

Research on Overseas Operations by ^{1/19} Member Companies of JAPIA (FY2022)

Purpose of the survey:

- ① To generate statistical data showing the contribution to the global economy
of member companies (Japanese automotive parts manufacturers)
- ② To identify common issues and reflect them in JAPIA projects
regarding overseas business development of member companies
- ③ To reduce direct questions to individual companies
by addressing in published materials with overseas business trends in
the auto parts industry

Japan Auto Parts Industries Association (JAPIA)

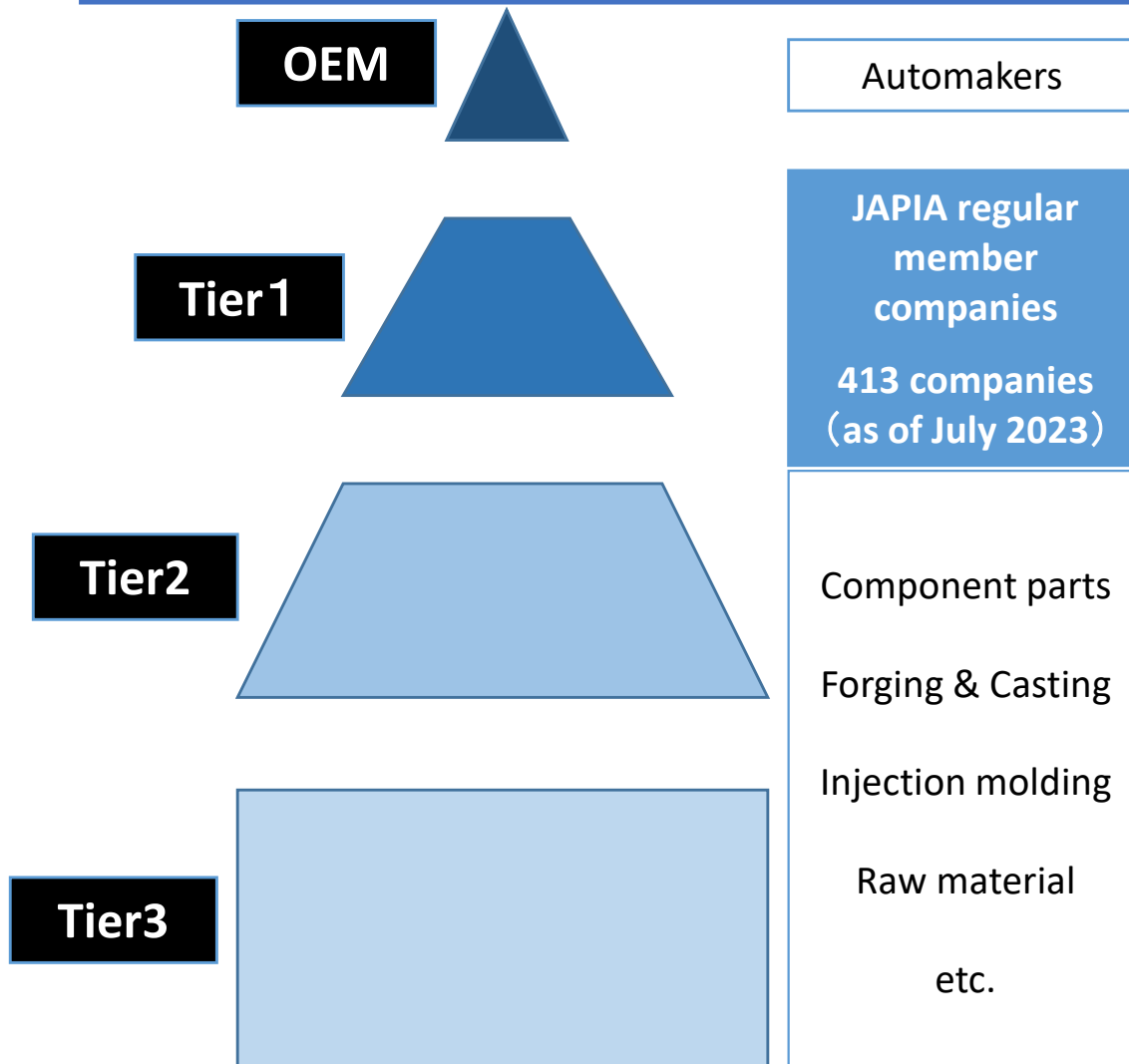
International Committee

December, 2023

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1. Overview of the survey

Due to a change of the membership system, only regular members are eligible to respond to this survey. Since the companies responding to the survey has changed from the previous survey, some analyses of this year's survey are used data from companies that have responded for two consecutive years.

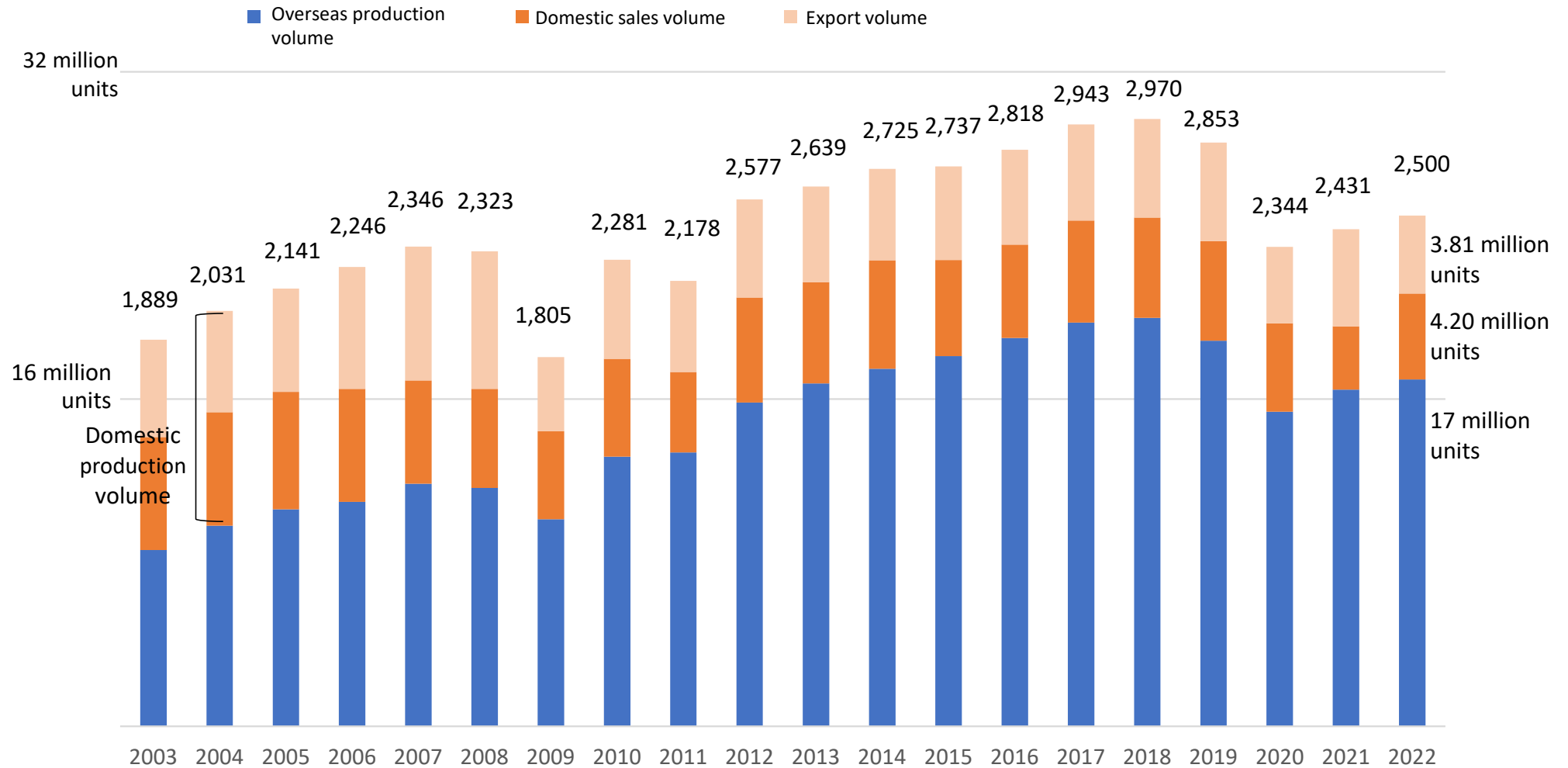


Period conducted the survey	August to December 2023
Number of companies surveyed (regular member companies with overseas subsidiaries)	266
Period covered in the survey	April 2022 to March 2023
Response rate	77.0%

- **Overseas production volume of Japanese automobile manufacturers**
 - The overseas production volume of Japanese automobile manufacturers in 2022 was 17 million units, up 3.3% from the previous year.
- **Overseas expansion of JAPIA members (changes in the number of overseas subsidiaries)**
 - The number of overseas subsidiaries is 2,517, a decrease for three consecutive years (-129 from the previous year).
- **Changes in overseas subsidiaries with production functions**
 - Net Sales increased from the previous year by JPY2.3 trillion (+11.6%) due to the impact of foreign exchange rates. The largest increases were in North America, China, and ASEAN, in that order.
 - The number of employees decreased by 160,000 from the previous year due to a decrease in the number of companies surveyed. The result of companies which responded for the two consecutive years slightly decreased by 99% compared the previous year.
 - The trend of decreasing exports to third countries and Japan and increasing the ratio of local supply continues.
 - The ratio of profitable companies increased in Europe and North America, but the profitability outlook worsened except in South America.
 - Local procurement rate remains high at 70-80%. Challenges include competitiveness of local suppliers and local cost increasing due to rising energy costs.
- **Topics survey**

This year's survey focused on economic security and resilience. While some companies have initiated measures such as evacuation from the country, confidentiality management, withdrawal, and multiplexing of production lines, a significant number have not yet responded.

3. Changes in production volume by Japanese automobile manufacturers



Data: JAMA

- Overseas production increased for the second consecutive year (+3.3% to 17 million units).
- Domestic production volume remained almost flat.

4. Changes in the number of overseas subsidiaries of JAPIA members

Number of overseas subsidiaries

6/19

	North America		Europe		China		ASEAN		India		Others		Total	
	Number of overseas subsidiaries	Number of changes	Number of overseas subsidiaries	Number of changes	Number of overseas subsidiaries	Number of changes	Number of overseas subsidiaries	Number of changes	Number of overseas subsidiaries	Number of changes	Number of overseas subsidiaries	Number of changes	Number of overseas subsidiaries	Number of changes
2022	502	-19	300	-41	618	-24	681	-29	131	-7	285	-9	2,517	-129
2021	521	-17	341	-14	642	+2	710	-12	138	±0	294	-9	2,646	-50

Changes and breakdown in the number of functions

(Note: Multiple answers allowed)

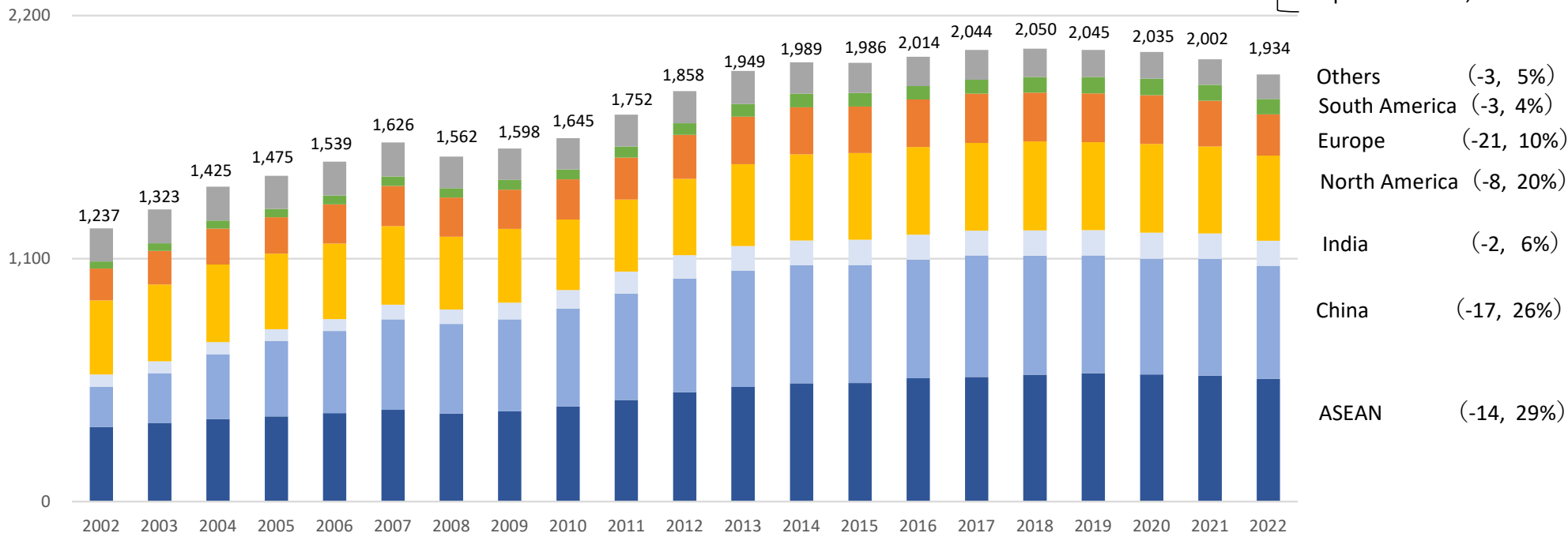
Functions (multiple answers allowed))	2022	2021	Number of overseas subsidiaries		Number of overseas subsidiaries		Number of functions × Compared to previous year							
			2022	2021	2022	2021								
production	1,934	2,002	only one function	2,006	2,200	2,006	2,200	91%						
sales	776	771												
administrative control	178	156							2-function	369	337	738	674	109%
design development	202	177							3-function	91	79	273	237	115%
marketing	76	57							4-function	37	26	148	104	142%
other	70	70							5-function	14	4	70	20	350%
									6-function	0	0	0	0	—
total	3,236	3,233	total	2,517	2,646	3,235	3,235	100%						

- The number of overseas subsidiaries decreased for the third consecutive year, but the total number of functions remained unchanged. ➡ The consolidation of functions into a single overseas subsidiary is progressing.
- Functions of administrative control, design, development and marketing increased, while the production function decreased.

5. Overseas subsidiaries with production function of JAPIA members

(Number of subsidiaries)

Increase/decrease composition compared to 2021, ratio in 2022



【Changes in the number】



- Decreased for the fourth consecutive year after peaking in 2018, down 68 from the previous year.
- China; -6 (new registrations +9 to cope with EVs, business integration/dissolution and withdrawals -15 related to mainly ICE vehicle parts, etc.
- Europe; -5 (UK -3, Russia -4, Albania +1 (first entry), etc.
- Others; new entries in Guatemala and Tunisia

5. Overseas subsidiaries with production function of JAPIA members

(1) Changes in the number

Top countries in change from previous year

	1998	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1	China (+16)	China (+10)	China (+28)	China (+38)	China (+31)	Mexico (+16)	Mexico (+15)	Mexico (+6)	Indonesia (+8)	China (+13)	Indonesia Mexico (+5)	Philippines (+5)	Mexico (+5)	China (+3)	China ▲17
2	U.S. (+14)	India (+9)	Thailand (+10)	India (+15)	Indonesia (+20)	China (+14)	Thailand (+11)	India (+2)	Thailand (+6)	Thailand Vietnam Brazil (+3)	Brazil (+4)	Brazil (+3)		Philippines (+2)	U.S. ▲7
3	India (+9)	Thailand (+7)	Indonesia (+9)	Indonesia (+14)	Mexico (+15)	Indonesia (+13)	China (+8)								
4	Indonesia Korea (+4)	Indonesia Mexico (+3)	Vietnam Germany Morocco (+3)	Thailand (+4)	India (+8)	U.S. (+8)	Vietnam (+5)		Mexico Philippines Cambodia (+3)		Thailand France Morocco (+3)	Thailand UK (+2)			Germany ▲6
5				Brazil (+7)	Vietnam (+6)	Russia (+6)	U.S. (+4)								
6	Thailand (+4)	U.S. (+2)		Mexico (+6)	Thailand (+4)	Thailand (+5)	Brazil (+2)	Malaysia Vietnam Laos Paraguay (+1)		Mexico UK Italy (+2)		Indonesia Canada Spain Germany Italy Portugal Poland Turkey (+1)			Korea Brazil UK Czech Republic Poland ▲3
7			France (+2)	Germany (+4)	Russia (+4)	Brazil (+5)	Russia (+2)				India (+2)				
8	2008 financial crisis														
9				Malaysia Vietnam Poland (+3)	Malaysia U.S. Turkey (+3)	India Germany Czech Republic (+4)					Philippines Colombia El Salvador Paraguay Serbia (+1)				
10	Great East Japan Earthquake												COVID-19		

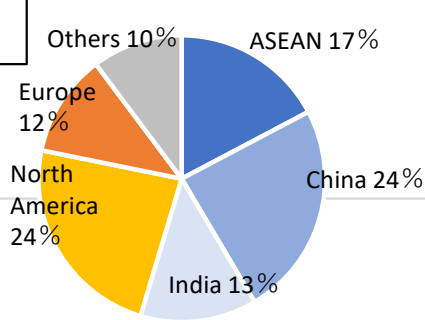
- Changes of US(-7), the Philippines(-6) and Germany(-6) are due to a change of companies surveyed.
- -2 of Russia's -4 due to withdrawal

5. Overseas subsidiaries with production function of JAPIA members

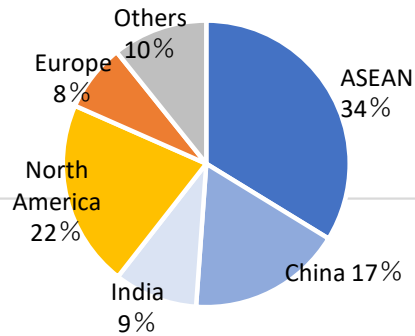
(2) Changes in the number of employees

By region

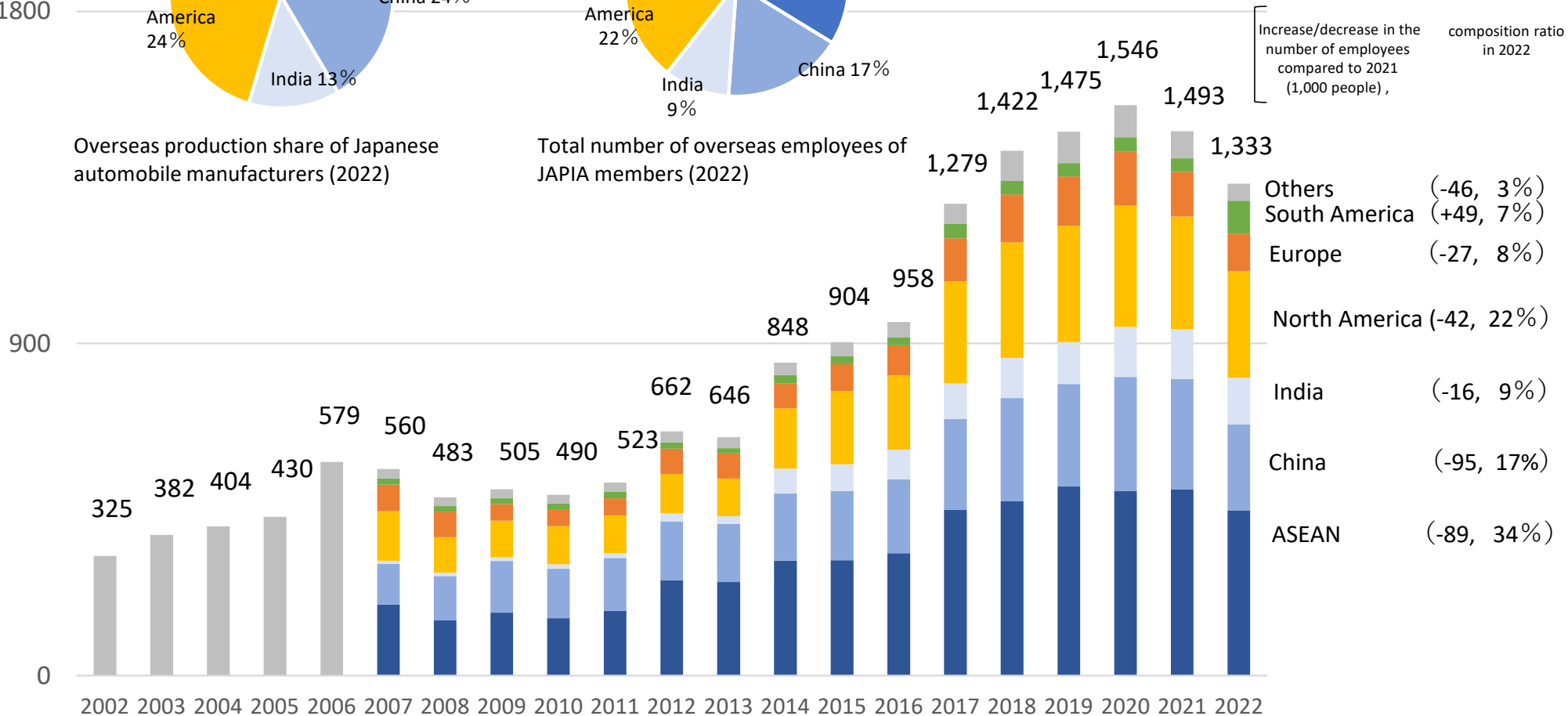
(1,000 people)
1800



Overseas production share of Japanese automobile manufacturers (2022)



Total number of overseas employees of JAPIA members (2022)



- The number of employees decreased by 160,000 compared to the previous year.
- For the result of companies responded for the two consecutive years slightly decreased by 99% compared the previous year. (102% in North America, 98% in Europe).

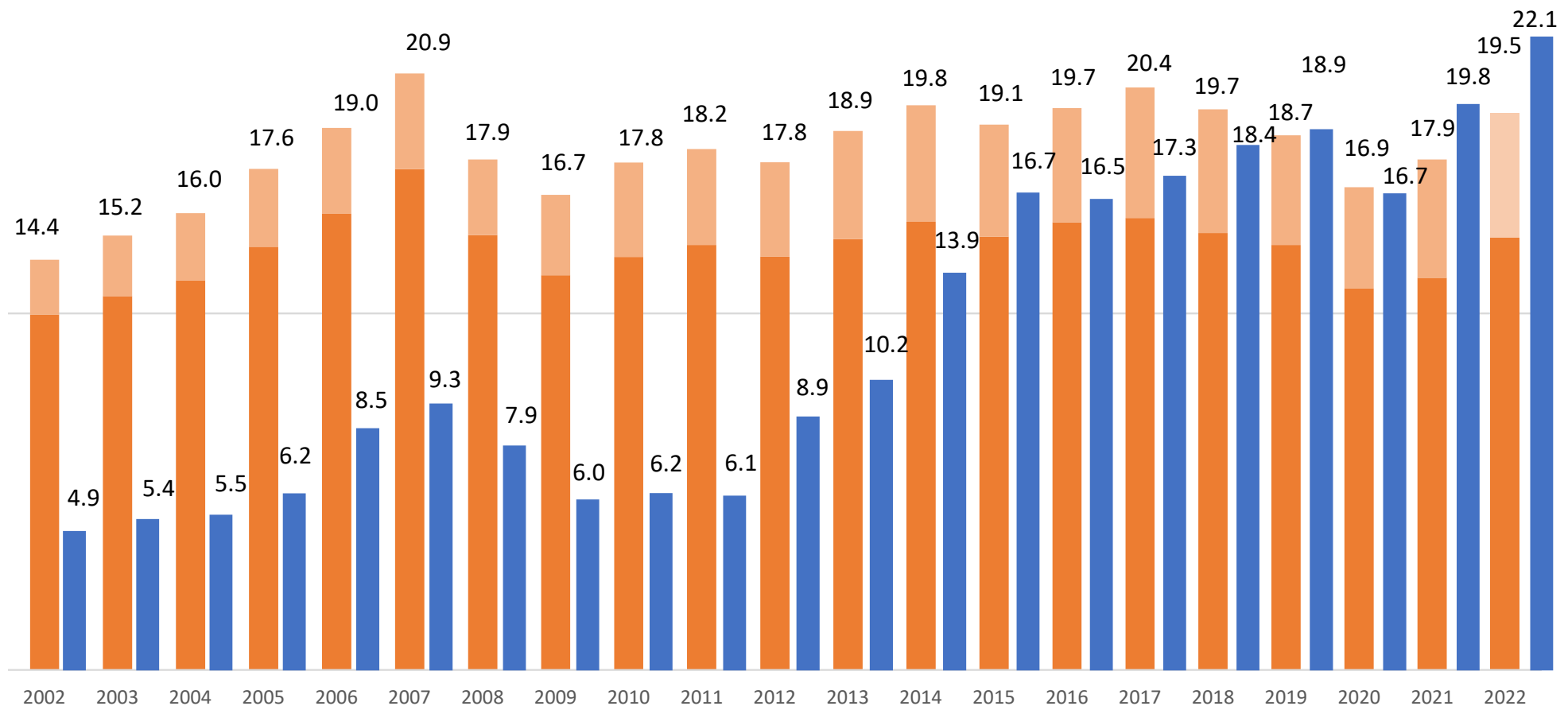
5. Overseas subsidiaries with production function of JAPIA members

(3) Changes in sales

Export
Domestic
 Domestic shipment value by JAPIA members
 Sales of overseas subsidiaries with production function of JAPIA members
10/19

(Trillion yen)

25



- Total sales was JPY22.1 trillion. Increase of JPY2.3 trillion (+11.6%) from the previous year.
- The result of companies responded for two consecutive years increased by 14% compared to the previous year, 12% of this increase is due to foreign exchange effects, while 2% is in real terms.

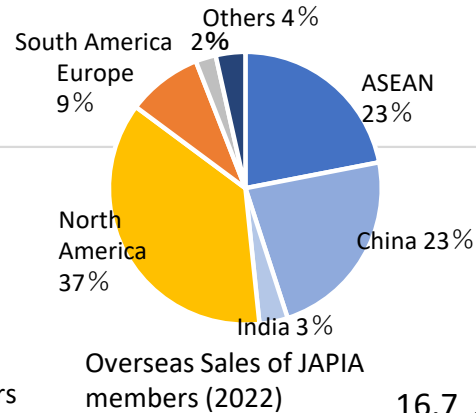
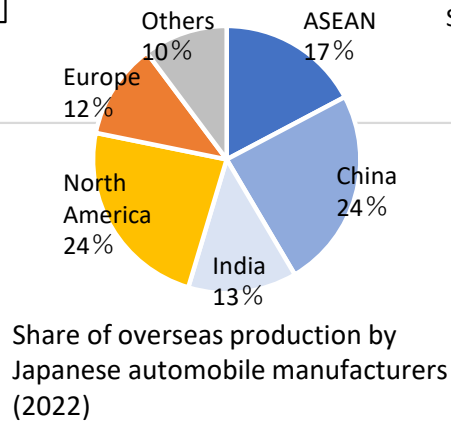
5. Overseas subsidiaries with production function of JAPIA members

(3) Changes in sales

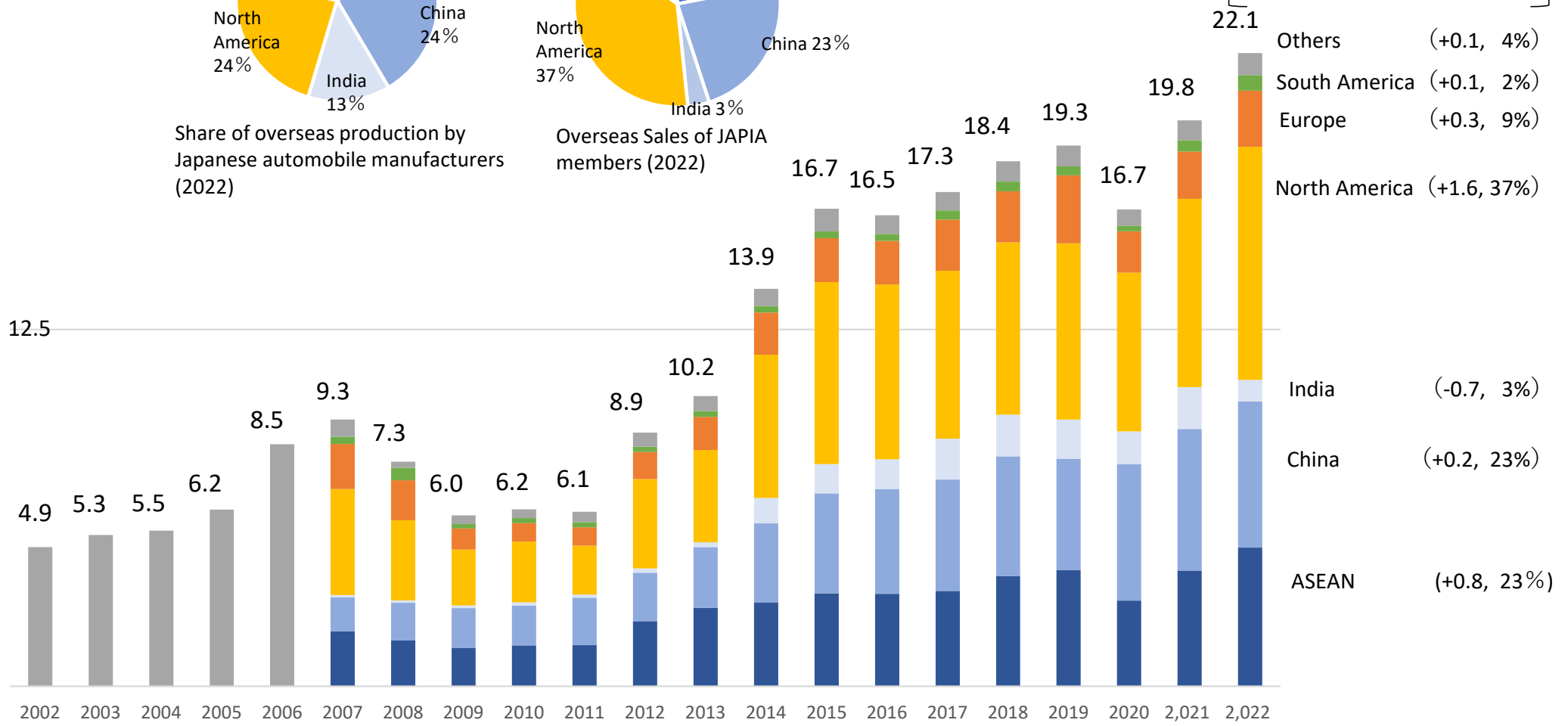
By region

11/19

(Trillion yen)
25.0



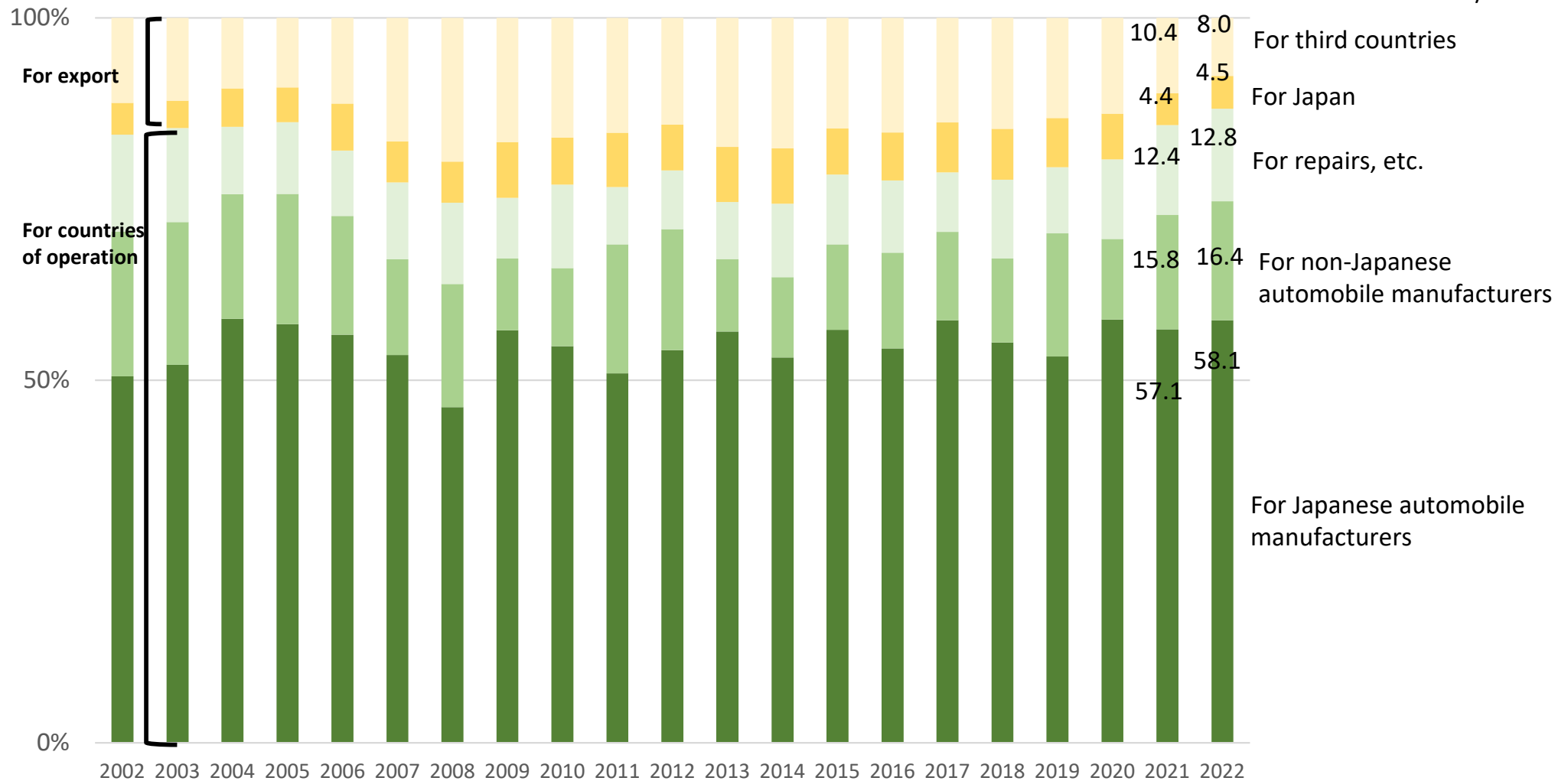
Increase/decrease compared to 2021 (Trillion yen), composition ratio in 2022



- There are large differences in exchange rate volatility among currencies (e.g. USD +19.7%, Chinese yuan +14.4%, EURO +6.3%)
- The real change in sales by region excluding the effect of currency exchange rates is 99% in North America, 112% in Europe and 89% in China. (by respondents for two consecutive years)

5. Overseas subsidiaries with production function of JAPIA members

(4) Ratio of sales by destinations

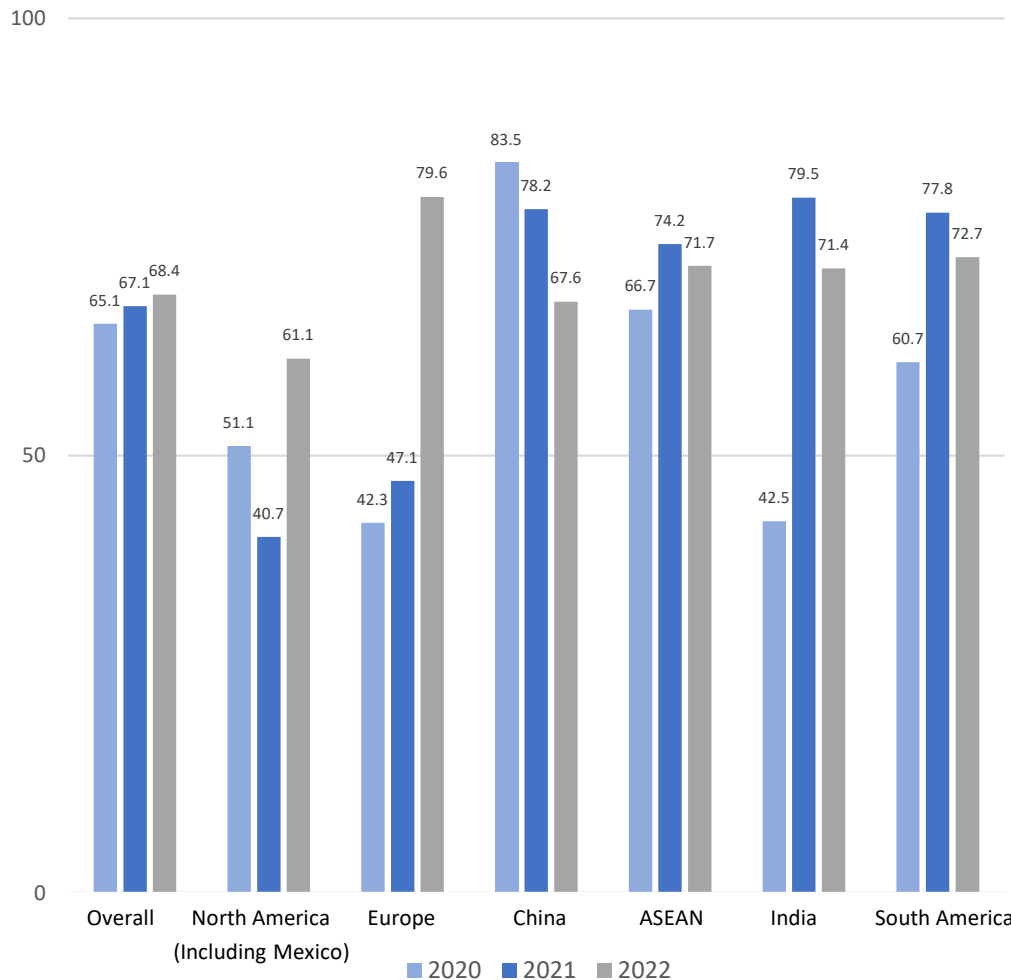


- **The export share fell from 14.8% in 2021 to 12.5% in 2022, continuing the trend of supplying a higher proportion of local customers.**
- **Dependence on Japanese automobile manufacturers has remained mostly unchanged.**
(by respondents for two consecutive years)

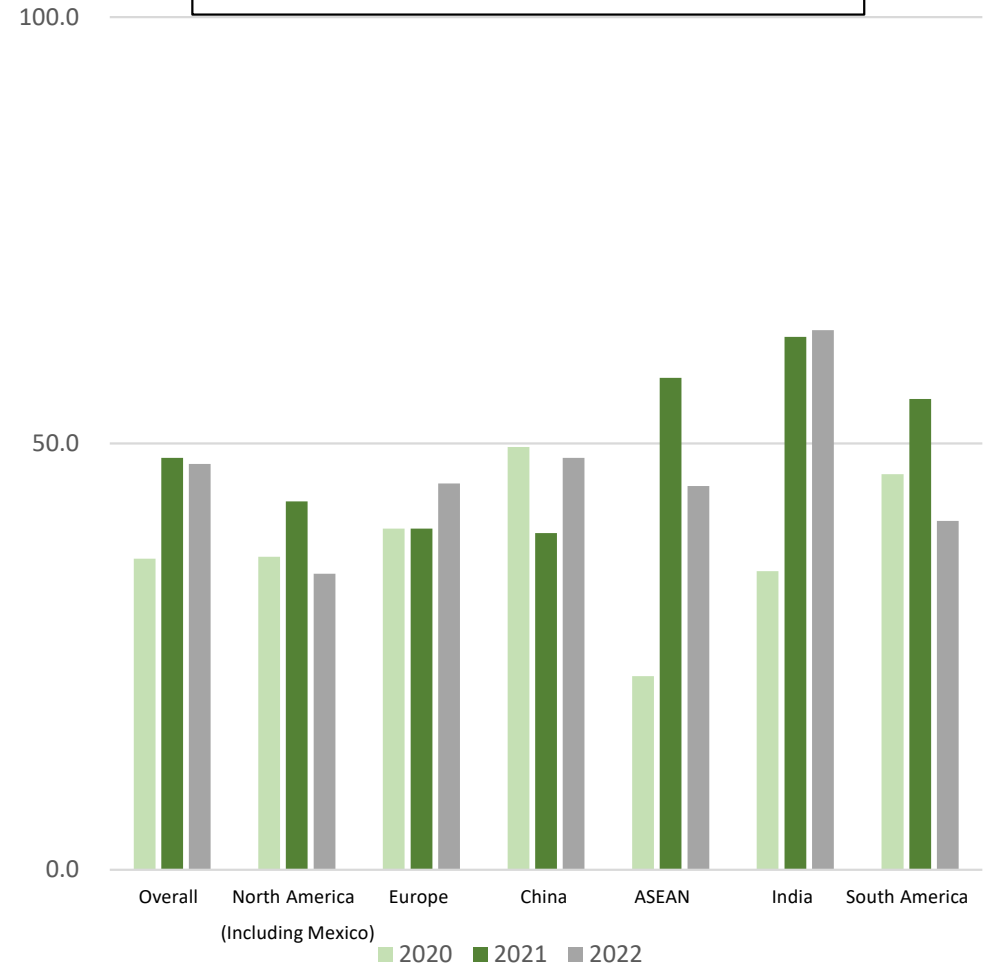
5. Overseas subsidiaries with production function of JAPIA members

(5) Ratio of profitable subsidiaries in a single fiscal year, profitability outlook

Changes in the ratio of profitable subsidiaries

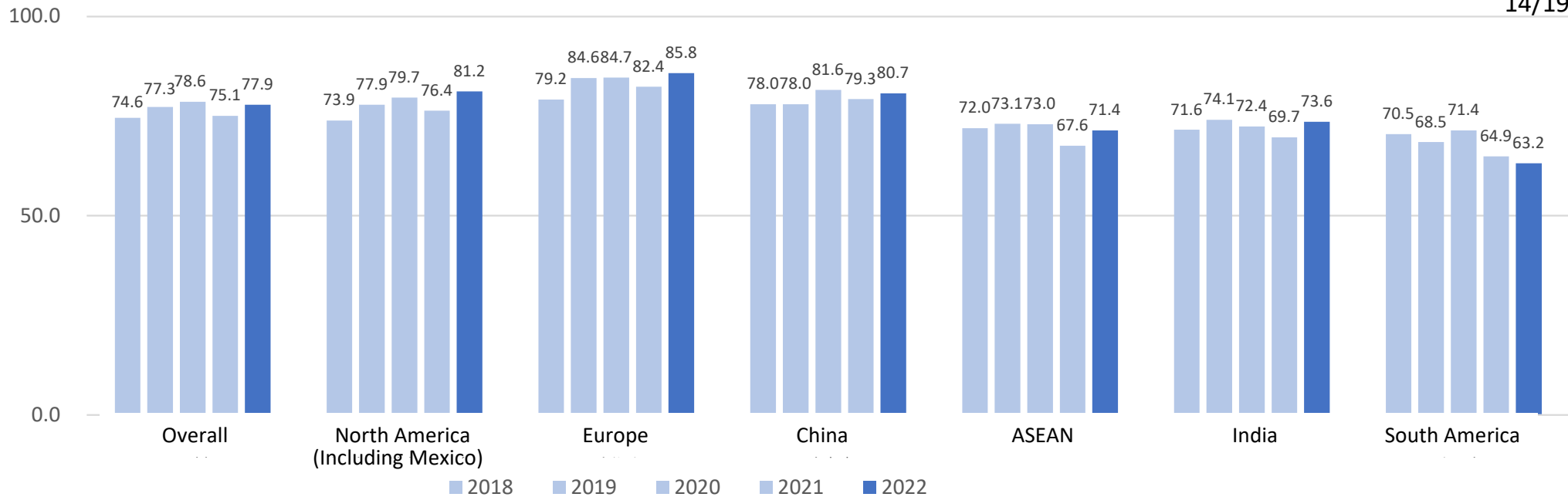


'improving' compared to the previous year



- The ratio of profitable subsidiaries in a single fiscal year has improved in Europe and North America.
- The profitability outlook has improved in India, Europe and China.

(By all respondents)



< Issues on local procurement (free answers, in no particular order) >

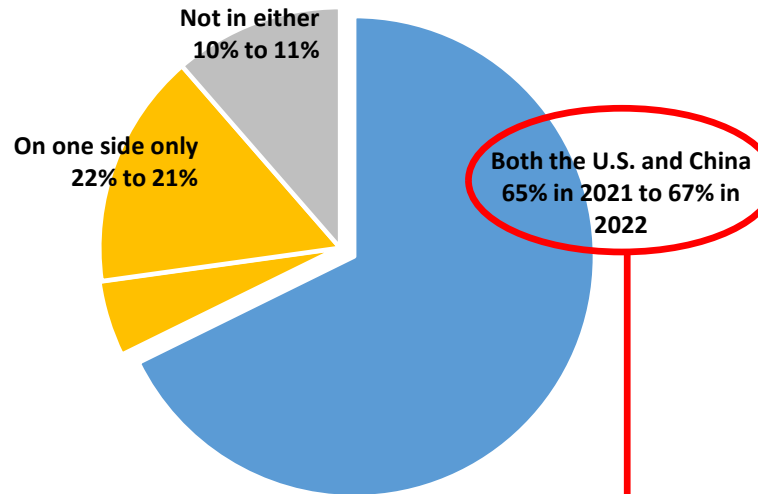
Lack of competitiveness of local suppliers	China, U.S., Mexico, Taiwan, Thailand, Malaysia, India, Vietnam, Canada, Czech Republic
Increase in costs due to rising energy costs, etc.	U.S., Mexico, Thailand, Indonesia, Philippines, India, Brazil, U.K., Czech Republic, Turkey
No equipment manufacturers or processors	Thailand, Indonesia, China, Korea, Brazil, Turkey
Rising of labor costs, difficulties in recruiting	U.S., Turkey
Logistics delays and rising rate	Indonesia, Mexico
Others (customer requests, etc.)	Thailand, Vietnam

- **The local procurement rate increased in countries/regions outside South America.**
- **Further challenges to localization include lack of competitiveness of local suppliers, rising local costs due to higher energy costs, and lack of equipment manufacturers and processors.**

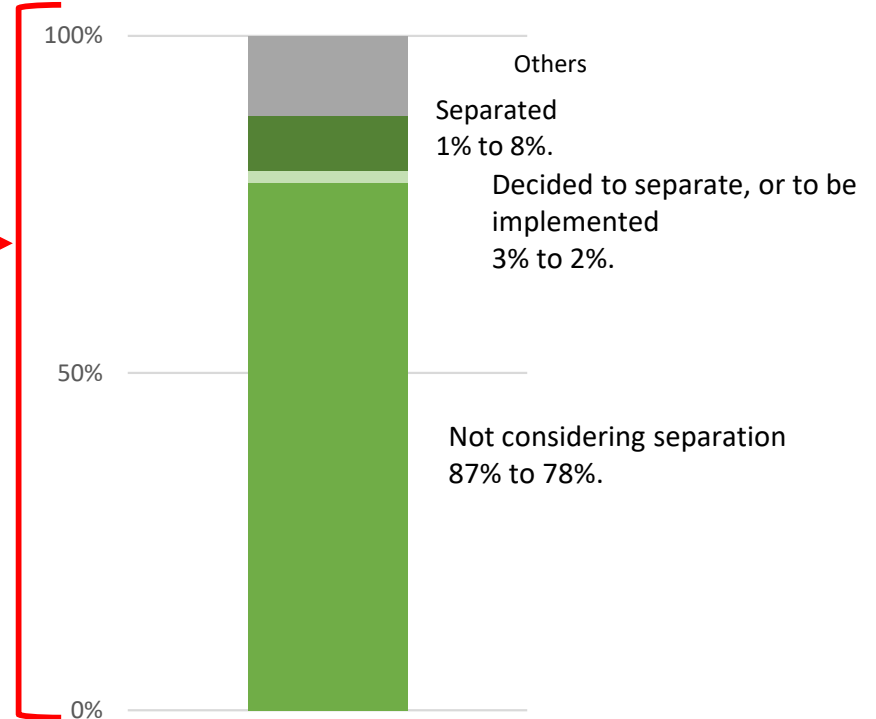
(by all respondents)

Locations in U.S. and China

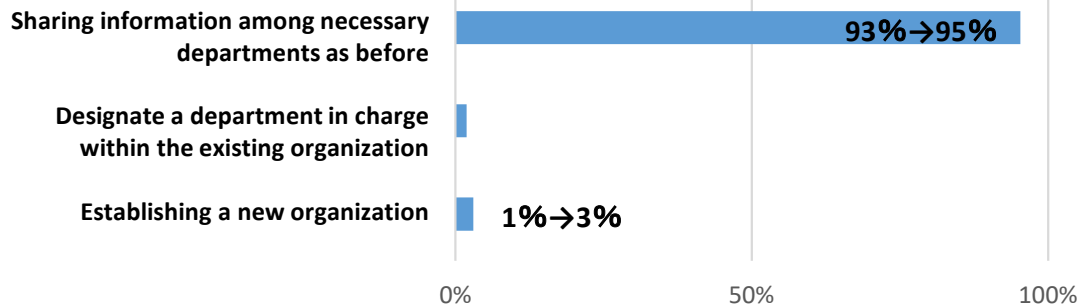
(158 respondents to 131 in the previous year)



Separation in U.S. and China



Establish an organizational structure to address economic security

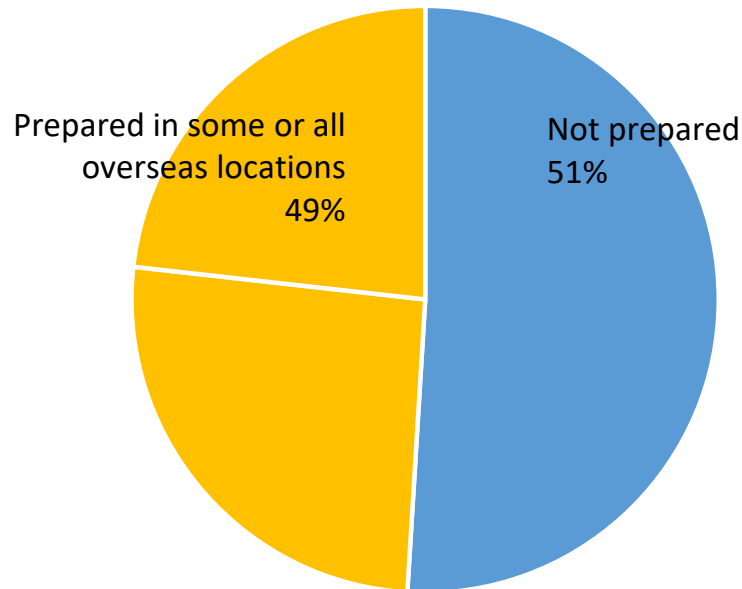


< Reasons for not considering separation >

- Originally, the business was established in the respective countries of the US and China and there is no mutual relationship.
- All possibilities are considered depending on the level of risk at the time.
- Some products have been moved from China to other countries, although they cannot be completely separated.

- The same questions as in the previous survey were asked in a fixed-point survey.
- The number of responses that has already separated increased. While complete separation is difficult, some products have been transferred, and other changes can be seen.

Status of preparation of evacuation manuals at overseas locations



< Reasons for not being prepared >

- Not considered important at this time
- Handled on a travel basis
- Can be determined on a case-by-case basis due to small dispatch area and number of people
- Entrusted to local subsidiaries
- Should follow instructions from the Ministry of Foreign Affairs or local Japanese embassy, rather than manual response
- Prepare at headquarters in Japan and instruct overseas
- Considered necessary, but no concrete progress has been made
- No personnel available to prepare

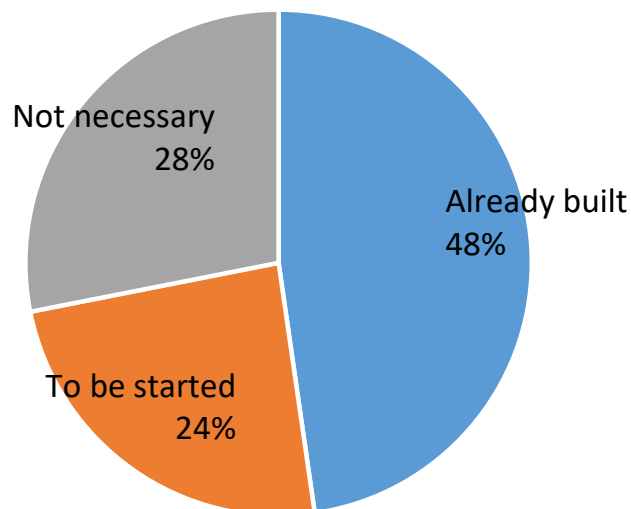
< Contents included in prepared manuals >

General BCP manual, evacuation manual for natural disasters, communication network, evacuation routes, action guidelines, when to start preparing for evacuation, how to determine when to start evacuation, procedures for evacuation of stationed personnel, emergency production, logistics response

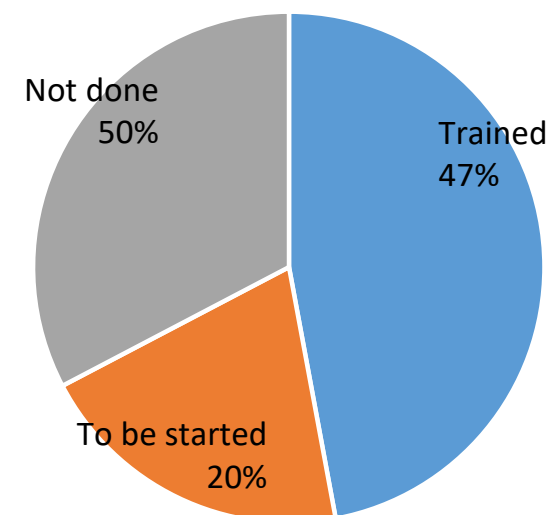
A contingency manual has been prepared and a system for evacuation has been established. Airline tickets for evacuees are distributed in advance.

- **Regarding evacuation manuals, half of the respondents answered “prepared” and the other half answered “not prepared.**
- **Reasons given for not having prepared included: the head office in Japan handles it on a case-by-case basis, the local offices are entrusted with it, there is no resident staff because of a business trip basis, and no one is dispatched to the danger zone. On the other hand, many respondents consider it necessary.**
- **Many of the manuals prepared include information on communication networks, evacuation routes, and other contingency plans.**

Internal management system



Employee training



< Reasons for 'not necessary' and 'not done' >

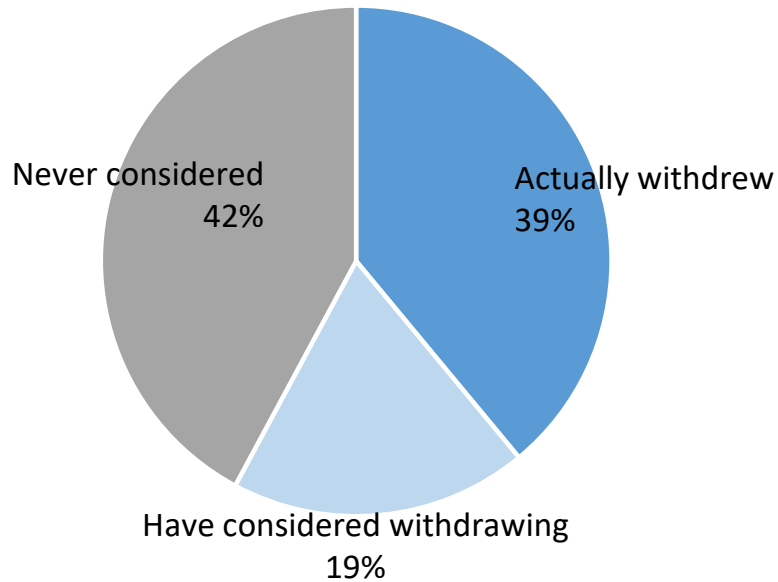
- Our products do not fall under sensitive technology control and prevention of military diversion.
- Does not currently possess technology that can be converted to military use.
- The technology of general-purpose and we have determined that it does not lead to the above decision.

< What you want to be supported >

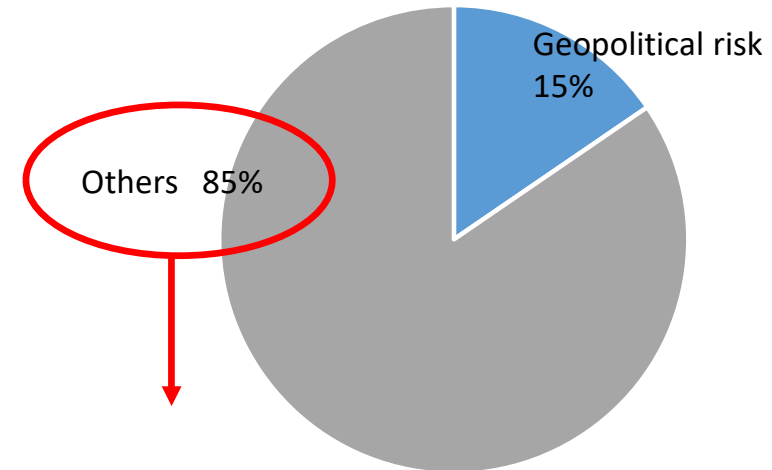
- Would like to receive information on what measures and training should be implemented in general.
- Specific responses of leading companies, teaching specific management and operational points as a company.
- Provision of specific information on what technologies are currently covered, and the basis for decisions.

- **Management for sensitive technologies and employee training are being addressed by around half of the respondents, while 30% of respondents do not see the need for management.**

Experience of withdrawal



Reasons for withdrawal



< Other reasons for withdrawal >

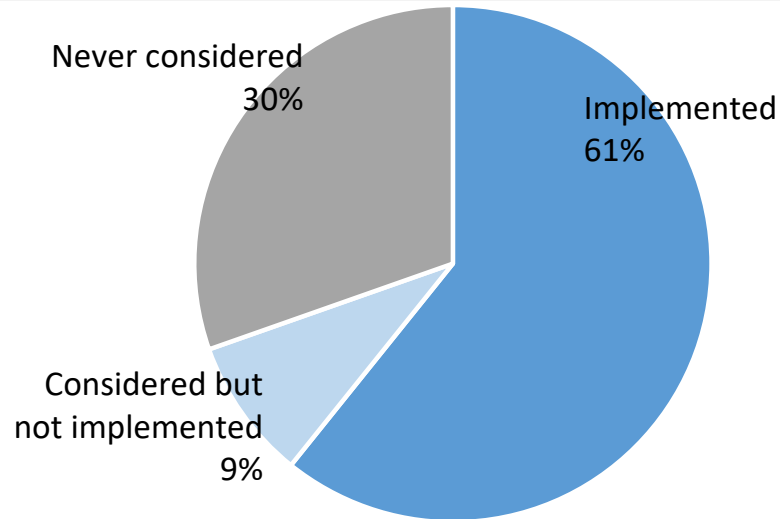
- Withdrawal of suppliers
- Relocation order from the local government (redevelopment of areas)
- Consolidation of own plants
- Poor sales of customers

< Troubles on withdrawal >

- Negotiations with unions (e.g. compensation conditions for employees, outplacement, etc.). Negotiations with partners, poor relations with local government/partners. Restrictions due to local laws, regulations and guidance from authorities (e.g. disallowance of overseas remittances, unjustified delays in tax refund procedures).

- Nearly 60% of the companies have experienced withdrawals, including considering.
- As necessary support, information on troubles that have been accumulated by companies withdrawn from similar areas, the introduction of specialists, the establishment of a contact point where experts can be consulted, support for the sale of assets, intermediary services for Japanese companies, etc. were also raised.

Multiple lines of production, production at the places of supply



< Difficulties on multiplexing production >

- How much risk to estimate.
- Establishment of complementary system between locations.
- Cost recovery of additional tooling and equipment investment through multiplexing productions.
- Difficulty in obtaining customer approval for changes
- Ensure equivalent materials (e.g. water quality)
- Customers demand for local production and communication difficulties.
- Recruitment and retention of quality local personnel.
- Developing local suppliers and language issues.
- Deciding on a production sites from a long-term perspective.

< What you want to be supported >

- Providing information on the latest incentive schemes and expanding subsidy schemes for investment.
- Information on country-specific precautions and other issues when considering the multiplexing of production.
- Information and support on locally available components and materials.
- Building up a database of suppliers in each country.
- Information on geopolitical risks (especially in China) and country-specific employment and wage.
- Lectures by experts (e.g. consulting firms) and experience companies.
- Simplified process transfer approval procedures for car manufacturers.

- 70% of companies have experience of multiplexing production and supply location production, including consideration.
- The difficulties include costs, obtaining customer approval and communicating with customers.
- Many are seeking supports in introducing the latest preferential schemes in their countries and in building up supplier databases.