

## Appendix

Table a. Correspondence of manufacturing sectors

Sector No.	Section description	Sector No.	Section description
1	food, beverages and tobacco	9	rubber and plastics products
2	textiles, wearing apparel and leather	10	non-metallic mineral products
3	cork and wood products (except furniture)	11	basic metals
4	paper and paper products	12	fabricated metal products
5	printing and reproduction of recorder media	13	machinery and equipment
6	coke and refined petroleum products	14	transport and related equipment
7	chemicals and chemical products	15	electronic and optical products
8	medicinal and pharmaceutical products	16	furniture

Table b. The volume of industrial wastewater discharge in China's manufacturing by sector

(unit: million tons)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	2080	1964	2574	2794	2695	2758	2638	2898	2381	2674	2636
2	1998	2320	2632	2717	2788	2857	2865	2808	2409	2366	2275
3	66	52	48	47	61	50	35	48	30	53	54
4	3674	3744	4246	4077	3926	3937	3823	3427	4007	2755	2367
5	16	12	20	17	18	16	13	14	11	16	19
6	681	703	731	705	664	700	796	875	760	840	848
7	3876	3855	3730	3500	3409	3514	3298	3097	4447	2945	2942
8	401	430	429	480	527	526	486	572	474	557	533
9	84	94	106	113	112	120	122	128	165	123	126
10	482	431	403	358	328	323	261	294	826	283	284
11	2037	1895	1887	1743	1550	1481	1546	1350	22845	1167	1233
12	211	224	333	283	313	302	299	336	566	334	336
13	351	323	303	347	338	344	281	274	242	283	286
14	247	257	220	285	274	262	284	288	247	293	295
15	260	318	368	376	393	409	472	506	550	544	613
16	8	9	18	18	19	21	7	6	5	9	9

Table c. The volume of industrial waste gas emissions in China's manufacturing by industry

(unit: billion cu.m.)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	447	603	714	728	951	1103	1058	924	1015	1082	1024
2	366	430	400	406	401	361	539	370	340	350	344
3	90	88	206	120	149	157	326	271	281	320	569
4	412	540	641	532	611	770	1709	615	672	670	666
5	7	5	7	10	14	11	25	25	25	25	34
6	913	1023	1219	1423	1580	1871	2176	2038	2135	2129	2207
7	1877	2257	3367	2449	2641	2851	3327	3281	3377	4401	3880
8	113	89	114	145	129	160	360	299	174	314	368
9	114	124	180	183	156	179	413	294	376	394	431
10	4986	6513	6778	6815	7887	8726	12985	12329	12034	12846	12469
11	6937	9044	10555	13116	12304	14723	20511	19267	20564	21786	21363
12	85	145	229	216	194	208	887	508	548	568	645
13	260	234	263	394	721	543	623	439	496	482	604
14	195	289	399	403	367	418	595	567	648	652	726
15	207	257	310	390	393	692	625	604	657	713	846
16	31	29	34	23	12	13	29	28	62	41	33

Table d. The volume of industrial solid waste discharge in China's manufacturing by sector

(unit: 10 thousand tons)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	2533	2663	3049	3469	3594	3758	3661	3805	3828	3732	3402
2	805	802	773	921	859	885	784	782	775	758	777
3	155	134	160	170	170	210	344	229	236	255	239
4	1243	1596	1797	1800	1939	2321	2483	2168	2055	2170	2248
5	8	8	10	11	16	13	22	21	21	27	50
6	1841	1779	2407	4439	2994	3513	3951	3672	3398	3745	3804
7	9575	10528	12139	12403	12968	14820	26913	26968	28255	29377	33207
8	243	258	317	353	346	406	309	312	281	324	356
9	135	143	186	198	205	215	208	238	184	196	225
10	3237	4224	4164	3944	4359	5161	5950	6781	7073	6915	7551
11	28285	34693	36106	38656	40981	46799	52648	52026	55257	55525	55914
12	121	227	403	322	506	364	472	523	910	625	726
13	688	386	405	585	747	865	429	459	438	460	369
14	337	572	390	524	506	562	574	534	552	562	582
15	154	161	155	201	199	197	101	351	103	152	164
16	42	33	21	18	16	18	13	12	14	12	13

Table e. Pollution Intensity Index (PI) of China's Manufacturing by Sector

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	$\bar{PI}$
1	0.267	0.256	0.288	0.295	0.264	0.270	0.220	0.228	0.181	0.219	0.212	0.246
2	0.160	0.173	0.171	0.193	0.188	0.191	0.199	0.197	0.140	0.180	0.189	0.180
3	0.205	0.143	0.205	0.131	0.126	0.124	0.179	0.139	0.134	0.149	0.226	0.160
4	1.490	1.542	1.648	1.610	1.604	1.665	1.838	1.538	1.567	1.570	1.538	1.601
5	0.007	0.003	0.008	0.003	0.009	0.004	0.019	0.019	0.010	0.013	0.021	0.011
6	0.338	0.297	0.386	0.558	0.492	0.483	0.429	0.449	0.453	0.519	0.649	0.459
7	0.922	0.872	0.990	0.922	0.867	0.854	1.072	1.078	1.083	1.097	1.119	0.989
8	0.203	0.198	0.204	0.234	0.197	0.209	0.199	0.201	0.122	0.186	0.191	0.195
9	0.041	0.040	0.051	0.052	0.041	0.043	0.067	0.063	0.072	0.071	0.077	0.056
10	1.431	1.455	1.434	1.351	1.301	1.309	1.310	1.352	1.351	1.288	1.282	1.351
11	1.483	1.463	1.481	1.625	1.614	1.663	1.639	1.644	2.311	1.812	1.937	1.697
12	0.059	0.080	0.121	0.091	0.105	0.086	0.176	0.123	0.168	0.131	0.147	0.117
13	0.032	0.016	0.010	0.014	0.028	0.019	0.007	0.008	0.008	0.007	0.006	0.014
14	0.041	0.057	0.045	0.052	0.034	0.032	0.037	0.042	0.043	0.042	0.042	0.043
15	0.007	0.012	0.012	0.018	0.021	0.038	0.027	0.040	0.036	0.042	0.051	0.028
16	0.057	0.038	0.035	0.016	0.003	0.006	0.003	0.005	0.027	0.011	0.001	0.018

Note:

 $\bar{PI}$  = mean value of the industrial pollution intensity index (PI)

Table f. The volume of China's manufacturing exports by sector (unit: USD 100 million)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	261	299	351	383	378	472	580	605	648	688	676
2	1202	1522	1822	2001	1823	2254	2680	2799	3108	3284	3123
3	76	99	114	115	93	112	132	141	145	162	158
4	39	54	71	77	76	96	129	137	160	178	188
5	11	14	20	25	24	27	31	35	37	38	39
6	209	214	236	365	228	304	363	348	376	387	317
7	408	484	632	816	641	885	1167	1135	1187	1325	1285
8	14	15	21	29	35	45	54	59	62	66	69
9	233	296	365	414	359	496	663	773	849	904	860
10	123	155	183	226	205	272	340	397	454	491	548
11	447	699	966	1229	614	893	1181	1203	1247	1488	1407
12	124	154	189	211	157	215	268	288	313	355	359
13	3220	4140	5288	6108	5370	6986	7995	8632	9444	9718	9586
14	284	384	550	707	601	889	1091	1084	1002	1048	1072
15	284	356	407	476	426	566	660	794	818	810	811
16	224	280	359	428	389	506	593	779	864	934	985

Table g. Intramural expenditure on R&amp;D in China's manufacturing by sector

(unit: CNY100 million)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	122	50	165	257	151	147	240	322	376	428	462
2	86	46	136	182	108	112	180	221	262	292	349
3	6	3	9	19	10	6	14	19	27	33	43
4	30	15	52	63	37	37	56	76	88	96	108
5	7	2	11	17	11	10	19	25	30	34	37
6	42	16	51	61	37	44	63	82	89	107	101
7	224	118	361	523	302	288	529	617	727	822	873
8	77	53	117	184	135	123	211	283	348	390	441
9	52	35	99	141	86	93	136	173	199	228	243
10	51	26	71	146	82	81	140	164	215	246	278
11	360	218	643	864	427	521	703	899	934	973	933
12	34	21	64	108	66	62	111	187	230	251	283
13	453	403	822	1299	923	897	1396	1604	1876	2084	2213
14	365	167	538	743	490	582	785	913	1052	1213	1340
15	449	367	694	902	676	744	1062	1188	1402	1562	1793
16	3	3	7	11	7	4	9	15	22	27	33

Table h. The ratio of foreign direct investment to total investment by sector (unit: %)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	27.83	27.30	25.56	23.72	25.51	23.95	22.94	21.27	16.71	18.62	16.20
2	19.29	24.06	31.13	42.47	56.86	65.05	72.14	31.05	27.24	27.62	26.48
3	27.87	26.19	20.25	17.47	19.64	18.61	17.12	13.82	10.15	8.65	8.76
4	38.36	37.98	38.13	34.02	38.19	35.98	41.39	38.86	42.33	41.03	39.50
5	26.21	25.85	24.84	24.64	27.86	26.01	28.56	22.33	22.11	22.66	19.97
6	5.87	5.22	4.48	4.47	7.19	6.43	5.31	4.53	4.23	4.11	5.41
7	21.70	21.38	23.16	23.71	26.15	26.93	26.80	25.10	22.94	23.95	22.54
8	18.44	19.60	18.88	20.76	22.25	21.94	22.57	19.38	17.04	14.54	12.92
9	46.62	44.75	40.48	42.34	45.25	41.80	42.36	12.60	17.93	32.55	27.93
10	21.35	20.37	19.75	19.33	20.82	17.95	17.65	14.92	15.13	12.29	11.37
11	10.09	10.92	11.85	11.58	11.58	11.83	5.94	9.71	9.43	9.42	8.13
12	4.39	5.35	7.19	11.37	15.46	18.70	22.07	21.88	22.84	21.22	17.95
13	30.19	28.33	27.96	26.43	29.73	28.59	26.45	23.97	22.33	20.45	21.73
14	6.03	7.33	11.36	18.96	27.69	35.22	41.20	25.25	24.29	24.19	23.75
15	53.72	57.47	55.40	54.20	61.19	56.50	56.75	47.69	51.22	48.30	44.17
16	46.72	42.50	41.54	41.71	45.18	39.07	43.31	30.24	25.88	29.17	24.09

Table i. Material capital per capita in China's manufacturing by sector

(unit: CNY100 million per capita)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	1.24	1.32	1.46	1.56	1.70	1.85	2.08	2.18	2.38	2.60	2.85
2	0.48	0.51	0.56	0.62	0.67	0.73	0.83	0.95	1.03	1.11	1.20
3	0.69	0.73	0.77	0.86	0.96	1.08	1.26	1.36	1.52	1.23	1.84
4	1.84	1.97	2.08	2.23	2.44	2.67	3.08	3.32	3.66	3.85	4.04
5	1.13	1.18	1.25	1.31	1.37	1.45	1.55	1.60	1.71	1.88	1.97
6	4.21	4.93	5.32	5.81	7.58	8.09	8.34	9.34	9.45	10.28	10.95
7	2.09	2.39	2.61	2.79	3.25	3.51	4.00	4.43	4.91	5.51	6.08
8	1.62	1.66	1.71	1.85	1.95	2.02	2.11	2.30	2.58	2.82	3.13
9	0.92	0.96	1.02	1.08	1.14	1.22	1.46	1.62	1.94	2.07	2.21
10	1.15	1.27	1.40	1.60	1.87	2.11	2.49	2.71	2.95	3.11	3.36
11	2.80	3.31	3.68	4.13	4.85	5.12	5.25	5.66	5.78	6.27	7.02
12	0.67	0.71	0.79	0.91	1.09	1.20	1.44	1.79	1.88	2.43	2.16
13	0.77	0.83	0.91	1.06	1.24	1.38	1.55	1.67	1.89	2.05	2.21
14	1.40	1.56	1.73	1.94	2.15	2.19	2.40	2.44	2.64	2.79	3.05
15	1.04	1.03	1.07	1.11	1.18	1.38	1.18	1.32	1.45	1.51	1.57
16	0.47	0.52	0.60	0.61	0.70	0.72	0.85	0.99	1.10	1.23	1.34

Table j. The intensity of environmental regulation in China's manufacturing by sector (unit: %)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	9.35	7.72	10.47	8.62	6.30	5.11	10.74	8.11	8.63	8.40	7.74
2	13.82	32.86	17.76	24.50	29.53	18.57	12.12	13.02	13.79	13.84	12.80
3	4.92	7.53	4.23	6.34	6.35	3.32	5.83	6.61	5.89	8.05	3.97
4	13.44	6.41	8.35	8.36	6.67	5.81	7.92	11.72	11.99	10.47	10.78
5	12.16	11.34	14.37	9.39	8.00	16.72	9.51	10.65	11.51	14.10	12.40
6	17.30	18.47	20.73	19.66	17.25	15.01	23.79	16.95	11.31	21.20	18.87
7	9.33	8.71	9.19	10.68	9.59	7.09	12.74	12.27	12.17	12.58	16.60
8	10.14	13.40	15.98	14.84	15.47	8.38	8.70	15.90	11.69	13.03	10.61
9	9.68	8.15	8.79	8.48	8.50	6.71	8.25	9.82	9.05	6.92	7.14
10	6.00	6.89	6.10	7.25	6.12	7.65	9.99	11.25	13.33	5.75	9.67
11	12.12	12.24	14.62	15.93	17.52	17.90	21.19	20.41	18.88	17.69	23.63
12	23.74	30.10	24.55	16.62	14.62	11.48	17.44	14.84	13.39	13.07	15.64
13	12.32	7.17	10.72	9.49	6.48	6.37	22.00	10.49	8.62	22.54	14.53
14	7.26	8.72	8.30	11.03	8.85	11.04	10.05	10.14	8.21	13.47	10.22
15	16.81	13.45	23.09	15.44	13.03	11.67	14.17	21.18	8.41	16.16	12.89
16	21.60	6.84	8.75	13.38	15.71	7.18	5.57	6.63	3.11	9.74	12.52

Table k. The employment in China's manufacturing by sector (unit: million)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	4.52	4.78	5.19	6.02	6.39	6.96	6.94	7.46	7.97	8.30	8.25
2	11.66	12.39	12.97	13.84	13.24	13.71	12.31	12.35	12.38	12.56	12.08
3	0.83	0.92	1.06	1.31	1.31	1.42	1.29	1.33	1.38	2.00	1.41
4	1.30	1.35	1.38	1.52	1.53	1.58	1.47	1.44	1.40	1.38	1.35
5	0.67	0.69	0.72	0.82	0.82	0.85	0.71	0.82	0.92	0.96	0.98
6	0.74	0.77	0.81	0.86	0.85	0.92	0.96	0.95	0.95	0.97	0.93
7	3.83	4.01	4.26	4.75	4.82	5.18	5.01	5.22	5.43	5.46	5.39
8	1.23	1.30	1.37	1.51	1.60	1.73	1.79	1.94	2.09	2.22	2.30
9	2.63	2.84	3.12	3.53	3.58	3.86	3.48	3.41	3.35	3.42	3.40
10	4.18	4.26	4.48	4.99	5.09	5.45	5.17	5.43	5.69	5.95	5.90
11	4.18	4.33	4.61	4.99	5.01	5.37	5.33	5.77	6.21	6.14	5.67
12	2.23	2.48	2.73	3.27	3.19	3.45	3.12	3.42	3.72	3.80	3.81
13	9.42	10.17	11.26	13.29	13.31	14.78	14.18	14.34	14.51	14.82	14.55
14	3.52	3.75	4.09	4.73	4.98	5.74	5.79	5.97	6.14	6.71	6.63
15	5.28	6.04	6.95	7.94	7.76	8.98	9.44	9.65	9.85	10.14	10.14
16	0.71	0.84	0.91	1.04	0.99	1.12	1.06	1.11	1.16	1.20	1.20

Table l. The number of S&amp;T personnel in China's manufacturing by sector (unit: thousand)

Sector No.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	60	21	84	122	73	61	101	121	137	154	157
2	87	26	102	134	72	64	105	131	143	149	165
3	6	1	7	14	6	2	8	10	12	15	18
4	16	5	21	29	17	15	21	27	31	35	34
5	5	2	7	13	8	7	12	15	17	18	19
6	24	7	24	29	14	14	18	21	20	23	22
7	124	50	166	240	150	114	196	225	255	278	286
8	52	25	73	128	90	71	119	142	163	183	27
9	29	11	44	78	44	45	61	83	87	99	97
10	46	15	53	92	55	43	75	88	109	117	116
11	204	67	266	318	181	174	231	319	344	366	351
12	25	10	37	67	44	35	58	98	113	123	123
13	334	157	447	722	493	415	660	767	847	921	908
14	211	93	271	326	198	219	287	339	391	421	434
15	239	135	346	519	351	353	452	536	568	600	610
16	2	1	5	8	5	3	7	11	13	16	17