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1.040 Project Management
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Private Finance Initiative

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Private Finance Initiative

- Denationalization program of Margaret Thatcher (British Prime Minister in the 1980's)
- The concept of PFI was introduced in 1992.
- Unlike privatization the emphasis of PFI is not on “asset acquisition” but on “procurement of service”

The Concept:

- “The Private Sector will provide funding for the capital project and will operate the facility to provide a public service”
- “Revenue will be achieved either directly from the user or through a payment mechanism negotiated with the public sector”

Government's Role:

- “Provision of public services,” not acquisition of capital assets.

■ Arguments for popularity of PFI

- Primarily: Government budgets have been capped; thus less funding is available for acquisition of capital assets
- Government's ability to borrow has been curtailed (see above)
- Direct user fees provide a clear conduit for capital recovery, avoiding governmental bureaucracy.
- Efficiency arguments: Design-Build-Operate nature of PFI projects allows for greater efficiency
- Private sector can/could manage and operate projects in a more efficient manner?

■ Implementation:

- Financially free-standing projects
- Joint venture projects
- Sale of services

- Issues of importance to success of PFI's
 - Educating government agencies (specifically local authorities) about “do's” and “don'ts” of PFI service delivery
 - Risks
 - Legal limits
 - Cost of capital (commercial roles vs. tax-free bonds)
- Bidding for PFI projects
 - In the case of joint venture type of PFI, government authority is faced with:
 - Whether the project will proceed at all; if so
 - Whether the project will be procured traditionally or as a PFI one; if so
 - How to choose a PFI supplier.
- The last point is typically the main cause of contention between the governmental authority and PFI bidders.
 - Large sums of money involved in bid preparation
 - Long negotiating time
 - Lack of experience on both sides

Construction Industry's Role:

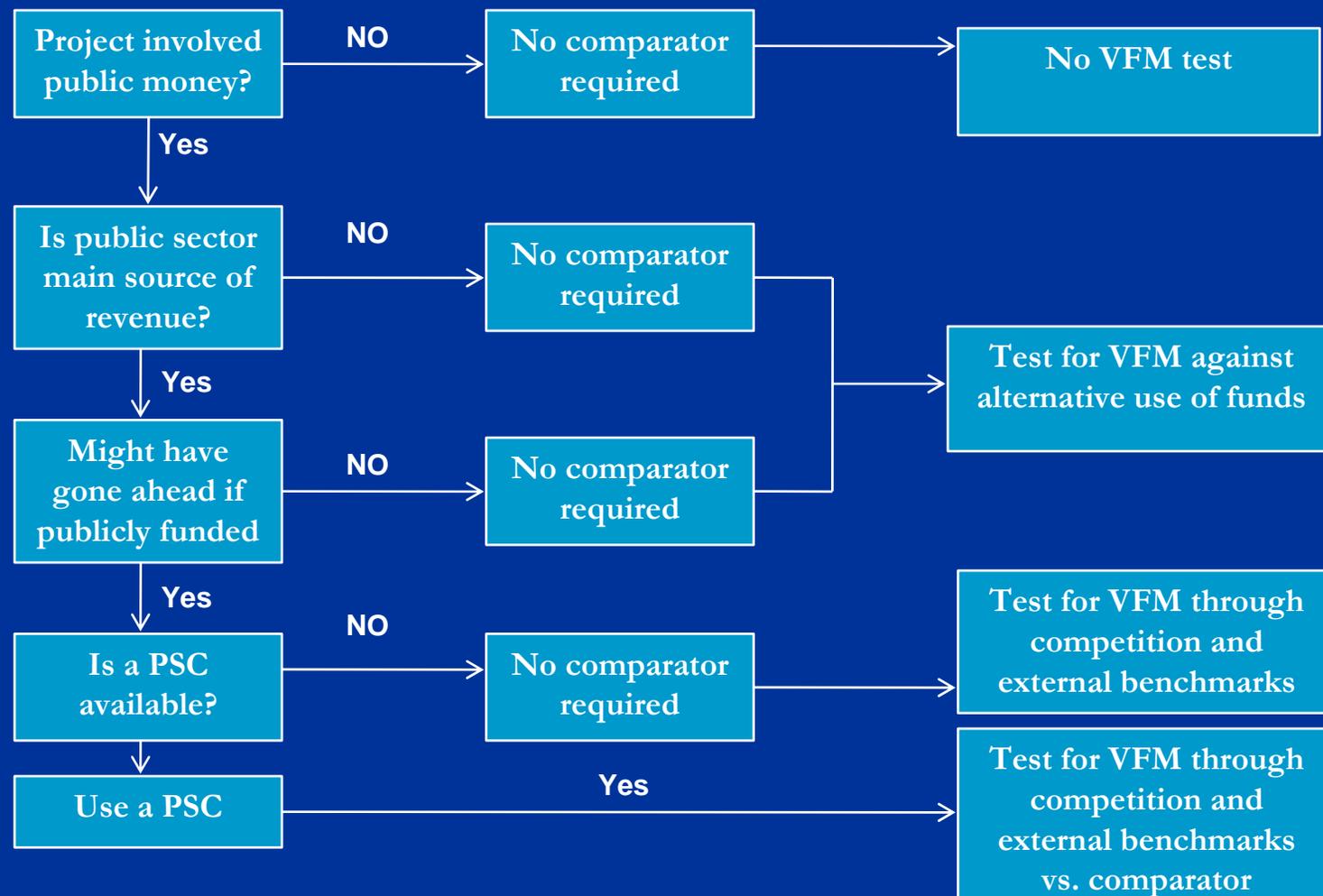
- Since they know how to build and - on many occasions - how to maintain infrastructure projects, they were the main players these types of PFI projects.
- Their weaknesses:
 - Lack of capital to participate in capitalization
 - Lack of experience in operation & cost flow management
 - Lack of experience in long-term nature of the projects
 - Lack of experience with management of PFI's risks
 - The design officers are inexperienced in translating demand for services into design

Public Sector's Role

- Protection of public funds
- Value for Money (VFM) criterion
- Ambiguity over risk assumption & risk allocation

- Lack of Experience & Expertise in Writing an “Output Specification” or “Service Provision Document” as against an “Asset Provision Document”
- Lack of Experience with past projects; thus a need for comparison on the basis of “VFM” especially when public funding is being committed.

How the public sector comparator (PSC) is used:



Public – Private Responsibilities

- When the project cannot be financed by the private sector, then the public sector enters in a variety of forms in order to close the gap between commercial financial analysis and social cost-benefit analysis.

Means for making projects feasible:

- Public Sector assumes additional risk sharing, thus increasing the robustness of the project cash flow and, in turn, attracting lenders with a better rate of interest.
- If the problem cannot be resolved by risk sharing, then the public sector could take an additional equity stake in the project.
- The public sector could generate additional revenue. (Case of Athens Airport. Government imposed additional tax on airline tickets.)
- Indirect Means Such as:
 - Tax Holidays
 - Grace Period
 - Soft Loan(s)

Infrastructure Project Global Lead Arrangers – Bank Loans (US \$ Millions) 2005 and 2006

2006 Rank	Name	2005 Rank	2006		
			Number of Facilities	Amount Underwritten	Percent of Total
1.	Royal Bank of Scotland	4	76	\$12,029	7.1%
2.	Calyon	3	69	8,745	5.1
3.	Societe Generale	1	45	7,037	4.1
4.	JBIC	7	7	5,935	3.7
5.	BNP Paribas	2	54	5,854	3.4
6.	HSBC	14	39	5,307	3.1
7.	BBVA Grupo	22	35	5,213	3.1
8.	West LB	6	42	4,094	2.5
9.	Goldman Sachs	20	30	4,053	2.5
10.	European Investment Bank	37	14	3,994	2.5
	Other		<u>1,006</u>	<u>98,705</u>	<u>62.9</u>
	Total		1,417	\$160,966	100.0%

Infrastructure Project Global Lead Managers – Bonds (US \$ Millions) 2005 and 2006

2006 Rank	Name	2005 Rank	2006		
			Number of Facilities	Amount Underwritten	Percent of Total
1.	Credit Suisse	8	7	\$3,340	16.9%
2.	ABN Amro	12	2	1,564	7.9
3.	HSBC	a	3	1,537	7.9
4.	Citigroup	1	2	1,435	7.3
5.	Deutsche Bank	6	4	1,393	7.1
6.	Lehman Brothers	3	4	1,350	6.8
7.	Royal Bank of Scotland	20	5	1,188	6.0
8.	Morgan Stanley	a	3	1,066	5.4
9.	Goldman Sachs	2	6	997	5.0
10.	Barclays	9	4	972	4.9
	Other		<u>26</u>	<u>4,862</u>	<u>24.9</u>
	Total		66	\$19,704	100.0%

*no deals arranged in 2005

Infrastructure Project Global Lead Arrangers, PPPs – Bank Loans (US\$ Millions): 2005 & 2006

2006 Rank	Name	2005 Rank	2006		
			Number of Facilities	Amount Underwritten	Percent of Total
1.	European Investment Bank	6	12	\$3,076	12.0%
2.	Dexia Group	1	20	2,689	10.4
3.	Royal Bank of Scotland	8	26	2,590	10.0
4.	Epfa Bank	32	10	1,723	6.7
5.	BBVA Grupo	28a	8	1,187	4.6
6.	Grupo Santander	28a	6	1,143	4.5
7.	Caja Madrid	5	7	1,009	3.9
8.	Bank of Scotland	3	10	772	3.0
9.	Calyon	14	4	761	3.0
10.	BNP Paribas	43	4	758	3.0
	Other		<u>110</u>	<u>9,772</u>	<u>38.9</u>
	Total Market		217	\$25,480	100.0%

a: tied for 28th

Infrastructure Project Global Lead Managers, PPPs – Bonds (US\$ Millions): 2005 and 2006

2006 Rank	Name	2005 Rank	2006		
			Number of Facilities	Amount Underwritten	Percent of Total
1.	ABN Amro	4	2	\$1,564	15.1%
2.	HSBC	a	3	1,537	14.8
3.	Deutsche Bank	2	4	1,393	13.4
4.	Citigroup	7	1	1,281	12.4
5.	Morgan Stanley	a	3	1,066	10.3
6.	Barclays	a	2	733	7.1
7.	Royal Bank of Scotland	a	1	644	6.2
8.	Merrill Lynch	a	2	630	6.1
9.	RBC Capital Markets	3	3	513	5.0
10.	Bank of Scotland	a	1	305	2.9
	Other		<u>5</u>	<u>681</u>	<u>6.7</u>
	Total Market		22	\$10,347	100.0%

Source: Adapted from Infrastructure Journal 2006 League Tables at <http://www.ijonline.com> and casewriter calculations.

Note: Tables include infrastructure projects in which a significant part of the assets are project financed. Sectors reported include oil and gas, power, telecom, water and sewage, petrochemicals, mining, and other, excluding agriculture, aviation, real estate, manufacturing plants and shipping projects.

a: No PPP deals arranged in 2005

Distribution of 620 Construction Contracts by Numbers of Years

	Number of Years						Mean	Median
	≤ 1.0	1.1 to 2.0	2.1 to 3.0	3.1 to 4.0	4.1 to 5.0	>5.		
Number	152	244	144	47	13	20	2.1	2.0
Percent	25%	39%	23%	8%	2%	3%		

Note: The construction period is the number of years to construct the project.

Distribution of Debt Instrument Maturities by Number of Years: 2000-2006

	Number of Years						Mean	Median
	≤ 5	5 to 9.9	10 to 14.9	15 to 19.9	20 to 25	\geq		
Bank Loans	26%	38%	19%	10%	4%	4%	9.9	8.0
Bonds	10%	29%	33%	26%	11%	2%	11.6	10.2

Sources: Thompson Financial SDC New Securities Issuance Database (bonds) and Loan Pricing Corporation (loans).

Number of project loans = 1,443; Number of project bonds = 126

Contract Length: 1994 to 2006

Distribution of Initial Debt-to-Total Capitalization Ratios by Year: 2002 to 2006 (633 projects)

Debt-to-Total Capital	2002	2003	2004	2005	2006	Total
<50%	15%	28%	13%	13%	8%	12%
50%-59%	11	9	10	7	8	9
60%-69%	9	9	10	9	14	12
70%-79%	11	17	22	13	22	22
80%-89%	26	26	23	28	21	24
90%	<u>26</u>	<u>12</u>	<u>22</u>	<u>26</u>	<u>28</u>	<u>21</u>
Total	100%	100%	100%	100%	100%	100%
Mean	71%	58%	71%	74%	75%	71%
Median	80%	71%	76%	76%	78%	76%

Project Finance Lending by Region: 2002 - 2006

Amount of Project Lending by Region (US\$ Billions)

Region	2002		2003		2004		2005		2006		Total 02-06		4 Year CAGR
Western Europe	\$23.36	38%	\$29.40	42%	\$25.69	22%	\$55.13	39%	\$57.84	33%	\$191.42	34%	25%
Asia	10.61	17	12.44	18	24.85	21	16.04	11	28.42	16	92.36	16	28
Middle East	2.75	4	6.50	9	18.56	16	28.15	20	31.20	15	87.15	15	84
North America	10.32	17	5.55	8	16.37	14	14.39	10	34.96	20	81.60	14	36
Americas	6.22	10	7.24	10	12.59	11	6.59	5	9.05	5	41.69	7	10
Australia /New Zealand	6.06	10	3.81	5	10.73	9	8.92	6	10.79	6	40.31	7	16
Africa	1.32	2	1.90	3	4.96	4	6.36	5	6.09	3	21.74	4	40
Eastern Europe	<u>1.54</u>	<u>2</u>	<u>2.72</u>	<u>4</u>	<u>2.69</u>	<u>2</u>	<u>4.66</u>	<u>3</u>	<u>2.26</u>	<u>1</u>	<u>12.83</u>	<u>2</u>	<u>14</u>
Total	62.18	100%	\$69.56	100%	\$116.44	100%	\$140.30	100%	\$180.61	100%	\$569.09	100%	31%

Project Finance Lending by Sector, 2002 - 2006

Amount of Project Lending by Sector (US\$ Billions)

Region	2002		2003		2004		2005		2006		Total 02-06		4 Year CAGR
	Value	Count	Value	Count	Value	Count	Value	Count	Value	Count	Value	Count	
Power	\$20.20	32	\$24.07	35	\$35.26	30	\$44.42	32	\$57.11	32	\$181.06	32	30
Transportation	13.59	22	14.99	22	23.51	20	28.73	20	44.60	25	125.42	22	35
Oil & Gas	6.44	10	9.03	13	22.52	19	24.04	17	26.37	15	88.40	16	42
Petrochemicals	5.71	9	5.88	8	8.80	8	6.97	5	20.26	11	47.62	8	37
Leisure & Property	4.76	8	4.44	6	7.00	6	13.28	9	17.25	9	46.76	8	37
Telecom	7.29	12	4.99	7	7.34	6	10.19	7	3.14	2	32.59	6	-19
Industrial	0.82	1	3.18	5	5.23	5	4.13	3	4.23	2	17.56	3	51
Mining	1.00	2	1.11	2	3.57	3	2.46	2	3.31	2	11.45	2	35
Water & Sewage	0.16	0	1.04	1	2.17	2	3.73	3	3.82	2	10.92	2	121
Other	<u>2.21</u>	<u>4</u>	<u>.84</u>	<u>1</u>	<u>1.04</u>	<u>1</u>	<u>2.36</u>	<u>2</u>	<u>0.53</u>	<u>0</u>	<u>6.98</u>	<u>1</u>	<u>-30</u>
Total	\$62.18	100%	\$69.56	100%	\$116.44	100%	\$140.30	100%	\$180.61	100%	\$569.09	100%	31%

Project-Finance Bank Loans by Sector and Region (US\$ Billions), 2002 to 2006

Sector	Europe, Middle East, Africa	Asia Pacific	Americas	2002 to 2006 Total	Percent of Total
Power	\$83.35	38.55	59.15	181.06	31.8
Transportation	72.99	37.75	14.69	125.42	22.1
Oil & Gas	43.68	16.69	15.49	88.40	15.5
Petrochemicals	27.72	15.55	4.34	47.62	8.4
Leisure & Property	37.29	7.83	1.62	46.76	8.2
Telecom	23.50	6.51	2.93	32.95	5.8
Industrial	8.78	4.45	4.27	17.56	3.1
Mining	2.15	3.10	6.19	11.45	2.0
Water & Sewage	8.78	1.28	0.85	10.92	1.9
Other	<u>4.34</u>	<u>1.53</u>	<u>1.12</u>	<u>6.98</u>	<u>1.2</u>
Total	\$312.58	\$133.32	\$123.19	\$569.09	100%
Percent	54.9%	23.4%	21.6%	100%	

Source: Adapted from Project Finance International, various issues January 2002 to January 2007

Shaded boxes show market segments with the largest amount of bank financing – 5% or more of total amount loaned.

Other includes waste and recycling, agriculture, and social infrastructure (e.g., schools, hospitals, prisons) projects.