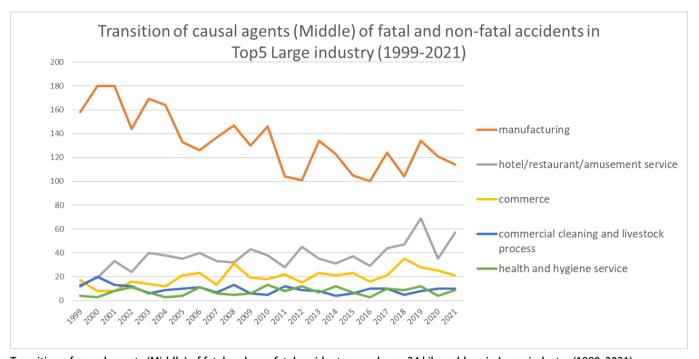
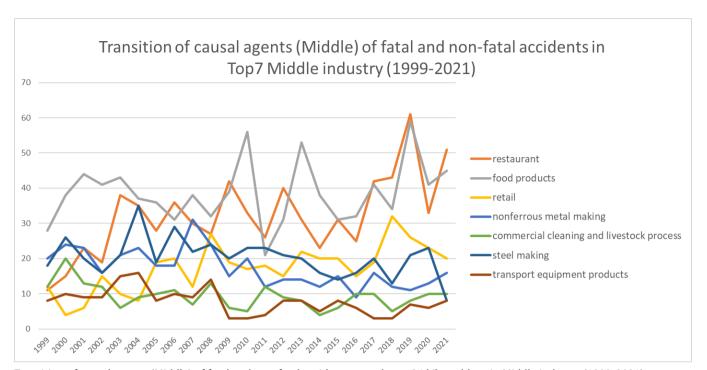
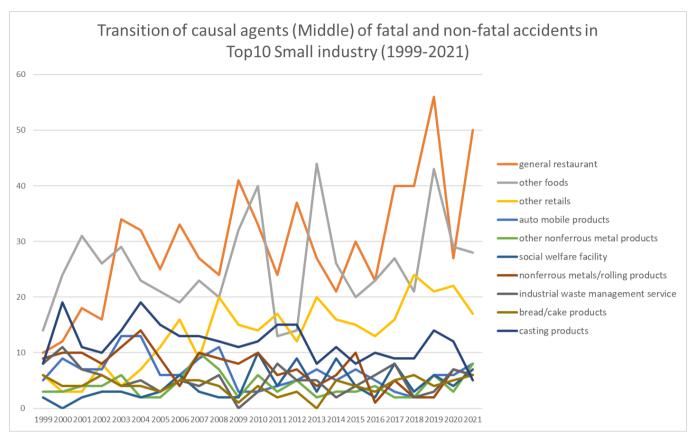
Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 34 kiln, caldron (1999-2021)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 34 kiln, caldron in Large industry (1999-2021)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 34 kiln, caldron in Middle Industry (1999-2021)



Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 34 kiln, caldron in Small Industry (1999-2021)

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 34 kiln, caldron 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
01	manufacturing	158	180	180	144	169	164	133	126	137	147	130	146	104	101	134	123	105	100	124	104	134	121	114	3,078	manufacturing
14	hotel/restaurant/amusement service	13	19	33	24	40	38	35	40	33	32	43	38	28	45	35	31	37	29	44	47	69	35	57	845	hotel/restaurant/amusement service
08	commerce	17	8	8	16	14	12	21	23	13	31	19	18	22	15	23	21	23	16	21	35	28	25	21	450	commerce
15	commercial cleaning and livestock process	12	20	13	12	6	9	10	11	7	13	6	5	12	9	8	4	6	10	10	5	8	10	10	216	commercial cleaning and livestock process
13	health and hygiene service	4	3	8	11	7	3	4	11	6	5	6	13	8	12	7	12	7	3	10	9	12	4	9	174	health and hygiene service
03	construction	17	13	12	26	17	15	12	16	9	4	14	9	6	2	9	7	11	5	6	4	10	13	4	241	construction

17	others	5	4	3	2	2	1	3	5	5	1	4		5	6		2	2		1	3	1	4	3	62	others
12	education/research service	2	2	2	2	2	1	3	2	3	1	2		2			2			1				1	28	education/research service
04	transportation service		2	1	2	1		2		1		1		1	2	2	1	3		2		1		1	23	transportation service
06	agriculture		1	1	2					1			1					1	2			1	2	1	13	agriculture
07	livestock/fishery	2	1	1	1		1			1		1			1	1				1					11	livestock/fishery
05	cargo handling service			1		1	1		1	1			1							1	1				8	cargo handling service
02	mining	1					1			1								1							4	mining
16	public office					1			2	1															4	public office
09	financial			1								1													2	financial
	business/advertisement											ľ														business/advertisement
10	movie/play service																									movie/play service
11	telecommunication service																									telecommunication service
	total	231	253	264	242	260	246	223	237	219	234	227	231	188	193	219	203	196	165	221	208	264	214	221	5,159	total

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 34 kiln, caldron 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
1402	restaurant	11	15	23	19	38	35	28	36	30	27	42	33	26	40	31	23	31	25	42	43	61	33	51	743	restaurant
0101	food products	28	38	44	41	43	37	36	31	38	32	39	56	21	31	53	38	31	32	41	34	59	41	45	889	food products
0802	retail	12	4	6	15	10	8	19	20	12	27	19	17	18	15	22	20	20	15	19	32	26	23	20	399	retail
0111	nonferrous metal making	20	24	23	16	21	23	18	18	31	24	15	20	12	14	14	12	15	9	16	12	11	13	16	397	nonferrous metal making
1501	commercial cleaning and livestock process	12	20	13	12	6	9	10	11	7	13	6	5	12	9	8	4	6	10	10	5	8	10	10	216	commercial cleaning and livestock process
0110	steel making	18	26	20	16	21	35	19	29	22	24	20	23	23	21	20	16	14	16	20	13	21	23	8	468	steel making
0115	transport equipment products	8	10	9	9	15	16	8	10	9	14	3	3	4	8	8	5	8	6	3	3	7	6	8	180	transport equipment products

0117	other manufacturing	14	11	12	3	6	5	7	6		6	9	6	11	4	5	7	4	11	10	5	6	8	8	164	other manufacturing
0112	metal products	18	19	19	11	18	15	7	2	12	12	12	14	8	9	9	12	9	6	14	7	9	8	7	257	metal products
0108	chemical products	15	9	14	17	8	5	10	7	5	11	12	9	7	3	8	13	5	5	4	6	8	8	7	196	chemical products
1302	social welfare facility	2		2	3	3	2	3	6	3	2	2	10	4	9	3	9	4	2	8	3	6	4	7	97	social welfare facility
0113	machine products	5	12	8	7	15	9	8	3	7	6	3	6	4	3	3	8	8	2	4	6	1	4	5	137	machine products
1401	hotel	2	4	2	2	1	3	6	2	1	2		4		1	4	7	4	1	1	2	6	2	4	61	hotel
0114	electrical equipment products	6	6		4	5	4	1	2	1	4	1	1	4	2	2	2	2	1	2	3	4	4	3	64	electrical equipment products
1702	others	5	3	3	2	2	1	3	5	3	1	4		5	6		2	2		1	3	1	4	3	59	others
0303	other construction works	11	7	4	8	10	10	4	6	6	2	8	6	1	1	4	3	8	5	2	3	7	5	2	123	other construction works
0302	construction work	5	4	6	18	5	5	7	8	3	1	3	3	4	1	4	4	3		3	1	2	7	2	99	construction work
1301	medical treatment service	1	2	4	7	4	1	1	4	2	3	4	3	4	3	4	3	2	1	2	6	6		2	69	medical treatment
1403	other amusement service			8	3	1		1	2	2	3	1	1	2	4		1	2	3	1	2	2		2	41	other amusement service
0105	furniture	2	7	1	3	1	3	1	2	2		2	2					1	2	2	5			2	38	furniture
0107	printing/bookbinding	1	1	1	1	1	1														1		1	2	10	printing/bookbinding
0109	sand and stone products	6	8	16	5	6	4	6	8	4	5	5	5	6	3	7	5	8	6	2	2	3	2	1	123	sand and stone
0102	textile products	6	1	4	2	2	2	3	2	1	2	1				3	1		3	2	1	2		1	39	textile products
0801	wholesale	4	2	1	1	3	3	2	3	1	4			2		1	1	1	1	1	3	2	2	1	39	wholesale
1201	education/research service	2	2	2	2	2	1	3	2	3	1	2		2			2			1				1	28	education/research service
0601	agriculture		1	1	2					1			1					1	1			1	1	1	11	agriculture
0103	fiber products	1	1	1			1		1	1		1									1	1		1	10	fiber products
0404	other transportation service																							1	1	other transportation

				<u> </u>	<u></u>																		<u> </u>	<u> </u>	service
0104	wood products	8	6	6	8	7	2	8	3	3	4	5	1	4	2	2	4		1	4	4	2		84	wood products
0301	civil engineering work	1	2	2		2		1	2		1	3		1		1				1		1	1	19	civil engineering wo
0106	pulp/paper processing products	2	1	1	1		1	1	1	1	1	1			1						1		3	16	pulp/paper processi products
0403	road cargo transportation service		1		2	1		1		1		1		1	2	1		1				1		13	road cargo transportation servi
0804	other commerce	1	2	1		1	1							2				1		1				10	other commerce
0701	livestock		1	1	1		1			1		1			1	1				1				9	livestock
1303	other health and hygiene service	1	1	2	1				1	1								1						8	other health and hygiene service
0501	land cargo handling service			1		1	1		1	1			1							1				7	land cargo handling
0116	electric/gas/water service			1			1		1		2	1												6	electric/gas/water service
0401	railroad/water transportation/airline service			1												1	1	2		1				6	railroad/water transportation/airli service
1601	public office					1			2	1														4	public office
0202	quarrying	1								1								1						3	quarrying
0402	road passenger transport service		1					1												1				3	road passenger transport service
1701	dispatch service		1							2														3	dispatch service
0602	forestry																		1				1	2	forestry
0702	fishery	2																						2	fishery
0803	haircut/beauty salon												1					1						2	haircut/beauty salc
0203	other mining						1																	1	other mining

0502	harbor transportation service																				1				1	harbor transportation
0302	narbor transportation service																				'					service
0901	financial business			1																					1	financial business
0003	advertisement and mediator											1													1	advertisement and
0902	advertisement and mediator																									mediator
0201	coal mining																									coal mining
1001	movie/play service																									movie/play service
1101	telecommunication service																									telecommunication
1101	telecommunication service																									service
	total	231	253	264	242	260	246	223	237	219	234	227	231	188	193	219	203	196	165	221	208	264	214	221	5,159	total

Transition of causal agents (Middle) of fatal and non-fatal accidents as code no. 34 kiln, caldron 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
	Sinan industry	.,,,,								2007			20.0			2013		2013	20.0	2017	20.0				to tu	Januar Haustry
140201	general restaurant	10	12	18	16	34	32	25	33	27	24	41	33	24	37	27	21	30	23	40	40	56	27	50	680	general restaurant
010109	other foods	14	24	31	26	29	23	21	19	23	20	32	40	13	14	44	26	20	23	27	21	43	29	28	590	other foods
080209	other retails	6	3	3	8	4	7	11	16	9	20	15	14	17	12	20	16	15	13	16	24	21	22	17	309	other retails
011502	auto mobile products	5	9	7	7	13	13	6	6	9	11	3	3	4	5	7	5	7	5	3	2	6	6	8	150	auto mobile products
011109	other nonferrous metal products	3	3	4	4	6	2	2	5	10	7	2	6	3	5	2	3	3	4	2	2	6	3	8	95	other nonferrous metal products
130201	social welfare facility	2		2	3	3	2	3	6	3	2	2	10	4	9	3	9	4	2	8	3	6	4	7	97	social welfare facility
011101	nonferrous metals/rolling products	9	10	10	8	11	14	9	4	10	9	8	10	6	7	4	6	10	1	5	2	2	7	6	168	nonferrous metals/rolling products
150102	industrial waste management service	8	11	7	6	4	5	3	5	4	6		3	8	5	5	2	4	6	8	2	3	7	6	118	industrial waste management service
010104	bread/cake products	6	4	4	6	4	4	3	5	5	4	1	4	2	3		5	4	3	5	6	4	5	6	93	bread/cake products
011002	casting products	8	19	11	10	14	19	15	13	13	12	11	12	15	15	8	11	8	10	9	9	14	12	5	273	casting products

011209	other metal products	15	12	15	6	16	13	3	2	6	12	6	9	7	5	4	7	6	4	11	6	6	2	5	178	other metal products
011301	machine products	4	9	7	6	13	7	8	3	6	4	3	5	3	3	3	8	6	2	4	4	1	3	5	117	machine products
011703	cleaning	5	5	3	2	1	2	2	5		2	2	5	7	2	3	2	2	5	4	2	4	3	5	73	cleaning
010102	fishery products	1	3	3	4	4	3	7	2	4	4		3	2	8	4	3	3		5	4	5	4	4	80	fishery products
140101	hotel	2	4	2	2	1	3	6	2	1	2		4		1	4	7	4	1	1	2	6	2	4	61	hotel
150103	other waste disposal service	2	3	1	3		1	3	3		5	2	1		1	1	1		3		2	1	2	4	39	other waste disposal service
011001	steel/iron/rolling products	5	6	6	6	5	9	2	12	9	9	9	9	6	5	11	2	4	6	9	2	7	9	3	151	steel/iron/rolling products
080201	all kinds of retail	3	1	2	6	5	1	8	4	3	6	4	3	1	3	1	4	5	2	3	8	5	1	3	82	all kinds of retail
170209	others	5	3	3	2	1	1	3	5	2	1	4		5	6		2	2		1	3	1	4	3	57	others
010805	plastics products	3	2	1	3	1		3	2		1	5		1	1	1	4	2	1		1	2	1	3	38	plastics products
011102	nonferrous metals casting products	8	11	9	4	4	7	7	9	11	8	5	4	3	2	8	3	2	4	9	8	3	3	2	134	nonferrous metals casting products
011709	other manufacturing	2	5	4		4	3	4	1		2	6	1	4	2		5	2	4	5	2	2	5	2	65	other manufacturing
011204	metal plating products	3	5	2	5	1	2	4		5		4	5		3	5	3	3	1	2		2	5	2	62	metal plating products
130101	hospital	1	2	2	7	3	1		4	1	3	4	3	2	3	4	3	2	1	2	6	6		2	62	hospital
010101	meat/dairy products	2	1	1	2	2	2	1	5	3	1	1	3	1	3	4	2	1	1	3	3	3	2	2	49	meat/dairy products
010899	other chemical products	2	1	4	1		1	1			1	1	2	1		1	1	1	2		1	2	2	2	27	other chemical products
010501	wood furniture	2	4	1	1	1	3	1	2			2						1	2		4			2	26	wood furniture
140309	other amusement service			1	3	1		1		2	2	1	1	1	2		1	2		1	2	1		2	24	other amusement service
010105	alcoholic drinks			1	1	3	3			1	1	1						1	2	1		2	1	2	20	alcoholic drinks
010106	soft drinks	2					2			1	1	1												2	9	soft drinks
010701	printing service	1	1	1	1		1														1			2	8	printing service
030309	other construction works	6	2	3	3	7	7	3	3	5	1	2	3	1	1	2	2	7	2	1	2	3	2	1	69	other construction works
140209	other restaurants	1	3	5	3	4	3	3	3	3	3	1		2	3	4	2	1	2	2	3	5	6	1	63	other restaurants
030302	machinery/apparatus setting work	4	5	1	5	3	3	1	3	1	1	5	3			2	1	1	3	1	1	4	3	1	52	machinery/apparatus setting work

010103 agricultural food prod	ucts	3	6	4	2	1		4		1	1	3	6	3	3	1	2	2	3			2		1	48	agricultural food products
other sand and stone products		2	3	8	2				3	2	3	1	1	3	2	3	2	2	1			2		1	41	other sand and stone products
080109 other wholesale		3	2	1	1	3	3	2	3	1	3			2		1	1	1		1	3	1	1	1	34	other wholesale
other education/resea service		2	2	2	2	2	1	3	2	3	1	2		2			2			1				1	28	other education/research service
010204 dyeing		5	1	2	1	1	1	2	2		1	1				3			3	1		1		1	26	dyeing
011409 other electrical equipr	ment	3	2		2	1	2			1		1	1	2	2		2	1		2	2		1	1	26	other electrical equipment
electronics equipment 011403 telecommunications apparatus		2	2		1	4	2	1	2		2			2		1		1			1	2	1	1	25	electronics equipment and telecommunications apparatus
030203 building facility constr work	ruction			1	7		1		2						1	2		1		1		1	3	1	21	building facility construction work
wooden house constru work	uction	3		2	1	1	1		1	2			1	2			1					1	1	1	18	wooden house construction work
010809 chemical fertilizer prod	ducts	2		1				1	1	1	2	1	3		1	1							1	1	16	chemical fertilizer products
011701 auto mobile servicing		6		4	1						1								2	1				1	16	auto mobile servicing
060101 agriculture			1	1	2					1			1					1	1			1	1	1	11	agriculture
010309 other fiber products		1	1	1			1		1	1		1									1	1		1	10	other fiber products
010803 pharmaceuticals								1		1				1						1	2	1	1	1	9	pharmaceuticals
011402 electrical appliance			2								1					1							1	1	6	electrical appliance
040409 other transportation s	ervice																							1	1	other transportation service
010801 non organic or organic	c	5	2	5	5	5	3	2	4	1	3	3	2	3		2	1	1	2	2	1	1	2		55	non organic or organic chemical products
030209 other building constru	uction	1	2	3	9	3	1	6	5	1		3	1	2		2	1	2		2			2		46	other building construction work
011009 other steel products		5	1	3		2	7	2	4		3		2	2	1	1	3	2		2	2		2		44	other steel products

010409	other lumber and wood products	4	4	3	4	3	1	4	2	1	2	4	1	3	2		1				2	1		42	other lumber and wood products
010902	glass products			2	2	3	1	3	1	1	1	1	3	1	1	1		6	1	1	1	1	1	32	glass products
150101	building maintenance service	2	3		3	1	2	2	2	2	1	1	1	3	1		1	1		1	1	4		32	building maintenance service
010401	lumbering	2	1	3	3	2		4	1	1	1	1		1			1		1	3		1		26	lumbering
011509	other transport equipment products	2	1	1	2	2	2		4		2				3	1		1	1		1	1		24	other transport equipment products
150109	other cleaning and livestock process service		3	4		1	1	1	1	1		3		1	2	2		1	1				1	23	other cleaning and livestock process service
010806	rubber products	1	1	2	1	1	1			1	3	1	1			1	5			1				20	rubber products
010402	plywood	2	1		1	2	1			1	1					2	2			1	2			16	plywood
010804	petroleum/coal products		1		4			1		1	1			1		1	2	1			1	1	1	16	petroleum/coal products
010901	cement products	3		2		1		1	1	1						1	1		1		1		1	14	cement products
011305	other precision machine products		2		1	1	2				2		1	1				2			1		1	14	other precision machine products
030201	steel frame/reinforced concrete house construction work	1	2		1	1	2	1			1		1				2				1		1	14	steel frame/reinforced concrete house construction work
010903	pottery products		1	2		1	2	2			1		1	2		1								13	pottery products
010905	other ceramic products	1	2	2	1	1	1		1							1			1	1				12	other ceramic products
010807	leather products	2	2	1	2	1		1							1							1		11	leather products
010904	fire resisting products		2						2			3					2		2					11	fire resisting products
011203	metal press products		1	1						1		2		1	1		2			1	1			11	metal press products
030199	other civil engineering work	1	1	1		1			2		1	1		1								1	1	11	other civil engineering work
040301	general truck transportation service		1		2	1		1		1		1		1	2							1		11	general truck transportation service
011702	machine repair	1	1	1		1		1			1	1				2					1			10	machine repair

070101	livestock		1	1	1		1			1		1			1	1				1				9	livestock
080409	other commerce	1	2			1	1							2				1		1				9	other commerce
140301	golf course			2					1		1				1				3			1		9	golf course
010209	other textile products			2		1		1		1	1									1		1		8	other textile products
010601	pulp/paper	1		1	1							1									1		3	8	pulp/paper
140302	park and amusement park			5					1					1	1									8	park and amusement park
010503	fittings		2		2					2			1											7	fittings
011401	heavy electrical equipment	1			1						1								1			2	1	7	heavy electrical equipment
030106	road construction work		1	1		1						2				1				1				7	road construction work
050101	land cargo handling service			1		1	1		1	1			1							1				7	land cargo handling service
130301	bathhouse	1	1	1	1				1	1								1						7	bathhouse
011501	ship building	1		1			1	2			1													6	ship building
010509	other furniture		1										1							2	1			5	other furniture
040103	airline service															1	1	2		1				5	airline service
010602	paper processing products							1		1	1				1									4	paper processing products
010609	other pulp/paper processing products	1	1				1		1															4	other pulp/paper processing products
011602	city gas service			1							2	1												4	city gas service
080101	all kinds of wholesale	1									1								1			1		4	all kinds of wholesale
080204	fuel retail	2				1					1													4	fuel retail
130109	other medical treatment service			2		1								1										4	other medical treatment service
150104	cremation service			1				1			1									1				4	cremation service
160101	public office					1			2	1														4	public office
010802	chemical fiber				1								1			1								3	chemical fiber
011201	western tableware/cutting tool products		1			1																	1	3	western tableware/cutting tool products

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011202	screw products			1														1			1			3	screw products
011303	optical instruments	1		1		1																		3	optical instruments
020201	quarrying	1								1							1							3	quarrying
130102	general clinic							1		1				1										3	general clinic
170101	dispatch service		1							2														3	dispatch service
010202	cotton-spinning				1															1				2	cotton-spinning
010203	weaving	1														1								2	weaving
010709	other printing and bookbinding					1																1		2	other printing and bookbinding
011302	measuring instruments									1										1				2	measuring instruments
011609	other electric/gas/water service						1		1															2	other electric/gas/water service
030301	electricity/telecommunication work	1										1												2	electricity/telecommunication
040201	taxi service		1																1					2	taxi service
040302	specific truck transportation service														1		1							2	specific truck transportation service
070209	other fishery	2																						2	other fishery
080202	auto mobile retail	1		1																				2	auto mobile retail
080203	furniture/fittings retail				1										1									2	furniture/fittings retail
080301	haircut												1				1							2	haircut
010201	silk-reeling						1																	1	silk-reeling
010808	painting products											1												1	painting products
011304	watch products		1																					1	watch products
020309	other mining						1																	1	other mining
030109	land consolidation civil							1																1	land consolidation civil
030103	engineering work																								engineering work

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040101	railroad service		1												1	railroad service
040202	bus service					1									1	bus service
050202	port cargo handling service												1		1	port cargo handling service
060201	lumbering													1	1	lumbering
060209	other forestry											1			1	other forestry
080102	furniture/fittings wholesale													1	1	furniture/fittings wholesale
080401	warehousing		1												1	warehousing
090109	other financial business		1												1	other financial business
090209	other advertisement and mediator							1							1	other advertisement and mediator
130309	other health and hygiene service		1												1	other health and hygiene service
170201	security service						1								1	security service
170202	information processing service				1										1	information processing service
010301	over/under wear															over/under wear
010502	metal furniture															metal furniture
010702	bookbinding															bookbinding
011503	railway vehicle products															railway vehicle products
011601	electric utility service															electric utility service
011603	city water service															city water service
011704	tobacco products															tobacco products
020101	general coal mining															general coal mining
020109	other coal mining															other coal mining
020202	gravel digging															gravel digging
020209	other quarrying															other quarrying

020301	metal mining																						metal mining
020302	petroleum mining																						petroleum mining
030101	hydroelectric plant																						hydroelectric plant
030101	construction work																						construction work
030102	tunnel construction work																						tunnel construction work
030103	subway construction work																						subway construction work
030104	railway construction work																						railway construction work
030105	bridge construction work																						bridge construction work
030107	river civil engineering work																						river civil engineering work
030108	sand collapse prevention civil																						sand collapse prevention civil
030100	engineering work																						engineering work
030110	water supply/sewage																						water supply/sewage
	construction work																						construction work
030111	port/seaside construction																						port/seaside construction
	work																						work
040102	water transportation service																						water transportation service
040209	other passenger transport																						other passenger transport
	service																						service
040303	cargo/ light automobile																						cargo/ light automobile
	transportation service																						transportation service
040309																							other land cargo
	transportation service																						transportation service
050201	general harbor transportation																						general harbor transportation
	service other harbor transportation																						other harbor transportation
050209	service																						service
070201																							fishery
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080205	newspaper retail																									newspaper retail
080302	beauty salon																									beauty salon
090101	banking/trust business																									banking/trust business
090102	stock/commodity trade business																									stock/commodity trade business
090103	insurance business																									insurance business
090201	traveling service																									traveling service
100101	movie production and																									movie production and
100101	delivery service																									delivery service
100102	movie theatre																									movie theatre
100109	other movie/play service																									other movie/play service
110101	telecommunication service																									telecommunication service
120101	auto mobile practical training																									auto mobile practical training
120102	software service																									software service
150105	livestock process service																									livestock process service
	total	231	253	264	242	260	246	223	237	219	234	227	231	188	193	219	203	196	165	221	208	264	214	221	5,159	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