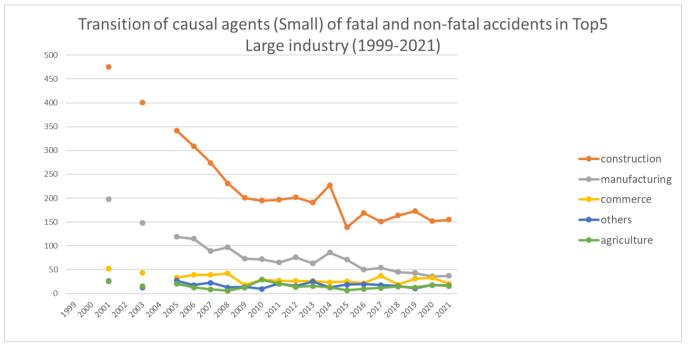
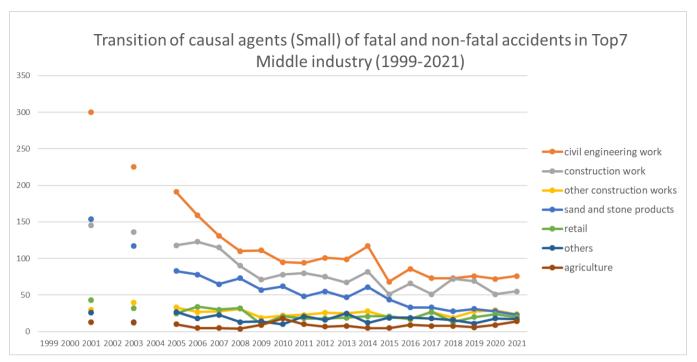
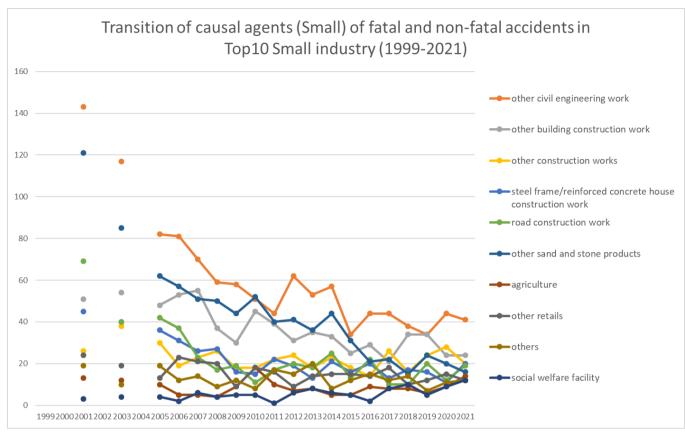
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 523 stone, sand, substance (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 523 stone, sand, substance in Large industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 523 stone, sand, substance in Middle Industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 523 stone, sand, substance in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 523 stone, sand, substance in Large industry (1999-2021)

code	Large industry	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Large industry
03	construction			475		401		342	309	274	231	201	195	197	202	191	227	139	169	151	164	173	152	155	4,348	construction
01	manufacturing			198		148		119	115	89	97	73	72	65	76	63	86	71	50	54	45	43	36	37	1,537	manufacturing
08	commerce			52		43		33	39	39	42	18	29	27	26	26	24	25	22	37	19	31	33	21	586	commerce
17	others			26		13		27	18	23	13	14	10	21	16	25	13	19	20	18	16	11	18	17	338	others
06	agriculture			25		16		21	13	9	6	13	29	21	14	16	13	7	10	12	15	13	18	16	287	agriculture
04	transportation service			49		32		28	23	31	30	20	17	17	16	20	28	17	11	19	25	24	15	14	436	transportation service
13	health and hygiene service			8		7		8	2	9	7	6	6	3	9	10	6	6	3	11	14	7	13	14	149	health and hygiene service
	commercial cleaning and																									commercial cleaning and

15	livestock process		27	23	18	29	26	26	21	14	21	25	24	23	19	16	18	15	16	26	13	400	livestock process
11	telecommunication service				8	1	5	5	2	4	7	1	3	4	1	1	2		3	1	8	56	telecommunication service
14	hotel/restaurant/amusement		12	q	8	7	8	8	9	8	11	7	7	7	6	9	5	9	6	1	5	142	hotel/restaurant/amusement
	service		12		6		6															142	service
12	education/research service		2	4	1	1	4	2	1	1	3		3	3	5	2	2		5	2	4	45	education/research service
02	mining		32	18	20	15	22	18	9	10	8	10	7	9	3	9	4	5	5	5	3	212	mining
07	livestock/fishery		6	2	4	2	2	3	4	5	3	3	2		1	3	1	2	1	1	1	46	livestock/fishery
05	cargo handling service		2	3	2	3	1	3	2		1		1	4			1	3	4		1	31	cargo handling service
09	financial		1	1	3				3			2						1		2	1	28	financial
09	business/advertisement			'	3	2			3		2	2	2	ľ	2			ľ	4			28	business/advertisement
16	public office		2	1		1		1		1		1				1	1	1	1		1	12	public office
10	movie/play service										1										1	2	movie/play service
	total		917	721	642	580	543	492	396	401	408	408	400	448	321	326	336	334	347	323	312	8,655	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 523 stone, sand, substance in Middle industry (1999-2021)

code	Middle industry	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Middle industry
0301	civil engineering work			300		225		191	159	131	110	111	95	94	101	99	117	68	86	73	73	76	72	76	2,257	civil engineering work
0302	construction work			145		136		118	123	115	90	71	78	80	75	67	82	51	66	51	72	69	51	55	1,595	construction work
0303	other construction works			30		40		33	27	28	31	19	22	23	26	25	28	20	17	27	19	28	29	24	496	other construction works
0109	sand and stone products			154		117		83	78	65	73	57	62	48	55	47	61	44	33	33	28	31	28	23	1,120	sand and stone products
0802	retail			43		32		25	34	30	32	10	21	18	18	19	21	21	17	27	13	20	24	20	445	retail
1702	others			26		13		27	18	23	13	14	10	21	16	25	12	19	19	18	16	11	18	17	336	others
0601	agriculture			13		12		10	5	5	4	9	18	10	7	8	5	5	9	8	8	6	9	14	165	agriculture
	commercial cleaning and livestock																									commercial cleaning

1501	process	27	23	18	29	26	26	21	14	21	25	24	23	19	16	18	15	16	26	13	400	and livestock process
0403	road cargo transportation service	44	30	26	21	25	21	15	13	14	14	17	25	16	9	16	19	17	14	12	368	road cargo transportation service
1302	social welfare facility	3	4	4	2	6	4	5	5	1	6	8	6	5	2	8	10	5	9	12	105	social welfare facility
1101	telecommunication service			8	1	5	5	2	4	7	1	3	4	1	1	2		3	1	8	56	telecommunication service
0101	food products	11	6	8	9	1	6	7	3	1	3	3	6	5	3	4	5	4	2	4	91	food products
1201	education/research service	2	4	1	1	4	2	1	1	3		3	3	5	2	2		5	2	4	45	education/research service
0202	quarrying	26	18	19	14	22	16	9	10	8	10	7	9	3	7	2	4	3	4	3	194	quarrying
0110	steel making	8	6	9	6	5	5	3	2	2	4	2	3	6	2	5	2			3	73	steel making
0602	forestry	12	4	11	8	4	2	4	11	11	7	8	8	2	1	4	7	7	9	2	122	forestry
1401	hotel	2	3	3	2	3	4	2	2		4	1	2	1	4		2			2	37	hotel
1301	medical treatment service	4	2	2		3	2	1	1	2	3	2		1	1	2	4	1	3	2	36	medical treatment
1402	restaurant	1		2	2		1	2	4	2	1	1	3	2	4	2	2	4	1	2	36	restaurant
0108	chemical products	3	1	1		1	2		1	1	2	2	1	1		1	1	2		2	22	chemical products
0801	wholesale	6	8	6	4	8	7	6	5	7	7	3	1	1	4	7	4	5	4	1	94	wholesale
1403	other amusement service	9	6	3	3	5	3	5	2	9	2	5	2	3	1	3	5	2		1	69	other amusement service
0117	other manufacturing		4	4	4	3	3		1	2	4	4	4	2	5	4	2	3	2	1	52	other manufacturing
0112	metal products	5	3	3	5	3	3		1	2	1	3	3	6	2	1	3	2		1	47	metal products
0401	railroad/water transportation/airline service	1		2	2	4	3	4	4	2	1	1	1	1	1	2	3	4	1	1	38	railroad/water transportation/airline service
0402	road passenger transport service	4	2			2	6	1		1	1	2	1		1	1	3	3		1	29	road passenger transport service

0104	wood products	5	1	2		1			2	1	3		2			1	1			1	20	wood products
0111	nonferrous metal making	1	3			2				1		1	1	2	2	1	1		1	1	17	nonferrous metal making
0901	financial business			1	2	1		2		2	2	1	1				1	2	1	1	17	financial business
0502	harbor transportation service	2			3		1	2					2			1	1	2		1	15	harbor transportation service
0701	livestock	1	2		1	1			1		1	1		1	2		1			1	13	livestock
1601	public office	2	1		1		1		1		1				1	1	1	1		1	12	public office
0114	electrical equipment products	1	1	1							1		1		2				1	1	9	electrical equipment products
1001	movie/play service									1										1	2	movie/play service
0804	other commerce	3	3	2		1	2	2	3	1	1	4	2	3		2	2	6	5		42	other commerce
0702	fishery	5		4	1	1	3	4	4	3	2	1			1	1	1	1	1		33	fishery
0113	machine products	3	2	2	5	2	2	2		4	1		1	1	1	3	1		1		31	machine products
0115	transport equipment products	3	2		1	2	2	2		1	1		1	3					1		19	transport equipment products
0501	land cargo handling service		3	2		1	2			1		1	2				2	2			16	land cargo handling service
0116	electric/gas/water service			4	2	2	1	1		1			1								12	electric/gas/water service
0902	advertisement and mediator	1	1	2				1				1		2				2	1		11	advertisement and mediator
0105	furniture	4	1		2							1	1			1					10	furniture
0203	other mining	1		1	1		1								2	1		2	1		10	other mining
0201	coal mining	5					1									1	1				8	coal mining
1303	other health and hygiene service	1	1	2			1									1		1	1		8	other health and

0106	pulp/paper processing products				2		1					1			1			1				_	pulp/paper processing
0100	pulp/paper processing products						'					ļ'										6	products
0803	haircut/beauty salon					1		1			1					1	1					5	haircut/beauty salon
0107	printing/bookbinding					2	1				1											4	printing/bookbinding
0102	textile products			1		1													1			3	textile products
1701	dispatch service													1		1						2	dispatch service
0103	fiber products								1													1	fiber products
0404	other transportation service													1								1	other transportation
0404	other transportation service													ľ									service
	total		917	721	642	580	543	492	396	401	408	408	400	448	321	326	336	334	347	323	312	8,655	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 523 stone, sand, substance in Small industry (1999-2021)

code	Small industry	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Small industry
030199	other civil engineering work			143		117		82	81	70	59	58	51	44	62	53	57	34	44	44	38	34	44	41	1,156	other civil engineering work
030209	other building construction work			51		54		48	53	55	37	30	45	39	31	35	33	25	29	21	34	34	24	24	702	other building construction work
030309	other construction works			26		38		30	19	23	26	18	18	22	24	18	23	18	14	26	16	24	28	20	431	other construction works
	steel frame/reinforced concrete house construction work			45		40		36	31	26	27	16	15	22	19	13	21	16	20	13	17	16	11	20	424	steel frame/reinforced concrete house construction work
030106	road construction work			69		40		42	37	23	17	19	11	17	20	18	25	13	22	10	10	20	12	19	444	road construction work
010909	other sand and stone products			121		85		62	57	51	50	44	52	40	41	36	44	31	21	22	15	24	20	16	832	other sand and stone products
060101	agriculture			13		12		10	5	5	4	9	18	10	7	8	5	5	9	8	8	6	9	14	165	agriculture
080209	other retails			24		19		13	23	21	20	9	18	16	9	14	15	15	14	18	10	12	15	12	297	other retails
170209	others			19		10		19	12	14	9	12	8	17	15	20	8	12	15	12	14	7	11	12	246	others

130201	social welfare facility	3	4	4	2	6	4	5	5	1	6	8	6	5	2	8	10	5	9	12	105	social welfare facility
040301	general truck transportation service	39	26	22	19	22	19	12	11	10	13	14	25	14	7	14	18	14	14	10	323	general truck transportation service
110101	telecommunication service			8	1	5	5	2	4	7	1	3	4	1	1	2		3	1	8	56	telecommunication service
030202	wooden house construction work	38	32	25	34	23	21	20	14	15	20	17	25	6	12	14	19	16	11	7	369	wooden house construction work
010901	cement products	31	28	18	19	13	17	10	10	6	14	11	13	12	12	7	12	7	7	7	254	cement products
030107	river civil engineering work	25	14	17	8	7	6	4	3	7	3	2	12	9	2	7	5	3	6	6	146	river civil engineering work
170201	security service	7	3	8	6	9	4	2	2	4	1	5	4	7	3	6	2	4	7	5	89	security service
080205	newspaper retail	8	2	3	3	2	3		2		6	1	2	2	2	7	1	5	7	5	61	newspaper retail
030203	building facility construction work	11	10	9	5	11	5	5	4	4	5	2	3	4	5	3	2	3	5	4	100	building facility construction work
150101	building maintenance service	7	3	2	5	7	4	3	2	5	7	6	2	3	1	4	5	4	8	4	82	building maintenance service
150103	other waste disposal service	7	6	3	6	6	4	4	1	3	4	7	1	1	3	1	3	2	2	4	68	other waste disposal service
030301	electricity/telecommunication work	2	2	3	3	5	3		2	1	1	5	4	1	2		2	3	1	4	44	electricity/telecommunication
120109	other education/research service	2	4	1	1	4	2	1	1	3		3	3	5	2	2		4	2	4	44	other education/research service
150102	industrial waste management service	4	11	10	15	8	17	11	9	9	12	10	13	11	8	12	6	7	13	3	189	industrial waste managemen service
020201	quarrying	14	17	13	10	17	8	7	6	6	3	7	7	2	6	1	3	2	3	3	135	quarrying
011002	casting products	7	6	9	3	3	5	3	2	2	4	2	2	6	2	5	1			3	65	casting products
030109	land consolidation civil engineering work	21	21	14	13	13	11	9	8	8	7	11	8	4	6	5	9	5	4	2	179	land consolidation civil engineering work
030110	water supply/sewage construction work	22	21	18	10	11	12	10	12	9	6	9	7	4	6	5	6	4	4	2	178	water supply/sewage construction work
150109	other cleaning and livestock	9	3	3	3	5	1	3	2	4	2	1	7	4	4	1	1	3	3	2	61	other cleaning and livestock

	process service																						process service
010109	other foods		4	3	5	4		3	2	2	1	1	2	2	2	1	1	3	2	1	2	41	other foods
030111	port/seaside construction work		5	2	7	3	2	3	1	2	2	1	1			3			2	1	2	37	port/seaside construction work
140101	hotel		2	3	3	2	3	4	2	2		4	1	2	1	4		2			2	37	hotel
030105	bridge construction work		2	2	3		1		1	1	3			2		2			4		2	23	bridge construction work
080203	furniture/fittings retail		2	1	1		1						1					1	1		2	10	furniture/fittings retail
130102	general clinic										1					1	1				2	5	general clinic
060201	lumbering		9	1	4	3	2	2	3	9	6	3	4	5	2	1	2	7	5	4	1	73	lumbering
060209	other forestry		3	3	7	5	2		1	2	5	4	4	3			2		2	5	1	49	other forestry
140301	golf course		7	3	2	2	5	1	4	1	8	2	4	1	2	1	2	2	1		1	49	golf course
040101	railroad service		1		2	2	4	3	4	4	2	1	1		1	1	2	3	4	1	1	37	railroad service
140201	general restaurant		1		2	1		1	2	3	2	1	1	3	1	3	2	2	3	1	1	30	general restaurant
011709	other manufacturing			1	1	3	2			1	1	2	2	2	2	4	3	1	2	1	1	29	other manufacturing
010103	agricultural food products		1		2	4		2	3					1	2	2	3	2		1	1	24	agricultural food products
030104	railway construction work		2	2	1	1			2	1	1	1	3	2		1	1	3	1	1	1	24	railway construction work
040302	specific truck transportation service		5	1	1		1	1	2	2	1	1	3		1		2		2		1	24	specific truck transportation service
040309	other land cargo transportation service			3	3	2	2	1	1		2				1	2			1		1	19	other land cargo transportation service
080204	fuel retail		1	3	1	2						2	1	2	1		1		1	2	1	18	fuel retail
030102	tunnel construction work		1	2	1	2	2		1	2	1			1	1			1	1		1	17	tunnel construction work
040201	taxi service		1	1			1	3	1		1	1				1		2	2		1	15	taxi service
010102	fishery products		2	3	1		1		2			1		1					1		1	13	fishery products
011102	nonferrous metals casting products		1	2							1		1	1	2	2	1	1			1	13	nonferrous metals casting products
070101	livestock		1	2		1	1			1		1	1		1	2		1			1	13	livestock

			1			1	1		1	1	1	1	1				1	1	1		1	1	1
090103	insurance business				1	2	1		1		1	2		1				1	2		1	13	insurance business
160101	public office	2		1		1		1		1		1				1	1	1	1		1	12	public office
010401	lumbering	4		1			1			1		2		1							1	11	lumbering
050202	port cargo handling service	2				3		1	1					1				1	1		1	11	port cargo handling service
010899	other chemical products				1			1			1	1	1				1		1		1	8	other chemical products
140209	other restaurants					1				1					1	1			1		1	6	other restaurants
080102	furniture/fittings wholesale	1		1							1		1								1	5	furniture/fittings wholesale
010804	petroleum/coal products	1						1													1	3	petroleum/coal products
011409	other electrical equipment			1												1					1	3	other electrical equipment
011203	metal press products																1				1	2	metal press products
100109	other movie/play service																				1	1	other movie/play service
080109	other wholesale	5		7	6	4	8	7	6	5	6	7	2	1	1	3	5	4	5	4		86	other wholesale
080201	all kinds of retail	8		6	7	6	5	9	1	1	2	1	2	1	3	1	1		1			55	all kinds of retail
030108	sand collapse prevention civil	9		3	6	3	1	2	1	4	2		2	3	2		1	1	2			45	sand collapse prevention civil
	engineering work	9				3	<u> </u>							3			<u> </u>	<u> </u>				43	engineering work
011209	other metal products	4		3	3	4	3	3		1	2	1	3	3	5	2		2	2			41	other metal products
020202	gravel digging	10		1	5	3	1	5	1	2	1	5		2	1	1			1	1		40	gravel digging
080409	other commerce	3		3	1			1	2	3	1	1	3	2	2		2	2	5	3		34	other commerce
070201	fishery	5			3	1		3	4	4	3	2	1			1		1	1	1		30	fishery
011301	machine products	3		1	2	4	2	2	2		2	1		1	1	1	2	1		1		26	machine products
130101	hospital	4		2	2		1	2	1		1	1	1		1		1	4	1	3		25	hospital
	machinery/apparatus setting																						machinery/apparatus setting
030302	work	2				5		2	1	2		1	2	1	1	1	1	1	1			21	work
020209	other quarrying	2			1	1	4	3	1	2	1	2					1	1				19	other quarrying
050101	land cargo handling service			3	2		1	2			1		1	2				2	2			16	land cargo handling service
140309	other amusement service	2		2	1	1		2		1	1		1	1			1	1	1			15	other amusement service
							İ										İ	i					

011702	machine repair				2	3	1		2			1	2	1	1		1						14	machine repair
040202	bus service		3		1			1	3					2	1			1	1	1			14	bus service
010905	other ceramic products				2	2		1	1	1		1			2			1					11	other ceramic products
011502	auto mobile products		2		1		1	1		1		1	1		1	2							11	auto mobile products
010409	other lumber and wood products		1			2					1	1	1		1			1	1				9	other lumber and wood products
010903	pottery products		1		2	1	1		1	1					1			1					9	pottery products
010902	glass products								2			1			1	1		2			1		8	glass products
011603	city water service					3	1	1		1		1			1								8	city water service
011701	auto mobile servicing							1	1					1	1			1	1	1	1		8	auto mobile servicing
020101	general coal mining		5						1									1	1				8	general coal mining
080401	warehousing					1		1	1					1		1				1	2		8	warehousing
020309	other mining						1		1								1	1		2	1		7	other mining
090209	other advertisement and mediator		1		1	1				1						1				1	1		7	other advertisement and mediator
010805	plastics products		2											1	1				1	1			6	plastics products
010904	fire resisting products		1				1		2	1									1				6	fire resisting products
011501	ship building		1		1				1	1						1					1		6	ship building
130109	other medical treatment service							2			1		2	1									6	other medical treatment service
010101	meat/dairy products		1				1				1		1							1			5	meat/dairy products
010503	fittings		2				1								1			1					5	fittings
030101	hydroelectric plant construction work		1		1		1						1			1							5	hydroelectric plant construction work
130309	other health and hygiene service		1			2												1		1			5	other health and hygiene service
140302	park and amusement park				1					1						1			2				5	park and amusement park
	11			11		1	11	11	10	11	11	10		11	П	11	11			11	11	11	11	J

010104	bread/cake products		1					1					1	1							4	bread/cake products
011001	steel/iron/rolling products					2	1											1			4	steel/iron/rolling products
011009	other steel products		1			1	1							1							4	other steel products
011403	electronics equipment and telecommunications apparatus		1											1		1				1	4	electronics equipment and telecommunications apparatus
080202	auto mobile retail			1			1							1				1			4	auto mobile retail
090201	traveling service				1								1		1				1		4	traveling service
010209	other textile products			1		1													1		3	other textile products
010609	other pulp/paper processing products				1		1								1						3	other pulp/paper processing products
010701	printing service					2	1														3	printing service
010801	non organic or organic chemical products			1						1		1									3	non organic or organic chemical products
011204	metal plating products		1			1												1			3	metal plating products
011305	other precision machine products			1							2										3	other precision machine products
020301	metal mining		1		1											1					3	metal mining
030103	subway construction work						1		2												3	subway construction work
070209	other fishery				1		1										1				3	other fishery
080101	all kinds of wholesale															1	2				3	all kinds of wholesale
080302	beauty salon					1		1									1				3	beauty salon
130301	bathhouse			1				1												1	3	bathhouse
010105	alcoholic drinks		1											1							2	alcoholic drinks
010106	soft drinks		1												1						2	soft drinks
010501	wood furniture		1	1																	2	wood furniture
010509	other furniture		1			1															2	other furniture

010602	paper processing products				1												1			2	paper processing products
010806	rubber products						1							1						2	rubber products
011101	nonferrous metals/rolling products						1												1	2	nonferrous metals/rolling products
011109	other nonferrous metal products			1			1													2	other nonferrous metal products
011402	electrical appliance				1						1									2	electrical appliance
011601	electric utility service						1	1												2	electric utility service
011602	city gas service				1	1														2	city gas service
040303	cargo/ light automobile transportation service									1							1			2	cargo/ light automobile transportation service
050201	general harbor transportation service															1		1		2	general harbor transportation service
050209	other harbor transportation service								1				1							2	other harbor transportation service
080301	haircut									1					1					2	haircut
090101	banking/trust business								1			1								2	banking/trust business
090109	other financial business									1									1	2	other financial business
170101	dispatch service												1		1					2	dispatch service
010309	other fiber products								1											1	other fiber products
010502	metal furniture											1								1	metal furniture
010601	pulp/paper										1									1	pulp/paper
010709	other printing and bookbinding									1										1	other printing and bookbinding
011202	screw products													1						1	screw products
011302	measuring instruments															1				1	measuring instruments
011303	optical instruments					1														1	optical instruments

011503	railway vehicle products				1										1	railway vehicle products
011509	other transport equipment products					1									1	other transport equipment products
011703	cleaning		1												1	cleaning
040103	airline service									1					1	airline service
040409	other transportation service								1	1					1	other transportation service
100101	movie production and delivery service							1							1	movie production and delivery service
120101	auto mobile practical training												1		1	auto mobile practical training
170202	information processing service										1				1	information processing service
010201	silk-reeling															silk-reeling
010202	cotton-spinning															cotton-spinning
010203	weaving															weaving
010204	dyeing															dyeing
010301	over/under wear															over/under wear
010402	plywood															plywood
010702	bookbinding															bookbinding
010802	chemical fiber															chemical fiber
010803	pharmaceuticals															pharmaceuticals
010807	leather products															leather products
010808	painting products															painting products
010809	chemical fertilizer products															chemical fertilizer products
011201	western tableware/cutting tool products															western tableware/cutting tool products
011304	watch products															watch products
011401	heavy electrical equipment															heavy electrical equipment

		=	<u> </u>		-	\vdash	-		-		-	1	-	-			-	-	_	<u> </u>				
011609	other electric/gas/water																							other electric/gas/water
	service																							service
011704	tobacco products																							tobacco products
020109	other coal mining																							other coal mining
020302	petroleum mining																							petroleum mining
040102	water transportation service																							water transportation service
040209	other passenger transport																							other passenger transport
	service																							service
090102	stock/commodity trade																							stock/commodity trade
030102	business																							business
100102	movie theatre																							movie theatre
120102	software service																							software service
150104	cremation service																							cremation service
150105	livestock process service																							livestock process service
	total			917	721	642	580	543	492	396	401	408	408	400	448	321	326	336	334	347	323	312	8,655	total

Data source: https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.htm (MHLW, Japan)

https://www.jisha.or.jp/english/statistics/202212_03.html