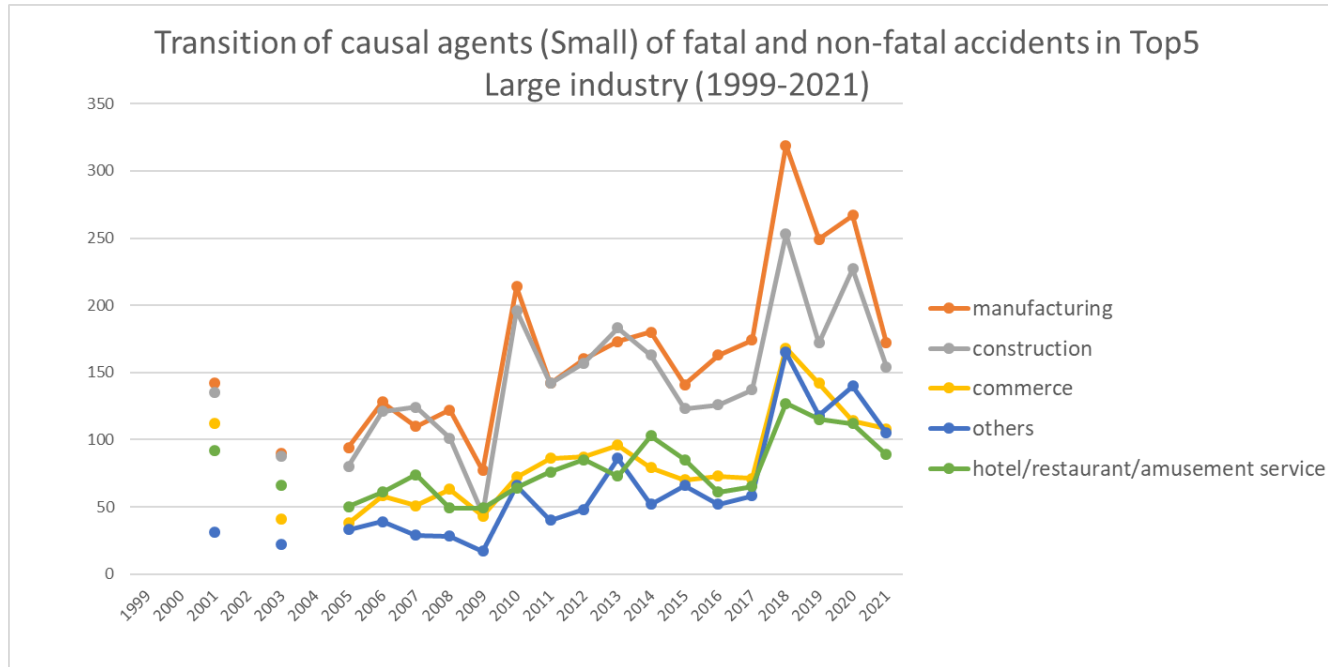
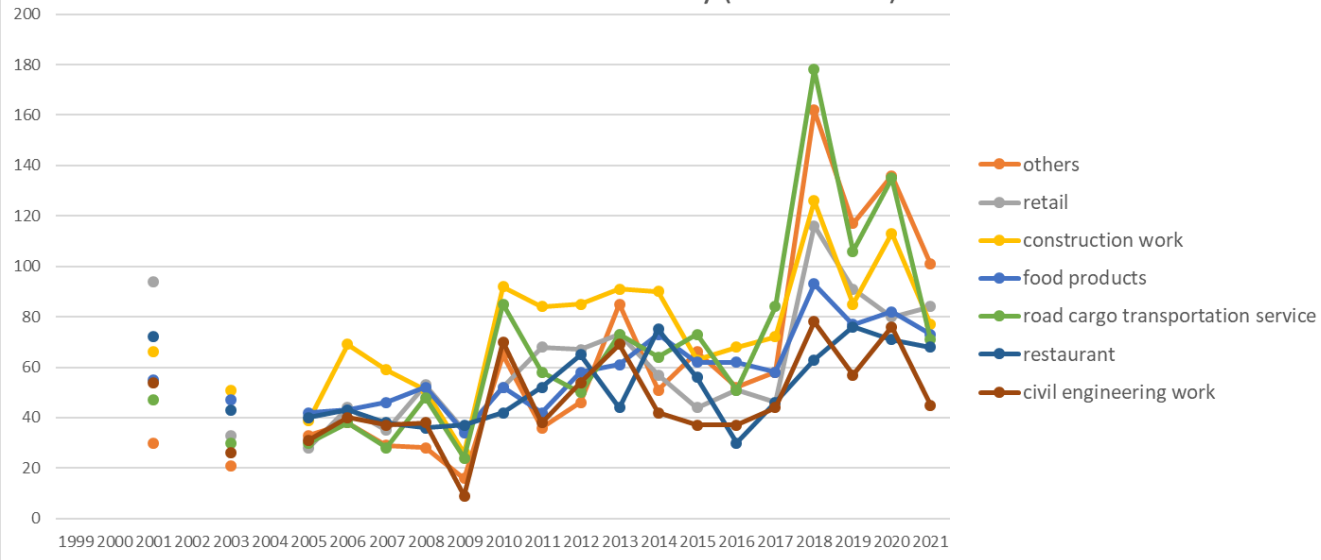


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 715 high/cold temperature environment (1999-2021)



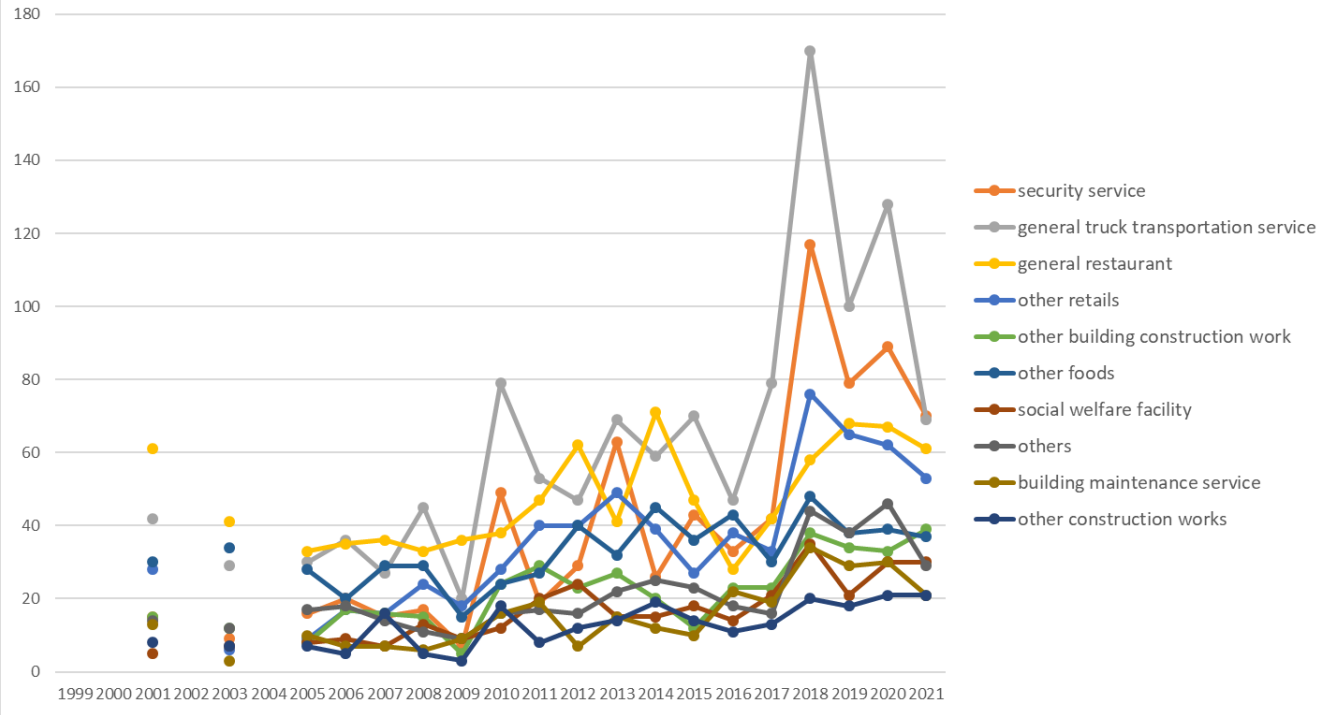
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 715 high/cold temperature environment in Large industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents in Top7 Middle industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 715 high/cold temperature environment in Middle Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents in Top10 Small industry (1999-2021)



Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 715 high/cold temperature environment in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 715 high/cold temperature environment 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			142		90		94	128	110	122	77	214	142	160	173	180	141	163	174	319	249	267	172	3,117	manufacturing
03	construction			135		88		80	121	124	101	45	196	142	157	183	163	123	126	137	253	172	227	154	2,727	construction
08	commerce			112		41		38	58	51	63	43	72	86	87	96	79	70	73	71	168	142	114	108	1,572	commerce
17	others			31		22		33	39	29	28	17	66	40	48	86	52	66	52	58	165	118	140	105	1,195	others
14	hotel/restaurant/amusement service			92		66		50	61	74	49	49	64	76	85	73	103	85	61	65	127	115	112	89	1,496	hotel/restaurant/amusement service
04	transportation service			63		35		33	42	35	54	24	92	65	57	82	71	79	61	97	195	119	148	78	1,430	transportation service
15	commercial cleaning and			32		11		16	17	16	17	17	44	36	30	36	25	25	43	35	94	66	65	42	667	commercial cleaning and

	livestock process																									livestock process
13	health and hygiene service			16		15		9	18	9	16	15	19	29	33	29	20	18	16	26	40	28	35	33	424	health and hygiene service
06	agriculture			11		7		7	7	9	7	6	23	16	19	18	22	21	25	29	41	26	23	21	338	agriculture
05	cargo handling service			3		5		1	4	4	9	1	12	6	11	9	14	7	26	18	25	23	23	14	215	cargo handling service
11	telecommunication service							8	10	3	5	3	11	2	7	15	8	6	5	7	18	12	16	11	147	telecommunication service
12	education/research service			2		4		2	1	8	6	2	3	6	3	1	3	7	6	5	13	5	10	7	94	education/research service
07	livestock/fishery			4				8	8	8	6		15	10	9	9	5	3	9	5	14	10	9	5	137	livestock/fishery
09	financial business/advertisement			5		2		2	1		1	1	2	4	3	7	3	2		3	9	1	1	5	52	financial business/advertisement
02	mining			3		3		1					1	1		1		2			1		3	1	17	mining
16	public office					2			1					1		1				2	1		1	1	10	public office
10	movie/play service			1							1							1		1		1		1	6	movie/play service
	total			652		391		382	516	480	485	300	834	662	709	819	748	656	666	733	1,483	1,087	1,194	847	13,644	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 715 high/cold temperature environment 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
1702	others			30		21		33	38	29	28	16	65	36	46	85	51	66	52	58	162	117	136	101	1,170	others
0802	retail			94		33		28	44	35	53	35	52	68	67	73	57	44	51	46	116	91	80	84	1,151	retail
0302	construction work			66		51		39	69	59	51	26	92	84	85	91	90	63	68	72	126	85	113	77	1,407	construction work
0101	food products			55		47		42	43	46	52	34	52	42	58	61	73	62	62	58	93	77	82	73	1,112	food products
0403	road cargo transportation service			47		30		30	38	28	48	24	85	58	50	73	64	73	51	84	178	106	135	71	1,273	road cargo transportation service
1402	restaurant			72		43		40	43	38	36	37	42	52	65	44	75	56	30	46	63	76	71	68	997	restaurant
0301	civil engineering work			54		26		31	40	37	38	9	70	38	54	69	42	37	37	44	78	57	76	45	882	civil engineering work
1501	commercial cleaning and livestock process			32		11		16	17	16	17	17	44	36	30	36	25	25	43	35	94	66	65	42	667	commercial cleaning and livestock process

0303	other construction works			15	11	10	12	28	12	10	34	20	18	23	31	23	21	21	49	30	38	32	438	other construction works
1302	social welfare facility			5	7	8	9	7	13	9	12	20	24	15	15	18	14	21	35	21	30	30	313	social welfare facility
0108	chemical products			7	5	9	13	5	11	3	15	16	11	8	14	9	10	18	23	29	16	21	243	chemical products
1403	other amusement service			10	6	8	6	19	11	6	16	16	16	19	22	18	19	14	48	29	35	15	333	other amusement service
0601	agriculture			2	1	3	1	5	3	4	17	9	10	10	13	14	11	22	36	19	16	14	210	agriculture
0117	other manufacturing			14	5	3	5	11	5	7	19	4	8	11	17	15	12	10	36	32	22	13	249	other manufacturing
0801	wholesale			12	4	5	6	7	6	5	7	8	12	12	10	9	12	14	29	25	16	13	212	wholesale
0115	transport equipment products			10	6	9	12	8	8	4	25	7	21	13	10	7	17	22	33	19	38	12	281	transport equipment products
0501	land cargo handling service			2	3	4	3	7	1	6	3	8	9	11	5	18	14	20	21	21	11	11	167	land cargo handling service
1101	telecommunication service					8	10	3	5	3	11	2	7	15	8	6	5	7	18	12	16	11	147	telecommunication service
0112	metal products			13	6	7	11	6	8	9	34	27	21	26	14	12	15	16	37	21	36	10	329	metal products
0804	other commerce			6	4	5	7	9	3	2	12	9	6	10	12	17	10	11	22	26	18	9	198	other commerce
0113	machine products			7		3	2	3	7	1	12	12	4	10	5	6	10	8	21	13	7	9	140	machine products
0114	electrical equipment products			6	3	3	11	4	7	2	3	6	9	9	2	3	3	5	11	8	8	8	111	electrical equipment products
0602	forestry			9	6	4	6	4	4	2	6	7	9	8	9	7	14	7	5	7	7	7	128	forestry
1201	education/research service			2	4	2	1	8	6	2	3	6	3	1	3	7	6	5	13	5	10	7	94	education/research service
1401	hotel			10	17	2	12	17	2	6	6	8	4	10	6	11	12	5	16	10	6	6	166	hotel
0402	road passenger transport service			14	4	3	2	5	6		6	6	6	7	6	3	6	5	9	9	7	6	110	road passenger transport service
0106	pulp/paper processing products			2	1	3	4	1	2	8	2	4	4	3	5	3	4	9	6	10	6	6	77	pulp/paper processing products

0701	livestock			1				5	4	4	4		5	5	5	7	3	1	3	2	10	3	5	5	72	livestock
0110	steel making			4		3		6	12	4	8	5	13	10	3	7	9	4	10	10	12	8	10	4	142	steel making
0901	financial business			4		2		2	1		1		2	3	2	4	2	1		2	7		1	4	38	financial business
0116	electric/gas/water service			1					1	1	1	1	2	1		1	2	1	4	2	2	2	3	4	29	electric/gas/water service
1701	dispatch service			1		1			1			1	1	4	2	1	1				3	1	4	4	25	dispatch service
0109	sand and stone products			9		8		5	4	9	6	1	15	6	7	7	14	7	5	9	12	13	19	3	159	sand and stone products
1301	medical treatment service			11		6			9	2	3	5	6	8	9	9	4		2	5	4	6	5	3	97	medical treatment service
0104	wood products			5		1		1	4	3	1	1	8	6	5	4	7	3	6	5	8	4	10	3	85	wood products
0502	harbor transportation service			1		2		1		1	2		6	3	3		3	2	8	4	5	2	2	3	48	harbor transportation service
0102	textile products			3		2		1	1	1	2		2	1		1	4	1	1	1	3	3	1	3	31	textile products
0111	nonferrous metal making			3		2		2	5	4	3	5	4		6	7	4	5	2	4	9	5	1	2	73	nonferrous metal making
0803	haircut/beauty salon								1		1	1	1	1	2	1					1			2	11	haircut/beauty salon
0401	railroad/water transportation/airline service			2					2	2			1	1	1	2	1	3	3	6	7	4	6	1	42	railroad/water transportation/airline service
0202	quarrying			2		3		1					1	1		1		1			1		3	1	15	quarrying
0902	advertisement and mediator			1								1		1	1	3	1	1		1	2	1		1	14	advertisement and mediator
1601	public office					2			1					1		1				2	1		1	1	10	public office
0103	fiber products			1				1		1					2	1				1		1		1	9	fiber products
1001	movie/play service			1							1							1		1		1		1	6	movie/play service
0702	fishery			3				3	4	4	2		10	5	4	2	2	2	6	3	4	7	4		65	fishery
0105	furniture					1		2	1		2			2		3	1	1	2	1	7	3	1		27	furniture

0107	printing/bookbinding			2										2	2		1		1		1				3	5	3			20	printing/bookbinding
1303	other health and hygiene service					2		1						1	1	1		5	1						1	1				14	other health and hygiene service
0404	other transportation service					1														1	2	1							5	other transportation service	
0203	other mining					1														1									2	other mining	
0201	coal mining																													coal mining	
	total			652		391		382	516	480	485	300	834	662	709	819	748	656	666	733	1,483	1,087	1,194	847	13,644				total		

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 715 high/cold temperature environment 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
170201	security service			15		9		16	20	15	17	7	49	19	29	63	26	43	33	42	117	79	89	70	758	security service
040301	general truck transportation service			42		29		30	36	27	45	20	79	53	47	69	59	70	47	79	170	100	128	69	1,199	general truck transportation service
140201	general restaurant			61		41		33	35	36	33	36	38	47	62	41	71	47	28	42	58	68	67	61	905	general restaurant
080209	other retails			28		6		9	17	16	24	18	28	40	40	49	39	27	38	33	76	65	62	53	668	other retails
030209	other building construction work			15		12		8	17	16	15	5	24	29	23	27	20	12	23	23	38	34	33	39	413	other building construction work
010109	other foods			30		34		28	20	29	29	15	24	27	40	32	45	36	43	30	48	38	39	37	624	other foods
130201	social welfare facility			5		7		8	9	7	13	9	12	20	24	15	15	18	14	21	35	21	30	30	313	social welfare facility
170209	others			14		12		17	18	14	11	9	16	17	16	22	25	23	18	16	44	38	46	29	405	others
150101	building maintenance service			13		3		10	7	7	6	9	16	19	7	15	12	10	22	19	34	29	30	21	289	building maintenance service
030309	other construction works			8		7		7	5	16	5	3	18	8	12	14	19	14	11	13	20	18	21	21	240	other construction works
030201	steel frame/reinforced concrete house construction work			30		23		22	30	33	28	13	36	32	32	36	46	31	25	33	50	23	46	19	588	steel frame/reinforced concrete house construction work

030199	other civil engineering work			23		12		15	18	13	15	1	31	21	26	32	19	15	18	25	37	27	35	15	398	other civil engineering work
030202	wooden house construction work			12		11		7	20	6	7	7	29	18	26	16	18	17	18	11	25	20	28	14	310	wooden house construction work
060101	agriculture			2		1		3	1	5	3	4	17	9	10	10	13	14	11	22	36	19	16	14	210	agriculture
030106	road construction work			16		7		5	11	5	12	3	15	6	9	13	10	13	14	7	18	13	18	14	209	road construction work
080109	other wholesale			8		4		4	4	6	6	5	6	8	11	11	9	9	12	14	27	24	14	12	194	other wholesale
010104	bread/cake products			4		2		3	6	8	9	8	6	5	8	12	7	10	7	7	14	9	16	12	153	bread/cake products
140301	golf course			5		2		4	4	13	10	4	12	8	9	9	16	9	8	7	34	16	24	11	205	golf course
050101	land cargo handling service			2		3			4	3	7	1	6	3	8	9	11	5	18	14	20	21	21	11	167	land cargo handling service
110101	telecommunication service							8	10	3	5	3	11	2	7	15	8	6	5	7	18	12	16	11	147	telecommunication service
010102	fishery products			9		6		3	6	2	2	3	9	3	3	3	8	4	5	6	7	13	9	10	111	fishery products
080201	all kinds of retail			33		13		10	10	12	12	11	11	10	10	8	4	7	7	4	18	8	3	9	200	all kinds of retail
011502	auto mobile products			7		2		6	5	5	4		18	3	15	9	7	3	12	14	25	11	21	9	176	auto mobile products
150103	other waste disposal service			5				2	5	5	6	2	6	7	8	5	4	7	7	3	16	11	14	9	122	other waste disposal service
010101	meat/dairy products			3		4		5	5	4	4	5	8	4	4	6	7	6	4	9	12	5	11	9	115	meat/dairy products
011209	other metal products			11		5		5	9	3	7	8	27	24	19	23	13	10	12	15	31	17	32	8	279	other metal products
030301	electricity/telecommunication work			3		1		2	2	6	5	1	13	8	2	5	6	6	5	4	16	7	9	8	109	electricity/telecommunication work
011301	machine products			6				3	2	3	5	1	10	10	4	10	5	6	7	6	20	13	6	7	124	machine products
150109	other cleaning and livestock process service			6		5		3	1	2	2	3	10	4	6	5	1	4	6	5	18	12	13	7	113	other cleaning and livestock process service
140209	other restaurants			11		2		7	8	2	3	1	4	5	3	3	4	9	2	4	5	8	4	7	92	other restaurants
120109	other education/research service			2		3		2	1	8	6	2	3	5	3	1	3	7	6	4	12	4	10	7	89	other education/research service
080204	fuel retail			4		3		2	3	2	3	2	3	3	4	4	2	3		1	6	4	4	7	60	fuel retail
010801	non organic or organic chemical products			1				1	5	3		1	3	3	1	2	2	1	3	3	3	7	5	7	51	non organic or organic chemical products

080202	auto mobile retail			1				1	1		1		2	2	3			1	4	2	3	3	4	7	35	auto mobile retail
080205	newspaper retail			28		10		6	13	4	13	4	7	13	9	12	10	6	2	6	13	10	5	6	177	newspaper retail
140101	hotel			10		17		2	12	17	2	6	6	8	4	10	6	11	12	5	16	10	6	6	166	hotel
080409	other commerce			3		4		1	3	6	1	2	6	7	4	3	7	11	5	6	15	12	13	6	115	other commerce
011709	other manufacturing			5		3		1	1	4		1	5		5	5	6	5	5	3	17	11	5	6	88	other manufacturing
030203	building facility construction work			9		5		2	2	4	1	1	3	5	4	12	6	3	2	5	13	8	6	5	96	building facility construction work
060209	other forestry			7		5		3	5	3	2		4	6	5	4	4	4	6	7	3	2	2	5	77	other forestry
070101	livestock			1				5	4	4	4		5	5	5	7	3	1	3	2	10	3	5	5	72	livestock
010805	plastics products			1		1		2	3		3	1	6	3	1	2	6	2	4	8	7	6	4	5	65	plastics products
150102	industrial waste management service			8		3		1	3	1	3	3	12	5	9	10	8	4	8	7	25	12	8	4	134	industrial waste management service
030109	land consolidation civil engineering work			4		1		6	5	4	6		3	2	3	9	5	4	1	3	4	8	9	4	81	land consolidation civil engineering work
030110	water supply/sewage construction work			3				3	3	3	2	1	8	2	4	4	4	1	3	2	5	3	7	4	62	water supply/sewage construction work
011409	other electrical equipment			2		1		2	5	1	3		1	3	6	2	1	1	1	2	7	6	5	4	53	other electrical equipment
030107	river civil engineering work			3		1			2	3			3	4	1	1	1	2		2	6	4	2	4	39	river civil engineering work
170101	dispatch service			1		1			1			1	1	4	2	1	1				3	1	4	4	25	dispatch service
030302	machinery/apparatus setting work			4		3		1	5	6	2	6	3	4	4	4	6	3	5	4	13	5	8	3	89	machinery/apparatus setting work
140309	other amusement service			5		3		3	1	6		2	4	5	5	5	4	7	2	6	8	8	9	3	86	other amusement service
080401	warehousing			3				4	4	3	2		6	2	2	7	5	6	5	5	7	14	5	3	83	warehousing
011501	ship building			2		3		3	6	1	4	4	4	3	3	3	1	3	5	5	3	5	11	3	72	ship building
040202	bus service			3		3		1	2	1	3		4	4	3	5	3	3	5	2	4	7	6	3	62	bus service
010602	paper processing products			1		1			1	2	1	1	6	1	3	2		3	1	4	5	4	6	3	45	paper processing products
040201	taxi service			10		1		2		3	3		1	2	1	2	3		1	3	4	2	1	3	42	taxi service

011703	cleaning			3		2			3	4	4	2	8	2	1	5	7	7	3	4	11	12	9	1	88	cleaning	
010901	cement products			4		3		2	3	6	1	1	8	3	4	5	7	1	2	5	7	6	8	1	77	cement products	
011002	casting products			1		1		3	9	2	3	3	5	2	2	4	3	1	4	2	4	4	4	1	58	casting products	
010909	other sand and stone products			2		3		1	1	1	1		4	2	1	2	6	3	2	2	3	3	7	1	45	other sand and stone products	
140302	park and amusement park					1		1	1		1			3	2	5	2	2	9	1	6	5	2	1	42	park and amusement park	
011009	other steel products			1		1		1	1	2	1		5	3		1	3	2	2	4	2		2	1	32	other steel products	
030105	bridge construction work			1		2				2	2	2	6	1	2	2	2	2		2	2	1	1	1	31	bridge construction work	
040101	railroad service			1					1	2			1		1	2	1	1	2	3	6	2	5	1	29	railroad service	
011101	nonferrous metals/rolling products			1		1		2	3	1	1	2			1	5	2	1		3	3		1	1	28	nonferrous metals/rolling products	
011109	other nonferrous metal products					1			2	1	2	1	3		5		2	2	1		1	2		1	24	other nonferrous metal products	
090103	insurance business			4		1		1			1		1	3		2	1	1		2	5			1	23	insurance business	
080101	all kinds of wholesale			4				1	2	1			1		1	1	1				1	1	2	1	17	all kinds of wholesale	
010803	pharmaceuticals			1					2					4	2	1	1		1	1	1	1		1	16	pharmaceuticals	
010402	plywood			1					1					4		2		1		2		1		2	1	15	plywood
011601	electric utility service												1	1		1	1	1	2	1	1	1	3	1	14	electric utility service	
010601	pulp/paper								1			1	1		1		1		1		2	2	2	1	13	pulp/paper	
011402	electrical appliance			2					1		2		1	1	1	1	1		1			1		1	13	electrical appliance	
030108	sand collapse prevention civil engineering work			1					1	1			1		1	3				1	1		1	1	13	sand collapse prevention civil engineering work	
030111	port/seaside construction work			1				1		2				1		3					2		1	1	12	port/seaside construction work	
130102	general clinic			3					2		2				1	1			1		1			1	12	general clinic	
020201	quarrying			1		2		1					1	1		1					1		2	1	11	quarrying	
050201	general harbor transportation			1		1		1					2	1			1		2	1				1	11	general harbor transportation	

010902	glass products			2		1		2			2			1	1		1	1	1	1		1	2		16	glass products
010701	printing service			2							1	2				1		1		3	3	2			15	printing service
011203	metal press products			1				1	2	1				2	1			1	2	1	2				14	metal press products
010105	alcoholic drinks			1						1			1	1	1		1	4	2						13	alcoholic drinks
010501	wood furniture					1				2				1			2	1	3	2					12	wood furniture
030102	tunnel construction work							1	1	1		2		3	1			1		1	1				12	tunnel construction work
070209	other fishery							1		1		2	1	2					1	1	2	1			12	other fishery
010903	pottery products									1	2						1		1		2	2			9	pottery products
040103	airline service												1				2	1	3		2				9	airline service
130109	other medical treatment service			2		1				1			1	1	1					1	1				9	other medical treatment service
011401	heavy electrical equipment									1	1	1	1		2					1		1			8	heavy electrical equipment
011503	railway vehicle products											1							1	2	1	3			8	railway vehicle products
130301	bathroom					1					1	1			3					1	1				8	bathroom
010509	other furniture							1					1	2	1					2					7	other furniture
010905	other ceramic products			1		1						2		1						1	1				7	other ceramic products
011602	city gas service							1		1	1					1		1	1		1				7	city gas service
040303	cargo/ light automobile transportation service											1				1	1	1	1	1		1			7	cargo/ light automobile transportation service
040209	other passenger transport service			1						1		1		2						1					6	other passenger transport service
050209	other harbor transportation service																	2	1	3					6	other harbor transportation service
130309	other health and hygiene service					1		1						1	2	1									6	other health and hygiene service
010209	other textile products							1	1							1	1		1						5	other textile products
010503	fittings							1	1				1							1		1			5	fittings

011202	screw products			1							1	1						1	1		5	screw products
040409	other transportation service				1										1	2	1				5	other transportation service
010202	cotton-spinning			1													1	2			4	cotton-spinning
010301	over/under wear			1			1					1	1								4	over/under wear
010802	chemical fiber												1			2		1			4	chemical fiber
010807	leather products						1						1				1	1			4	leather products
020202	gravel digging			1		1									1					1	4	gravel digging
040102	water transportation service			1													1		1		4	water transportation service
090201	traveling service												1	1	1	1					4	traveling service
120101	auto mobile practical training					1										1	1	1			4	auto mobile practical training
010502	metal furniture														1		1	1			3	metal furniture
010709	other printing and bookbinding												1						1	1	3	other printing and bookbinding
100101	movie production and delivery service														1		1		1		3	movie production and delivery service
010702	bookbinding											1							1		2	bookbinding
150104	cremation service																		1		2	cremation service
010201	silk-reeling			1																	1	silk-reeling
010203	weaving															1					1	weaving
011201	western tableware/cutting tool products																				1	western tableware/cutting tool products
011303	optical instruments												1								1	optical instruments
011304	watch products																				1	watch products
020301	metal mining			1																	1	metal mining
020309	other mining															1					1	other mining
080102	furniture/fittings wholesale																			1	1	furniture/fittings wholesale
120102	software service																				1	software service

