

International Business: a European Perspective

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?



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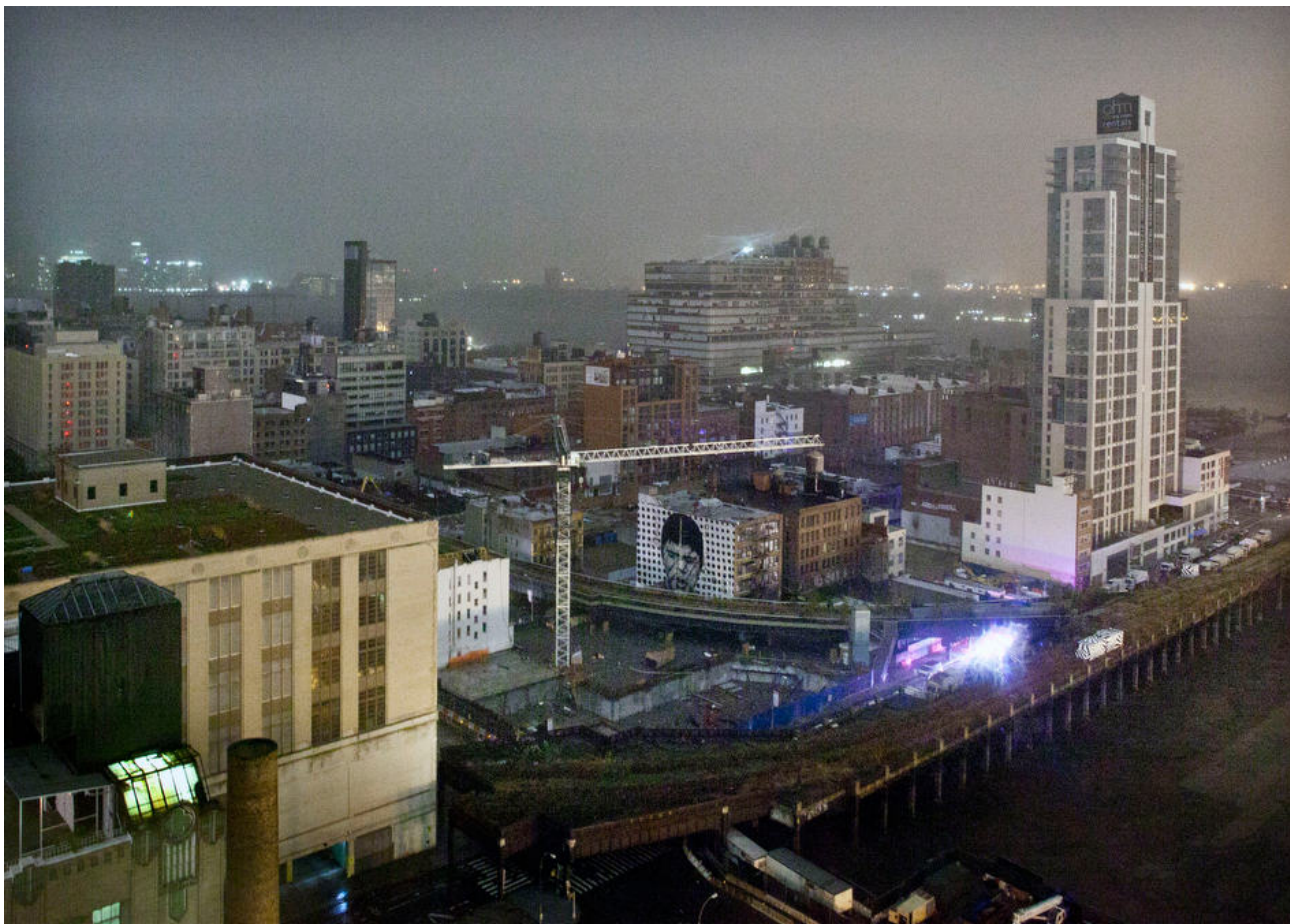


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11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?



This photo taken Tuesday, Oct. 30, 2012, shows what appear to be transformers exploding after much of lower Manhattan lost power during hurricane Sandy in New York. Much of New York was plunged into darkness Monday by a superstorm that overflowed the city's historic waterfront, flooded the financial district and subway tunnels and cut power to nearly a million people. (AP Photo/Karly Domb Sadof)

Spanish energy MNC Iberdrola enters US market in 2008 paying \$4.5 billion for Rochester Gas & Electric and New York State Electric and Gas + New England utilities previously owned by Energy East.

1.25 million electric and 565,000 gas customers.

Hurricane Sandy hits US shores in October 2012.

Audit of Iberdrola by Public Service Commission criticized maintenance (obsolete equipment and lack of tree trimming), making network more susceptible to outages with severe weather. Too much staff outsourcing, not enough staff, and "meddling" corporate government from Spain applying human resource figures for Spain, not New York.

On the other hand, Iberdrola awarded "Emergency Recovery Award" from Edison Electric Institute.

Utilities are different...

Economic

Huge sunk costs

Economies of scale and scope –
monopolies (regional or national)

Networks - network economies

Backbone of the economy

Socio-Political

Survival and Health

Quality of Life

Inclusion

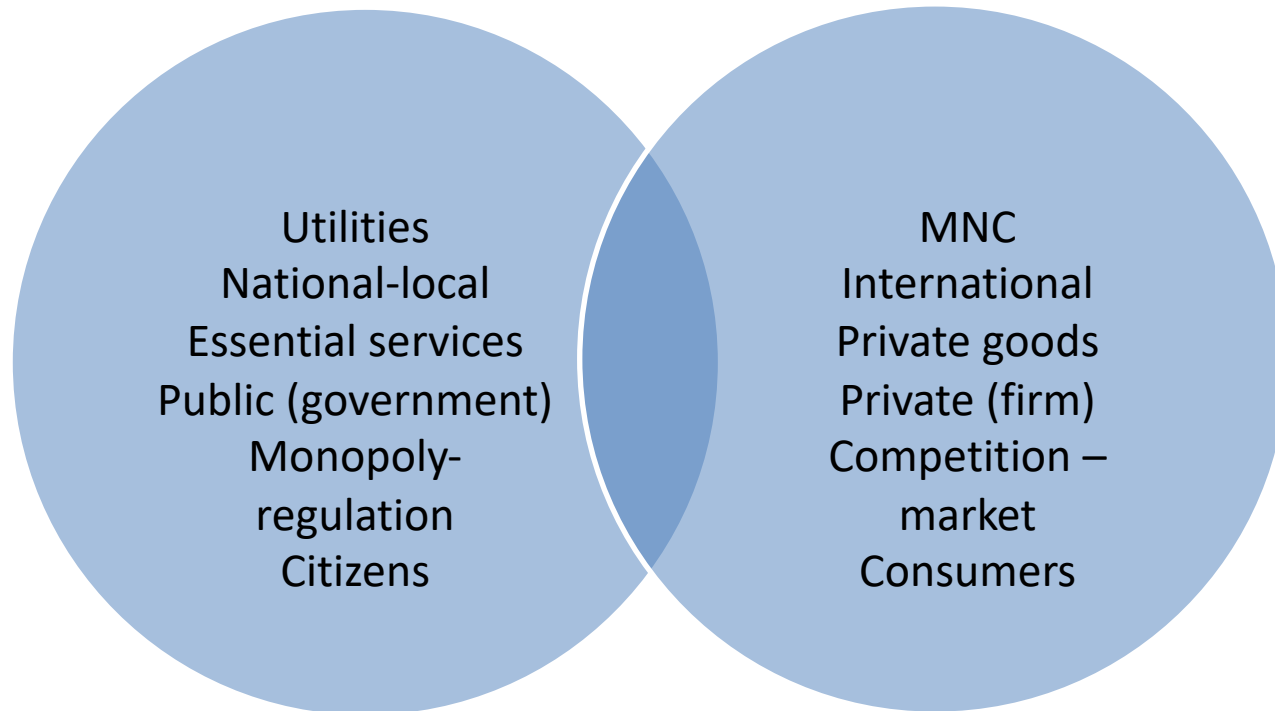
Strategic (defence)

Status (nuclear, rail..)



Different universes? Utilities and MNC

There is a common perception that utilities and MNC inhabit opposite, even antagonistic areas of the economy...



With little overlap...

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

But this changed since the 2000s...

- As a result of previous policy changes from the 1980s:
 - Privatization (sales; Public-Private Partnerships...)
 - Competition
 - Deregulation
 - Relaxation of Foreign Direct Investment (FDI) regimes
- In consequence, utilities have emerged as some of the world's largest Multinationals....

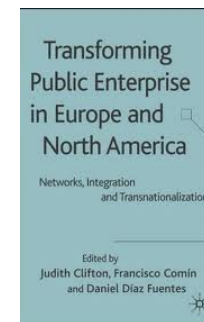
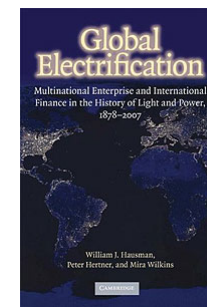
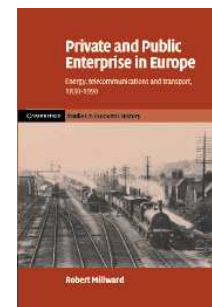
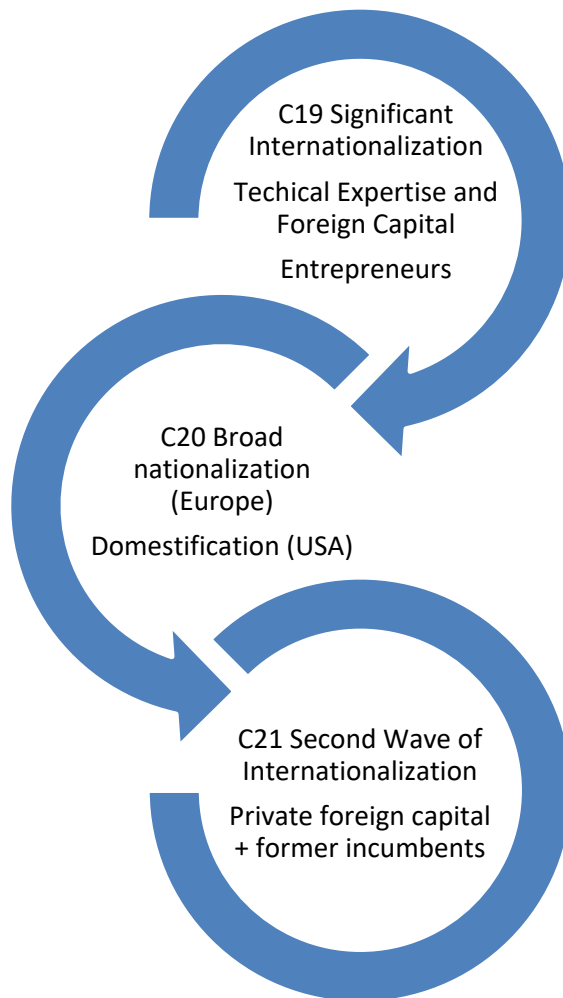
Structure of the Lecture

- 1). The Coming of Age of the Infrastructure MNC
- 2). A profile of major players: geography, sectors, ownership
- 3). A glimpse of how it happened: policy drivers
- 4). Drawing out four major implications for IB studies
- 5). Open Floor

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1). THE COMING OF AGE OF THE INFRASTRUCTURE MNC

The Coming of Age of the Infrastructure MNC: Historical Setting



The Coming of Age of the Infrastructure MNC: Historical Setting

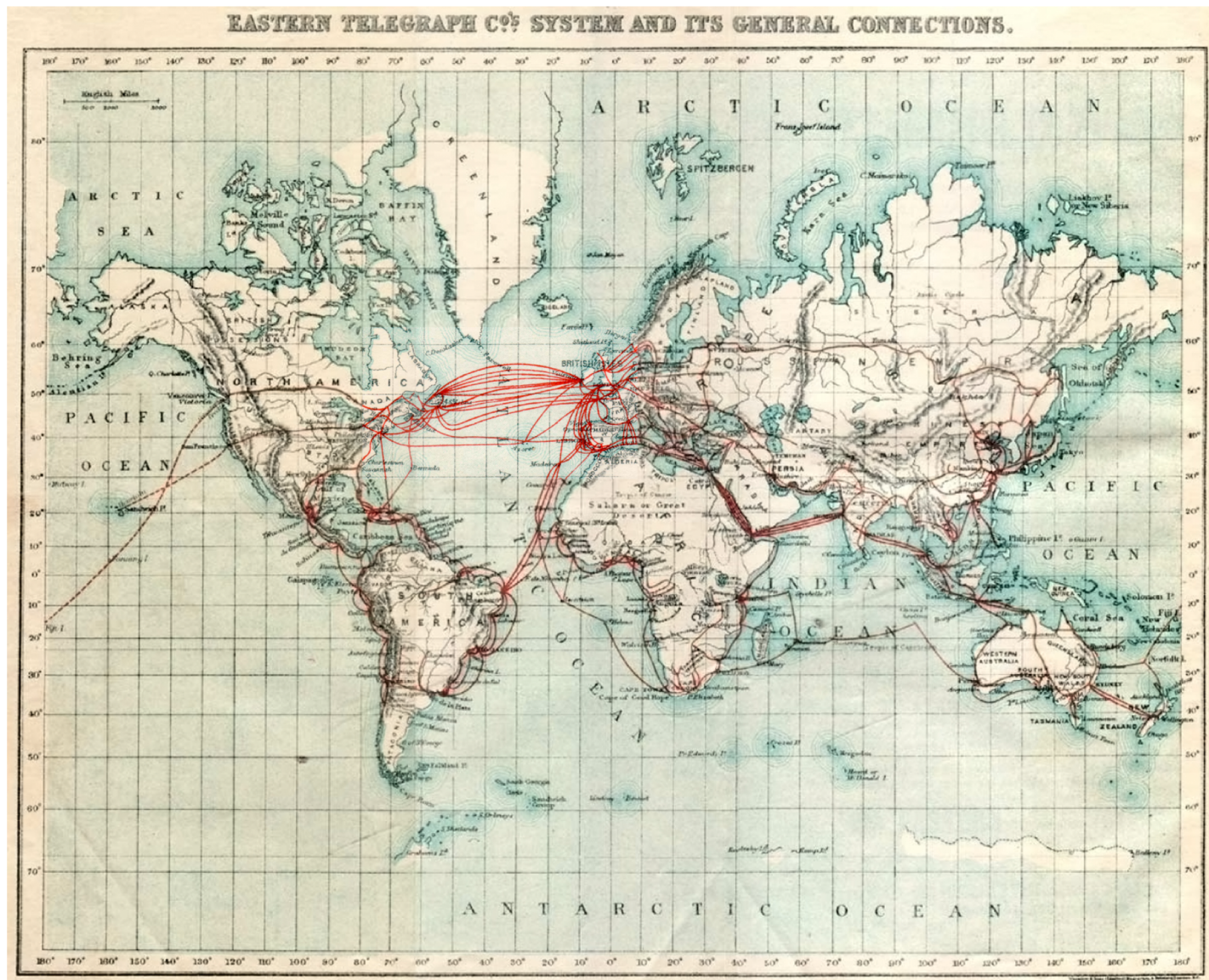
European countries to their colonies:

- Cable and Wireless (East Telegraph, map in 1901).
- Usually privately owned. Spheres of influence.

Also cases of US public utilities abroad:

- International Telephone and Telegraph Corporation (ITT)
- American & Foreign Power Company

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The Coming of Age of the Infrastructure MNC: Historical Setting

- But this changed by the post-war wave of nationalization: Europe, Latin America...
- In the USA, “domestication” (Hertner, Hausman & Wilkins, 2008)
- Private utilities perceived to have failed: price collusion, failure to link up networks, strategic interest (war)
- Growing role of government (ownership and/or regulation).

The Coming of Age of the Infrastructure MNC: The Challenges of Globalization

- Wave of privatization (from public to private ownership, and other forms of private participation)
- Competition
- Deregulation
- Relaxation of government's Foreign Direct Investment (FDI) regime making many utilities open for investment, including, formerly "strategic" sectors...
- Over the course of a decade or so, utilities saw the opportunity to internationalize...

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The Coming of Age of the Infrastructure MNC: The Challenges of Globalization

Box table III.11.1. Equity and non-equity forms of TNC involvement in infrastructure

Fully equity	Concessions						Fully non-equity	
FDI projects (including privatization and greenfield projects and joint ventures)	Build, own, and operate (BOO)	Build, lease, and own (BLO)	Build, own, operate, and transfer (BOOT)	Build, operate, and transfer (BOT)	Build, rehabilitate, operate, and transfer (BROT)	Rehabilitate, operate, and transfer (ROT)	Rehabilitate, lease or rent, and transfer (RLOT)	Management and lease contracts

Source: UNCTAD.

Source: UNCTAD (2008) World Investment Report, p. 98.

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

Even in 1990, utilities did not rank highly as world MNC...

The largest 100 non-financial transnational corporations, ranked by foreign assets, 1990

(Billions of dollars and number of employees)

Ranking by Foreign assets	Corporation	Country	Industry ^a	Assets		Sales		Employment	
				Foreign	Total	Foreign	Total	Foreign	Total
1	Royal Dutch Shell	United Kingdom/Netherlands	Petroleum refining	69.2 ^b	106.4	47.1 ^b	106.5	99000	137000
2	Ford	United States	Motor vehicles & parts	55.2	173.7	47.3	97.7	188904	370383
3	GM	United States	Motor vehicles & parts	52.6	180.2	37.3	122.0	251130	767200
4	Exxon	United States	Petroleum refining	51.6	87.7	90.5	115.8	65000	104000
5	IBM	United States	Computers	45.7	87.6	41.9	69.0	167868	373816
6	British Petroleum	United Kingdom	Petroleum refining	31.6	59.3	43.3	59.3	87200	118050
7	ABB	Switzerland	Industrial & farm equip	26.9	30.2	25.6 ^d	26.7	200177	215154
8	Nestlé	Switzerland	Food	.. ^c	28.0	35.8	36.5	192070	199021
9	Philips Electronics	Netherlands	Electronics	23.3	30.6	28.8 ^d	30.8	217149	272800
10	Mobil	United States	Petroleum refining	22.3	41.7	44.3	57.8	27593	67300
11	Unilever	United Kingdom/Netherlands	Food	.. ^c	24.7	16.7 ^b	39.6	261000	304000
12	Matsushita Electric	Japan	Electronics	.. ^c	62.0	21.0	46.8	67000	210848
13	Fiat	Italy	Motor vehicles & parts	19.5	66.3	20.7 ^d	47.5	66712	303238
14	Siemens	Germany	Electronics	.. ^c	43.1	14.7 ^d	39.2	143000	373000
15	Sony	Japan	Electronics	.. ^c	32.6	12.7	20.9	62100	112900
16	Volkswagen	Germany	Motor vehicles & parts	.. ^c	42.0	25.5 ^d	42.1	95934	268744
17	Elf Aquitaine	France	Petroleum refining	17.0	42.6	11.4 ^d	32.4	33957	90000
18	Mitsubishi	Japan	Trading	16.7	73.8	45.5	129.3	..	32417
19	GE	United States	Electronics	16.5	153.9	8.3	57.7	62580	298000
20	Du Pont	United States	Chemicals	16.0	38.9	17.5	37.8	36400	124900
21	Alcatel Alsthom	France	Electronics	15.3	38.2	13.0	26.6	112966	205500
22	Mitsui	Japan	Trading	15.0	60.8	48.1	136.2	..	9094
23	News Corporation	Australia	Publishing & printing	14.6	20.7	4.6	5.7	..	38432
24	Bayer	Germany	Chemicals	14.2	25.4	20.3	25.9	80000	171000
25	B.A.T. Industries	United Kingdom	Tobacco	.. ^c	48.1	16.5 ^d	22.9	..	217373
26	FerruzziMontedison	Italy	Food	13.4	30.8	8.0	14.0	22300	44949
27	Rhone-Poulenc	France	Chemicals	13.0	21.3	11.1	14.4	50525	91571
28	BASF	Germany	Chemicals	.. ^c	24.3	19.1 ^d	29.0	46059	134647
29	Toyota	Japan	Motor vehicles & parts	12.8	55.1	24.8	60.1	11326	96849
30	Philip Morris	United States	Food	12.5	46.6	10.5	51.2	66000	168000
31	Hoechst	Germany	Chemicals	.. ^c	22.9	20.7 ^d	27.8	82169	172890
32	Roche Holding	Switzerland	Pharmaceuticals	.. ^c	17.8	6.7 ^d	7.0	41802	52685
33	Ciba-Geigy	Switzerland	Chemicals	.. ^c	20.5	7.9 ^{bd}	14.3	69702	94141
34	Hanson	United Kingdom	Building materials	11.1	27.6	6.3	13.4	52000	80000
35	Michelin	France	Rubber & plastics	.. ^c	14.9	9.1	11.5	111533	140829
36	Dow Chemical	United Kingdom	Chemicals	10.9	24.0	10.3	19.8	28612	62080
37	Total	France	Petroleum refining	.. ^c	20.6	17.1	23.6	23824	46024

...

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

But by 2000s, MNC utilities emerged...

Table IV.1. The world's top 100 non-financial TNCs, ranked by foreign assets, 2000
(Millions of dollars and number of employees)

Ranking in 2000:		Ranking in 1999:		Corporation	Home economy	Industry ^b	Assets		Sales		Employment		
Foreign assets	TNI ^a	Foreign assets	TNI ^a				Foreign	Total	Foreign ^c	Total	Foreign	Total	TNI ^a (Per cent)
1	15	-	-	Vodafone	United Kingdom	Telecommunications	221 238	222 326	7 419	11 747	24 000	29 465	81.4
2	73	1	74	General Electric	United States	Electrical & electronic equipment	159 188	437 006	49 528	129 853	145 000	313 000	40.3
3	30	2	22	ExxonMobil	United States	Petroleum expl./ref./distr.	101 728	149 000	143 044	206 083	64 000	97 900	67.7
4	42	47	75	Vivendi Universal	France	Diversified	93 260	141 935	19 420	39 357	210 084	327 380	59.7
5	84	4	82	General Motors	United States	Motor vehicles	75 150	303 100	48 233	184 632	165 300	386 000	31.2
6	46	3	43	Royal Dutch/Shell	United Kingdom/ Netherlands	Petroleum expl./ref./distr.	74 807	122 498	81 086	149 146	54 337	95 365	57.5
7	24	10	18	BP	United Kingdom	Petroleum expl./ref./distr.	57 451	75 173	105 626	148 062	88 300	107 200	76.7
8	80	6	81	Toyota Motor	Japan	Motor vehicles	55 974	154 091	62 245	125 575	..	210 709	35.1
9	55	30	73	Telefónica	Spain	Telecommunications	55 968	87 084	12 929	26 278	71 292	148 707	53.8
10	47	50	80	Fiat	Italy	Motor vehicles	52 803	95 755	35 854	53 554	112 224	223 953	57.4
11	57	9	49	IBM	United States	Electrical & electronic equipment	43 139	88 349	51 180	88 396	170 000	316 303	53.5
12	44	12	45	Volkswagen	Germany	Motor vehicles	42 725	75 922	57 787	79 609	160 274	324 402	59.4
13	64	-	-	ChevronTexaco	United States	Petroleum expl./ref./distr.	42 576	77 621	65 016	117 095	21 693	69 265	47.2
14	52	48	53	Hutchison Whampoa	Hong Kong, China	Diversified	41 881	56 610	2 840	7 311	27 165	49 570	55.9
15	23	19	57	Suez	France	Electricity, gas and water	38 521	43 460	24 145	32 211	117 280	173 200	77.1
16	93	7	50	DaimlerChrysler	Germany/ United States	Motor vehicles	..	187 087	48 717	152 446	83 464	416 501	24.0
17	11	31	14	News Corporation	Australia	Media	36 108	39 279	12 777	14 151	24 500	33 800	84.9
18	4	11	2	Nestlé	Switzerland	Food & beverages	35 289	39 954	48 928	49 648	218 112	224 541	94.7
19	62	-	-	TotalFinaElf	France	Petroleum expl./ref./distr.	33 119	81 700	82 534	105 828	30 020	123 303	47.6
20	87	16	54	Repsol YPF	Spain	Petroleum expl./ref./distr.	31 944	48 776	15 891	42 563	16 455	37 387	29.3
21	51	20	32	BMW	Germany	Motor vehicles	31 184	45 910	26 147	34 639	23 759	93 624	56.3
22	48	22	42	Sony	Japan	Electrical & electronic equipment	30 214	68 129	42 768	63 664	109 080	181 800	57.2
23	77	-	-	E.ON	Germany	Electricity, gas and water	..	114 951	41 843	86 882	83 338	186 788	39.4
24	3	21	3	ABB	Switzerland	Machinery and equipment	28 619	30 962	22 528	22 967	151 340	160 818	94.9
25	10	33	35	Philips Electronics	Netherlands	Electrical & electronic equipment	27 885	35 885	33 308	34 870	184 200	219 429	85.7
26	8	-	-	Anglo American	United Kingdom	Mining & quarrying	26 000	30 616	18 100	20 570	230 000	249 000	88.4
27	19	17	13	Diageo	United Kingdom	Food & beverages	25 980	37 550	15 880	18 470	59 587	72 474	79.1
28	91	15	89	Wal-Mart Stores	United States	Retail	25 742	78 130	32 100	191 329	300 000	1300 000	24.3
29	43	29	27	Honda Motor	Japan	Motor vehicles	25 576	46 146	41 909	57 454	56 200	112 400	59.5
30	26	43	25	Alcatel	France	Machinery and equipment	24 461	39 524	25 269	29 487	..	131 598	72.8
31	5	35	7	British American Tobacco	United Kingdom	Tobacco	23 860	25 076	16 374	17 603	82 583	86 805	94.4
32	66	34	68	Nissan Motor	Japan	Motor vehicles	23 347	51 610	28 680	48 717	39 698	133 833	44.6
33	37	46	36	BASF	Germany	Chemicals	23 208	36 197	26 332	33 746	48 917	103 273	63.2
34	18	27	6	Roche	Switzerland	Pharmaceuticals	22 960	42 469	17 232	17 537	56 099	64 758	79.7
35	31	41	33	Bayer	Germany	Pharmaceuticals	21 288	33 917	24 875	28 818	65 900	122 100	67.7
36	74	36	67	Eni	Italy	Petroleum expl./ref./distr.	20 788	45 688	19 311	44 606	21 279	69 969	39.7
37	49	24	8	Unilever	United Kingdom/ Netherlands	Diversified	20 382	52 587	26 067	44 254	215 000	295 000	56.8
38	85	5	76	Ford Motor	United States	Motor vehicles	19 874	283 390	51 691	170 058	185 264	350 117	30.1
39	1	86	34	Rio Tinto	United Kingdom/ Australia	Mining & quarrying	19 405	19 443	9 735	9 972	33 415	34 399	98.2
40	56	25	48	Aventis	France	Pharmaceuticals	19 264	38 142	14 088	20 940	44 477 ^d	102 489	53.7

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

Annex table 26. The world's top 100 non-financial TNCs, ranked by foreign assets (ts, 2008^a)

(Millions of dollars and number of employees)

Ranking by:		Corporation	Home economy	Industry ^c	Assets		Sales		Employment		TNI ^b (Per cent)
Foreign assets	TNI ^b				Foreign	Total	Foreign	Total	Foreign ^d	Total	
1	75	General Electric	United States	Electrical & electronic equipment	401 290	797 769	97 214	182 515	171 000	323 000	52,2
2	32	Royal Dutch/Shell Group	United Kingdom	Petroleum expl./ref./distr.	222 324	282 401	261 383	458 361	85 000	102 000	73,0
3	5	Vodafone Group Plc	United Kingdom	Telecommunications	201 570	218 955	60 197	69 250	68 747	79 317	88,6
4	20	BP PLC	United Kingdom	Petroleum expl./ref./distr.	188 208	203 233	243 878	365 700	76 100	92 000	81,0
5	74	Toyota Motor Corporation	Japan	Motor vehicles	169 569	296 249	129 724	203 955	121 755	320 808	52,9
6	42	ExxonMobil Corporation	United States	Petroleum expl./ref./distr.	161 245	228 052	321 964	459 579	50 337	79 900	67,9
7	27	Total SA	France	Petroleum expl./ref./distr.	141 442	141 638	127 756	234 574	59 838	96 959	74,5
8	67	E.ON	Germany	Utilities (Electricity, gas and water)	141 168	218 573	53 020	126 235	51 254	93 538	55,8
9	30	Electricite De France	France	Utilities (Electricity, gas and water)	133 898	278 759	43 914	94 044	61 253	160 913	42,2
10	10	ArcelorMittal	Luxembourg	Metals and metal products	127 427	129 033	112 669	124 936	239 453	315 867	87,2
11	53	Volkswagen Group	Germany	Motor vehicles	123 677	293 708	128 667	166 598	195 586	369 928	60,5
12	64	GDF Suez	France	Utilities (Electricity, gas and water)	119 374	232 718	68 992	99 277	66 678	196 592	56,4
13	8	Anheuser-Busch Inbev SA	Netherlands	Food, beverages and tobacco	106 247	113 170	18 699	23 558	108 425	119 874	87,9
14	59	Chevron Corporation	United States	Petroleum expl./ref./distr.	106 129	161 165	153 854	273 005	35 000	67 000	58,1
15	33	Siemens AG	Germany	Electrical & electronic equipment	104 488	135 102	84 322	116 089	295 000	427 000	73,0
16	71	Ford Motor Company	United States	Motor vehicles	102 588	222 977	85 901	146 277	124 000	213 000	54,3
17	62	Eni Group	Italy	Petroleum expl./ref./distr.	95 818	162 269	95 448	158 227	29 400	78 880	56,4
18	33	Telefonica SA	Spain	Telecommunications	95 446	139 034	54 124	84 778	197 000	251 775	70,3
19	79	Deutsche Telekom AG	Germany	Telecommunications	95 019	171 385	47 960	90 221	96 034	227 747	50,3
20	37	Honda Motor Co Ltd	Japan	Motor vehicles	89 204	120 478	90 861	93 438	111 581	181 876	72,2
21	70	Daimler AG	Germany	Motor vehicles	87 927	184 021	108 040	140 268	105 463	273 216	54,5
22	77	France Telecom	France	Telecommunications	81 378	132 630	36 465	78 256	83 795	186 049	51,0
23	88	Genocophiles	Spain	Utilities (Electricity, gas and water)	77 000	182 800	74 346	240 842	15 128	33 800	43,4
24	63	Iberdrola SA	Spain	Utilities (Electricity, gas and water)	73 576	119 467	19 785	36 863	17 000	32 993	56,4
25	18	Hutchison Wharfedale PLC	United Kingdom	Textiles	70 202	81 000	25 006	40 236	182 148	220 000	82,0
26	36	Eads NV	France	Aircraft	66 950	105 989	57 890	63 299	73 969	118 349	72,4
27	11	Nestlé SA	Switzerland	Food, beverages and tobacco	66 316	99 854	99 559	101 466	274 043	283 000	87,1
28	78	BMW AG	Germany	Motor vehicles	63 201	140 690	62 119	77 830	26 125	100 041	50,3
29	55	Procter & Gamble	United States	Diversified	62 942	134 833	47 949	79 029	99 019	135 000	60,2
30	97	Wal-Mart Stores	United States	Retail & Trade	62 514	163 429	98 645	401 244	648 905	2 100 000	31,2
31	21	Roche Group	Switzerland	Pharmaceuticals	60 927	71 532	42 114	42 590	45 510	80 080	80,3
32	96	Mitsubishi Corporation	Japan	Wholesale trade	59 160	111 295	6 634	61 063	18 027	60 095	31,3
33	48	Sony Corporation	Japan	Electrical & electronic equipment	57 116	122 462	58 185	76 795	107 900	171 300	61,8
34	56	Nissan Motor Co Ltd	Japan	Motor vehicles	57 080	104 379	60 693	83 819	81 249	160 422	59,2
35	40	Grupo Ferrovial	Spain	Construction and real estate	54 322	97 086	73 100	20 557	64 309	106 596	68,3
36	52	RWE Group	Germany	Utilities (Electricity, gas and water)	53 557	130 035	26 710	71 617	20 000	65 908	39,7
37	1	Xstrata PLC	United Kingdom	Mining & quarrying	52 227	55 314	25 215	27 952	37 883	39 940	93,2
38	50	IBM	United States	Electrical & electronic equipment	52 020	109 524	66 944	103 630	283 455	398 455	61,1
39	57	Sanofi-aventis	France	Pharmaceuticals	50 328	100 191	22 636	40 334	69 990	98 213	59,2
40	3	Nokia	Finland	Electrical & electronic equipment	50 006	55 090	73 662	74 192	101 559	125 829	90,3

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And this also occurred in developing countries...

Annex table 27. The top 100 non-financial TNCs from developing and transition economies, ranked by foreign assets, 2008 ^a

(Millions of dollars and number of employees)

Ranking by:				Assets		Sales		Employment		TNI ^b (Per cent)	
Foreign assets	TNI ^b	Corporation	Home economy	Industry ^c	Foreign	Total	Foreign	Total	Foreign ^e		Total
1	9	Hutchison Whampoa Limited	Hong Kong, China	Diversified	70 762	87 745	25 006	30 236	182 148	220 000	82,0
2	88	CITIC Group	China	Diversified	43 750	238 725	5 427	22 230	18 305	90 650	21,0
3	11	Cemex S.A.	Mexico	Non-metallic mineral products	40 258	45 084	17 982	21 830	41 586	56 791	81,6
4	41	Samsung Electronics Co., Ltd.	Korea, Republic of	Electrical & electronic equipment	28 765	83 738	88 892	110 321	77 236	161 700	54,2
5	79	Petronas - Petroleum Nasional Bhd	Malaysia	Petroleum expl./ref./distr.	28 447	106 416	32 477	77 094	7 847	39 236	29,6
6	71	Hyundai Motor Company	Korea, Republic of	Motor vehicles	28 359	82 072	33 874	72 523	22 066	78 270	36,5
7	46	China Ocean Shipping (Group) Company	China	Transport and storage	28 066	36 253	18 041	27 431	4 581	69 648	49,9
8	61	Lukoil	Russian Federation	Petroleum and natural gas	21 515	71 461	87 637	107 680	23 000	152 500	42,2
9	67	Vale S.A.	Brazil	Mining & quarrying	19 635	79 931	30 939	37 426	4 725	62 490	38,3
10	85	Petróleos De Venezuela	Venezuela, Bolivarian Republic of	Petroleum expl./ref./distr.	18 244	131 832	62 494	126 364	5 140	61 909	21,5
11	30	Zain	Kuwait	Telecommunications	18 746	19 761	6 034	7 452	1 151	15 000	61,2
12	22	Wahson Holdings Ltd.	Hong Kong, China	Diversified	17 544	22 288	13 361	20 300	79 276	150 000	69,2
13	26	Singtel Ltd.	Singapore	Telecommunications	17 326	21 887	6 745	10 374	9 358	20 000	60,2
14	64	Formosa Plastics Group	Taiwan Province of China	Chemicals	16 937	76 587	17 078	66 259	70 519	94 268	43,9
15	18	Tata Steel Ltd.	India	Metal and metal products	16 826	23 868	26 426	32 168	45 864	80 782	69,8
16	91	Petroleo Brasileiro S.A. - Petrobras	Brazil	Petroleum expl./ref./distr.	15 075	125 695	40 179	146 529	6 775	74 240	16,2
17	35	Hon Hai Precision Industries	Taiwan Province of China	Electrical & electronic equipment	14 664	26 771	21 727	61 810	515 626	611 000	58,1
18	49	Metalurgica Sesa S.A.	Brazil	Metal and metal products	13 658	29 750	13 234	22 482	22 315	45 000	48,6
19	81	Abu Dhabi National Energy Company	United Arab Emirates	Utilities (Electricity, gas and water)	13 519	23 523	3 376	4 536	1 839	2 383	69,5
20	82	Oil And Natural Gas Corporation	India	Petroleum expl./ref./distr.	13 477	38 456	4 238	27 684	3 921	33 035	23,8
21	24	MTN Group Limited	South Africa	Telecommunications	13 266	18 281	7 868	12 403	10 811	16 452	67,4
22	58	LG Corp.	Korea, Republic of	Electrical & electronic equipment	13 265	51 617	44 439	82 060	32 962	64 000	43,8
23	53	Euras	Russian Federation	Metal and metal products	11 198	19 446	12 805	20 380	29 480	134 000	47,5
24	20	Qatar Telecom	Qatar	Telecommunications	10 598	20 412	4 077	5 582	1 339	1 832	69,7
25	44	América Móvil	Mexico	Telecommunications	10 420	31 481	17 323	31 026	38 353	52 879	52,6
26	33	CapitaLand Limited	Singapore	Construction and real estate	9 852	17 429	1 255	1 946	5 935	10 500	60,9
27	100	China National Petroleum Corporation	China	Petroleum expl./ref./distr.	9 409	264 016	4 384	165 224	20 489	1 086 966	2,7
28	69	New World Development Co., Ltd.	Hong Kong, China	Diversified	9 061	22 775	1 304	3 144	17 262	55 000	37,5
29	17	Hindalco Industries Limited	India	Diversified	8 564	12 653	11 371	14 338	13 447	19 867	71,6
30	74	STX Corporation	Korea, Republic of	Other equipments goods	8 308	18 338	1 668	12 914	246	544	34,5
31	23	Axiata Group Bhd	Malaysia	Telecommunications	8 184	10 783	1 746	3 406	18 975	25 000	67,7
32	77	Severstal	Russian Federation	Metal and metal products	8 066	22 480	9 325	22 393	12 662	96 695	30,2
33	34	Wilmar International Limited	Singapore	Food, beverages and tobacco	7 812	17 869	22 144	29 145	12 906	23 313	58,4
34	7	China Resources Enterprises	Hong Kong, China	Petroleum expl./ref./distr.	7 371	9 013	7 483	8 299	136 800	144 000	89,0
35	2	China Merchants Holdings International	Hong Kong, China	Diversified	7 154	7 388	564	595	4 988	5 055	96,8
36	27	Termin SA	Argentina	Metal and metal products	7 063	10 671	5 357	8 465	10 042	15 651	64,5
37	90	China State Construction Engineering Corp.	China	Construction and real estate	7 015	29 873	3 613	20 280	15 765	113 251	16,6
38	51	MTL Corp. Barbados	Malaysia	Utilities (Electricity, gas and water)	7 014	11 102	1 968	1 265	1 931	6 232	47,8
39	1	First Pacific Company Limited	Hong Kong, China	Electrical & electronic equipment	6 998	7 199	4 105	4 105	66 416	66 452	99,0
40	48	Tata Motors Ltd	India	Automobile	6 767	14 359	9 869	15 635	17 998	49 473	48,9

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

2). A PROFILE OF MAJOR PLAYERS: GEOGRAPHY, SECTORS, OWNERSHIP

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

A profile of major players: geography

Neither was there emergence even...

Table III.12. Foreign and total assets of the world's 100 largest infrastructure TNCs, by home economy and region, 2006
(Millions of dollars and per cent)

Home region / economy	Number of firms	Foreign assets		Total assets		Foreign assets as a share of total assets (%)
		Value	Share in total (%)	Value	Share in total (%)	
World	100	1 601 063	100.0	4 062 647	100.0	39.4
Developed economies	78	1 416 178	88.5	3 712 743	91.4	38.1
European Union	53	1 228 041	76.7	2 586 748	63.7	47.5
France	8	368 835	23.0	737 063	18.1	50.0
Germany	6	270 926	16.9	571 337	14.1	47.4
Spain	10	233 338	14.6	440 796	10.8	52.9
United Kingdom	8	185 705	11.6	301 174	7.4	61.7
Sweden	4	62 849	3.9	95 198	2.3	66.0
Denmark	2	18 562	1.2	68 965	1.7	26.9
Portugal	2	17 990	1.1	49 547	1.2	36.3
Italy	4	15 681	1.0	205 530	5.1	7.6
Luxembourg	3	15 501	1.0	15 656	0.4	99.0
Austria	2	2 971	0.2	17 302	0.4	17.2
Other European Union	4	35 683	2.2	84 181	2.1	42.4
Other developed economies	25	188 137	11.8	1 125 995	27.7	16.7
United States	14	119 079	7.4	948 638	23.4	12.6
Canada	6	34 230	2.1	100 402	2.5	34.1
Australia	3	13 638	0.9	45 740	1.1	29.8
Other	2	21 190	1.3	31 214	0.8	67.9
Developing economies	20	180 493	11.3	321 413	7.9	56.2
Africa	2	8 319	0.5	22 540	0.6	36.9
Latin America and the Caribbean	2	14 490	0.9	53 739	1.3	27.0
Mexico	2	14 490	0.9	53 739	1.3	27.0
Asia and Oceania	16	157 683	9.8	245 134	6.0	64.3
Hong Kong, China	6	64 663	5.3	116 771	2.9	72.5
Singapore	3	29 583	1.8	47 503	1.2	62.3
Malaysia	3	10 046	0.6	24 639	0.6	40.8
Kuwait	2	9 818	0.6	14 504	0.4	67.7
Other Asia	3	23 573	1.5	41 718	1.0	56.5
South-East Europe and CIS	2	4 392	0.3	28 491	0.7	15.4
Russian Federation	2	4 392	0.3	28 491	0.7	15.4

Source: UNCTAD, based on annex table A.III.4.

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

A profile of major players: geography

But this involvement of infrastructure companies abroad was uneven, by sector and by region...(not to speak of reversals)

Table III.4. Inward FDI stock in electricity, gas and water, and in transport,^a storage and communications, by region, 1990, 1995, 2000 and 2006 (Millions of dollars)

Region	1990		1995		2000		2006	
	Electricity, gas and water	Transport, storage and communications	Electricity, gas and water	Transport, storage and communications	Electricity, gas and water	Transport, storage and communications	Electricity, gas and water	Transport, storage and communications
World	7 427	17 542	22 543	54 806	91 938	337 910	186 847	598 328
Developed countries	5 120	13 026	14 591	30 514	57 833	253 380	137 996	439 217
Developing countries	2 307	4 488	7 824	20 476	33 277	78 566	47 270	151 626
Africa	-	132	73	1 901	180	5 737	15	12 813
Asia and Oceania	14	1 366	1 875	10 944	5 884	34 708	13 833	80 121
Latin America and the Caribbean	2 293	2 990	5 876	7 630	27 213	38 121	33 422 ^b	58 692 ^b
South-East Europe and the CIS	-	28	129	3 816	828	5 965	1 581	7 486
<i>Memorandum item: LDCs</i>	-	1	240	209	396	627	2 511	870

Source: UNCTAD (2008) World Investment Report, The Infrastructure Challenge, UNCTAD, Geneva.

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

A profile of major players: sectors & firms

Table III.11. Largest TNCs in infrastructure industries, ranked by foreign assets, 2006
(Companies highlighted are based in developing or transition economies)

Rank	Electricity	Telecommunications	Transport	Water and sewage	Natural gas	More than one infrastructure industry
1	Electricité de France	Vodafone Group	Grupo Ferrovial	Veolia Environnement	Gaz de France	Suez
2	E.ON	Telefónica	Abertis	Grupo Agbar	Spectra Energy Corp.	Hutchison Whampoa
3	Endesa	Deutsche Telekom	AP Moller-Maersk	Waste Management Inc	Centrica	RWE Group
4	Vattenfall	France Télécom	DP World	Shanks Group	Gas Natural	Bouygues
5	National Grid	Vivendi Inc	China Ocean Shipping	Waste Services Inc	Transcanada Corp.	YTL Power
6	AES Corp.	Liberty Global Inc	Canadian National Railways Co.	Stericycle Inc	Enbridge Inc	Babcock & Brown Infrastructure
7	Fortum	TeliaSonera	Skanska	Hyflux Limited	Sempra Energy	Enka Insaat ve Sanayi
8	Duke Energy Corp.	SingTel	PSA International	Clean Harbors Inc	El Paso Corp.	NWS Holdings
9	EDP Energias de Portugal	Telenor	Hochtief	..	Hunting Plc	..
10	International Power Plc	Nortel Networks	Vinci	..	Williams Companies	..
11	CLP Holdings	KPN	Macquarie Airports	..	Hong Kong & China Gas Co.	..
12	Iberdrola	BT Group	Deutsche Bahn	..	Distrigaz 'D'	..
13	Unión Fenosa	Verizon Communications	Orient Overseas International	..	Canadian Utilities Ltd.	..
14	PPL Corp.	SES	Grupo ACS	..	Iwatani International Corp.	..
15	Atel - Aare Tessin	Telecom Italia	Obrascon Huarte Lain	..	..	..
16	Public Service Enterprise Group	América Móvil	Kansas City Southern	..	..	..
17	Keppel Corp.	Mobile Telecommunications Co.	Canadian Pacific Railway	..	..	..
18	Cofide-CIR Group	TDC A/S	First Group	..	..	..
19	Edison International	Portugal Telecom	BBA Aviation	..	..	..
20	Enel	Tele2	China Communications Construction Co.	..	..	..

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

A profile of major players: ownership

Table I.7. The top 30 non-financial State-owned TNCs, ranked by foreign assets, 2009 *
(Millions of dollars and number of employees)

Corporation	Home economy	Government stake ^b	Industry ^c	Assets		Sales		Employment		TNI ^e (per cent)
				Foreign	Total	Foreign	Total	Foreign ^d	Total	
Enel SpA	Italy	34.7	Electricity, gas and water	157	231	44	86	43	81	57.2
Volkswagen Group	Germany	20.0	Motor vehicles	156	255	105	146	196	369	61.9
GDF Suez	France	36.4	Utilities (Electricity, gas and water)	146	247	68	111	96	197	56.5
EDF SA	France	84.7	Utilities (Electricity, gas and water)	134	348	40	92	58	169	39.0
Deutsche Telekom AG	Germany	31.7	Telecommunications	113	184	53	90	108	258	54.1
Eni SpA	Italy	30.3	Petroleum expl./ref./distr.	102	169	78	117	40	78	59.2
General Motors Co	United States	32.0	Motor vehicles	76	136	55	105	114	217	53.7
France Telecom SA	France	26.7	Telecommunications	73	133	31	64	64	167	47.0
EADS NV	France	22.4	Aircraft	72	116	54	60	75	120	71.9
Vattenfall AB	Sweden	100	Electricity, gas and water	72	83	22	27	34	40	84.9
Veolia Environnement SA	France	10.7	Utilities (Electricity, gas and water)	52	72	29	48	212	313	66.9
CITIC Group	China	100	Diversified	44	315	11	31	25	125	23.2
Statoil ASA	Norway	67.0	Petroleum expl./ref./distr.	43	97	17	74	11	29	34.4
Deutsche Post AG	Germany	30.5	Transport and storage	39	50	44	67	258	425	68.3
Vale SA	Brazil	5.5 (12 golden shares)	Mining & quarrying	39	102	20	24	13	60	48.2
Petronas - Petrolim Nasional Bhd	Malaysia	100	Petroleum expl./ref./distr.	34	126	28	63	8	41	30.7
TeliaSonera AB	Sweden	37.3	Telecommunications	32	37	10	14	20	29	73.3
Renault SA	France	18.3	Motor vehicles	30	92	29	47	66	121	50.2
Japan Tobacco Inc	Japan	50.0	Food, beverages and tobacco	30	42	29	66	25	50	55.4
Finmeccanica Spa	Italy	30.2	Machinery and equipment	29	44	20	25	32	73	62.7
China Ocean Shipping (Group) Company	China	100	Transport and storage	28	36	18	28	4	72	49.7
Lukoil OAO	Russian Federation	13.4	Petroleum and natural gas	24	79	38	68	22	143	34.0
Singapore Telecommunications Ltd	Singapore	54.4	Telecommunications	23	27	8	12	10	23	64.3
Zain	Kuwait	49.2	Telecommunications	19	20	7	8	12	13	92.1
Qatar Telecom	Qatar	55.0	Telecommunications	18	23	5	7	1	2	78.0
Tata Steel Ltd	India	12.9	Metal and metal products	16	24	16	22	47	81	65.2
Petroleo Brasileiro SA	Brazil	39.8	Petroleum expl./ref./distr.	15	200	29	116	8	77	14.2
Abu Dhabi National Energy Co PJSC	United Arab Emirates	100	Utilities (Electricity, gas and water)	14	25	3	5	3	4	67.2
Petróleos de Venezuela SA	Venezuela, Bolivarian Rep. of	100	Petroleum expl./ref./distr.	12	150	33	75	5	92	19.0
China National Petroleum Corporation	China	100	Petroleum expl./ref./distr.	12	325	5	178	30	1 585	2.7

Source: UNCTAD.

^a All data are based on the companies' annual reports unless otherwise stated.

^b Based on most recent data available from Thomson Worldscope (retrieved 31 May 2011).

^c Industry classification for companies follows the United States Standard Industrial Classification as used by the United States Securities and Exchange Commission (SEC).

^d In a number of cases foreign employment data were calculated by applying the share of foreign employment in total employment of the previous year to total employment of 2009.

^e TNI, the Transnationality Index, is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

Does foreign ownership matter?

Table 1

An ideal-type stylized framework of five core dimensions to predict and assess expected behavior from the public and private shareholder.

Dimension	Public shareholder	Private shareholder
Financial	Profit-motivated but not only so; tempered by other key public and social objectives (taking into consideration a short and long term approach).	Predominantly motivated by short-term profit maximizing, financial costs and benefits, at the expense of concerns about accountability and transparency.
Economic	Assumes regulation to reduce or eliminate monopolistic rents.	Seeks to avoid competition when perceived as an impediment to profit (rent-seeking motivation).
Technical	Technically efficient and innovation-seeking (long- term optimal allocation of resources).	Technical efficiency is subordinated to profit and rent-seeking.
Social	Promotion of social development (external effects are accounted for and services are provided according to who needs them most).	Social efficiency is subordinated to profit seeking (external effects are not taken in consideration and services are provided according to willingness to pay).
Environmental	Promotion of environmental sustainability (takes into account ecosystem change).	Environmental efficiency is subordinated to profit and rent seeking.

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The loss of public values when public shareholders go abroad



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ABSTRACT

Governments emerged as “international public shareholders” when publicly-owned utilities developed into some of the world’s largest multinationals. This article enquires whether these international public shareholders maintain their public values when operating abroad. Taking a public values approach, we assess whether public values were transferred across borders focusing on five core dimensions: financial, economic, social, technical and environmental. We analyze the internationalization activities of two large public utilities, Vattenfall and Endesa - strategically selected for representing strong and weak public values – in their major markets in Europe and Latin America. We find that, irrespective of the relative strength of the initial public values legacy of the public utility, the lure of financial success trumped other competing objectives associated with the public shareholder abroad.

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1. Introduction

Policies of privatization, liberalization and deregulation dramatically reshaped the regulatory environment of public utilities in the Western world from the 1980s onwards (Clifton et al. 2003; Florio, 2013; McDonald, 2014). Early expectations were that an ensuing privatization “boom” into utilities would constitute some kind of panacea, resolving problems of under-investment, transferring know-how and de-politicizing public enterprise management by subjecting it to the disciplines of competition and financial markets (Clifton et al., 2006). These reforms, it was argued, would render utilities more efficient (Kessides, 2005). Final users – firms and citizens – would be beneficiaries of these reformed utilities, most obviously through price reductions but also through greater consumer choice, and improved social welfare.

In retrospect, even the World Bank and the Organization for Economic Cooperation and Development (OECD) have acknowledged that things did not go quite as planned, and that reforming utilities in these directions was much more complex than first anticipated (Estache, 2006; OECD, 2002). After three decades of utility reform, investment and know-how transfer around the world have been asymmetrical as cream-skimming predominated. Moreover, introducing competition into utilities has been

notoriously complex (OECD, 2002). The original policy to introduce competition “in” the market was diluted to introducing competition “for” the market (Archibugi et al., 2003). Liberalization triggered a wave of Mergers and Acquisitions, which resulted in increased market concentration in energy markets in Europe (Thomas, 2003). Meanwhile, new evidence emerged that prices rose, citizen satisfaction was uneven: vulnerable consumers and those living in rural areas were often less satisfied with reformed utilities (Clifton et al. 2014; Florio, 2013). Additionally, citizens living in rural areas expressed lower satisfaction with some services when compared to their urban counterparts (Clifton et al., 2016). Meta-regression analysis of privatization and costs provided no statistical support for cost savings (Bel et al. 2010).

Despite these reforms, public ownership and involvement in utilities did not disappear. Even after the wave of privatization, instances of public ownership of utilities could still be found around the world. For example, some governments used public ownership to protect utilities from hostile takeovers, treating them as “national champions” (Clifton et al., 2010). Hence, when dozens of utility providers expanded their activities abroad from the 1990s, this meant that some of the world’s largest multinational utility firms were still partly or fully publicly-owned. Indeed, utility privatization itself proved reversible when privatized utilities were taken over by partially publicly-owned ones (such as the case of Spanish Endesa’s acquisition by Italian Enel, as we discuss). In Germany and France, a process of re-municipalization of utilities has begun, especially in water (Hall et al. 2013; Chong et al. 2012).

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4). DRAWING OUT FOUR MAJOR IMPLICATIONS FOR IB

Drawing out four major implications for IB

1). Asymmetries

IB studies pay little attention to MNCs in these sectors

A general challenge with the rise of utility MNC especially when industry concentration occurs (small number of huge players, perverse consequence of competition!)

Extreme asymmetries when MNC come in to provide basic services to developing countries

Tensions between profit-making ambitions and provision of universal service when unprofitable

Governments between short-term capital requirements and strategic planning

Drawing out four major implications for IB

2). Under provision of infrastructure

Globalization provided great expectations, but has not been even

“Cream-skimming” dominates

Globally, greater interest in investing in telecoms than water (sector) and in growing Asian economies than in Africa (geography)

Small, landlocked African countries may not be attractive

The World Bank says countries should invest 7-9% of GDP in infrastructure but the reality is 3%.

Capacity: UNCTAD provides FDI templates and know how to close the “infrastructure gap”

Drawing out four major implications for IB

3) Geopolitics?

Privatization was to get government (politics) out of business

And out of infrastructure provision

But many governments retain controlling (or majority) shares or vested interests

And the West views with suspicion state-controlled MNC from the global south (hypocritically)

Are state-controlled utility MNC doing business as usual or do they have geopolitical interests?

- Russia's Gazprom cut gas exports to Europe 2006-9, 2012
- US blocks Dubai Ports in 2006 for "national security" reasons

Drawing out four major implications for IB

4) Public values...?

Privatization aims at maximising shareholding value, not the public interest.

Privatization is though shaped by regulation.

But, just as privatization, competition and FDI liberalization are uneven around the globe, so is regulation of the public interest.

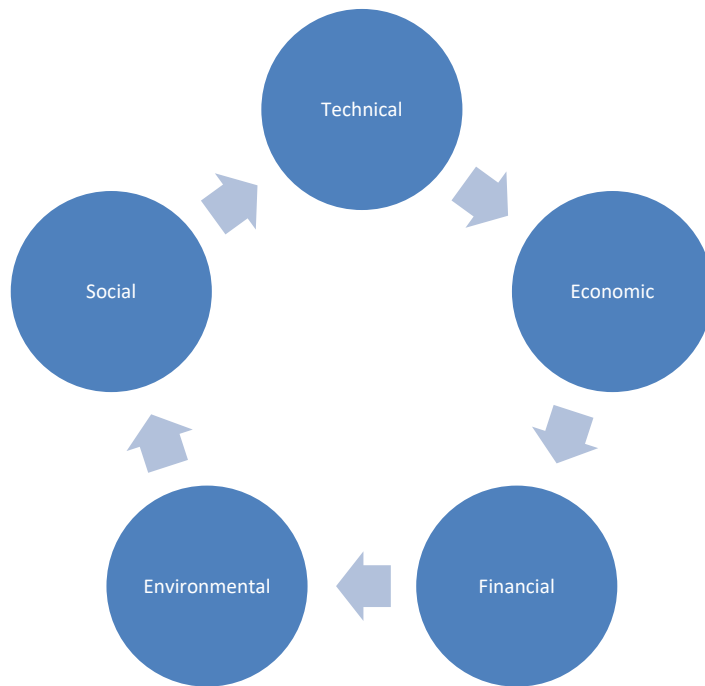
What happens, for instance, when a public utility goes abroad?

Does it behave like any other private business?

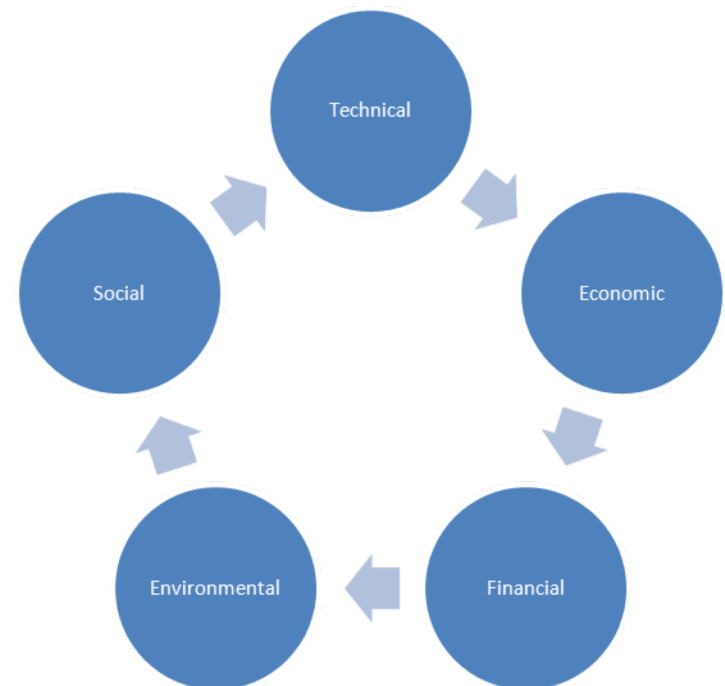
Or does it transfer across its public values?

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

Drawing out four major implications for IB



“Home” country/locality



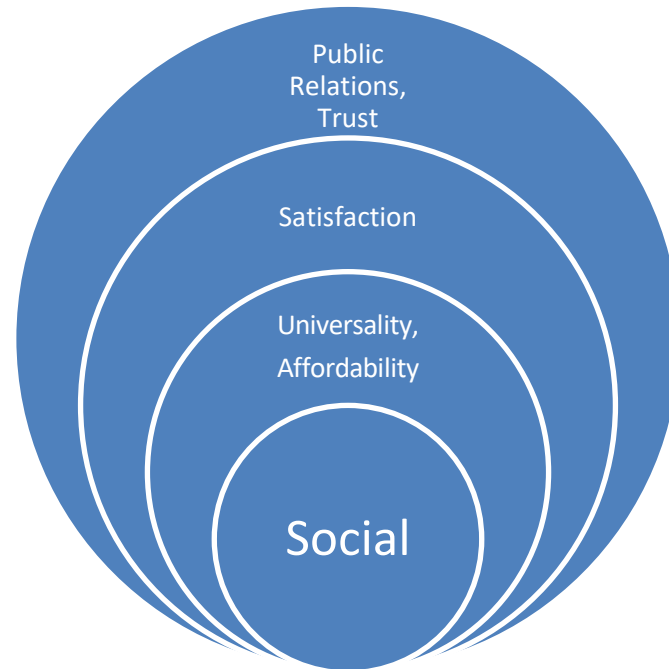
“Host” country/locality

Drawing out four major implications for IB

- Trend: continental European utilities in the UK
- EdF State-Owned Utility MNC
- Now the largest generator of electricity and low-carbon electricity in the UK
- No one supplier to non-domestic and no 5 to domestic customers
- Operates 8 nuclear power stations in the UK
- Recently signed deal between EdF and Chinese SOE to build new generation nuclear power stations in Somerset, England.
- First new nuclear power station in the UK for 20 years...

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

Drawing out four major implications for IB



Universality, affordability (OFGEM)

-Customer satisfaction (Consumer Focus, OFGEM)

-Public Relations

EdF Energy tries to sue 21 environmentalists in 2013...gives up after popular outcry

<http://www.monbiot.com/2013/02/25/corporate-blowback/>

11. The coming of age of the energy and water multinationals: How do public TNC behave abroad?

Key reading

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