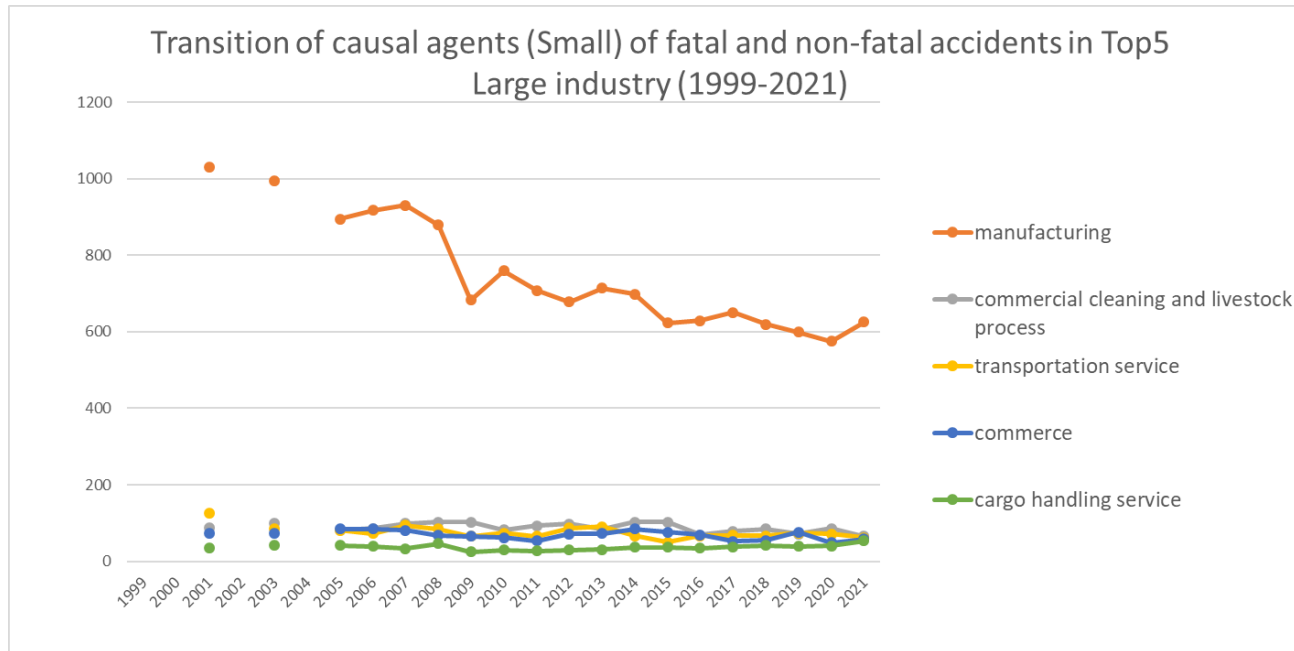
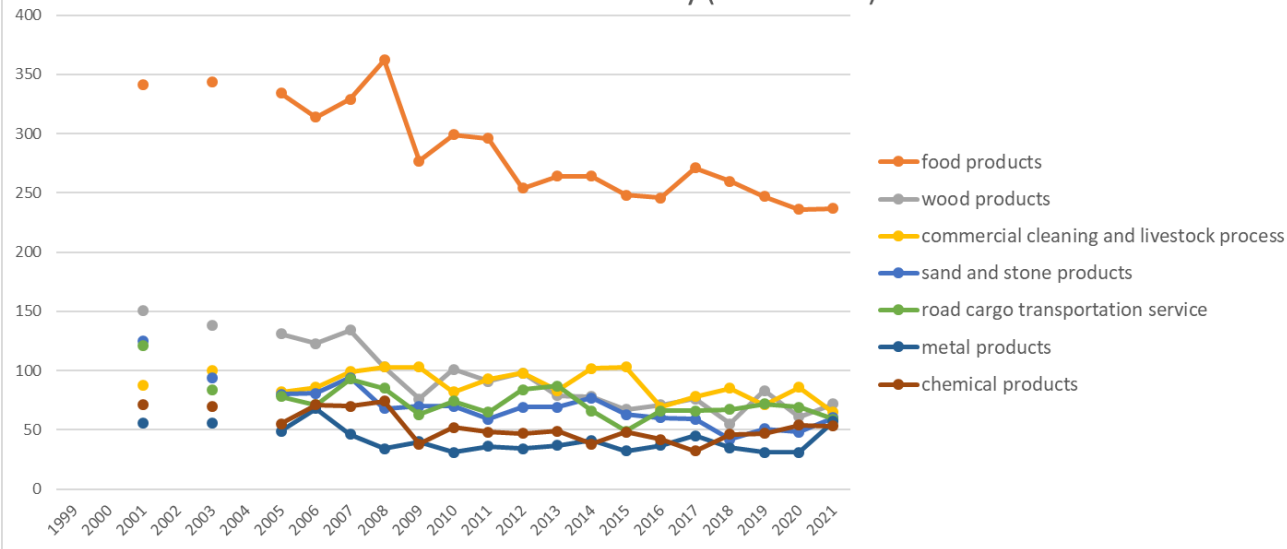


Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 224 conveyor (1999-2021)



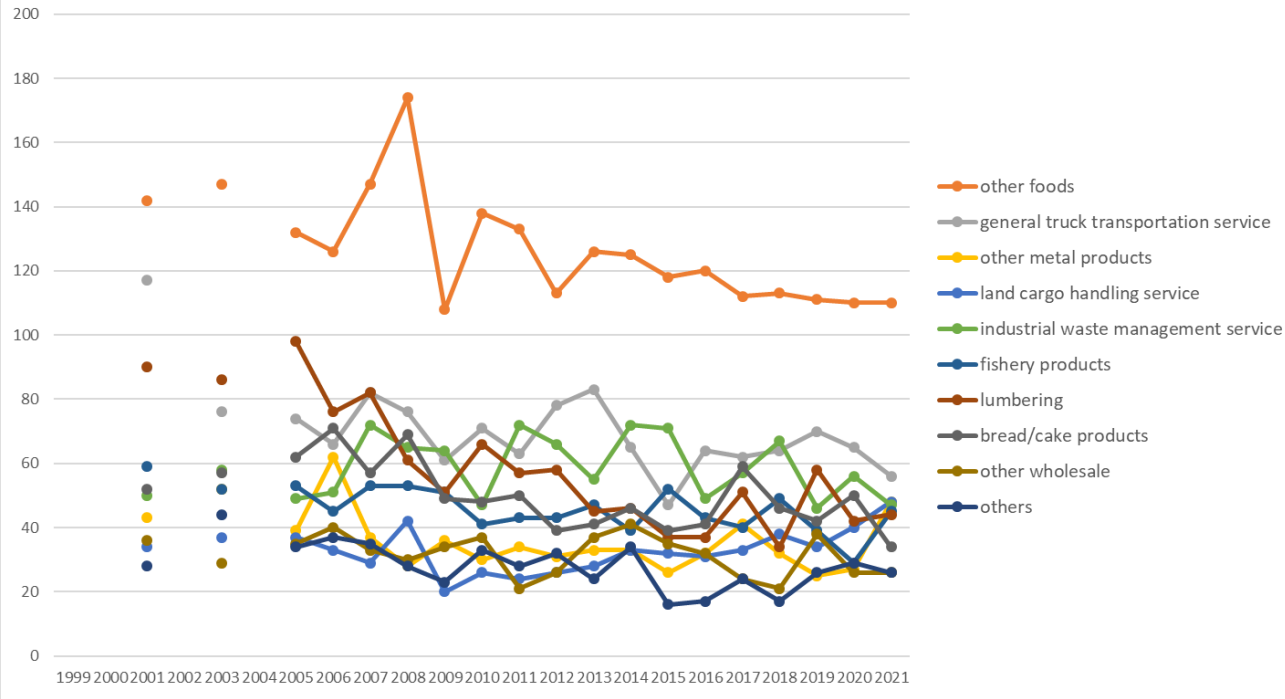
Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 224 conveyor in Large industry (1999-2021)

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. 224 conveyor 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. 224 conveyor in Small Industry (1999-2021)

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 224 conveyor 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			1,030		995		895	918	931	879	683	760	708	678	714	699	623	629	651	620	599	575	625	14,212	manufacturing
15	commercial cleaning and livestock process			88		100		82	86	99	103	103	82	93	98	83	102	103	69	78	85	71	86	65	1,676	commercial cleaning and livestock process
04	transportation service			125		85		81	73	94	85	65	74	65	87	90	66	50	66	68	67	74	71	62	1,448	transportation service
08	commerce			74		74		85	85	81	68	65	62	53	71	73	85	76	69	52	55	76	49	58	1,311	commerce
05	cargo handling service			36		43		42	39	33	46	25	30	27	30	31	37	37	34	38	42	39	40	53	702	cargo handling service
17	others			30		51		41	42	40	30	25	34	32	34	27	35	20	19	25	17	27	32	26	587	others
07	livestock/fishery			35		25		20	29	22	24	14	33	28	23	33	29	20	20	23	20	12	20	22	452	livestock/fishery
03	construction			45		48		40	36	25	32	18	16	30	24	15	16	14	25	22	29	17	25	20	497	construction

02	mining			46		55		54	44	41	32	34	25	22	35	36	36	21	24	30	25	23	20	17	620	mining
06	agriculture			15		11		9	17	10	13	17	9	12	7	13	13	21	15	11	10	16	14	16	249	agriculture
14	hotel/restaurant/amusement service			13		14		11	7	9	14	12	9	15	9	6	6	7	6	9	11	4	3	7	172	hotel/restaurant/amusement service
11	telecommunication service							7	5	9	10	6	12	5	4	2	4	3	3	8	4	1	4	2	89	telecommunication service
13	health and hygiene service			3		1		5	3	4	1	3	2	1	3	2	2	2		3	2	5	1	2	45	health and hygiene service
12	education/research service			9		1		3	3	2		1	4		1	2		1	1	1		2	1	1	33	education/research service
09	financial business/advertisement			4					2		2						1				1	1			12	financial business/advertisement
16	public office			1		1		1	1					1					1						6	public office
10	movie/play service																									movie/play service
	total			1,554		1,504		1,376	1,390	1,400	1,339	1,071	1,153	1,092	1,104	1,127	1,131	998	981	1,019	988	967	941	976	22,111	total

Transition of causal agents (Small) of fatal and non-fatal accidents as code no. 224 conveyor 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
0101	food products			341		344		334	314	329	362	277	299	296	254	264	264	248	246	271	260	247	236	237	5,423	food products
0104	wood products			151		138		131	123	134	103	76	101	91	98	79	78	67	71	76	55	83	61	72	1,788	wood products
1501	commercial cleaning and livestock process			88		100		82	86	99	103	103	82	93	98	83	102	103	69	78	85	71	86	65	1,676	commercial cleaning and livestock process
0109	sand and stone products			125		94		80	81	94	68	70	70	59	69	69	77	63	60	59	42	51	48	60	1,339	sand and stone products
0403	road cargo transportation service			121		84		78	71	93	85	63	74	65	84	87	66	49	66	66	67	72	69	59	1,419	road cargo transportation service
0112	metal products			56		56		49	68	46	34	40	31	36	34	37	41	32	37	45	35	31	31	57	796	metal products
0108	chemical products			71		70		55	71	70	74	38	52	48	47	49	38	48	42	32	46	47	54	53	1,005	chemical products
0501	land cargo handling service			34		37		37	33	29	42	20	26	24	26	28	33	32	31	33	38	34	40	48	625	land cargo handling service

0801	wholesale			39		34		43	46	40	32	37	38	24	29	40	42	38	33	25	24	39	26	27	656	wholesale
1702	others			29		45		36	40	35	29	23	33	30	32	24	35	18	18	25	17	26	29	26	550	others
0117	other manufacturing			66		62		58	58	64	53	35	54	40	50	54	53	51	52	49	58	40	31	25	953	other manufacturing
0106	pulp/paper processing products			57		52		40	43	37	43	40	36	29	25	35	29	15	35	25	23	26	25	25	640	pulp/paper processing products
0115	transport equipment products			32		41		28	43	44	29	13	20	26	22	25	27	22	12	23	35	26	24	23	515	transport equipment products
0701	livestock			26		23		16	25	19	22	11	31	25	21	29	28	19	19	21	16	12	17	21	401	livestock
0802	retail			21		25		30	25	23	18	17	8	18	22	15	22	16	19	16	18	15	12	19	359	retail
0113	machine products			31		29		26	24	29	26	24	25	14	20	13	19	12	13	11	16	10	11	18	371	machine products
0110	steel making			34		31		43	44	32	44	25	37	37	33	33	32	26	27	24	20	17	21	17	577	steel making
0202	quarrying			43		53		51	42	39	28	33	25	21	33	30	35	21	24	30	25	22	20	15	590	quarrying
0601	agriculture			13		11		8	17	9	12	16	9	11	7	11	11	19	12	10	8	15	13	15	227	agriculture
0804	other commerce			14		15		12	14	18	18	11	16	11	20	18	21	22	17	11	13	22	11	12	296	other commerce
0114	electrical equipment products			24		22		15	16	13	13	5	8	6	4	13	6	7	8	7	7	7	13	11	205	electrical equipment products
0111	nonferrous metal making			12		16		10	8	7	6	11	13	9	6	19	10	9	6	11	5	7	7	11	183	nonferrous metal making
0303	other construction works			11		13		19	14	12	12	5	5	15	9	7	5	9	10	9	13	8	13	10	199	other construction works
0301	civil engineering work			13		20		14	10	8	12	7	5	7	10	7	7	4	9	8	14	7	9	6	177	civil engineering work
0107	printing/bookbinding			9		16		11	14	6	12	6	2	8	4	4	6	10	4	9	8	1	5	6	141	printing/bookbinding
0502	harbor transportation service			2		6		5	6	4	4	5	4	3	4	3	4	5	3	5	4	5		5	77	harbor transportation service
0302	construction work			21		15		7	12	5	8	6	6	8	5	1	4	1	6	5	2	2	3	4	121	construction work
1403	other amusement service			8		6		5	4	3	9	9	7	4	4		2	4	2	6	3	3	2	4	85	other amusement service
0116	electric/gas/water service			1		2		1		2	3	4	3	4	2	1	1	1	2	2	3	1		4	37	electric/gas/water

																								service		
0105	furniture			10		5		6	4	13	3	8	5	2	1	5	4	7	6	1	3	3	3	92	furniture	
1402	restaurant			5		6		6	3	6	5	3	2	10	5	6	4	2	4	3	8	1	1	3	83	restaurant
1101	telecommunication service							7	5	9	10	6	12	5	4	2	4	3	3	8	4	1	4	2	89	telecommunication service
0103	fiber products			3		3			4	5	1	4	2	1	2	6	2	2	2	4		1	2	2	46	fiber products
0203	other mining			2		1		2	1	2	4			1	1	4						1		2	21	other mining
0401	railroad/water transportation/airline service			2				2	2	1		1			3	2		1		2		1		2	19	railroad/water transportation/airline service
1302	social welfare facility			2					1	1	1	2	1					1		2	1	3	1	2	18	social welfare facility
0102	textile products			7		14		8	3	6	5	7	2	2	7	8	12	3	6	2	4	1	3	1	101	textile products
0702	fishery			9		2		4	4	3	2	3	2	3	2	4	1	1	1	2	4		3	1	51	fishery
1201	education/research service			9		1		3	3	2		1	4		1	2		1	1	1		2	1	1	33	education/research service
0602	forestry			2				1		1	1	1		1		2	2	2	3	1	2	1	1	1	22	forestry
0404	other transportation service			1		1		1															2	1	6	other transportation service
1701	dispatch service			1		6		5	2	5	1	2	1	2	2	3		2	1			1	3		37	dispatch service
1301	medical treatment service			1		1		5	2	3		1		1	3	1	2	1		1		2			24	medical treatment service
0201	coal mining			1		1		1	1			1			1	2	1								9	coal mining
0901	financial business			2					1					1								1	1		6	financial business
0902	advertisement and mediator			2					1		2						1								6	advertisement and mediator
1601	public office			1		1		1	1					1					1						6	public office
0402	road passenger transport service			1								1				1						1			4	road passenger transport service



	products																									products
010409	other lumber and wood products			41		34		20	30	29	26	15	20	23	27	23	26	21	21	14	20	15	9	18	432	other lumber and wood products
010602	paper processing products			33		28		19	21	20	23	23	18	15	15	26	19	6	20	18	13	19	19	18	373	paper processing products
080209	other retails			15		19		24	21	18	15	11	7	13	21	15	19	13	17	15	17	12	11	17	300	other retails
060101	agriculture			13		11		8	17	9	12	16	9	11	7	11	11	19	12	10	8	15	13	15	227	agriculture
011703	cleaning			22		18		15	19	23	21	12	20	18	18	16	17	19	14	18	13	13	6	13	315	cleaning
011709	other manufacturing			42		39		35	35	40	28	22	30	19	28	32	32	32	35	28	40	25	22	12	576	other manufacturing
080401	warehousing			9		9		4	9	14	15	8	13	9	12	14	16	16	13	9	10	19	7	12	218	warehousing
010103	agricultural food products			34		29		31	19	25	21	29	29	27	22	15	19	15	15	20	24	15	14	11	414	agricultural food products
011301	machine products			27		24		22	17	25	21	22	22	13	18	10	17	10	11	11	14	9	11	11	315	machine products
150103	other waste disposal service			15		19		18	17	17	26	19	19	13	17	18	17	18	11	11	5	20	15	11	306	other waste disposal service
011002	casting products			17		17		25	27	20	29	10	19	27	19	22	21	16	19	10	10	11	12	10	341	casting products
010402	plywood			20		18		13	17	23	16	10	15	11	13	11	6	9	13	11	1	10	10	10	237	plywood
020201	quarrying			25		26		32	16	24	13	21	15	9	19	19	18	11	18	22	13	14	15	9	339	quarrying
010106	soft drinks			13		9		11	12	6	5	8	4	8	4	7	9	2	9	13	7	7	6	8	148	soft drinks
010806	rubber products			7		12		7	9	9	13	4	5	5	5	8	1	7	4	1	5	10	6	8	126	rubber products
010902	glass products			14		8		4	9	6	3	3	1	7	1	5	4	3	5	1	4	6	2	7	93	glass products
030309	other construction works			2		6		8	6	3	6	3	2	9		4	3	2	5	4	2	3	4	7	79	other construction works
011305	other precision machine products			3		5		3	5	4	4	1		1	2	3	1	1	2		2	1		7	45	other precision machine products
010899	other chemical products			22		10		9	11	12	11	4	7	15	4	3	10	10	9	10	9	7	8	6	177	other chemical products
010801	non organic or organic chemical products			10		13		6	9	12	10	5	2	5	11	7	6	5	4	2	6	5	7	6	131	non organic or organic chemical products
010903	pottery products			17		7		5	6	11	13	6	8	6	6	6	6	4	5	8	2	6	2	6	130	pottery products
010601	pulp/paper			10		6		5	13	9	12	8	9	5	6	7	4	4	9	5	4	2	3	6	127	pulp/paper
011009	other steel products			7		5		8	9	5	2	5	10	3	5	6	5	5	2	10	3	3	7	6	106	other steel products
	nonferrous metals/rolling																									nonferrous metals/rolling



011101	products			2		8		3	5	2	3	5	6	4	3	9	9	6	1	4	2	1	2	6	81	products
020202	gravel digging			15		20		12	17	13	12	10	7	9	11	10	14	8	3	6	8	7	5	5	192	gravel digging
010905	other ceramic products			7		8		6	5	8	7	3	4	4	3	6	4	5	3	4	8	1	2	5	93	other ceramic products
010701	printing service			5		8		6	7	4	4	4	1	5	3	3	3	7	3	4	5	1	4	5	82	printing service
050202	port cargo handling service			1		5		5	3	2	4	4	4	3	4	3	4	4	3	5	3	3		5	65	port cargo handling service
011203	metal press products			6		2		5	3	3	3	2	1	1	2		2	2	2	3	2	4	3	5	51	metal press products
150109	other cleaning and livestock process service			13		15		14	12	8	7	14	9	5	10	7	8	8	5	4	7	2	6	4	158	other cleaning and livestock process service
010105	alcoholic drinks			16		10		9	12	10	9	5	7	11	8	2	3	6	3	4	6	7	1	4	133	alcoholic drinks
010804	petroleum/coal products			5		3		3	11	3	5	5	7	3	1	3	3	1	1	4	5	2	5	4	74	petroleum/coal products
011403	electronics equipment and telecommunications apparatus			8		5		5	2	4	1	1	1	1	1	4	1	1	1	1	2		2	4	45	electronics equipment and telecommunications apparatus
030302	machinery/apparatus setting work			9		6		10	8	9	6	2	3	6	8	3	2	7	5	5	11	5	9	3	117	machinery/apparatus setting work
011409	other electrical equipment			11		13		4	11	8	6	3	5	2	2	7	2	4	5	3	2	6	8	3	105	other electrical equipment
010809	chemical fertilizer products			6		8		6	4	4	6	7	6	4	6	4	3	5	8	6	3	5	5	3	99	chemical fertilizer products
150101	building maintenance service			8		7		1	6	1	3	6	6	1	3	1	5	6	3	5	5	2	8	3	80	building maintenance service
010803	pharmaceuticals			2		3		4	7	7	4	2	3	3	3	6	3	4	3		2	3	3	3	65	pharmaceuticals
011509	other transport equipment products			6		5		3	4	9	4	1	1	1	5	3	4	1	1	4	3	1	2	3	61	other transport equipment products
140201	general restaurant			4		4		2	1	5	3	2	1	8	2	4	4		3	3	8		1	3	58	general restaurant
011102	nonferrous metals casting products			6		5		3	1	1	2	4	4	1	1	7		1	2	3	2	4	1	3	51	nonferrous metals casting products
011402	electrical appliance			5		2		4	2	1	4	1	2	2		2	2	2		2	3	1		3	38	electrical appliance
040309	other land cargo transportation service			1		2		2	1	5	3	1	1	1	1	1	1		2	2	1	1	2	3	31	other land cargo transportation service
140301	golf course			2				2	1	2	2	1	3	1				2	1	2				3	22	golf course

030199	other civil engineering work			9		10		5	6	6	11	4	3	3	4	5	4	2	4	2	8	3	4	2	95	other civil engineering work	
110101	telecommunication service							7	5	9	10	6	12	5	4	2	4	3	3	8	4	1	4	2	89	telecommunication service	
030209	other building construction work			10		8		4	7	1	5	5	4	3	2	1	1	1	4	2	2	1	3	2	66	other building construction work	
011109	other nonferrous metal products			4		3		4	2	4	1	2	3	4	2	3	1	2	3	4	1	2	4	2	51	other nonferrous metal products	
010501	wood furniture			6		2		2		4	1	7	1	1		4	1	4	5	1	1	3	1	2	46	wood furniture	
011204	metal plating products			5		2		2	2	5	2	1		1	1	4	4	1	3	1		1	1	2	38	metal plating products	
010309	other fiber products			1		2			3	3	1	2	1	1	1	4	2	2	2	4		1	2	2	34	other fiber products	
080201	all kinds of retail			6		5		4		2	2	4	1	3	1			2	2					2	34	all kinds of retail	
030106	road construction work					2		2	1		1	1		2	3	1	2	2	2	2	2	2	1	1	2	27	road construction work
130201	social welfare facility			2					1	1	1	2	1					1		2	1	3	1	2	18	social welfare facility	
020309	other mining			2				2	1	2	2			1	1	4								2	17	other mining	
011202	screw products			1				1	1		1	1					1	3				1		2	12	screw products	
040103	airline service			2					1	1		1			1	2				1		1		2	12	airline service	
011603	city water service									1	1	2	2						1					2	9	city water service	
010609	other pulp/paper processing products			14		18		16	9	8	8	9	9	9	4	2	6	5	6	2	6	5	3	1	140	other pulp/paper processing products	
011001	steel/iron/rolling products			10		9		10	8	7	13	10	8	7	9	5	6	5	6	4	7	3	2	1	130	steel/iron/rolling products	
010209	other textile products			3		10		5	1	3	2	4	2	1	4	8	6	3	3	2	3	1	2	1	64	other textile products	
020209	other quarrying			3		7		7	9	2	3	2	3	3	3	1	3	2	3	2	4	1		1	59	other quarrying	
140309	other amusement service			6		5		3	2	1	7	8	3	3	4		1	2	1	3	2	2	2	1	56	other amusement service	
080101	all kinds of wholesale			3		4		8	6	6	2	2	1	2	3	2	1	2	1	1	2	1		1	48	all kinds of wholesale	
010702	bookbinding			4		5		4	5	1	6	2	1	2		1		3	1	3	2		1	1	42	bookbinding	
010904	fire resisting products			2		2		2	2		1	2	2	2	4	2	6	4	2	3	2		1	1	40	fire resisting products	
070209	other fishery			4		1		3	3	2	2	1	2	1	1	1	1	1	1	2	4		2	1	33	other fishery	
120109	other education/research service			9		1		3	3	2		1	4		1	2		1	1	1		2	1	1	33	other education/research service	

030201	steel frame/reinforced concrete house construction work			5		2			4	2	1		1	1	2		1		1	1		1		1	23	steel frame/reinforced concrete house construction work
011601	electric utility service			1						1	2	2		2	1	1		1	1	2	2	1		1	18	electric utility service
011401	heavy electrical equipment					2		2	1		2			1	1		1		2	1			3	1	17	heavy electrical equipment
030203	building facility construction work			1		2		2	1	2			1	3			1			2				1	16	building facility construction work
010802	chemical fiber			1		1		1		1	1	1		3	1	1	1			1				1	14	chemical fiber
030109	land consolidation civil engineering work			1		2			1	1		1		1					2		2	1	1		14	land consolidation civil engineering work
060201	lumbering			1						1				1		1	2	1	2	1	1	1		1	13	lumbering
010503	fittings			2				1		2			1											1	7	fittings
030107	river civil engineering work			1				1					1		2								1	1	7	river civil engineering work
040409	other transportation service			1		1		1															2	1	6	other transportation service
011602	city gas service					1							1	2										1	5	city gas service
080409	other commerce			5		6		8	5	4	3	3	3	2	8	4	5	6	4	2	3	3	4		78	other commerce
011702	machine repair			2		4		3	3	1	1	1	4	2	4	4	2		3	3	3	1	2		43	machine repair
170101	dispatch service			1		6		5	2	5	1	2	1	2	2	3		2	1			1	3		37	dispatch service
040302	specific truck transportation service			3		3		2	4	5	3	1	1	1	4	2		1		2	2	1	1		36	specific truck transportation service
010509	other furniture			1		1		2	3	4	2	1	2	1	1	1	2	2	1				1		25	other furniture
140209	other restaurants			1		2		4	2	1	2	1	1	2	3	2		2	1			1			25	other restaurants
011501	ship building			1		1		2	4		1	1	1	1	1	1	1		1	1	3	2			22	ship building
130101	hospital			1		1		5	2	2		1		1	2	1	2	1		1		2			22	hospital
070201	fishery			5		1		1	1	1		2		2	1	3							1		18	fishery
150105	livestock process service			2		1				1	2		1	2	2	2			1	1	1	1	1		18	livestock process service
010709	other printing and bookbinding					3		1	2	1	2			1	1		3			2	1				17	other printing and bookbinding

080204	fuel retail				1		1	1	2	1	2		2			1	1		1	1	2	1		17	fuel retail
030202	wooden house construction work			5	3		1			2	1		1	1		1		1						16	wooden house construction work
010203	weaving			1			2		1	2	1		1	1		4				1		1		15	weaving
030102	tunnel construction work				3		4				1	1						2	1	1		2		15	tunnel construction work
010502	metal furniture			1		2		1	1	3			1			1	1			2		1		14	metal furniture
170201	security service			1		1		1	3		1			2		1	2	1	1					14	security service
010202	cotton-spinning			2		2		2	1		2			2		1		1						13	cotton-spinning
010301	over/under wear			2		1			1	2		2	1		1	2								12	over/under wear
040303	cargo/ light automobile transportation service					3			1	3		1		1	1		1					1		12	cargo/ light automobile transportation service
011701	auto mobile servicing						3	1		1					2	1				1		1		10	auto mobile servicing
011704	tobacco products				1		2			2			1			1				1	1			9	tobacco products
060209	other forestry			1			1			1	1				1		1	1		1		1		9	other forestry
010807	leather products			1			2		2			1		1	1									8	leather products
010808	painting products				1		1			1			1			1	1	1			1			8	painting products
011302	measuring instruments						1	2			1	1				1	1							7	measuring instruments
080102	furniture/fittings wholesale				1				1		1		1		1		1			1				7	furniture/fittings wholesale
140302	park and amusement park				1			1				1				1			1	1	1			7	park and amusement park
011201	western tableware/cutting tool products			1			2		1						1					1				6	western tableware/cutting tool products
020109	other coal mining				1			1			1			1	1	1								6	other coal mining
030110	water supply/sewage construction work			1		2		1									1				1			6	water supply/sewage construction work
050201	general harbor transportation service				1				2		1								1	1				6	general harbor transportation service
050209	other harbor transportation service			1				3								1					1			6	other harbor transportation service

160101	public office			1		1		1	1					1							6	public office		
010204	dyeing			1		1			1	1												5	dyeing	
011609	other electric/gas/water service					1		1						1		1						5	other electric/gas/water service	
030108	sand collapse prevention civil engineering work					1		1		1												5	sand collapse prevention civil engineering work	
080202	auto mobile retail							1	1	1						1						5	auto mobile retail	
090209	other advertisement and mediator			2					1	1						1						5	other advertisement and mediator	
010201	silk-reeling					1		1								1						4	silk-reeling	
011303	optical instruments			1						1		2										4	optical instruments	
020301	metal mining					1				2											1	4	metal mining	
040101	railroad service							2	1							1						4	railroad service	
140101	hotel					2							1			1						4	hotel	
011503	railway vehicle products					2						1										3	railway vehicle products	
020101	general coal mining			1				1								1						3	general coal mining	
030101	hydroelectric plant construction work							1									1	1				3	hydroelectric plant construction work	
030111	port/seaside construction work			1					1												1	3	port/seaside construction work	
030301	electricity/telecommunication work					1		1								1						3	electricity/telecommunication work	
040102	water transportation service													2							1	3	water transportation service	
090109	other financial business			1					1												1	3	other financial business	
040202	bus service			1																	1	2	bus service	
040209	other passenger transport service												1									1	2	other passenger transport service
080203	furniture/fittings retail								1							1						2	furniture/fittings retail	



