (%)
Wholesale	2021	67,287	—	7.5	897,091	—	27,066,253	—	5.0	539,813,946	—
	2022	65,218	- 3.1	7.5	865,258	- 3.5	26,972,423	- 0.3	4.9	551,956,399	2.2
Retail trade	2021	22,299	—	7.0	319,249	—	17,039,465	—	4.2	401,633,535	—
	2022	21,687	- 2.7	7.0	311,241	- 2.5	17,142,015	0.6	4.2	412,558,026	2.7
Wholesale	2021	44,988	—	7.8	577,842	—	10,026,785	—	7.3	138,180,412	—
	2022	43,531	- 3.2	7.9	554,017	- 4.1	9,830,409	- 2.0	7.1	139,398,373	0.9

Note 1: Number of establishments as of June 1, 2021 and June 1, 2022, respectively.

Note 2: Number of Annual Sales of Goods as of 2020 and 2021, respectively.

Source: 2021 Economic Census for Business Activity, 2022 Census of Economic Structure (Cross-industry survey)

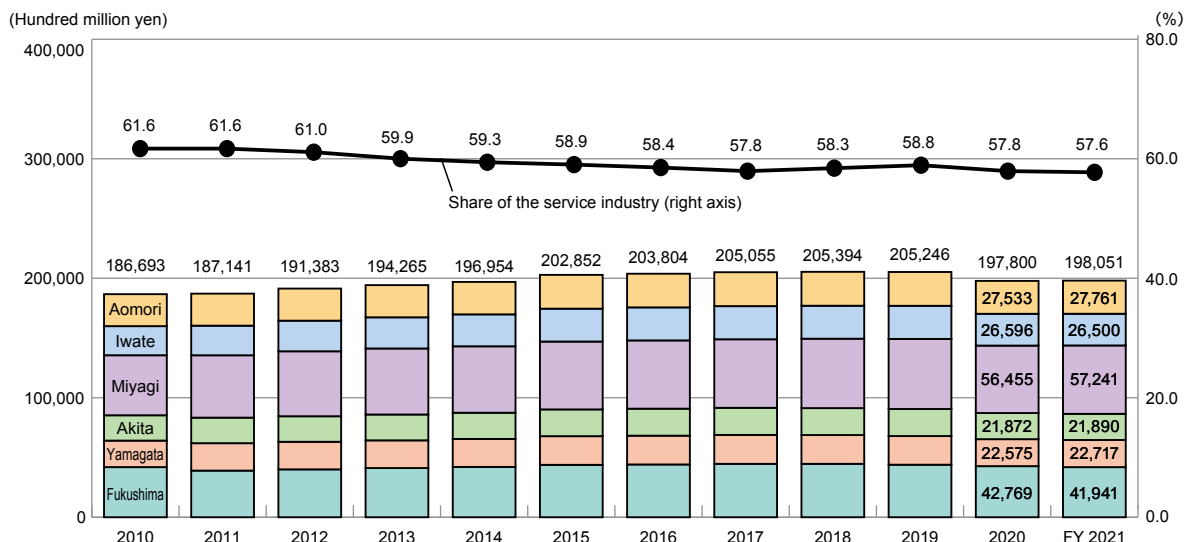
(3) Service Industry

(3) Service Industry

Gross regional domestic product (GRDP) of the service sector increased for the first time in three years.

- In FY 2021, the GRDP of the service sector in the Tohoku region was 19,805.1 billion yen, up 0.1% from the previous year, the first increase in three years.
- The share of the service industry's GRDP (nominal) in the total gross regional product of all industries in the Tohoku region was 57.6%, a decrease of 0.2 percentage points from the previous year.

Changes in Gross Production (Nominal) for the Service Industry



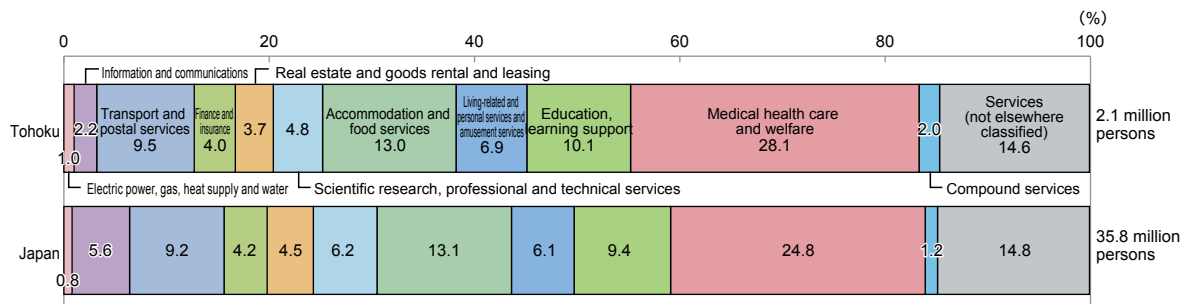
Note 1: The service industries in the above graph include electric power, gas and water supply, and waste management service; transport and postal services; accommodation and food services; information and communications; finance and insurance; real estate; professional/scientific technology; business support services; public administration; education; health and social services; and other services.

Note 2: 2011 is the base coefficient for FY 2010, and 2015 is the base coefficient for FY 2011 and later.

Source: Prefectural Accounts

- The number of service industry employees in the Tohoku region was 2.1 million. The ratio by JSIC (Japan Standard Industrial Classification) shows that, "medical health care and welfare" accounted for the highest percentage at 28.1%, followed by "services (not elsewhere classified)" at 14.6% and "accommodation and food services" at 13.0%.
- Compared to Japan, the Tohoku region has a large share of employees in "medical health care and welfare" and a small share in "information and communications."

Number of employees in the service industry by JSIC



Note 1: The service industries in the above graph refer to the major group categories of industries in the Japan Standard Industry Classification (revised in October 2013), from "Division F - Electric power, gas, heat supply and water" to "R - Services, n. e. c." The graph excludes employees engaged in "I - Wholesale and retail trade."

Note 2: The number of employees in the service industry is as of June 1, 2021.

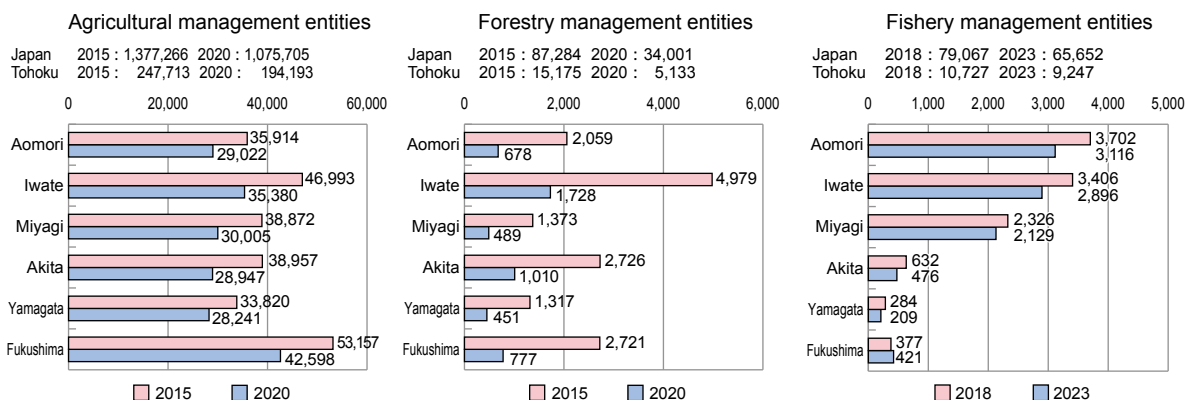
Source: 2021 Economic Census for Business Activity

(4) Agriculture, Forestry and Fisheries

Agriculture, forestry and fisheries increased in terms of production value.

- In 2020, the number of agricultural management entities in the Tohoku region was 194,193 (down 21.6% from the 2015 survey, down 21.9% nationwide), and the number of forestry management entities was 5,133 (down 66.2% from the 2015 survey, 61.0% decrease nationwide).
- The number of fishery management entities in the Tohoku region in 2023 was 9,247 management entities (down 13.8% from the 2018 survey, down 17.0% nationwide).

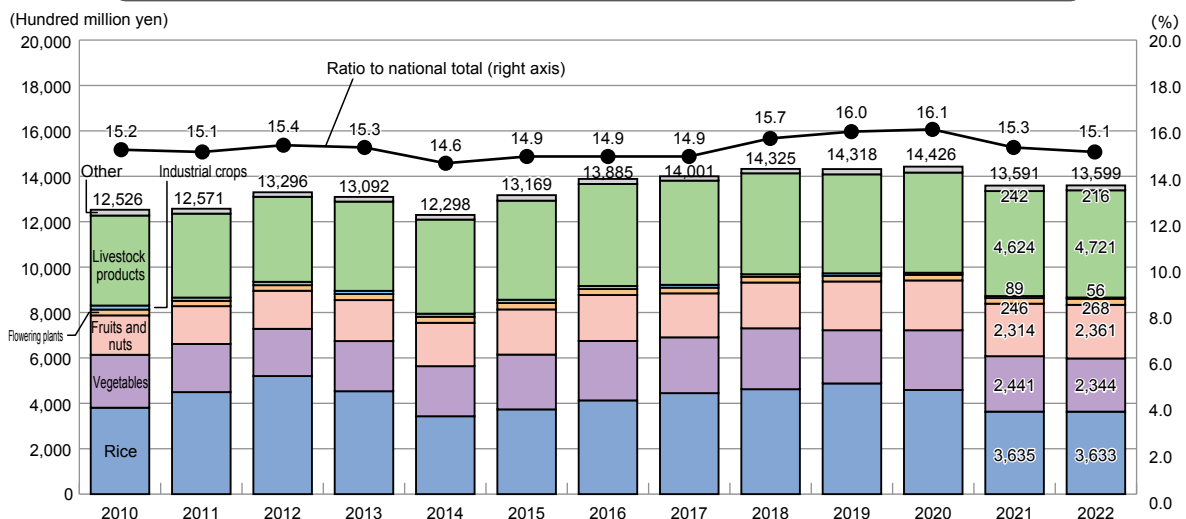
Number of Agricultural, Forestry and Fishery Management Entities



Source: *Census of Agriculture and Forestry* (as of February 1 each year) and *Census of Fisheries* (as of November 1 each year)
Summary of Results of the 2023 *Census of Fisheries* (Approximate Places)

- Agricultural production value in the Tohoku region in 2022 was 1,359.9 billion yen. This represents 15.1% of the nation's total agricultural output of 9,014.2 billion yen, down 0.2 percentage points from the previous year. By item, livestock accounted for the largest share of 472.1 billion yen, or 34.7% of the total agricultural output in the Tohoku region, followed by rice with 363.3 billion yen, or 26.7% of the total.

Changes in the Agricultural Production Value and the Ratio to National Total



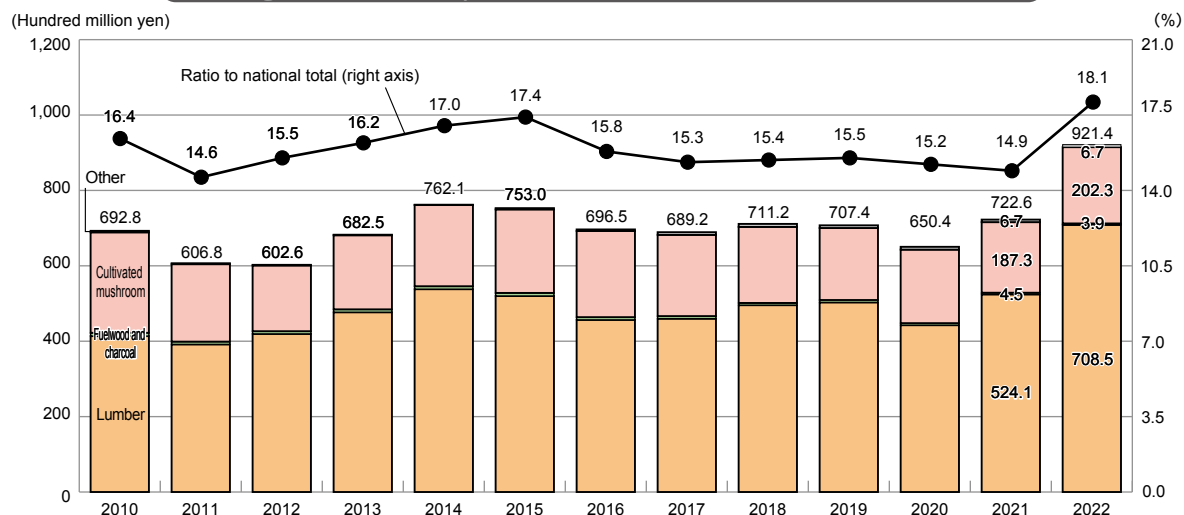
Source: *Statistics of Agricultural Income Produced*, Ministry of Agriculture, Forestry and Fisheries

3. Industrial Structure of the Tohoku Region

(4) Agriculture, Forestry and Fisheries

- The value of forestry production in the Tohoku region in 2022 is estimated at 921.4 billion yen. This represents 18.1% of the national forestry production value of 509.98 billion yen, up 3.2 percentage points from the previous year. By category, lumber production accounted for 76.9% of the total forestry production value in the Tohoku region, at 708.5 billion yen, and cultivated mushroom production accounted for 22.0%, at 202.3 billion yen.

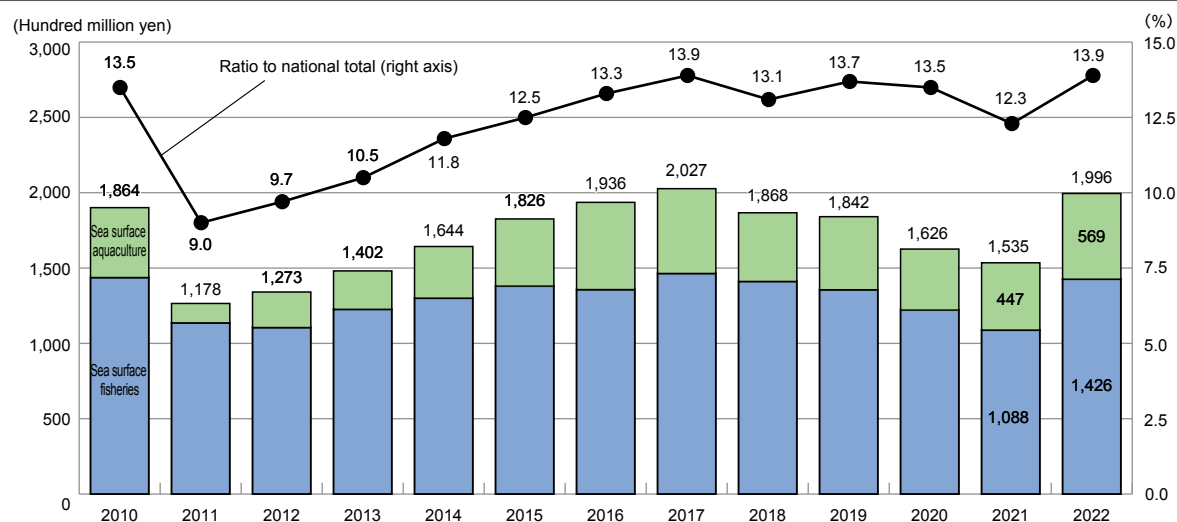
Changes in the Forestry Production Value and Ratio to National Total



Source: Gross Forestry Output, Ministry of Agriculture, Forestry and Fisheries

- The value of sea surface fisheries and aquaculture production in the Tohoku region in 2022 was 199.6 billion yen. The share of the Tohoku region in the national output of 1,434.7 billion yen is 13.9%, up 1.6 percentage points from the previous year. By business category, sea surface fisheries accounted for 142.6 billion yen, and sea surface aquaculture 56.9 billion yen.

Changes in the Value of Sea Surface Fisheries and Aquaculture Production and Comparison to Japan Total



Note: The figures for 2010 are the totals except for Akita as they do not disclose information for the sea surface aquaculture.

The figures for 2011, 2012 and 2013 are the totals except for Fukushima as they do not disclose information for the sea surface aquaculture.

Source: Fishery Output, Ministry of Agriculture, Forestry and Fisheries

2024

ECONOMIC OVERVIEW OF TOHOKU REGION

