

Building State Infrastructure Privately:

**The Emergence and Diffusion of Public Private Partnerships in Canada, the United
Kingdom and the United States of America**

by

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Abstract

This study introduces a new explanation of the creation and expansion of public-private partnerships (PPP's) in developed countries, using Canada, the United States and the United Kingdom as case studies.

While classical accounts of the rise of PPP's have highlighted the fiscal constraints of states, superior efficiency of PPPs, particular political parties and the long history of governments' cooperation with the private sector, none of those accounts can explain the emergence of PPPs at a specific time in history and the cross-jurisdictional variation in the timing of the diffusion.

Using a policy diffusion perspective, the thesis examines the historical evolution of project finance in the private sector starting in the 1930s in Texas's oil prospecting venture industry. Taking into account this evolution and the associated evolution of supporting institutions over time helps explain better the specific timing of the birth of PPP's in the United Kingdom, the United States and Canada. This historical analysis becomes the basis of an integrated model where the private sector is at the core of the first wave of policy diffusion. The private sector, at its core, was composed of accountants, bankers and lawyers forming a coalition of interests as they all had a similar financial interest in seeing an increase in financial deals - what the dissertation dubs the Financial Engineering Sector (FES) as an heuristic - and it was involved in the project finance tool (PF) from its inception in Texas (1930) to the North Sea petroleum exploration (1960s). The FES adapted the PF product over time to industrial sectors other than oil and gas in the 1970s, and its expertise was then available to the Conservative governments of Thatcher, Reagan and Mulroney, among others, for the privatization of

state assets. The FES is not monolithic, but used here simply as a heuristic for a coalition of interests composed non-exclusively of accountants, bankers and lawyers. Nonetheless, this coalition had a direct interest in the diffusion of PF and, later, PPP: an interest strong enough to finance the creation of PPP organizations dedicated to diffuse ideas about their merits and usefulness to governments and fiscally conservative politicians.

In the 1980s the PF tool was for the first time applied in the public sector through PPP's. The public sector, in need of bridges and highways, was seen by the FES as simply another business target, such as telecommunications or mining: working groups were created by the firms to find ways to sell PF to the public sector in the 1970's and 1980's. However, as a new mode of combining public services and private investments, the FES needed - for the first time - to demonstrate the legitimacy of PF to sell it as PPP's to both the political class and the public in general. To create those ideas about PPP's, the FES funded the creation of several hubs of diffusion, such as the National Council for Public Private Partnerships (US), the Canadian Council for Public Private Partnerships, and to some extent PartnershipsUK PPP (UK). Those organizations, in turn, lobbied governments - pretending to provide independent expertise - for the enactment of "enabling legislation" and dedicated PPP agencies, all the while diffusing the idea of PPP's in the form of reports, conferences and seminars. In turn, Conservative governments saw PPP's as an opportunity in tune with their rhetoric and pro-market convictions.

By the 2000s, governments have established various agencies as requested by various PPP councils and the FES, such as PPP Canada or PartnershipsBC, to incentivize and steer public officials toward PPP's. From the 1930's up to now, the FES has

continuously expanded the PF product to new sectors, such as schools and hospitals, including many non-infrastructure components of those projects (e.g., nursing, cleaning, maintenance). While conservative governments saw PPP's as an attractive tool - in part by their political conviction and in part following the diffusion of ideas about PPP's -- the tool had been created and sold in the private sector for decades. But politicians became part of this grand coalition of interest, albeit not necessarily only for economic efficiency, but in many case for political efficiency (e.g., inaugurating more projects than one can normally afford is politically attractive).

By taking into account the material evolution of project finance and its interplay with the realm of ideas and actors who have converging, but distinct interests, and are working in structurally different environments, this study explains - at a macro level - the diffusion of the phenomenon with more depth, provides a new set of questions for future research, and contributes to a theoretical foundation of the public policy of PPP's for policy analysts, politicians, and practitioners alike.

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Table of Contents

ACKNOWLEDGEMENTS	V
TABLE OF CONTENTS	VII
LIST OF TABLES	XII
LIST OF FIGURES	XIII
LIST OF APPENDICES	XV
LIST OF ACRONYMS	0
CHAPTER 1 - PUBLIC PRIVATE PARTNERSHIPS IN A POLICY DIFFUSION	
PERSPECTIVE	1
1.1 PPPs as a new phenomenon?	1
1.2 Public-private partnerships: what are they exactly?	3
1.3 Why are we seeing PPPs emerge at this particular time in history?	9
1.4 Explaining the phenomenon: the mainstream way	12
1.5 Problems with the previous explanations	25
1.6 Research question	36
1.7 Are PPPs simply a more advanced form of governance for project implementation?	41
1.8 Policy diffusion or where does the ideas about PPPs come from and how they travelled	43

1.9	Material source of policy initiative and diffusion	44
1.10	Limitations and challenges of this historical and comparative study on policy diffusion	46
1.11	Policy diffusion perspective as a way to grasp the phenomenon	47
CHAPTER 2: THE EVOLUTION OF THE FINANCIAL MARKET AND THE RISE OF PROJECT FINANCE		49
1.1	Defining project finance	49
1.2	Where does project finance come from?	51
1.3	A new era of project financing	60
1.4	Private partnerships through project finance	65
1.5	From an ad hoc necessity stemming from a particular environment to a fully developed financial product	71
1.6	The evolution of private partnerships into PPP	73
1.7	The diffusion of a product	77
1.8	Turbulent times	79
1.9	From PF, divestiture to PF as PPPs	84
1.10	What to conclude from this?	86
CHAPTER 3 – THE UNITED KINGDOM: THE BIRTH OF A SOPHISTICATED FINANCIAL ENGINEERING SECTOR		89
1.11	A contextual historical evolution creating special channels of diffusion	90
1.12	PPPs are not stemming from an idea or a policy in the UK	93
1.13	Structured finance	100

1.14	Lending for project finance	106
1.15	Institutionalization of the financial engineering sector	112
1.16	The evolution of project finance in the US	139
1.17	Urban renewal	139
1.18	Power generation	143
1.19	From PUHCA to PURPA and the creation of an engineered financial product in the US	149
1.20	The birth of modern project finance in the US	153
1.21	From project finance to PP's and PPPs in the US	157
1.22	Diffusing project finance for PP's and then PPPs	161
1.23	Diffusion and advocacy in the US	163
1.24	Privatization experience	165
1.25	The creation of the biggest hub of diffusion worldwide in a country which has few PPPs	170
1.26	Making explicit the diffusion efforts	183
1.27	Conclusion	197

CHAPTER 5 – THE CANADIAN EXPERIENCE: WEAK PROJECT FINANCE, MODEST PRIVATIZATION EXPERIENCE AND LATE PPPS DEVELOPMENT

200

1.1	Toward nationalization of an independent electric supplier	201
1.2	Nationalization <i>à la québécoise</i> with Hydro-Québec	205
1.3	Developing the oil (tar) sands	210
1.4	Later development, later availability	216

1.5	Canada's privatization experience	218
1.6	The management consultant in Canada: left on the side road	222
1.7	The management consultant – competing for advisory roles	230
1.8	Canadian banking : much more deposit oriented than the US and the UK	235
1.9	Neither Giants nor Magic: Canadian law firms	240
1.10	Fuelling the Canadian pipeline through CCPPP	245
1.11	Provincial PPP agencies blossom	247
1.12	The Canadian diffusion building program	254
1.13	The symbolic protection of a crown corporation: favoring an industry	256
1.14	Conclusion	259
 CHAPTER 6 - CONCLUSION: WHY ARE WE DOING PPPS AND 'SO WHAT'?		 261
1.1	The construction of intellectual shortcuts and symbolic images: the generation of ideas	270
1.2	Material pre-condition to ideational diffusion of PPPs	274
1.3	Theoretical implications of this study	281
1.4	Implication for policy diffusion	291
1.5	So what?	292
 BIBLIOGRAPHY		 297
 APPENDICES		 323

APPENDIX 1 - PROJECT FINANCE PER PROJECT PER YEAR (1975-1992)	323
APPENDIX 2 - EXHAUSTIVE MULTI-SOURCE PROJECT FINANCE PROJECT PER YEAR (1975-1992)	326
APPENDIX 3 – SPONSORS OF CCPPP AS OF 2012	337

List of Tables

Table 1 - Location of project finance private partnerships (1975-1992).....	67
Table 2 - The first application of private finance to the public sector and the creation of PPP in developing countries.....	69
Table 3 - TheCityUK's Domestic Promotion Committee's membership	127
Table 4 - TheCityUK's Overseas Promotion Committee's membership	128
Table 5 - Legal counsel - 1994-2012 - US	173
Table 6 - Financial advisors - 1994-2012 - US	179
Table 7 - PF loan per type in Canada - 1970-1996.....	216

List of Figures

Figure 1 - CCPPP's partnerships spectrum.....	6
Figure 2 - Present understanding found in most textbooks	38
Figure 3 - New understanding of the emergence and diffusion of PPPs.....	39
Figure 4 - North Sea's harsh conditions.....	61
Figure 5 - Pipeline of project finance on an historical perspective (1972-1996)	75
Figure 6 - Deals flows for project finance in developing countries worldwide per year (1984-2009).....	76
Figure 7 - Revenues from privatization: OECD countries vs. Rest of the World (1977- 2004).....	77
Figure 8 - UK PPPs capital expenditure.....	93
Figure 9 - PFI project in the UK (1992-2009).....	102
Figure 10 - Illustrative role of advisers acting for the public sector procurer	121
Figure 11 - Major firms in the UK providing services to the international PPP market. 121	
Figure 12 - Trends in PFI in UK and PPP in Europe	132
Figure 13 - PPP in Europe and in the UK in an historical and comparative perspective	133
Figure 14 - PFI/PPP in UK government departments in a comparative and historical perspective.....	134
Figure 15 - PFI in UK government departments	135
Figure 16 - Debt over time by sector in the US (Project Finance).....	167
Figure 17 – Sponsors and Sustaining Members of the NCPMP	171
Figure 18 - Financial advisors - deals closure in the US	172
Figure 19 - Legal counsels - 1994-1998.....	177
Figure 20 – PF debt by country – 1994-2012.....	182

Figure 21 - Debt over time by sector - Canada	215
Figure 22 - Major Canadian Federal Privatization	219
Figure 23 - Major Canadian Provincial Privatization.....	221
Figure 24 - Debt over time by Country - UK, CA, US	226
Figure 25 - Volume of debt by Sector – World (94-98).....	227
Figure 26 - Volume of debt by Sector - World (98-02)	228
Figure 27 - Debt over time by Sector - Canada (94-12).....	229
Figure 28 - Debt over time by Sector - PF - Canada (94-12).....	230
Figure 29 - Financial advisers - Canada	231
Figure 30 - Canadian Financial Advisers	238
Figure 31 - PF debt of Legal Counsels - Canada (94-12).....	240

List of Appendices

Appendix 1.....	325
Appendix 2.....	328
Appendix 3.....	339

List of Acronyms

AFP

Alternative Financing and
Procurement, 2

APPP

Agence des partenariats public privés,
251

BP

British Petroleum, 62

CAMC

Canadian Association of Management
Consultants, 224

CCPPP

Canadian Council for Public-Private
Partnerships, 1

CDO's

Collateralized debt obligations, 179

CF

Conventional Financing, 51

CRCHUM

Centre de Recherche et Centre
Hospitalier de l'Université de
Montréal, 29

CSD

Civil Service Department, 92

CUPE

Canadian Union for Public Employees,
10

CUSM

Centre Universitaire de la Santé
McGill, 29

DOD

Department of Defence, 191

E&Y

Ernst&Young, 233

EU

European Union, 27

FERC

Federal Energy Regulatory
Commission, 152

FES

Financial Engineering Sector, 40

FHA

Federal Housing Administration, 141

FPC

Federal Power Commission, 146

FTC

Federal Trade Commission, 144

GAO	Liberalisation of Trade in Services, 123
General American Oil, 52	
GCOS	MLH&P
Great Canadian Oil Sands, 211	Montreal Light, Heat & Power, 205
HUD	NCPPP
Housing and Urban Development, 138	National Council for Public-Private Partnerships, 3
IFSL	NPM
International Financial Services London, 96	New Public Management, 92
IGOs	OAG
International Governmental OrganizationsOrganizations, 43	Office of the Auditor General, 223
IMF	OECD
International Monetary Fund, 43	Organization for Economic Cooperation and Development, 37
IO	OSIFA
Infrastructure Ontario, 249	Ontario Strategic Infrastructure Financing Authority, 249
IPP's	P3's
Independent Power Producers, 154	Public Private Partnerships, 22
IPPP	PC
Institut pour les partenariats public privés, 254	Privatization Council, 162
IQ	PEMS
Infrastructure Québec, 253	Policy and Expenditure Management System, 224
LOTIS	

PFI	Public Utility Regulatory Act, 90
Private Finance Initiative, 7	PwC
PPA's	PricewaterhouseCooper, 64
Power Purchase Agreement, 155	QF
PPBS	Qualifying Facilities, 153
Planning, Programming and Budgeting System, 224	RFP
PPFA	Request for Proposal, 241
Private Project Finance Application, 7	SEC
PPIAF	Securities and Exchange Commission, 148
Public-Private Infrastructure Advisory Facility, 4	SPEs
PPPs	Special Purpose Entities, 62
Public Private PartnershipsPartnerships, 1	SPV
PSC	Special Purpose Vehicle, 4
Public Sector Comparator, 32, 95	SPV's
PUHCA	Special Purpose Vehicles, 62
Public Utility Holding Company Act, 143	SW&PC
PUK	Shawinigan Water and Power Company, 207
Partnerships UK, 9	TCE
PURPA	Transaction Cost Economics, 33
Private Utility Regulatory Act, 142	TVA
	Tennessee Valley Authority, 206
	UDAG

Urban Development Action Grant, 139	United States of AmericaAmerica, 1
UK	VfM
United Kingdom, 1	Value for Money, 16
UN	ZBB
United Nations, 43	Zero Base Budgeting, 224
US	

CHAPTER 1 - PUBLIC PRIVATE PARTNERSHIPS IN A POLICY DIFFUSION PERSPECTIVE

“PPP currently enjoys remarkable acclaim in both official and scholarly circles. Organizations ranging from the European Union to Canadian Heritage not only endorse the partnership idea but actively employ it as a programmatic tool for adapting to what they perceive as changing needs and circumstances” (Rosenau, 2000, p. 19).

The citizens of countries such as Canada, the United States of America (US) and the United Kingdom (UK), have recognized roads, highways, prisons, water supply, hospitals and schools as essential services. For those enjoying these services now, there is a great chance that those infrastructures and services have been financed, constructed, and managed by their governments’ public servants, or through the supervision of private actors. But this state of affairs has changed and infrastructures, once financed by governments, are being increasingly provided - financially - by private firms and consortia. Why is it so?

1.1 PPPs as a new phenomenon?

From an historical perspective, thirty years ago public-private partnerships (PPPs) were almost nowhere to be found. In Canada, for example, it was only in 1993 that the Canadian Council for Public-Private Partnerships (CCPPP) was established “as a member-sponsored organization” (mostly corporations having an economic interest) to act “As

proponents of the *concept* of public-private partnerships” (my emphasis, Canadian Council for Public Private Partnerships, 2013). For this purpose, the Council “conducts research, publishes findings, facilitates forums for discussion and sponsors an Annual Conference on topics related to PPPs, both domestic and international” (Canadian Council for Public Private Partnerships, 2013). The same year, the \$739 million Confederation Bridge was announced as the most important PPP in Canada (PEI Media, 2010).

Since then, key political actors in Canada have acknowledged the remarkable acceleration in the expansion of the phenomenon. It would now be only the beginning of a blooming “market”, as Finance minister Jim Flaherty termed it in his address to the industry (PEI Media, 2010, p. 8). On the industry’s side, the interest is so strong and the expansion so quick that “Europe’s public-private partnership investors went west in search of riches in the US”, but, disappointed by the lack of enthusiasm there, “They realized that perhaps a more apt direction would be to head north. For Canada is fast becoming a land of opportunity for PPPs – looking poised to outgrow both its tutor in the UK and its toddler in the US” (PEI Media, 2010). There are now numerous so-called PPPs or “Alternative Financing and Procurement” (AFP) projects planned, underway, or finalized in Canada and its provinces.

In fact, as of 2013, the CCPPP database shows that there were 149 in 2011 and 195 in 2013 PPPs underway in Canada, excluding the municipal level. Most of the projects are concentrated in British Columbia (37), Ontario (99), New Brunswick (10) and Québec (18) (2013). Saskatchewan does have 2 PPPs within its territory, but is flanked on the west by Alberta, which has 15 PPPs, and on the east by Manitoba, which has five. More specifically, there are 71 PPPs in the healthcare sector (mostly hospital buildings), 43 PPPs

in the transportation sector and 19 PPPs in the correctional sector (2013).

In the US, the National Council for Public-Private Partnerships (NCPPP) - from which the CCPPP was directly inspired eight years later - was created in 1985; it was the first of its kind. The mission of NCPMP “is to advocate and facilitate the formation of public-private partnerships at the federal, state and local levels, where appropriate, and to raise the awareness of governments and businesses of the means by which their cooperation can cost effectively provide the public with quality goods, services and facilities” (The National Council for Public-Private Partnerships, 2011a). Everything that the NCPMP organizes is geared to promote the PPP model and all its “networking events” are “sharply focused opportunities” for new economic gains, which are at the core of the “benefits of the memberships” (ibid). Unfortunately, the NCPMP does not provide a database such as CCPPP’s, but suffice it to say for now that, based on the research to be presented later, the US has not embraced PPPs as strongly as industry would have wished. As an empirical example, this can be seen by the fact that the institutionalization of the concept (i.e., specialized agencies such as Partnerships B.C., Infrastructure Ontario, or Partnerships UK) has been nearly nonexistent there to any significant extent, but this is changing, and California, for example, might have one shortly after this study is completed.

1.2 Public-private partnerships: what are they exactly?

There is one thing clear about PPPs: there is no agreed and universal understanding of what they are. For Vining and Boardman, “There are three major options for infrastructure delivery (although each has many variations): direct public provision, contracting-out (i.e., design, build, transfer), or public–private partnerships (P3s)” (Vining

& Boardman, 2008, p. 149). They would be a clear option for infrastructure delivery. For Loxley, “Definitions of public-private partnerships (P3s) range from broad to specific, and their nature varies according to who is beholding them” (Loxley & Loxley, 2010, p. 2). From a legal perspective, Tvarno proposes that “a PPP can be characterised as a long-term contract arrangement between a public authority and a consortium of private parties based on co-operation, aiming to provide a mechanism for developing public service provision involving significant assets or services for a long period of time” (Tvarno, 2010, p. 23). Edkins is one of a few who include the Special Purpose Vehicle¹ (SPV) as an essential component of its Private Finance Initiative/Public Private Partnership² (PFI/PPP) definition:

“PFI/PPP projects involve the engagement of private sector organisations in the provision of public infrastructure and services through concession contracts of up to 40 year’s duration. The primary parties are client, concession contractor, called the Special Purpose Vehicle (SPV), and constituent members of the SPV” (Smyth & Edkins, 2006, p. 232).

The recognized PPI Project Database, which is maintained by the World Bank and the Public-Private Infrastructure Advisory Facility (PPIAF) refers to brownfield concessions, a type of PPP where the private sector renovates an existing infrastructure, as “concessions,” and defines them as contractual arrangements whereby “a private entity

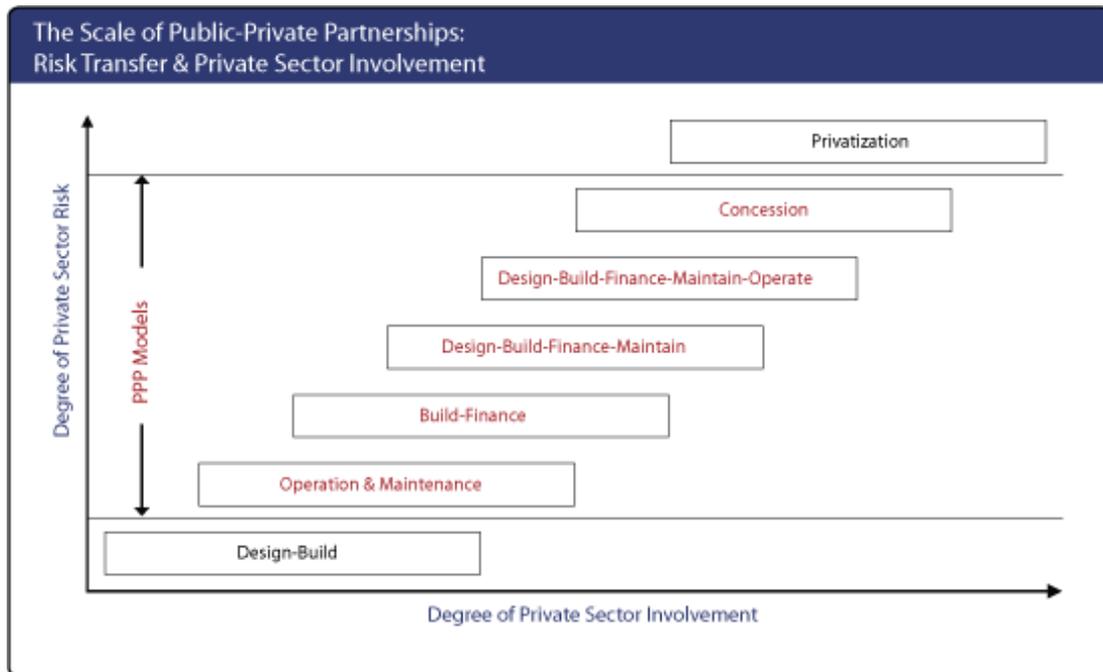
¹ A Special Purpose Vehicle is a company created to accomplish a specific function, by legal design, and used as a shield by the creator from financial risks and liabilities.

² In the UK, PFI refers to a particular form of PPP, much as outsourcing or joint-venture.

takes over the management of a state-owned enterprise for a given period during which it also assumes significant investment risk” (Leigland, 2008, p. 1). The Parliament of Australia defines PPPs as “partnerships between the public sector and the private sector for the purposes of designing, planning, financing, constructing and/or operating projects which would be regarded traditionally as falling within the remit of the public sector. Infrastructural projects such as roads and bridges are prime examples” (R. Webb & Pulle, 2002). An online dictionary defines PPPs as follows: “A method of providing funds for major capital investments where private firms are contracted to complete and manage the projects. These contracts are typically given to construction firms and last a long time, sometimes up to 30 years. The public services are leased to the public and the government authority makes annual payments to the private company” (McLean & McMillan, 2009). For Garcin, the more one reads about PPPs, the more one gets confused about what they really are: “the definition of PPP has become progressively blurred and vague” (Garcin, 2010).

The CCPPP, an organization advocating the product, defines PPPs as “A cooperative venture between the public and private sectors, built on the expertise of each partner, that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards” (Canadian Council for Public Private Partnerships, 2010). Below is a figure it uses, which is widely circulated (Figure 1).

Figure 1 - CCPPP's partnerships spectrum



© The Canadian Council for Public-Private Partnerships

(original figure, 2010)

We see that, “There is still no clear definition of what constitutes a PPP. This might result from the fact that PPPs fill a vast space between traditional procurement and full privatisation of production (full direct provision by the government is also possible but not often implemented). The concept of PPP is also difficult to define due to the persistent controversy concerning what “partnership” really means” (Carmona, 2010, p. 2).

For the purpose of this study, we propose to define PPPs in a straightforward way. The definition will be applicable to any infrastructure projects or any services involving private financing over a limited term. We will hence make an important distinction in what

has been termed, up to now, public-private partnerships, and its numerous variations, such as public-private policy partnership, private finance initiative, alternative finance procurement and other terminologies, which blur more than help our understanding. We propose, first, to eliminate the partnership word. Then we distinguish, on the basis of financing, the type of governance structure for simplicity, because it makes more sense. The new definition used here is: The application of private finance to a public project constitutes a ‘Private Project Finance Application³’ (PPFA) where private actors will be involved, in part or in full, to design, build, maintain, operate or take any other actions that could have been accomplished by the public sector alone, but is now accomplished under private financing techniques.

This definition helps us by removing the governance structure from the definition and hence making it clearer. To be sure, many service contracts have been described as PPPs because they extended over several decades, but *the new and interesting factor is actually the private finance of those activities and not the activities per se*. For example, if a government gives to a private consortium the management of a public highway, under a concession contract, it would not be a PPP – contrary to Figure 1 - because it is not a PPFA. So what would it be? It would simply be a concession if private finance is not involved. Another example; if the government outsourced the operation and maintenance of a road, it would not be a PPP – again contrary to Figure 1 – since it is not a PPFA. Operation contracts or maintenance contracts are what they are. They can be grouped into a single contract of services, but are still not a PPFA. My proposition is to replace PPP, PFI,, AFP and the like, by a single term, which encompasses them all (those who qualify

³ In French, ‘Application publique du financement privé’.

as PPFA are PPPs and vice-versa) under an objective criterion: the application of private project finance to the public sector. Simply put, a design-build-operate financed by the public sector is not a PPFA because there is not private finance involved; bundling three outsourcing into one contract without private finance does not qualify as PPFA and should be seen as outsourcing for clarity. A contrario, design-build-*finance*-operate is a PPFA because the private finance is involved and replace the traditional procurement financing model where the public sector was financing its projects - when we refer to PPPs or to the application of the PF product to the public sector in this study, we have the latter in mind.

To make sense of the phenomenon, it is important to be able to differentiate collaboration between the public and private sector (which is often reported as a Public Private Partnership), a concession contract for maintenance of an infrastructure, and the private financing of a public infrastructure. For the rest of this study, we will retain the PPP acronym only because most of the literature and organizations involved in them are using it; using this new one at the same time would only confuse the reader. Hence, we will use PPPs or P3s, but they are understood as the PPFAs defined above. The PPFA to the public sector is the true novelty on an historical perspective. PPFA is the element that constitutes the difference between different contract types, such as the traditional building contract, design contract and operation contract and the new methods where the building contract has a PPFA component. Most of the projects that have been termed PFIs or PPPs are in fact PPFAs. Some Design-Build-Operate contracts have been referred to as PPPs, but since they do not have a PPFA component, they are simply what they are – more complex contracts. If contracts become partnerships as they get more complex and include a service engagement, for example (as with the current understanding) then privatizations

would have to be defined as instance of PPPs; this, of course, make no sense. Our key point is to focus on phenomena that involve instances of private project financing for public endeavours to highlight how the diffusion was operated.

1.3 Why are we seeing PPPs emerge at this particular time in history?

Mainstream accounts of PPPs all posit that the end of the 1990's saw an "explosion" of PPP with the Private Finance Initiative (PFI) initiative in the UK. Attempts to empirically validate this claim create an interesting problem: there is no equivalent to CCPPP and NCPMP in the UK, and Partnerships UK was created only in 2000. The typical story argues that this "explosion" started in 1992 under Prime Minister John Major. Major, a former Chancellor of the Exchequer to Margaret Thatcher, before becoming Prime Minister between 1990 and 1997, would have continued Thatcher's objectives.

In 1997, the Labour Party made PPPs an election issue, stating that it would change the process to somehow "force" departments to go the PFI way under close supervision from the Treasury. It would only be in 2000 that Partnerships UK (PUK) was created to take over from the Treasury's authorities on PFI. PUK has 920 entries in its PFI database of projects that "achieved [a] financial close" (PartnershipsUK, 2011b). Interestingly, PUK has been disbanded while we were writing this study seemingly facing the similar fate of Québec's "Agence des PPP" which was dismantled in 2010 after numerous scandals.

Mainstream accounts of PPPs in these countries describe a story that the government, once it decided to "create" PPPs, simply turned on a tap and PPPs were ready to be negotiated. The desire of the public officials is the independent variable. In these accounts, we don't really know where PPPs came from. While the UK story features Major's initiative, in Canada and in the US there is no such story. We do not have any

account of CCPPP or NCPMP or of any other related organization on how they have been involved in policy diffusion. We don't know who created these organizations and for what reason. Indeed, PPPs came out of nowhere even for union strategists such as the Canadian Union for Public Employees (CUPE) who had, and still have, enormous difficulty explaining the problems they perceive with PPPs. They are incapable of highlighting the macro-story of the phenomenon as they are seemingly glued to micro-debates on the intrinsic efficiency of PPPs.

After having reviewed the available and specific literature on PPPs, one would have to conclude that they just suddenly appeared after Conservative politicians decided to use them. But what is/are the driving variable(s) of the phenomenon? Why are we undertaking PPPs in developed countries such as Canada, the UK and the US? Why this enthusiasm for PPPs in Canada and its provinces, but much less in the US? What we do know is that we know little about the way the phenomenon is being diffused and this has an effect on the thinking we have developed surrounding PPPs. By ignoring the driving force of the phenomenon, we might have ignored some possible consequences attached to the enterprise. We would argue that this academic knowledge gap is similar to the ignorance in the public policy, political science, and economic fields at the beginning of the privatization enterprise, with the consequences we now know (Hodge, Greve, & Boardman, 2010).

The first thing to do is to acknowledge that there are two types of "literature" one can research for a grounding on this topic: 1) what we will refer to as an "organizational literature," stemming from private consulting firms and special bodies, institutions and organizations promoting the PPP formula and 2) what is recognized as the "scientific

literature” found mainly in academic journals and books, and characterized by a disinterested approach (i.e., to be contrasted from firms’ literature) which has a clear methodology usually aimed at explaining causal relations either by using a deductive or an inductive approach. We will examine both literatures to construct the core of the empirical explanations in an integrated fashion.

For the purpose of introducing the study, there are three broad explanations advocated by *proponents* of PPPs: 1) the State is under fiscal constraint and would be otherwise *unable* to redress infrastructure deficits; 2) PPPs are a way to harness the superior *efficiency* of the market, offload high *risks* onto the private partner, increase *accountability, transparency* and *democracy* while getting better and faster infrastructure at a *lower* cost to the government (Canadian Council for Public Private Partnerships, 2013; Infrastructure Ontario, 2011; Infrastructure Québec, 2011; Partnerships BC, 2011a; PEI Media, 2010; PPP Canada, 2011) and 3) PPPs have always existed and have come back following the decay of the welfare state era. We can add another class of explanation generally advanced by those who are *opposed* to the PPP enterprise: 4) it is related to a political party (e.g., Jean Charest’s Réingénierie de l’État) and the neoliberal agenda it promotes (Danis, 2004, p. 3).

After having reviewed the literature, we will highlight difficulties in the explanations: What is/are the driving variable(s) to explain why public institutions enter into PPPs? What is the engine of diffusion? More specifically, our research question to be explained below is: *How have PPPs been created and diffused as a legitimate public policy and implemented by private firms with a varying degree of success?* This thesis is about public-private partnerships, but we investigate them under the lens of policy

diffusion in a comparative and historical perspective or, stated differently, how they have been created, by whom and how they are being diffused. Again, we are not interested in the particular models of PPPs, whether or not they had success in a region or province - or a country not studied here - or in their efficiency *per se*, but by what proponents say about them, about the ideas diffused about them and by those who diffuse such ideas - which often involve pretensions about how they are efficient which we will discuss. Our central contention is that it all started without the “public” as primitive project finance developed itself into private partnerships as the industry was growing. The fact that they have been created by private consortia and diffused by them early on in an historical perspective doesn't prejudge what they have become;; we don't pose a judgment on PPPs. Our goal is to highlight a macro-explanation that currently is not available and which will lead to a new understanding of PPPs. Whether they were more or less efficient in this or that particular project is irrelevant to our explanation, if only to highlight that they are not always more efficient than the public sector comparator. No religion on PPPs should get in the way of this study on their diffusion; to be sure, we conclude from this study that they are superior in particular circumstances and less interesting in others.

We will now review the standard explanations for the increasing usage of PPPs in the country studies here and this will pave the way for a review of the policy diffusion literature.

1.4 Explaining the phenomenon: the mainstream way

In this section, we review the core aspects of the mainstream explanations found in both types of literature as presented above: as discussed earlier, they seem to explain the diffusion phenomenon observed above. After extensive review, we have constructed three

commonly used classes of explanation –fiscal constraint, efficient solution, and historical readjustment - and a fourth, less common, but nonetheless having intuitive appeal, which we cannot disregard – the ideological⁴ drive.

1.4.1 The fiscal constraint on the State

The first class of explanations is well summarized by Michel Boisclair and Louis Dallaire in *Les Défis du Partenariat dans les Administrations Publiques*, a book of collected essays for PPP professionals (2008). After the crisis created by the destabilisation of the monetary system caused by the Nixon’s decision to withdraw from Bretton Wood accord in 1971 and the 1973 oil crisis (see section 1.8, p.78 for an extended discussion on those turbulent times of stagflation, unemployment, deficit and ballooning debt),

The exchange is getting excited, the salaries are decreasing and the social benefits are being revised. Non-permanent jobs are becoming prevalent. Hence, the model is starting to breakdown. These phenomena, notwithstanding differences in the timing of their arrival and of their forces from country to country, are the starting point of the ‘welfare state’ crisis, to use Pierre Rosanvallon’s words (Boisclair & Dallaire, 2008, p. 5; translation by author).

The State, while trying to cope with strong economic turbulence, would have become paralyzed financially: “Most developed countries are having major recurring budgetary deficits. Those countries are able, or with difficulty, to accomplish their first mission, which is the implementation of collectives infrastructures and services” (Boisclair

⁴ Ideology is understood in this thesis as either normative idea about the way the market should interact with the state or political idea, such as fiscal conservatism, which often, but not always align with party politics (e.g., Conservative party attract fiscal conservative).

& Dallaire, 2008, p. 5; translation by author). A report from the Library of Parliament of Canada goes as far as explaining the sudden surge in PPPs by the fact that the “resources required ... exceed what many government are able to offer,” and presenting the Canadian infrastructure gap “estimated between \$44 billion and \$125 billion” as supporting evidence of this necessity (Padova, 2010).

CCPPP, in their Intelligence Report, argue similarly that for “governments trying to cope with deficits and the under-investment of infrastructure, what viable options lie ahead for financing”? They – the proponents — answer that PPPs are an answer to this problem (PEI Media, 2010, p. 4). PPPs/PFIs permit an expansion of infrastructure provision, “an expansion beyond what the state on *its own could achieve given budgetary constraints*” (Parker & Hartley, 2003, p. 97). In his speech to the Council for Public-Private Partnerships’ 15th annual conference on PPPs in 2007, Finance minister Jim Flaherty made clear that “government *can no longer afford to finance, build, and maintain every single infrastructure project in the country*” (our emphasis, Flaherty, 2007), particularly because of the infrastructure gap left by the previous Liberal government (Cannon, 2007). This class of explanations is supported broadly (Bettignies & Ross, 2004; Bing, Akintoye, Edwards, & Hardcastle, 2005; Bovaird, 2004; Boyle & Anthony Harrison, 2000; Estache, Juan, & Trujillo, 2007; Stephen Harris, 2004; Lortie, 2008; Loxley & Loxley, 2010; Murphy, 2008; Perl, 2010; PricewaterhouseCoopers, 2006, 2008a, 2009; Rubin & Stankiewics, 2001; The National Council for Public-Private Partnerships, 2011b).

Taking a somewhat optimistic view, PriceWaterhouseCoopers proposes that the fiscal constraint depicted above creates new opportunities: “The project may become affordable within annual authority budget”; “the public sector can afford to procure a

greater number of projects in aggregate” (i.e., in the short term electoral period); “PPPs are a pragmatic solution to overcome a legal impediment” (see also, International Monetary Fund, 2006; PricewaterhouseCoopers, 2006, p. 18). On this note, the Federal-Provincial-Territorial Working Group on Private-Public Partnerships proposed that PPPs are a way of “financing of public infrastructure development off-the-book of governments” (Federal-Provincial-Territorial Working Group on Private-Public Partnerships, 1999, p. 4). In the UK, the PFI “became a primary means to increase investment without exceeding prescribed borrowing limits imposed by the European Union” (Smyth & Edkins, 2006, p. 233). For Li Bing *et al.*, “the UK Government appeared to view [PFI’s] primarily as a way of getting infrastructure costs off the balance sheet, keeping investment levels up, cutting public spending and avoiding the constraints of public sector borrowing limits.” (2004, p. 25). Murphy states, “In this system, postponing the obligation or stretching the payment through a P3 arrangement permits a government to build now and pay later – an attractive proposition to cash-strapped governments” (2008, p. 100). Other go as far as stating that “Since the political costs of raising taxes makes it impracticable to finance the infrastructure otherwise, the ruse is politically acceptable” (Baker, 2003, p. 447).

As we just saw, this class of explanation could be understood to suggest that 1) the state is somehow forced to consider the PPP formula, and/or 2) that this constraint creates new opportunities for private and public players in a particular institutional arrangement. As we will show below, this cannot provide an explanation for the *timing* and the *differentiation* of the phenomenon in a comparative perspective. Moreover, it cannot explain why states that do not face this fiscal impediment have still embraced PPPs (e.g., Australia).

1.4.2 The efficiency gains of public-private partnerships

The second class of explanations is at the core of the ideational support of the PPP enterprise in Canada, and worldwide. The “efficiency” argument packaged in the Value for Money (VfM) analysis came to be used by PPP proponents in the UK after the first wave of PPPs had been advocated, on the basis of the “fiscal constraint” faced by governments, and has subsequently been used everywhere. We will discuss later in the study why this is so. For now, it is important to understand that VfM rests on the assumed intrinsic efficiency of the market, and it is in this context that risk transfer from government to market would be beneficial to government.⁵ If the market is not perfectly efficient (in a neo-classical understanding), then the superiority of PPPs might not translate as well as it could under ideal circumstances. No matter the state of the market, PPPs are often presented as intrinsically more efficient.

This belief in efficiency is so deeply held that when Allyson Pollock, in her book on the UK health care system, asked the Prime Minister Gordon Brown if “he could explain the rationale behind the use of private finance for public investment, given that private borrowing was more expensive, and the risks were not in practice transferred to the private sector. His response was simply to declare repeatedly that the public sector is bad at management, and that only the private sector is efficient and can manage services well” (Pollock, 2004, p. 3). Along those lines, Partnership UK argues that “better and stronger partnerships between the public and the private sectors” foster a faster “delivery of

⁵ Innovations are sometimes treated separately, but fall under the intrinsic efficiency of the market in our depiction, since they would innovate to keep up with the ratcheting effect of competition (stronger as one gets closer to perfection) on internal efficiency.

infrastructure renewal, high quality public services and the efficient use of public assets” (PartnershipsUK, 2011a). The Greek Special Secretariats for PPPs has the same ideological support for the enterprise (The Special Secretariat for PPPs, 2011). The World Bank, under the Public-Private Infrastructure Advisory Facility, argues that “the PPP process *enables a more efficient use of resources.*” (our emphasis, The World Bank, 2009, p. 2). PriceWaterhouseCoopers, in the report *Delivering the PPP Promise*, proposes that “The principal reason for using PPPs is that ... they can deliver better value for money than the alternatives” and, all of this, “more quickly and efficiently, so that together we can close the service and infrastructure gap” (PricewaterhouseCoopers, 2006, p. 3). The Netherlands would even have “adopted PPP-type structures primarily in order to promote efficient procurement practice and, importantly, to reform the public sector,” and not so much because of fiscal impediments (Stephen Harris, 2004). Christina Tvarno et al., in *Public-Private Partnerships: An International Analysis - From a Legal and Economic Perspective*, argue the European Commission has set out the following reasons for establishing PPPs:

- Acceleration of infrastructure provision;
- Faster implementation;
- Reduced whole life costs;
- More optimal risk allocation;
- Improvement of the incentives to perform;
- Improvement of the quality of service;
- Generation of additional revenues in the private sectors;
- Transferring responsibility and enhanced public management;

- Increasing investments in general;
- Higher efficiency in the use of resources by joint utilities;
- Generating commercial value from public sector assets by joint utilities

(Tvarno, 2010, p. 28)⁶.

Tvarno argues that “The PPP is based on the idea that the experience from the private sector used in infrastructure projects will create the best and economically most efficient model for the governments” (2010, p. 15). Canada does not operate under different assumptions than its international peers. The newly created (i.e., 2008) state organization PPP Canada that has the mandate of fostering the Canadian PPP market to increase the value that Canadians gain with more efficient public infrastructure under PPPs (Bordeleau, 2012). It assumes that “the PPP solution reduces the financial burden of the taxpayer and their exposure to risks all the while creating infrastructures that Canada needs in a more efficient and effective way” (PPP Canada, 2009b, pp. 2, 10; translation by author). In their seminal review of that literature, *Discount Rate and the Evaluation for Public Private Partnerships*, Jenkins and Burgess propose that PPPs lead to a “greater scope for innovation, stronger incentives to deliver desired results, the potential for cost saving through organizational/managerial efficiency, and a more efficient assignment of risk”; those advantages would be the *leitmotiv* for the enterprise (Burgess & Jenkins, 2010,

⁶ Recently, fifteen objectives of PPPs have been proposed by Hodge, Greve and Boardman (2010): “1. Enables provision of infrastructure without increased public sector borrowing. 2. Reduces pressure on public sector budgets. 3. Provides better VfM for taxpayers. 4. Reduces risks to government from infrastructure projects. 5. Improves accountability. 6. Provides better on-time delivery. 7. Allows better on-budget delivery. 8. Allows greater infrastructure (project) innovation. 9. Encourages a more innovative public sector. 10. Improves business confidence. 11. Improves political feasibility to impose user fees. 12. Enables the full life-cycle costs of infrastructure to be provided. 13. Boosts sales of professional PPP services abroad. 14. Supports businesses in difficult global market conditions (business assistance/subsidy). 15. Provides a crucial tool to underpin the broad societal objective of economic development.” (2010)

p. 5). PPPs “are now being seen as essentially a new approach to risk allocation” (Bing et al., 2004, p. 25). Parker and Hartley explain that “PPP’s ... are part of a wider policy of ‘privatisation’ based on the expectation that the private sector provides services more efficiently⁷ and more effectively than the public sector” (Parker & Hartley, 2003, p. 97).

Unsurprisingly, the World Bank, in its report *Public–Private Partnerships for Creative Technical and Institutional Solutions*, holds that a private sector employee can collect a solid waste disposal bag more efficiently than a public sector employee because of the intrinsic efficiency of the private sector (Serageldin, Barrett, & Martin–Brown, 1995, p. 22). Others go as far as stating that PPPs would be “generally perceived as a ‘miraculous’ solution” that would automatically increase efficiency and, hence, be superior to traditional methods (Carmona, 2010). PPPs are considered as “holding out the promise of a more efficient allocation of society’s resources and a better ‘value for money’ for taxpayers” (see also, Argyriades, 2003; Bettignies & Ross, 2004, p. 136). This class of explanation is widely supported (Bovaird, 2004 see also Crozier & Friedberg 1977; Reynaud & Reynaud 1994; Reynaud 1997; Boyle & Anthony Harrison, 2000; Budina, Brixi, & Irwin, 2007; Ernst & Young Corporate Finance, 2006; Estache et al., 2007; Giauque, 2005; Grimsey & Lewis, 2004; Halachmi, 2010; Hansen, 2009; HM Treasury (UK), 2006; International Monetary Fund, 2006; Loxley & Loxley, 2010; Murphy, 2008;

⁷ In an interesting investigation into the subject of utilities, Osmo et al. argue that “The economic benefits assumed” from private involvement (either privatization or PPPs) “are grounded in the belief that private operators manage more efficiently, are more technically advanced, and invest capital (2001). Fraser Milner Casgrain LLP, in a report to the OECD forum, put forward the vision of “efficient management techniques”, “risk sharing” and “a more effective use of capital” as the cornerstone advantages of the PPP concept. They also emphasize that the simple completion of a “sufficient number of projects” would be able “to demonstrate the superiority of the PPP approach”. (Lortie, 2008)

Osborne, 2002 see also McQuaid, 19; Padova, 2010; Partnerships BC, 2011b; Perl, 2010; PricewaterhouseCoopers, 2011; Rosenau, 2000; Sedjari, 2004; The National Council for Public-Private Partnerships, 2011b; R. Webb & Pulle, 2002; Zhong, Arthur, Mol, & Fu, 2008).

As we just saw, private sector efficiency is not usually debated (for an exception, see Loxley & Loxley, 2010). This is so for several reasons that we will analyze later on, but suffice it to say now, there are two preponderant reasons: 1) a theoretical foundation based on a certain rigid view of economics and 2) the multi-faced conception and complexity of efficiency pertaining to PPPs in reality – which is usually assessed in VfM analysis – which is typically difficult to deconstruct without having access to the original data and methodology, which in the case of PPPs is often sealed as a commercial secret or proprietary information. From a different perspective, even if one accepts the premise of the intrinsic efficiency of PPPs, it would not necessarily explain its timing and the differentiated development. If efficiency is the major independent variable, all governments would be expected to undertake PPPs to a comparable extent – it would be only a matter of choice between A and B where A is simply more efficient than B and, hence, A is chosen by government officials. At the same time, if it were simply a matter of efficiency, PPPs should have arisen earlier; if the market is efficient in 2000s, it was efficient in 1990s too. Why so much variation in an historical and comparative perspective?

Obviously, the situation is much more complex, and efficiency is not simply a technical matter; in the course of human affairs, who gets what, when and how is always part of the political struggle. If efficiency were the only criterion, then we should see PPPs everywhere and for every project, but this is not the case. Because they are not

omnipresent, other institutional factors must play a role or create friction in their diffusion. For example, are PPPs promoting local capital and local construction firms or are they favouring international consortia or detrimental to unionized labour? Frustrated labour unions can have a project derailed with important costs or reduce with zeal the promised efficiency (e.g., a good example is the Turcot PPP in Québec which was abandoned following union and public outcry). Obviously, PPPs could be more efficient from a buyer's perspective and hurt the local economy by the use of international consortia at the same time. In another case, legislation prevents some states from buying the PF product from the FES in the US. All of this - non-exclusively - impacts the deployment of such a product in various countries be they efficient or not.

1.4.3 The historical partner

A third class of explanation suggests that, on an historical perspective, service delivery by the public sector is a relatively recent phenomenon, and that the return of the private sector into the delivery of services is somehow a return to historical norms. PPP proponents, using this explanation, refer to a period prior to the establishment of the 20th century democratic welfare state.

The Inter-American Development Bank, in a working paper titled *Public Private Partnerships: Delivering Better Infrastructure Services*, argues, “the provision of many services by government is a comparatively recent development. A hundred and fifty years ago many services, such as transportation, health and education were delivered by the private sector” (Stephen Harris, 2004). In this perspective, “Governments took over this role in order to deliver services equally to citizens, irrespective of, for example, their ability to pay or their geographical location...” (ibid) and with the increase in PPPs we

would simply be witnessing a return to the normal and we should press for it. Ross et al. argue that “it is worth remembering this, as it reminds us that the current wave of P3’s is not really so revolutionary – the private sector has always been engaged in many parts of the provision of public services, including architectural work and construction” (Bettignies & Ross, 2004, p. 138).

In *Public Private Partnerships: The Worldwide Revolution in Infrastructure Provision and Project Finance*, Lewis and Mervyn argue that “turnpikes have been described by Adam Smith as 'the precursors of the modern build, operate and transfer systems' ... The first turnpike was established in 1663 (Grimsey & Lewis, 2004, p. 43). In the US, Estache et al. (2000) claim that 'in the first half of the nineteenth century, private toll roads outnumbered public roads’” while “public provision and financing was dominant for most of the twentieth century... but in the last two decades, private financing has returned to the top agenda” (Grimsey & Lewis, 2004, pp. 10, 47).

Now even the natural monopolies that economists have always feared and termed an ineluctable “market failure” and which had been under public governance for those reasons are being “re-privatized” (Rosenau, 2000, p. 5). For the International Monetary Fund, as outlined in a 2006 report titled *Public-Private Partnerships, Government Guarantees, and Fiscal Risk*, PPPs were a means to extend privatization, to areas where the political legitimacy of privatization has slowed the movement at the end of the 1980’s, because they “offer benefits similar to those offered by privatization” to the market (International Monetary Fund, 2006, p. 1). Minow argues in *Public and Private Partnerships: Accounting for the New Religion* that “In some ways, our time mirrors the early nineteenth century, with its rising confidence in private initiative” (Minow, 2003, p.

1237). For Miraftab, PPPs are “The Trojan horse of Neoliberal development,” that is to say a return of the private interest in areas where it had been pushed out (2004, p. 89).

The major problem with this explanation is the concept of market failure. Many of the services that the state has “taken over” from the private sector were previously, in fact, not provided at all or were grossly inadequate. These often expensive and poor quality services forced reforms to address those market failures (for an historical explanation through a particular case, see Lanoue & Hafsi, 2010).

1.4.4 Ideology of a particular party

The fourth and final class of explanation is more limited, and pertains to the ideological disposition of political parties: “free market conservatism” would be the major independent variable. Regan and Thacher, both neo-conservative, would have created PPPs with fiscally conservative policy and an agenda for market based solution to public problems (see section 1.8, p. 79 for a short discussion on the electoral context of Thatcher, Reagan and Mulroney). This explanation should not be disregarded since it has been widely acknowledged that tremendous reforms have been implemented and carried through by particular political parties. A large literature in the study of electoral behaviour has documented how different political parties behave differently on economic questions. For example, André Blais has shown statistically that political parties from the “left” spend more than those on the “right” and that this could amount to as much as 5 % over a decade (Blais, 2003, p. 932).

Intuitively, this class of explanation, in the context of PPPs, has a set of methodological challenges, namely: a challenge related to considering the importance of political parties to account for policy change and the weakness and scarcity of analysis

dealing with the political factor as an independent variable explaining the phenomenon (for an exception, see Krumm & Mause, 2010).

Empirically, these lines of argument have been used mainly by opponents (usually unions) in search of a political grip to mount a charge against the PPP enterprise.

“Opposition tends to come from public sector unions, left-of-centre think tanks and citizen organizations established to protect the public delivery of health, water and other services.”

(Loxley & Loxley, 2010). Danis provides a good example of the political party as the starting point for criticisms of PPPs:

In Québec, the election of Jean Charest’s Liberal government clearly indicated an ideological change which can be seen in the rhetoric of the government. Campaign documents of the Québec Liberal Party, *les orientations et les discours gouvernementaux*, particularly the action plan *Briller parmi les meilleurs*, aim all in the same direction: there is a need to subject governmental actions to the market’s conditions (original emphasis, Danis, 2004, p. 3; translation by author).

In Danis, Charest’s conservatism would be responsible for PPPs in Québec. For others, an “ideological revival of laissez-faire economic thinking, which reflects a lack of confidence in the ability of the state to solve economic problems” deeply influenced some political parties (Grimshaw, Vincent, & Willmott, 2002, p. 476). In the UK, according to some accounts, PPPs were “dreamt up by John Major” and implemented next morning (Walker as reported in J. Hood & Mcgarvey, 2010, p. 23). Simply explain, “PPP’s were part of the John Major government’s reform program in the UK in the early 1990s” (Greve and

Hodge in Osborne, 2010, p. 151).

Outside of the academic literature, though perhaps reflecting popular sentiment, online encyclopaedias, such as Answers and even Wikipedia, propose that PPPs were implemented for the first time by the “Conservative government of John Major” due to its Thatcherist ideology (McLean & McMillan, 2009).

1.5 Problems with the previous explanations

The explanations for PPPs presented in the previous section seem persuasive. While it is clear that they do contain some element of truth, there remain some problems with them with regards to the question this study seeks to address.

1.5.1 The fiscal constraint

First, pertaining to the “fiscal constraint” class of explanation: while it is true that “fiscal constraints” have been “present” in several jurisdictions in Canada, technically the Canadian provinces have maintained a good credit rating (e.g., Ontario and Québec have a AAA rating) and can borrow at a lower rate than the private sector. This is also true for the US and its states. Moreover, states have numerous means of financing infrastructure projects, including the same user-fee apparatus that private partners will use in some projects (e.g., highway tolls have been used in the past by Québec’s ministère des Transports and elsewhere). In *The Political Economy of Public-Private Partnerships in Canada*, the authors argue that “[s]ince many of these constraints are self-induced, the fiscal argument for P3s is in many respects a self-serving one, as governments are in large measure responsible for the fiscal straightjacket they claim they face” (Loxley & Loxley, 2010, p. 5). If it is true that, as Loxley argues, “Governments have adopted neo-liberal

economic and fiscal policies that constrain state spending, budget deficits and public debt by equating them with financial mismanagement” (Loxley & Loxley, 2010, p. 5), then PPPs become attractive.

Fiscal constraint, as the technical *impossibility of public financing* simply does not exist, in any inescapable form, in the countries studied in this thesis. The United States, Canada and the United Kingdom were never in a situation where they couldn't borrow nor that private finance was cheaper than public borrowing. While it is true that the aforementioned countries went through serious debt issues (e.g., 1995-06 in Canada), facing pressure on their credit ranking, public borrowing was still available and has been used before PPPs became widely available in Canada. To be sure, as Loxley argues, PPPs “do not fool credit agencies. This is because they view the issuance of lease-based debt - even when issued through an arm's length government entity - as a financial obligation on the part of the public sector entity” (2010, p. 31). Hence, the *fiscal constraint of the state* argument does not explain comprehensively and satisfactorily the diffusion and the subsequent differentiated development of the phenomenon *per se*.

1.5.2 The intrinsic efficiency of PPPs

Second, related to the “intrinsic efficiency” class of explanation, several reports from provincial auditors across Canada contradict the claim of the value for money (VfM) argument related to increase in efficiency, finance, and risk sharing.⁸ More specifically, Québec, Ontario, and Nova Scotia’s Auditor Generals have argued that, in the projects they have analysed, PPPs were always more expensive than the public sector

⁸ Serious limitations also prevent a recognition of the advantages of PPPs, such as accelerated delivery, an enhanced delivery and wider social impact. Infrastructure UK's VfM as per 2012's revision does not account for those variables (Ballingall, 2013).

alternative. This was also found to be the case in an independent analysis in British Colombia. In each case, the analyses presented by private consultants for the governments were flawed and/or contained erroneous hypotheses and assumptions. In the UK, the Treasury concluded from two decades of PPPs that several aspects were negative: the “procurement process has often been slow and expensive”, the “contracts have been insufficiently flexible”, there has been “insufficient transparency on the future liabilities ... to the taxpayers”, “inappropriate risks have been transferred” both to private and public sector and “equity investors ... have made windfall gains, and this has led to concern about value for money of projects” (HM Treasury (UK), 2012). This last finding raises many questions examined later in the study. Moreover, many other problems related to health, security, and accountability issues were uncovered. Similar findings were uncovered in Westminster’s Transport committee, France’s Cour des Comptes, and Australia’s New South Wales jurisdiction, which warrant a closer look at this issue. Each of the Canadian reports will be taken up in a succinct manner shortly.

What is characteristic of the efficiency class of explanation is that it was and still is the main ideational support for PPPs. The “fiscal constraint” explanation was used at the beginning in the UK, and in the European Union (EU), but it has not been used as extensively as the “efficiency” explanation in Canada and in the US, mainly because “off-the-book” accounting does not have much normative appeal to voters, especially in the aftermath of public and corporate scandals, such as Enron in which the “creative accounting” of the Arthur Andersen⁹ firm allowed for criminal embezzlement to go

⁹ The consulting arm of the firm, Andersen Consulting, was renamed Accenture Consulting in the wake of the infamous scandal.

undetected. In the EU, “off balance sheet” accounting is being used extensively “in particular because of the EU’s stipulations around public sector borrowing limits” (Deloitte, 2013). As Deloitte's UK PPPs’ leader Frank Wilson states proudly, “Now we have the magic wand to put these projects off balance sheet, and manage the cost over 25 years” (ibid). Whatever the ethical implications of such manoeuver, this doesn't create efficiency *per se* for PPPs.

Oliver Williamson has argued that efficiency in the neo-classical understanding is a “hypothetical ideal” (1999). Lanoue go as far as stating that those who have attempted empirical enquiries have either no evidence, mixed evidence, or have found evidence of a more efficient public sector (Lanoue & Hafsi, 2010). Without entering into a sterile debate, suffice for now that no matter how many anecdotal “successful completions” of roads one can collect, it does not empirically prove universal efficiency gains, even if they do arise in some circumstances, because there are always a few in which they do not¹⁰.

Contrary to what proponents say, the statement that “PPP work”, does not end the debate, even if it finds success on the rhetorical front. This “ideational construction” is specifically complex and derives from a heterogeneous amalgam of theoretical perspectives. To be sure, the theoretical prediction has been empirically challenged by the Auditor Generals in Canada (Québec, Ontario, Nova Scotia, British Columbia’s

¹⁰ ““The Alberta Special Waste Management System is an example of a P3 that had a greater impact on government expenditure than conventional procurement might have. The private partner in the contract for the waste management facility found that the contract provided incentives to build excess capacity. As a result, the Province of Alberta subsidized the facility in the amount of some \$445 million between 1985 and 1995 before having to take it over and operate it at a loss. ” (Padova, 2010). Proponents argue that this could have been avoided with a “comprehensive P3 contract”, but they ignore empirical evidence that such a comprehensive rationality is an ideal difficult, if not impossible, be found in human transactions. (ibid).

independent analysis, the United Kingdom, Australia and France's *Cour des Comptes*).

While visiting the core of the efficiency argument will not directly answer our question, it should not be seen as an *ad hoc* discussion. The efficiency class of explanation is so widely used that this study simply cannot ignore the claim. Even if we are not interested in the efficiency *per se* of PPPs, we need to treat it as an idea while our focus is on how they have been diffused. That efficiency is a highly contentious issue which we cannot resolve in this policy diffusion study should not prevent us from discussing the issue, as it will be fruitful on two fronts: 1) it will help highlight the interplay of ideas and interests central to our thesis - demonstrating how the efficiency argument could have operated like a shield to protect the enterprise of PPPs and give it political legitimacy, and 2) as this is a public policy thesis, it will bring a valuable contribution to the political discussion – it is hence highly relevant to undertake the discussion albeit while keeping it as short as possible.

As discussed previously, the “efficiency” class of explanation has been empirically undermined by several reports from independent institutions such as the Vérificateur Général du Québec, several Auditor Generals in Canada, the Library of Parliament (Canada), HM Treasury (UK), an academic investigation in British Columbia, an Australian authority, la Cour des Comptes in France, and a Special Committee of the UK House of Commons. This simply allows us to treat the efficiency class of explanation as an idea in the case of PPPs as opposed to a technical criteria exclusively.

1.5.2.1 La province de Québec

In his *Rapport Spécial à l'Assemblée Nationale* (Lachance, 2010), the Vérificateur Général, Renaud Lachance, analyzed the details of two projects: the CRCHUM (Centre de Recherche et Centre Hospitalier de l'Université de Montréal) and the CUSM (Centre Universitaire de la Santé McGill) – projects worth more than \$5.2 billion together - and found several deliberate errors that created a favourable case for PPPs (Lachance, 2010, p. 33).

Pertaining to cost, in both CRCHUM and CUSM analysis other conventional modes were ignored; the quantification of risks was based on an arbitrary choice; the assumptions of public deficits were unrealistic and contrary to the “*Loi favorisant le maintien et le renouvellement des infrastructures publiques*”; the assumptions regarding the degradation of the infrastructure under public ownership were “irréalistes” as they implied that as soon as the building was completed it would already have been depreciated at a 20 % rate; the discount factor had been manipulated using 8 % for public financing and 6.5 % for the PPP, while 3.5 % was more usual for similar projects, thereby creating an economy of a few hundred million dollars without any justification. The sensitivity analysis was poorly done, and the qualitative analysis did not discuss the problem that PPPs might bring (Lachance, 2010).

Simply by correcting this last assumption, the conventional approach would have been \$10.4 million more economical than the PPP. Correcting the total analysis, the public option resulted in economies of more than \$700 million!

1.5.2.2 The province of Ontario

The 2008 Annual Report of the Office of the Auditor General of Ontario, when referring to the decision to undertake a PPP for the Brampton Civic Hospital project, noted that:

[B]efore this decision was made, the costs and benefits of alternative procurement approaches, including traditional procurement, were not adequately assessed. This, along with a number of other issues we had with respect to this first P3 project at WOHC, led us to conclude that the all-in cost could well have been lower had the hospital and the related non-clinical services been procured under the traditional approach, rather than the P3 approach implemented in this case¹¹ (McCarter, 2008, p. 104).

While the PPP process was supposed to bring better planning, “a portion of the \$63 million cost to modify the facilities for installation of equipment could have been avoided with better planning” (McCarter, 2008, p. 105).

1.5.2.3 The province of Nova Scotia

The 2010 *Report to the House of Assembly* of Nova Scotia by the Auditor General, Jacques R. Lapointe, contains similar findings to Ontario’s and Québec’s, bringing into question VfM assessment. Lapointe concluded that “Important services were not being received and payment errors were made ... We found the developers were not providing

¹¹ “Had the province financed the design and construction costs at its lower rate, the savings would have been approximately \$200 million over the term of the project’s P3 arrangement (\$107 million in 2004 dollars)” (McCarter, 2008, p. 104).

many of the contracted service levels tested for, and for some services there was no evidence that the required service levels were being met”¹² (Lapointe, 2010, pp. 30-46).

1.5.2.4 The province of British Columbia

In British Columbia, Marvin Shaffer, a professor of Public Policy at Simon Fraser University analyzed the working assumptions and actual analyses of Partnerships BC in the report *The Real Cost of the Sea-to-Sky P3*. Similarly to what the Vérificateur Général du Québec and the Auditor General of Ontario discovered, Shaffer found that:

- “A more transparent analysis, based on the actual interest rate government would pay and giving appropriate weight to future taxpayer obligations, would show that the Sea-to-Sky P3 will cost taxpayers over \$220 million more than a traditionally procured and financed project.
- There may be some risk transfer and other benefits to the P3, but there is no evidence that those benefits offset this much higher cost taxpayers will face....
- Even with Partnerships BC’s \$80 million adjustment for the incremental risk and self-insurance under the [Public Sector Comparator] PSC, these results indicate that the adjusted PSC cost would in fact be \$46 million less than the total costs with the P3.

Nonetheless, Partnerships BC still concluded the P3 would offer better value for money” (Shaffer, 2006, p. 2).

¹² “Developers are required to obtain child abuse registry checks on all contracted staff prior to their working in schools. We found 20 of the 40 contracted staff we tested did not have a child abuse registry check completed... Nine of 13 schools examined did not have all fire safety inspections completed as required by the Fire Safety Act.” (Lapointe 2010, 30-46).

1.5.2.5 Other jurisdictions

It is important to recall that similar problems to those found in the four Canadian provinces were identified in the UK with the Metronet failure by the House of Commons Transport Committee (Vining & Boardman, 2008, p. 149), by La Cour des Comptes in France (Maistre, 2008, p. 675), by Austria's government (Hammerschmid, 2005), and by the Australian Auditor Generals of New South Wales, Victoria, and Western Australia (English, 2006).

Independent reviews have been conducted in several jurisdictions around the globe and it is clear that efficiency is not automatic. In fact, not a single one of these auditors was able to find the advertised savings. The prevailing problems found span across jurisdiction and pertain to the evaluation of the cost of financing, dubious assumptions used for the public sector comparator, unmet contractual engagements, cost of the process *per se* and poor risk transfer - this is in tune with much of transaction cost economics' (TCE) predictions. Loxley also argued, based on TCE perspective, that complex monitoring mechanism should be put in place by the public sector to reduce those transaction costs but they aren't usually factored in the costs of PPPs (2010, p. 23). This is important as they would amount to an increase of up to 5 to 10 % according to the World Bank Group (Klein, So, & Shin, 1996). While this thesis is not about the efficiency of PPPs, those empirical facts help us frame efficiency as one of the key ideational backdrops to PPPs advantages.

Let's now resume where we left - before reviewing these auditor generals' findings in the four Canadian provinces – that is, the third class of explanation, namely the “historical return” of PPPs.

1.5.3 PPPs have a long history

This class of explanation is arguing that the “private sector” during the Roman Empire was “partnering” with a (unclearly defined) “public sector,” but this does not provide any rigorous explanation to help understand the recent phenomenon. As Vives, Benavides and Paris put it: “The Roman Empire and medieval kingdoms frequently appealed to external funds and expertise to build and maintain their roads and waterworks...” (2008, p. 285). For them, France and the United States would have relied on private partners to build canals and build highways operated as toll roads (ibid). Those partnerships would have been short-lived and “By the late 1880s, most of the British road system had been taken back into public ownership” (Grimsey & Lewis, 2004, p. 46). Today, we see “partnerships” come back from their first usage in the Roman Empire (ibid, 42). However, this argument can only be used by proponents to provide a symbolic historical legitimacy useful for rhetorical pleas. There are a few reasons for this: 1) the state has changed on an historical perspective – e.g., the ‘modern democratic state’ has little in common with the despotic societies of the 17th and 18th centuries; 2) many of the “partnership” examples are in fact *laissez-faire* or simply contractual mandates and, in some case, could be described in certain instance as venal offices or positions and 3) progressive reform, through feedback effects, have created a democratic culture that has had an effect on the politics of a particular time (e.g., the public provision of some basic education to children has been off-the-radar of political debates – nobody seriously argues that it shouldn’t be the case - for some time in most developed countries).

Apart from those conceptual problems, this class of explanation cannot explain why the PPP enterprise “came back” at this particular time more than at any other. PPP

proponents would contend that it is related to an ideological change. But why did the PPP phenomenon appear only at the end of the 1990's in Europe and in the 2000's in Canada? If PPPs were linked with managerial reform or neo-liberalism, they could have appeared in the 1980's in the UK, the US and Canada, (and elsewhere for that matter) more or less at the same time. Moreover, the historical partnership story cannot explain why acceleration is being acknowledged by the PPP industry itself, independent of other reforms or political ideologies. As we will demonstrate in this study, the PPP phenomenon we know today has its "material origin" at the end of the 1930's, in Texas, much before the classical account of ideological change.

1.5.4 They have been created and implemented by right wing politicians

Fourth and lastly, the idea that PPPs are linked to a particular government might be convincing as it has intuitive appeal, but empirical evidence shows that different political parties - from left to right - have frequently launched numerous PPPs, and institutional actions to foster them. For example, at the federal level in Canada, both the Liberal and the (Progressive) Conservative parties have supported the PPP enterprise, while in Québec, both the Parti Québécois (usually viewed as a center-left party) and the Liberals have invested in the PPP formula. In Ontario, while the first PPPs were initiated by Harris's Conservatives and criticized by the Liberal opposition, once in power, the Liberals continued and extended the program. Federally, Jean Chrétien's Liberals initiated the first PPP, and today Harper's Conservatives are extending the enterprise.

In the UK, the Labour party, while in opposition, was very critical of John Major's Conservatives' PFI program. Tony Blair even "committed the Labour party to returning all contracted-out prisons to the state sector" (Flinders, 2005, pp. 217, 219). However, once in

power, the Labour party extended the scope of PFIs arguing that “there should be ‘no barriers, no dogma, no vested interests that stand in the way of delivering the best services’” (ibid). At the local level, the an empirical study that has statistically investigated the hypothesis of left/right ideology of political parties in the UK has found that this variable does not explain the implementation of PPPs (Krumm & Mause, 2010).

Having touched on the empirical problems and the lack of satisfactorily integrated explanations¹³, we can now lay down a more detailed thesis statement¹⁴ that will pave the way for our original undertaking.

1.6 Research question

It is now possible to frame a formal research question: *How have PPPs been created and diffused as a legitimate public policy and implemented by private firms with a varying degree of success?* This thesis addresses the following sub-questions:

- Where did PPPs come from?

¹³ For Hodge, Greve and Boardman (2010), an integrated account is difficult to find because “the accountants tend to emphasize matters of on-balance-sheet figures and the appropriate recording of transactions and commitments ... The engineers and bureaucrats emphasize the desirability of infrastructure projects, improvements to contract specifications, the development of information databases, and financial incentives for early project completion ... The economists emphasize evaluations of relative managerial efficiency and allocative efficiency across different infrastructure delivery methods ... The political scientists emphasize the degree to which PPPs have seen central advocacy in different jurisdictions; how traditional policy debates have been avoided ... or how the debate arena has shifted elsewhere ... The policy and planning scholars emphasize the need to meet policy goals amidst negotiated knowledge, the need for both procedural as well as analytical rationality, the numerous conflicts of interest now buried inside government and the need for greater transparency rather than continued calls for contract information to remain confidential ... And regulatory scholarship has made the observation that unlike other essential infrastructure such as private electricity supplies or telecommunications, it is the individual *ad hoc* contract-by-contract arrangement that ‘governs’ our future, not the newly elected government of the day or a robust independent regulator”.

¹⁴ Thesis statement is used here as the exact equivalent of the French ‘problématique’. Some English academics use also ‘problem statement’. The Grand Dictionnaire Terminologique du Québec gives ‘problematic’ as the translation of ‘problématique’, but it does not capture the same meaning in the academic context.

- How did the financing instruments get established?
- How were ideas diffused?

Obviously, there are many more questions that could be raised, reflecting the complexity of the PPP phenomena. Before seeking to answer the questions posed, some basic hypotheses used to formulate our research question and which guided our initial investigation need to be stated:

- In order for PPPs to thrive, a specific economic structure must have already matured to grant the required financing and manage a pipeline of projects: referred to as the “capacity of the supply side” (timing). Simply put, PPPs cannot be a persuasive option if the industry is unable to deliver them to any significant extent.
- The material availability had to be packaged in a legitimate and interesting ideational form to get diffused. Several “hubs of diffusion” were involved in the packaging of PPPs (e.g., NCPPP, CCPPP, OECD, the World Bank, PriceWaterhouseCoopers).
- The state of involvement of private consultants in privatization was important since those transactions gave them the necessary legitimacy to push those new ideas stemming from the material evolution of financial markets.
- The supply and demand of PPPs comes from a coalition of interests seeking to gain from the enterprise.
- Previous institutional arrangements act as an impediment that can hinder the “demand” for PPPs and as the supply gains maturity, institutional change will be desired by the coalition of interests (e.g., enabling legislation), but could be limited by constitutional arrangements and even culture.

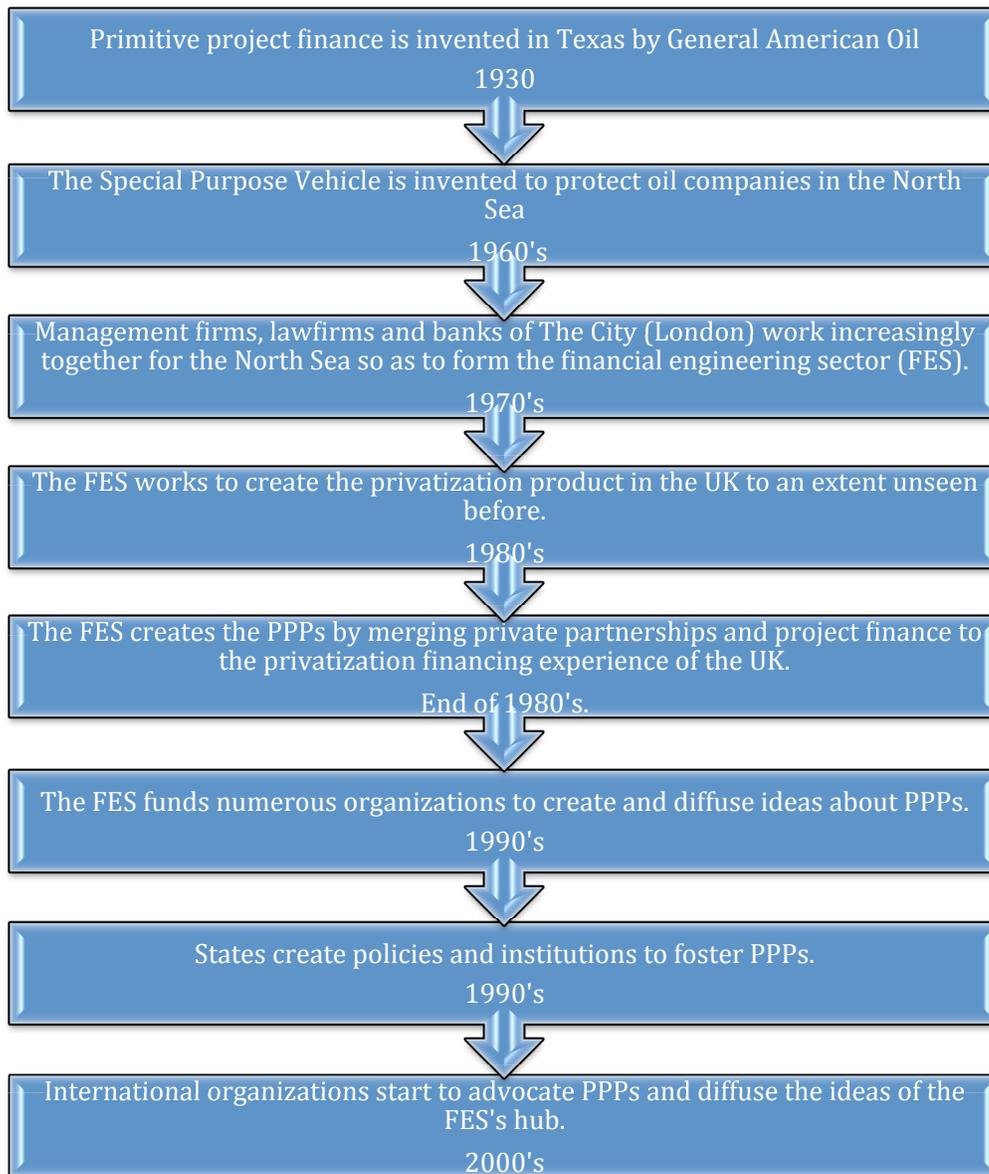
Figure 2 - Present understanding found in most textbooks



This complexity can be contrasted with Figure 2 which shows in a simplistic figure the present understanding of PPPs to be found in most public policy textbooks. It is important to note that project finance's emergence and diffusion is seldom discussed in the political science, public policy and public administration literature pertaining to PPPs. As will become clear in later chapters, and is consistent with our definition of PPFA, the development of the project financing instrument was key to the development of PPPs.

The more sophisticated understanding we are proposing is contained in Figure 3. For obvious reasons, this study will focus on a few of those causal relationships in more depth, but this is not to say that we will ignore the others.

Figure 3 - New understanding of the emergence and diffusion of PPPs



We can divide the model into two parts, simply for presentational purposes: a) emergence and b) diffusion. We will investigate where PF started and follow this trail all the way to the first PPPs (chapter 2) and, from there, we will enter into the second part to shed light on the diffusion of the phenomenon in the countries studied here (chapter 3-5). This approach is crucial for a few reasons: 1) the material development of what we dub the

“financial engineering sector”¹⁵ (FES) has not been documented nor conceptualized in a causal model of PPPs, 2) this explanation allows for an incremental development of the industry and its capacity and overcomes the purely ideological explanation (i.e., disconnected from the material practices where PPPs could have been enacted following an original idea from Thatcher or Major and then implemented by an industry ready overnight) and 3) it places at the core of the explanation the private sector’s actions regarding the diffusion of the product, a perspective which is not discussed properly in the literature (Hodge et al., 2010).

The second phase (diffusion) helps conceptualize variation in the demand once the supply is available (i.e., once PPPs have been created). Stated in a metaphorical way, once the water is available and starts to flow (supply) those interactions create the initial size of the bottleneck (demand) for each country. As the deals start to flow down the “pipeline”, pressures mount for a larger “pipe” allowing for incremental or market growth.

To conceptualize this process in a modular way (i.e., emergence and then differentiated development) is useful because many of the variables are contextual and evolving in an historical perspective. For example, diverging institutional arrangements help explain why a country like the US, which is – at least rhetorically — the most pro-

¹⁵ For us, the FES is comprised of sectoral firms united, by their common interest, around a product such as PPP – there is no monolithic intention. This is only a shortform for the law. Law firms, engineering firms, banks, accountants and their consulting arms working together around project financing application, such as PPPs. All of the sectoral firms have a vested interest of their own, but which align with the other members of the FES, in seeing an increasing number of PPPs being implemented. The financial engineering sector is hence conceptualized as the interconnection and interdependence between the cross-sectoral practices of law firms, accountancies and management consultancies and banks working and benefiting together from the various analysis and risk assessment required by project financing applied to private partnerships, divestitures and public private partnerships, nonexclusively. The financial engineering description of activities is from Beder & Marshall (T. Beder & Marshall, 2011) and the addition of “sector” - Financial Engineering Sector - to describe the firms involved in such activities, is simply used as a shortform with no reification intent.

market country in the world, is an outlier in terms of the small number of PPPs projects enacted (PEI Media, 2010). As the Library of Parliament of Canada noted in a report:

Generally speaking, significant political, fiscal, and institutional hurdles must be overcome in order to move from the conventional procurement model for public infrastructure or services to one that includes the private sector. The presence of certain legal and institutional frameworks can encourage the diffusion of P3s in an economy and support their success by attracting private sector investors and reducing unanticipated transaction costs (Padova, 2010, p. 8).

This conceptualization allows private organizations to be at the heart of the diffusion of PPPs, where they can be active in increasing the demand by shaping the legal and institutional framework either directly or indirectly, something that the diffusion literature has not considered carefully (Bennett, 1997; Dolowitz & David Marsh, 2000, p. 11; Pal, 2012; Rose, 1993; Denis Saint-Martin, 2011; Stone, 2004).

1.7 Are PPPs simply a more advanced form of governance for project implementation?

My contention is that the sudden interest in PPPs has to be related to the construction of an ideational paradigm, which politically legitimizes the enterprise. Organizations like CCPPP, founded and financed by FES members such as PricewaterhouseCooper LLC, acknowledge that they have been doing that since 1993; the “Council's vision is to influence the way in which public services are financed and delivered in Canada” (Canadian Council for Public Private Partnerships, 2013). The

CCPPP conducts research, publishes findings, facilitates forums for discussion and sponsors an Annual Conference on topics related to PPPs, both domestic and internationally (Canadian Council for Public Private Partnerships, 2013). CCPPP has put in place a program to promote the growth and expansion of PPPs and to educate managers in the public service about the benefits of PPPs: conferences, prizes and PPP Champion awards are among the tools used by CCPPP to diffuse PPPs. While when used as a class of explanation of PPPs, “efficiency” does not prove fruitful, it does constitute a form of justification of the interests of the FES. One thing is clear: the whole enterprise is composed almost entirely of for-profit private firms who would not push for PPPs if it were financially harmful to themselves to do so.

What is to be concluded from this review? Each of the explanations reviewed offers a vision of the desired interaction between the “public” and “private” sector, but they do not provide a clear and comprehensive explanation of the phenomenon.

To get a better description, the discussion above helps us to recognize who is driving those ideas and, therefore, private actors’ motivations, both symbolic and pecuniary. Corollary, many politicians were once themselves lawyers, bankers and accountants and some of them returned to the private sector after their time in office. They became influential board members and party funders and they were in a good position to advocate for their firm’s interest toward privatization and PPPs: we will examine secondment and revolving doors in the case study chapters. Now, the first step is to conceptualize how these have caught on internationally. This is done through the policy diffusion literature.

1.8 Policy diffusion or where do the ideas about PPPs come from and how they travelled

The policy diffusion literature aims to highlight how policy ideas travel. The focus has been primarily on states and their sub-national and local governments. More recently, international organizations have been recognized as policy hub where ideas could be floated from a wide variety of actors. But the role of the private sector is not usually discussed in the policy diffusion literature.

In his empirical study of the OECD, Pal argues that “the issue of policy transfer or diffusion ... is central to the OECD story...” (2012, p. 13). But while he is acknowledging a global audience, the private sector is not discussed *per se*. In 1993, Rose provided the “seminal contribution” on “lesson-drawing” in public policy and “explicitly highlighted the role of IGOs” such as the IMF, the World Bank, and UN agencies, but the private sector’s diffusion capabilities are again not alluded to (Rose, 1993, p. 70). In a review of Bennett’s work, Pal finds that Bennett “concluded that there was no one method of diffusion, but that there were different dynamics of adoption” (2012, p. 13), but again, in Bennett’s work, the private sector’s role is seldom discussed as a central component: instead “the diffusion is attributable to harmonization through international organizations” (1997, p. 213).

Several authors who have proposed theories of policy diffusion, but the emphasis is never on the private sector. For Dolowitz and Marsh, IGOs are involved in “the spread of ideas, programs and institutions around the globe.” Organization like “OECD, G-7, IMF and the UN” are influencing “national policy-makers directly, through their policies and loan conditions, and indirectly, through the information policies spread at their conferences

and reports” (Dolowitz & David Marsh, 2000, p. 11). Dolowitz and Marsh recognize, in what they name “international consultants”, some form of private sector participation in policy diffusion: “while consultants may ‘force’ a uniform model of market reform upon developing nations, if they are hired by a government” they are not able to diffuse policy by themselves (ibid). For them, rational actors who look first and foremost at their expected political gains drive policy diffusion. What they seek, by importing policies from other jurisdictions, is to reduce their chances of an electoral defeat (Dolowitz. & David Marsh, 1996; Denis Saint-Martin, 2011). They would, like a “cook”, do some “ ‘mixing-and-matching,’ in which the best parts of Program A are combined with the best parts of Program B, C, D, E, etc.” (Denis Saint-Martin, 2011). Finally, it has been suggested by Stone that policy diffusion is affected primarily by structural forces: industrialization, globalization or regionalization would, by themselves, set the stage for similar policies (2004): industries have no active role in Stone.

1.9 Material source of policy initiative and diffusion

In an innovative discussion, Saint-Martin argues that the literature on policy diffusion has ignored the historical components of the diffusion processes. Grounding himself in historical institutionalism, he recalls that Pierson maintained that “institutions are generally not plastic... They do not adapt swiftly and effortlessly” (2011, p. 6). Recognizing that diffusion is not automatic helps us to acknowledge the fact that the history of a particular diffusion effort can shed new light on a phenomenon. This is important, because these insights help highlight a gap in the diffusion literature. This recognition is vital because PPPs haven’t been diffused by the state (or any IGOs) itself in the first stage - even if they have been active in doing so later on.

For example, Pal, in his OECD study, uses Simmons, Dobin, and Garrett's approach, which "examined the global diffusion of market and democracy through a lens that highlights four causal mechanisms of diffusion or transfer: coercion, competition, learning, and emulation" (2012, p. 21). While it is an interesting and intuitive approach to policy diffusion, the starting point is mostly the state.

If it is true that while these processes were observed in the later stage of the development of PPPs, they were not present in the first phases. What is lacking is not the recognition that diffusion is important and happens internationally. In fact, what is missing is an explanation of who has created the original to be copied and who is diffusing the original. The recognition that the "policy transfer concept is ahistorical" in the way it is generally discussed creates an interesting opportunity to investigate the diffusion of PPPs in different countries through an historical diffusion perspective (Denis Saint-Martin, 2011; Stone, 2001). In the case of PPPs, the starting point is absent in the discussion on diffusion. Stated simply, we do not generally get an explanation of how the original version was created, apart from the vague statement that "it started in the UK in 1992".

For this purpose, it will mean for us an investigation of the evolution of the project finance product and of the Financial Engineering Sector's (FES) actors through time to discover *who initially created PPPs and how they have been diffused*. Our intention is not to reify the FES, but to use it as a shorthand for the common interest only of the firms involved in PF and, later, PPPs. This will allow us to acknowledge *the empirical complexities of each country's experience* and help get a more realistic understanding of the timing and diffusion of the phenomenon. This is important, because this legislative and constitutional context "may dampen P3 activity in spite of legislative and institutional changes to increase P3 diffusion" (Padova, 2010).

1.10 Limitations and challenges of this historical and comparative study on policy diffusion

Our hypothesis points to a predominant involvement of the private sector early in the 20th century. Having for an object of interest private firms is in itself a challenge for objective research - firms in an historical perspective are most challenging. By arguing that PPPs are a product stemming from PF brings the private market to the forefront; this is a strength of this study to acknowledge this important role played by the private sector, but at the same time creates limitations. The latter are twofold: 1) the need to investigate where PF came from (i.e., early 1900's in Texas) and by whom they have been created (i.e., the private sector) impacts our study on the empirical front. There was no database or public information on the development of PF in Canada, the US and the UK. Like the pieces of a puzzle, we had to find information and data piece by piece and make linkages and connections to backtrack to other information. We had to rely on corporate reports and publications because it was sometime the only piece of evidence available. We have triangulated the information from multiple sources as much as possible, but there are some instances where this was simply impossible. This situation hasn't prevented us from uncovering other data before and after which lead in the same direction to produce an historically coherent study; 2) the private financial market and firms who are taking part in it are very secretive; for reasons that align with the conclusion of this study, nobody in the market wants to talk about the intricacy of the PPP product. Even in the modern era of PPPs, starting early 1990s, the information on the firms, the PPP contracts, the PF specifics and the state of the financial market is very difficult to obtain. Most of the data on current

and past PPPs is sealed under commercial contracts - which is a public accountability issue in itself - and general public information Acts are of no help in most cases. Moreover, primary data collection has been difficult, not only for documents and data, but we were unable to conduct a single interview for this study. Even public organizations such as PPP Canada have not been willing to participate as if PPPs are a very sensitive subject. Early on, we decided, after several attempts, to pursue the study without interviews. The main reason is that most of our study span as far as 80 years ago in multiple jurisdictions and most of the discussion of the early PF happens in the 1960-70s. Without interviews, we relied on primary data from PPP database and information from governmental reports, and sometimes citations, from scientific article and corporate and financial news articles to highlight their role. This secrecy is troublesome, but not surprising and should not prevent us from shedding light on the material origin of PPPs.

1.11 Policy diffusion perspective as a way to grasp the phenomenon

After having shown in the previous sections that there are debates on the merits of PPPs, we are in a better position to argue that PPPs are being diffused for other reasons and that the interest component could be the driving factor for several proponents.

As argued above, PPPs are based on ideas, which need to be diffused. While it is clear that at the local level CCPPP and NCPMP are doing just that, ideas were advocated by the international network of firms, and firms themselves, at the core of the financial engineering sector in the first place, not by a particular government.

In Chapter 2, we will present the result of empirical investigation over project finance; what is it, where it all started, by whom and why, its development in the US and the modernisation of the product in the UK - the goal is simply to highlight that PF

predates PPPs. In Chapter 3, we will investigate the UK case to verify if our proposition is true, that is, did the PF's development predate PPPs and was FES involved in the diffusion of ideas and the creation of PartnershipsUK? In Chapter 4, we will study the US case to understand why there was delay in the development of PPPs even if PF was available and the FES able to deliver PPPs - that is, could privatization experiences and institutional arrangements, such as constitutional prohibitions, have impeded the product's application? We will study how the diffusion efforts aimed toward removing such impediments to the demand for PPPs have been put in place and by who. Chapter 5 will be devoted to Canada's experience. We will have a closer look at some provinces that have been most active with PPPs: because the provinces have jurisdiction over most of the infrastructure in the country and because they moved first to create public agencies for PPPs such as PartnershipsBC. We will be interested in verifying if the late emergence of PPPs can be better explained by the late emergence of the PF/FES and why it has been so, among other factors. The main goal of Chapters 3 to 5 is to acknowledge the correlation between the PF/FES's state of development and the PPPs' emergence and how the FES is operating a diffusion program, by financing PPP hubs like CCPPP or NCPPP, if so, in each country. Finally, we will conclude with a review of the findings, a few observations on theoretical implications, and a discussion of the public policy implications of this study.

CHAPTER 2: THE EVOLUTION OF THE FINANCIAL MARKET AND THE RISE OF PROJECT FINANCE

"[Project finance] is all around us, often from the water you drink to the gas you burn in your stove and the electricity you use in your home." (Vinter, 2006, p. vii)

In Chapter 1, we have seen that public private partnerships (PPPs) cannot be explained satisfactorily and we have proposed a new way to look at the phenomenon. In this chapter, we will learn the current understandings of project finance. From this understanding, the history of project finance, which started first in Texas, and the following development of the financial engineering sector and the financial market will be presented. The goal is to determine if the birth of PF can be linked to the emergence of private partnerships in Texas and later the North Sea, all of which happened before the application of PF to the public sector. This will set the stage for the analysis of the three cases studied in this thesis, namely the UK, the US and Canada.

1.1 Defining project finance

In his Introduction to *Project Finance*, Andrew Fight claims: "The term features prominently in the press, more specifically with respect to infrastructure, public and private venture capital needs. The press often refers to huge projects, such as building infrastructure projects like highways, Eurotunnel, metro systems, or airports" (Fight, 2005, p. 1). Project finance is "a technique that has been used to raise huge amounts of capital and promises to continue to do so, in both developed and developing countries, for the

foreseeable future” (Fight, 2005, p. 1). More specifically, E.R. Yescombe, in his *Principles of Project Finance*, explains that “Traditionally, large scale public-sector projects in developed countries were financed by public-sector debt; private-sector projects were financed by large companies raising corporate loans. In developing countries, projects were financed by the government borrowing from the international banking market, multilateral institutions such as the World Bank, or through export credits” (Yescombe, 2002, p. 1). In *Project Finance: A Legal Guide*, Graham Vinter states that project finance is used in “financing the development or exploitation of a right, natural resource or other asset where the bulk of the financing is not to be provided by any form of share capital and is to be repaid principally out of revenues produced by the project in question” (Vinter, 2006, p. 1).

For this study, we propose this definition:

Project Finance is a financing scheme whereby private or public projects are undertaken not on the basis of the creditworthiness of the borrowers, but on the basis that the project creates revenues that can be captured directly by the lenders, hence reducing the risk to an acceptable level for a wider range of lenders and financing tools. By contrast, conventional financing is a practice where the lenders evaluate the creditworthiness of the borrower, as they will not lend solely on the financial merit of its proposed project.

From this definition, it is clear that there are two classes of financing available to an enterprise or government: what we will refer to as conventional financing (CF), and project

financing (PF). In conventional financing, sometimes called “classical long term lending”, the creditworthiness of the borrower is at the heart of the decision-making process regarding lending. But with project finance, or what Fight calls “non-recourse financing,” lending would now “[depend] purely on the merits of a project rather than the creditworthiness of the project sponsor. Credit appraisal therefore resides in the anticipated cash flows of the project, and is independent of the creditworthiness of the project sponsors” (Fight, 2005, p. 5). This is very important to understand, because it actually means that firms who have no assets or credit history can borrow large amounts of capital with the project finance product, something impossible with the conventional finance product, only because the cash flow is highly predictable - this predictability, absent in the CF, is key to PF. This also means that the better the guarantee is about the projected cash flow, the better the situation is for the lenders and all of the other actors involved in the scheme.

1.2 Where does project finance come from?

When PPPs are discussed today, either in the organizational or academic literature or the media, the project financing product behind them is rarely mentioned. Since PPPs (in the PPFA definition) are using the PF product as their core financial instrument, there is a need to better understand the relation between the PF product, the private-private partnerships (when a private sponsor and a private lender work together for a private project) (Boyer, Gravel, & Mokbel, 2013, p. 5) and the later public-private partnerships (where a private sponsor and a private lender use the public monopoly over an asset or area to deliver a project advantageously). If the modern project financing techniques required for PPPs are part of “a relatively new financial discipline that has developed rapidly over the last 20 years” (Yescombe, 2002, p. 1), there is a need to understand how and why it

developed the way it did, since, we argue, the concept is closely connected with the appearance of PPPs.

1.2.1 Oil prospecting in Texas

While some would argue that “[p]roject financing can be traced back to the medieval times” (Buljevich & Park, 1999), our contention is that it is really at the beginning of the century, with the “Spindeltop strike” of 1901, that Texas, using project finance, became a champion of petrochemical development for the next forty years. The discovery of the (at the time) most productive well ever found was largely responsible for the intense prospecting undertaken in the state. “The oil discovery that jump-started Texas’ transformation into a major petroleum producer and industrial power was Spindeltop... Capt. Anthony F. Lucas drilled the discovery well of Spindeltop field” (Texas Almanac, 2011). As Yescombe argues, “Finance for natural resources projects (mining, oil, and gas), from which modern project finance techniques are derived, developed first in the Texas oil fields in the 1930s” (Yescombe, 2002, p. 6).

Empirically, the first company involved in the US in what might be called primitive project finance, was the General American Oil Company of Texas, founded in 1936 (University of Georgia, 2002) and derived from a previous finance company named General American Finance System, founded in 1930, by Algur Hurtle Meadows and Ralph G. Trippett. Meadows and Trippett joined with J.W. Gilliland, a petroleum expert, to found the General American Oil (GAO) in 1936 to execute Meadows’ “ABC plan”. “The Scheme... involved three parties in the purchase transaction to minimize tax liability and

the use of interest-bearing oil payments to meet a large percentage of the purchase price” (Texas State Historical Association, 2011).

Faced with the Great Depression, “the company began to finance drilling operations by buying ‘production payment’, a kind of financial instrument resembling a mortgage but payable from the sale of oil and gas when it was produced”: this allowed Dallas to establish itself as the financial center for primitive project finance techniques for the oil industry (ibid). This new form of finance stemmed from a material imperative, and not, at first, from a choice. At the time, the oil market was extremely unstable and was vulnerable to irrational overproduction, leading to sudden price drops that effectively stalled exploration and production, only to create another shortage leading to a price explosion. Exploration firms did not have the kind of liquidity necessary to face the Great Depression, but by 1930’s, the demand for oil was picking up, as many American families now owned automobiles.

During the Depression decade, the GAO made use of the Meadows’ ingenious method to develop rapidly, considering the conditions of the Great Depression:

Headquarters for the company in Dallas were established in 1937.

Through the merger the new company acquired 170 oil wells, several refineries and casinghead-gas plants, and all the assets of General American Finance System and its subsidiaries. Gilliland replaced Trippett as president in 1937, and for the next five years the company struggled, as crude oil prices dropped and overdrilling led to the Hot

Oil act and other industry regulation (Texas State Historical Association, 2011).

In 1941, GAO acquired three acres in Hawkins, “near the East Texas oilfield, which provided three million barrels of oil reserves” (ibid). Left, by the preceding decade, without much liquidity, GAO used “oil payments bankable at face value with interest paid out of oil, or interest-bearing production payments” (ibid). Stated simply, GAO was provided with the liquidity to extract the oil and to transform it into a commodity (i.e. the barrel), which was then used to repay, with interest, the lenders. Under those conditions, the liquid-low company flourished, “attributing its success to its ability to buy large reserves of oil and gas in the ground rather than having to undertake exploration” (ibid). GAO was growing out of projected cash-flow through project finance. With the help of this leverage, GAO “integrated [its operations] further with the purchase of 100 wells on several West Texas properties in 1943 and others in 1944 and 1945” (ibid). Many other firms would make use of the scheme implemented by GAO.

Primitive project finance developed at that time for three reasons: firstly, the enthusiasm for prospecting drew many small firms that did not have the required capital for extraction and production. Many of those firms were created quickly and did not have the credentials or history necessary to establish credit worthiness. Second, with the mass production of personal automobiles, beginning with Henry Ford’s model T, along with the second World War, prospects for a long-term, unlimited demand for oil created the *sine qua non* conditions necessary to assure lenders that the future cash flow would materialize; the demand for oil seemed unlimited. Finally, the development in Texas was taking place in a country that was economically united. The US common law made it possible for New

York's highly developed and sophisticated financial market to get involved along Dallas' in the first step of oil field project financing by registering an increasing number of transactions under New York law, hence, facilitating the standardization of transactions and the interplay between New York's lawyers and financiers as other firm soon started to make use of the GAO scheme in other states.

Project finance would see another wave of development toward its modern version with the 1959 oil discovery at Groningen in Holland. This discovery would lead the way to the North Sea exploration and the growing interest of financiers, lawyers and consultants around the world. The question was how to use the tools that were implemented in a stable and predictable environment in Texas and then the US and to transpose them into the very risky deep-sea offshore extraction operations in another jurisdiction? An innovation would be provided by the financial engineering sector.

1.2.2 The North Sea development

While Texas was becoming one of the most developed oil states in the US, prospecting was underway in many parts of the world. The North Sea, located east of the UK's coast, which was to become a significant oil resource, "had been a subject of speculation among geologists for many decades" (Lang, 1990, p. 119). "It had been suspected for some time that Oil and Gas were probably to be found under the North Sea. But there were three reasons why the International Oil companies held back from the search" (Dukes Wood Oil Museum, 2011). Firstly, "until the 1960s there was no international agreement as to who owned mineral rights in the shallow seas outside the three mile limit;" secondly, "the technology to successfully produce oil from ocean depths

of a few hundred feet” was not sufficiently developed to be able to operate in the particularly harsh conditions of the North Sea; and finally, “the main reason for delayed exploration of the North Sea was that geologically, it was not a prospect that was held very high” (ibid). While there was consensus that oil and gas could be found, there was not enough information for financing to be secured for extraction (California, 1967). While previously, where “oil had been discovered in Britain, Holland and Germany apart from Eakring the fields were generally small and would not be economic propositions for the very expensive operating conditions of the North Sea” (Dukes Wood Oil Museum, 2011). However, these first onshore discoveries, while small, did provide a “wealth of geological information built up during oil exploration on the British mainland in places like Eakring for showing the first real offshore oil prospects” (ibid).

The presence of enormous natural gas reserves was an exciting opportunity and, “The discovery of gas at Groningen in Holland in 1959 confirmed this, and the search for oil and gas under the North Sea began” (Lang, 1990). In 1964, legislation enabling exploration through licensing was passed in the UK, in the form of *The Continental Shelf Act*, which covered an area of 42,000 square miles (~108,778 Km²) (ibid).

The drilling platform, called Mr. Louis, drilled the first hole in the North Sea in May 1964 (California, 1967; Dukes Wood Oil Museum, 2011; Veil, 2006). This event sealed the fate of the well as it became too dangerous for commercial exploitation. But a year later, on the 5th of June 1965, preparations and drilling began for the operations of the 5,600 ton Drilling Barge Sea Gem. On the morning of Friday 17th September 1965, the barge entered operation (Rigsworld, 2013). The Sea Gem was operational 24/7, but was

not alone in the North Sea: Amoseas, Mr. Cap and Glomar IV were already in operation (ibid).

As drilling on the Sea Gem continued to a depth of 8,500 feet (2.5 Km), and as a belief was forming that the well was probably another “dry hole”, crews hit what they believed was a small pocket of gas. Finding small pockets of gas was not uncommon at that depth; usually, this kind of froth is caused by natural gas, however, after a few days, it became clear that this was no “small pocket”. The stakes were high:

A lot of speculation was being made since 1964 about the North Sea in the press and in Parliament at this time and expectations were high and a lot of attention was put on the drill rigs currently working in the North Sea. Security had to be tight as a leaked story could discredit the Oil men if the find turned out to be wrong. On 20th September the Sea Gem crew decided to stop drilling and run a drill-stem test to make a preliminary assessment of the flow and pressure of gas. The results of this test were sent by teleprinter to Cleethorpes and then onto the BP Headquarters at Eakring (Dukes Wood Oil Museum, 2011).

This was the first “serious” discovery of hydrocarbon in the British sector of the North Sea, and was a historic and highly awaited moment (Campbell, 2013). Even if the announcement made it clear that drilling had to continue “deeper in the hope that commercial production may yet be encountered,” the press reported: “BP Strikes GAS ... North Sea Klondike” (ibid). Gas was found first, but oil would soon be discovered. A few years later, in 1969, the Montrose field was discovered by an Amoco-led group. Montrose,

later renamed Arbroath, was the first commercial oil field discovered in any sector of the northern North Sea. On the offshore Norway, Ekofisk was discovered by Phillips and following this large discovery, BP decided to explore acreage it had had for a long time, but which was not interesting with the information of the time: the result was the Forties fields. While BP downplayed at first the magnitude of the discovery, soon the:

recoverable reserves at Forties were later revised to more than 3bn barrels. Such was the political and economic importance of the discovery, the UK government extended a loan of £370m to help bring the oil onstream. Dubbed the ‘gold-plated Forties’ by those astounded at the cost to develop it - Queen Elizabeth II pushed a gold-plated button to start deliveries to shore via pipeline as the pinnacle of a £500,000 ceremony on November 3 1975 (Campbell, 2013).

But, as in Texas, the discovery of oil a few years later, in 1969, would create incentives for the development of project finance. “When North Sea exploration began in the 1960s, the oil price was about \$2 per barrel. Then came the first of the Middle East crises (the Yom Kippur war). By the time UK production started, prices had risen to \$12 per barrel” (Dukes Wood Oil Museum, 2011). “The rollcall of fields shows the speed at which the potential of the North Sea was explored and, by 1974, offshore exploration companies had found 50 % of all the UK oil that would ever be discovered...” (Campbell, 2013). While oil prices rose fourfold in matter of weeks, project finance techniques coupled with the windfall profits that this increase was promising, helped lenders (mostly banks at that time) in becoming enthusiastic - enough to swallow the risk - about lending, for the first time, enormous amounts on the basis of future cash flow.

However, the factors that had contributed to the development of project finance in the case of oil to a larger extent, apart from the very high oil price described above, were not present in that of gas:

The economics of gas field development is different from that of an oil field because of two factors. First of all, oil is mainly used as a transport fuel and as a chemical feedstock, whereas gas is mainly used for heating. The demand for oil throughout the year does not fluctuate very much, but the demand for gas during the winter is more than twice the summer demand. In fact, there are both daily and seasonal variations in gas demand. Secondly, oil can be easily transported in bulk on land by road or rail transport, whereas gas can be transported economically on the large scale by pipeline only (Lang, 1990).

Moreover, the structure of the tax system towards oil was more favourable at that time, and reduced complexities helped project finance to be applied with more intensity in the case of oil (ibid). Finally, automobiles were still forecasted to run on oil for several decades and nothing was clearer than the fact that personal consumption of gasoline was going to increase – double digits - for the foreseeable future, while the prospects for gas were not comparable even if gas led to oil discoveries.

Despite these disadvantages for natural gas compared to oil, as in the case of Texas, the prospect of future cash flow from discoveries in the North Sea fuelled a new industry in the UK, organized around the offshore oil fields and the application of project finance, that developed rapidly compared with its primitive début in the 1930's, and was to

develop itself around higher risk project finance. Stated simply, the magnitude of the discoveries as well as demand was so important that financiers were ready to take the risk and to innovate. Also, they benefited from the American experience with primitive project finance. The alternative of leaving those resources untouched because of financial constraints was not an option: an incremental improvement was needed.

1.3 A new era of project financing

The differences in physical conditions between Texas and the North Sea were important and contributed to increased risk of negative outcomes, and therefore required different financing in the North Sea. In the North Sea, production was more capital intensive, and the risk of negative outcomes was greater in magnitude and more likely to occur.

The risk of operations in the North Sea is a complex issue... in terms of the money at stake and the number of costly surprises, the North Sea may be considered a high risk area. In terms of the probability of losing money on the existing development projects, the North Sea has not been considered a high risk proposition (Eckbo, 1979, p. 87).

Stated simply, Eckbo states that the environment was risky, but the perspective of selling oil wasn't very risky because of the vast amount found - it is worthwhile then to find a way to protect the firms who will undertake the projects. Compared with Texas, and other similar onshore discoveries, where primitive project finance was first applied, the North Sea production was offshore, in deep water, and faced the violent seas characteristic of the area. The oil platforms were expensive to design, build, transport and assemble, and

hard to keep supplied under the harsh conditions (see Figure 4 for informational purpose only).

Figure 4 - North Sea's harsh conditions



(Dukes Wood Oil Museum, 2011)

The rough seas were especially difficult to contend with and led to the loss of oil rigs: a few days after Christmas 1965, the Sea Gem oil rig, responsible for the discovery of natural gas in the North Sea, was struck by a large wave while being prepared for relocation. It sank in an hour and a half, and only fourteen crewmembers survived. In 1980, “a previously undetected crack in one leg of the Alexander Kielland oil rig caused it to capsize when it was hit by a large wave in the North Sea. 123 people were killed and

many more injured” (Thompsons Solicitors, 2011). In 1988, “a gas leak on board the Piper Alpha oil rig in the North Sea started fires which resulted in 167 deaths and many more injuries... It was the world’s worst offshore oil disaster” (Thompsons Solicitors, 2011).

The risk of negative outcomes was so great that, to develop the North Sea, an innovation in the financial sector was required; a safety valve was needed to protect a company as large as British Petroleum (BP) from bankruptcy. The creation of such a financial solution marked the birth of an active financial engineering sector in London - where lawyers, banks and financial consultants would work together on different aspects of this evolution - the modern PF techniques.

1.3.1 The special purpose vehicle

There exists no consensus on when exactly the Special Purpose Entities/Corporations (SPE/SPC’s) or Special Purpose Vehicles (SPV’s) were created. Some argue they were first used at the beginning of the 20th century in the United States for tax evasion, while others situate their birth during the mid-1960’s with an explosion in their use occurring throughout the 1970’s and 1980’s until finally they were “hijacked by companies in the 1980s and 1990s to achieve dubious accounting objectives such as off-balance sheet financing and revenue recognition” (Thompsons Solicitors, 2011).

In a chapter entitled *Financial Engineering with Special Purpose Entities*, Bala G. Dharan reports her testimony to the US Congress following Enron’s accounting issues where she described very well and succinctly the concept of SPEs/SPVs:

Special purpose entities (SPEs) are business entities formed for the purpose of conducting a well-specified activity, such as the construction

of a gas pipeline or collection of a specific group of accounts receivable. Because they are devised to conduct just one prespecified activity, it is often possible to attract a group of investors to invest in SPEs because the cash flows and risks of the venture they perform are clearly specified by design. By contrast, once an investor makes a cash investment in a normal corporation, the corporate management undertakes a variety of transactions and activities that were not specified by prior agreement with its investors. Thus, when it comes to investing in a project with well-defined risks and returns, many investors prefer the isolated and uniquely identifiable nature of an SPE to a more diffusely defined corporate form. For this reason, SPEs have been used for several decades as a preferred entity to raise financing for large international projects and other projects with well-defined cash flows and risk characteristics (Dharan, 2002).

Stated simply, an SPE/SPV is like a computer program; a programmer designs the program to run a specific and predefined set of operations and the user cannot do anything else with it. Lawyers, generally working in national and multinational law firms, do this programming. Slaughter and May, a London based law firm states in their Project Finance section that “We have had a leading Project Finance practice since the very first transaction in the UK. We acted on most of the early North Sea projects and their financings, and have continued to be involved at the cutting edge of project finance, acting on many of the largest and most complex international transactions” (Dharan, 2002).

Marsh, Parlin & Associates, LLP, specialized in project finance law, states that :

“project finance for high-risk infrastructure schemes originated with the development of the North Sea oil fields in the 1970s and 1980s. For such investments, newly created Special Purpose Corporations (“SPCs”) were created for each project, with multiple owners and complex schemes distributing insurance, loans, management, and project operations. Such projects were previously accomplished through utility or government bond issuances, or other traditional corporate finance structures” (Marsh, 2012).

This peculiarity helped SPEs to become highly leveraged receptacles for the then developing project finance because the increased forecasting ability awarded by this “programming” allowed for financial engineering and, hence, the development of this sector. Because of the new SPE, the lenders were now sure that the forecasted cash flow wouldn’t land anywhere else than what has been “programmed” by the lawyers.

While law firms secure the “programming” of the SPE to be used, the financial engineering, operated at first by banks, but later with an increasing involvement of accounting and management global firms (e.g., Grant Thornton Int., PwC, Deloitte), depends on the specifics of each reservoir and many variables need to be assessed.

No two oil or gas reservoirs behave the same. Before a decision can be made as to how best to develop a field, the reservoir engineer has to have an idea of the reservoir characteristics of the particular field... Economic analysis forms an essential part of the decision-making process... The more important areas to be examined in an economic

model are: (1) pricing, (2) finance, (3) taxation, (4) project evaluation
(Lang, 1990, p. 121).

Lenders, financial advisors, engineers and lawyers need to work together to organize successful project financing. The banks need the lawyers' expertise to develop a viable SPE that will protect their loans. Financial advisors need the expertise of the engineers to assess the project and forecast revenue flows. All of the sectors operating the required financial engineering to develop the North Sea have a strong interest in project financing and in its increased usage; for some it increases their consultancy's billable time and for others it increases the number and the amount of loans and their interest.

1.4 Private partnerships through project finance

This thesis is about PPPs, but the central contention is that it all started without the "Public," as primitive project finance developed itself into private partnerships (PF used with SPE/SPV for a private client), and as the industry was growing, the lawyers, bankers and accounting firms were expanding their product to new markets, both private and public. This is the leitmotif of all of the firms involved in PPPs; their *raison d'être* is expanding its business opportunities. Of course, the development of the North Sea was seen as a very positive state of affairs from an economic or public interest perspective in the UK.

Stefanie Kleimeier and William L. Megginson provide support for this contention when they propose that "Project finance (PF) was first used on a large scale to develop the North Sea oil fields during the 1970s, where the scale and riskiness of the investment required far exceeded the capabilities of any single petroleum company – or even any

single consortium of companies” (1998, p. 58). Kleimeier also provides support for this when she states that:

PF originated in the production loans to US oil companies during the 1940s and 1950s. These loans were solely dependent on the cash flows from production of the oil company. Later, combining production and development loans formed the first PF contracts. In the 1970s, the North Sea oil and gas field developments offered a wide range of applications for PF and various new contractual structures were developed (Kleimeier, 1995, p. 27).

Empirically, while it is clear that the first private partnerships around project financing were struck in the 1960’s following the North Sea discoveries, those few private partnerships (1965-1975) are difficult to highlight because they were not recorded in any database. Projectware and Dealscan, project finance database, are limited before 1990; Dealscan goes back to 1986 and no entry before that is recorded, but even before 1992-93, the coverage is sparse¹⁶. Stephanie Kleimeier wrote the first empirical analysis on this issue in 1993, but she used a manually collected database spanning from 1975 to 1992. Table 1 below, from the 1993 original dataset and published in 1995, shows that private partnerships were developed before John Major’s 1992 UK PFI initiative – discussed frequently in the literature as the birth of PPPs.

¹⁶ Projectware and Dealscan are professional tools that can be used to monitor the market and audit a sector of PF deals by country or with the help of other indicators. They appeared as the market was getting more mature in the 1990’s.

Table 1 - Location of project finance private partnerships (1975-1992)

Country or region	Number of projects in country or region
United States	111
Australia	63
North Sea	52
Indonesia	32
United Kingdom	32
Canada	23
Canada/US	3
Thailand	20
China	17
Malaysia	15
Turkey	10

(adapted from Kleimeier, 1995)

It is important to remember that in Table 1, the number of projects is an aggregate of the 1975-1992 period. Also, the value of those projects hasn't been recorded. The fact that the North Sea is not at the top is misleading, as the table does not provide a historical perspective. Notable in Table 1 is that the bulk of the private partnerships were located in the United States, Australia, the North Sea (UK), Indonesia, the UK, and Canada – many years before the “birth of PPPs”. Appendix 2 shows, through a sample of 120 PFs out of 467 PFs that project finance was first applied in the context of private partnerships (Kleimeier, 1995, 1998).

From General American Oil début in Texas to the North Sea, PF hasn't been applied to the public sector as PPPs: this would change only in the 1980's after the development of the North Sea when, for the first time recorded, project financing would be used to create an investment in public infrastructure.

This contention is supported by a comprehensive report that we have generated through the Private Participation in Infrastructure database engine of the World Bank. While this database does not cover developed countries such as those that are the focus of this study and doesn't points to the first application with any details, it shows that private participation in the financing of infrastructure as public private partnerships started during the late 1980's. What this confirms is that PPPs did not predate PF even in countries not studied here. To be sure, Table 2 reports instances of application of PF to the public sector either through a Greenfield project (i.e., a new project), the concession of public infrastructures, or the divestiture of a public asset to the private sector with a private financing component involved. Table 2 below shows the first instance of the application of private finance recorded to the public sector as determined by the indicators of the World Bank¹⁷.

¹⁷ The database covers infrastructure projects that meet three criteria: 1) Projects that are owned or managed by private companies in low- and middle-income countries. Private parties have at least a 25 % participation in the project contract, except for divestitures which are included with at least 5 % of equity owned by private parties. 2) Projects that directly or indirectly serve the public -- captive facilities (such as cogeneration power plants and private telecommunications networks) are excluded unless a significant share of output (20 %) is sold to serve the public under a contract with a utility. 3) Projects that reached financial closure after 1983 (database coverage currently extends to 2011). (2011).

Table 2 - The first application of private finance to the public sector and the creation of PPP in developing countries

Region	Year	Type of projects	Number
East Asia and Pacific	1984	Greenfield	2
East Asia and Pacific	1985	Concession	2
East Asia and Pacific	1990	Divestiture	3
Europe and Central Asia	1987	Divestiture	1
Europe and Central Asia	1990	Greenfield	1
Europe and Central Asia	1997	Concession	2
Latin America and the Caribbean	1984	Greenfield	1
Latin America and the Caribbean	1986	Divestiture	1
Latin America and the Caribbean	1987	Concession	1
Middle East and North Africa	1990	Concession	1
Middle East and North Africa	1993	Greenfield	2
Middle East and North Africa	1998	Divestiture	1
South Asia	1988	Concession	1
South Asia	1988	Greenfield	1
South Asia	1992	Divestiture	1
Sub-Saharan Africa	1987	Concession	1

Sub-Saharan Africa	1987	Greenfield	1
Sub-Saharan Africa	1989	Divestiture	2

(Data extracted and adapted from World Bank, 2011)

PPPs were the applications of what had been done in the private sector to the public sector at a later stage; this was a product being sold to another sector of the economy, not a policy. There are different types of projects (i.e. Greenfield, concession and divestiture) in Table 2, all of which are considered here as the application of private finance to the public sector. While "Management and lease contracts transfer at least partially the operational risk to a private sponsor through contractual obligations. In greenfield projects and divestitures, the operational risk is transferred to a private party through contractual obligations and/or equity ownership in the project." (The World Bank, 2013) For our purpose, Greenfield is the most significant. As we have shown before (see Chapter 1), the first PPP in Canada was claimed to have been created in 1993, officially 1992 in the UK, and evidence points to 1992 in the US for the Chicago Stadium and the Mid-State Highway (Appendix 1). This shows that, as hypothesized, PF was initially used in the North Sea for private partnerships and used later for PPPs. Stated simply; PPPs haven't appeared before the private partnerships (e.g., North Sea development) as they are an application of PF to the public sector by the industry.

Appendix 1 indicates that the first private partnership in the North Sea was British Petroleum's 1972 Forties Field. In an early discussion on the North Sea development,

Eckbo reports that the Forties Field was the first application of private project finance through a special purpose vehicle, hence creating a private partnership:

The first example of this was British Petroleum's Forties Field loan where they undertook to extract any oil that was in place, but the banks took the risk of there being sufficient oil in place to repay their loans. The Forties Field financing was signed in August 1972 (1979, pp. 88-89).

As discussed in Chapter 1, initial assumptions were that for “PPPs to thrive, a specific economic structure must have already matured to grant the required financing” (p.36) and it is clear now that PF has developed over time in the private sector before any PPPs had been realized and that PF is a central component of the latter. The evolution of private partnerships and of the actors who were selling the PF product is important to understand so as to better explain the timing of the PPP phenomenon and to acknowledge how it structured the diffusion of the product in the public sector. For diffusion to occur and for PPPs to develop, first there had to be the PF and a FES experienced with the product to be diffused to the public sector.

1.5 From an ad hoc necessity stemming from a particular environment to a fully developed financial product

Once Forties Field financing had been finalized, private partnerships started to blossom in the North Sea: Piper Field, Occidental and Piper Field, Thomson in 1974, Claymore Field, Occidental and Claymore Field, Thomson in 1976, Thistle Field, and Tricentrol in 1976. By 1978, the known financed fields were: Forties, Piper, Dunlin,

Statfjordb, Ekofisk, Claymore, Brent, Beryl, Thistle, Ninian, Murchison, Montrose, Tartan, Heather, Valhall, Cormorant, Argyll, Auk, Buchan (Eckbo, 1979).

Following successful application to the North Sea's oil, private partnerships, that is the usage of PF through an SPV for private purpose (e.g., drilling rig, oil refinery), started to be used in other sectors, such as onshore gas and mining, and power generation. This first wave of diffusion mainly occurred in the UK (North Sea), New Zealand, the US, Australia, and Spain (see Table 4). As Gardner and Wright propose, PF

“was adopted widely during the 1970s in the development of the North Sea oilfields and also in the U.S. power market following the 1978 Public Utility Regulatory Policy Act (PURPA), which provided the regulatory impetus for independent power producers (IPP) through the requirement of long term offtake contracts for the power they produced” (Gardner & Wright, 2014).

This pace of diffusion was also accelerating; between 1972 and 1979, the number of private partnerships per year jumped from one up to four in 1979, in 1981 there were eight and by 1983, 79 private partnerships were signed. It is the first year that so many new countries would make their appearance on the list as private partnerships beneficiaries, many not sharing the same characteristics as the first developed group: Indonesia, Bahrain, Abu Dhabi, Malaysia, Nigeria, Kuwait, Saudi Arabia, Cameroon, Papua New Guinea, Tunisia and Sudan. Some developed countries, such as Canada, Germany, and South Korea would see private partnerships come to life on their territory in 1983. Private partnerships would be used everywhere as long as oil, gas and mining operations could be initiated and later other sector such as telecom. Particularly, once it had been shown in the

North Sea that private partnerships, based on modern project finance coupled with a special purpose vehicle, were a success for oil, many sponsors who did not have the liquidity in developing countries for the extraction of natural resources could make use of London's expertise with the PF product. Several firms like White & Case would be involved in international application of PF in either UK or US law:

It is a prerequisite of any large deal involving international banks and a consequential sum of money that English [or New York] law be used in financing as it is seen to be the only way of getting these facilities syndicated. Obviously local law firms for the most part do not have the capacity to be able to offer such services and clients, whether it is the sponsor or the financial institutions have had to tap the expertise in the City or Wall Street (Project Finance International, 2000, p. 56).

In some other cases, western corporations which wanted to operate in risky political environments - such as those seen in table 2 - would make use of the private partnership (PF-SPV) to protect their operations.

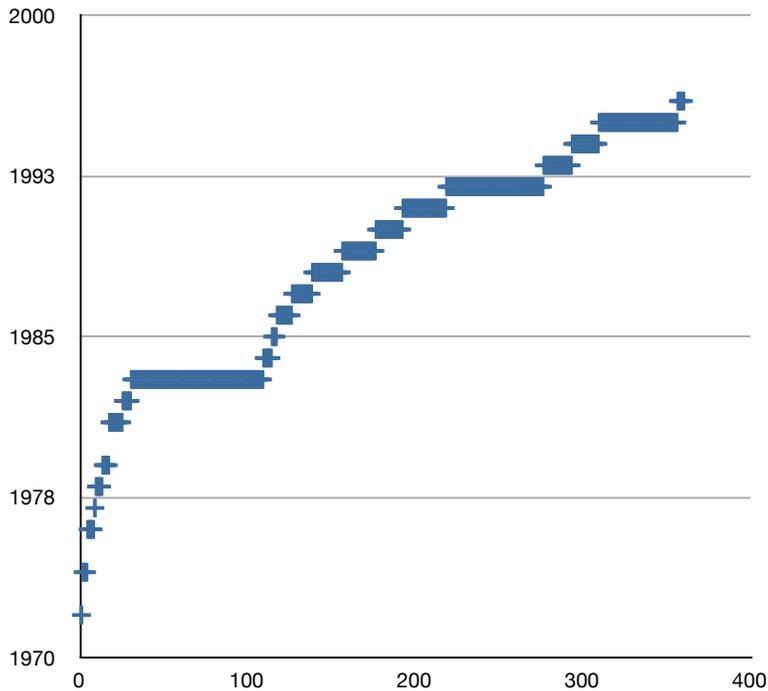
1.6 The evolution of private partnerships into PPP

All the pieces of the puzzle were in place in the mid-1980's for the first wave of the private partnerships (the usage of project finance through a SPV for private purpose) applied to a public purpose, hence making it public private partnership (PPP): the idea of financing future cash flow had been applied to the private sector's projects for more than 50 years. SPEs and SPVs had been designed and used frequently in the North Sea for a decade; the latter would be the "showcase" for subsequent worldwide development: it has

been done at Forties Field where \$945 million to develop it were raised and in 88 other projects (INSEAD, 2013). After 1975, the industry's growth was almost exponential, fuelled with every project realized while the key actors of the FES were broadening the scope and nature of projects (see Table 4), mostly still "project finance was used by private sector for industrial projects, such as mines, pipes, oil fields" (INSEAD, 2013). From BP's 1971-72 Forties Field to the first reported Greenfield project in 1984 in East Asia and the Pacific, over twelve years, the seeds of an industry had been dispersed. International firms like Slaughter & May would make use of the experience acquired in the North Sea to structure deal internationally (2011).

In Figure 5, it is easy to see that the maturity of the pipeline was more important at the beginning of the 1990's (with more than 300 projects per year) than when it all started at the beginning of the 1970's (with a handful of projects per year), even when one acknowledges market fluctuations, economic cycles and recession. Stated simply, the market kept growing for the PF product from 1972 up to 1996. This is important because it brings other evidences that PF evolved slowly after it had first been created as our assumptions in Chapter 1 proposed highlighting the importance of the industry and its experience with PF in the North Sea. For example, Slaughter & May have been "internationally recognised for handling ground-breaking transactions, including across the Middle East, Asia and Europe" but only after they gained their credential with PF in the North Sea (Slaughter and May, 2011).

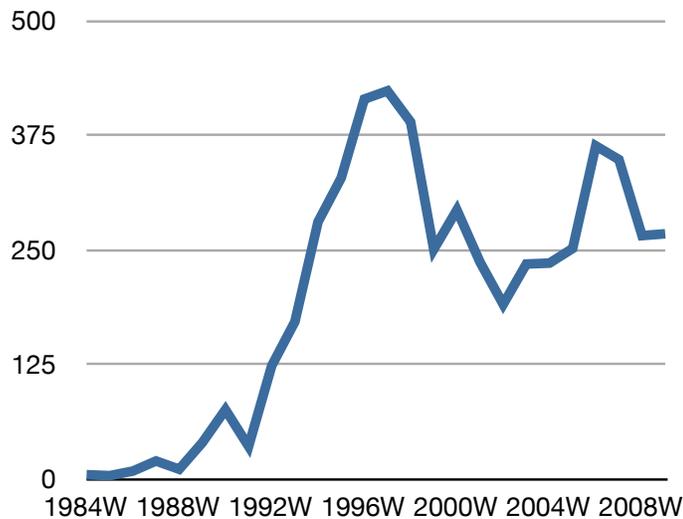
Figure 5 - Pipeline of project finance on an historical perspective (1972-1996)



Y = year and X = PPs (adapted from Kleimeier 1995)

This shows that modern PF was first applied in the North Sea through private partnerships and that after the industry had gained experience was it possible to extend around the world. To be sure, as Figure 6 shows, in developing countries, PF was only applied in any important way at the end of the 1980's, and particularly after 1992. All of the initial financial engineering was taking place either under London or New York law (Project Finance International, 2000).

Figure 6 - Deals flows for project finance in developing countries worldwide per year (1984-2009)

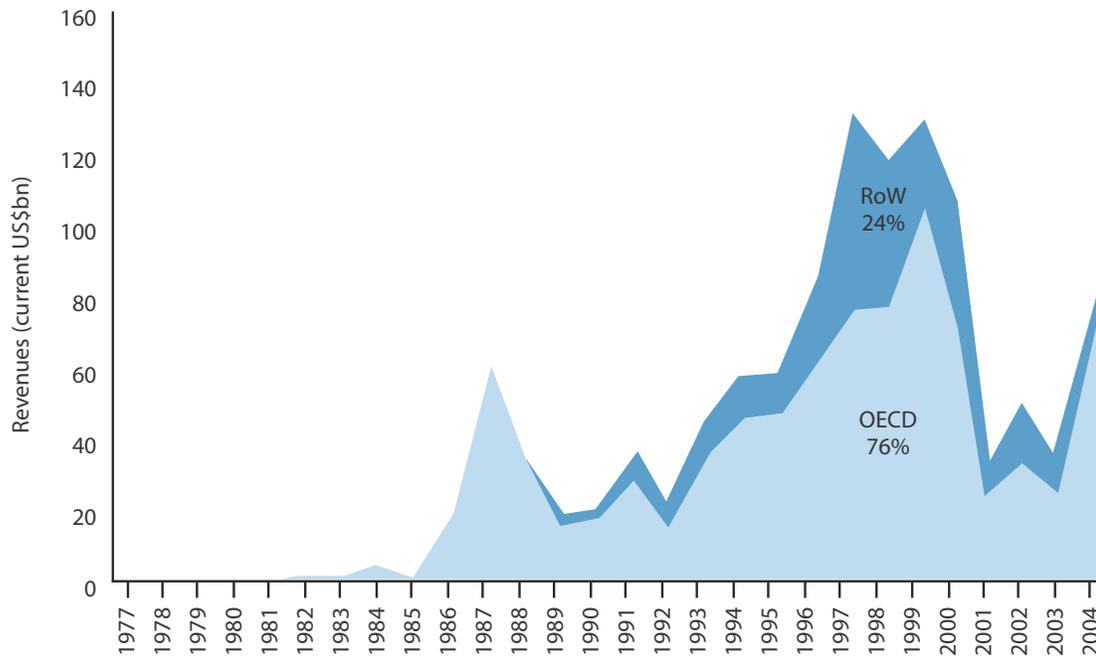


Y = deals and X = year (graphic adapted from the data of the World Bank, 2011)

Figure 7 helps in situating historically private partnerships and divestiture. As our assumptions were proposing in Chapter 1, divestiture happened before most PPPs, but both were predated by PF. As we can see, the evolution of project finance as private partnerships (PF and SPV) and the correlated evolution of the financial engineering expertise required to design and implement them was also used in the divestiture which took off a decade after the first growth of private partnerships. For example, Strikeman Elliott's "PPP/Infrastructure Group [was involved in the] development, financing, and acquisition/divestiture of projects utilizing different combinations of Design, Build, Finance, Operate and Maintain models." (2012b) : divestiture and PPP are not mutually exclusive, as they all make good usage of the FES and the expertise its members with PF.

The financial engineering expertise developed in the North Sea helped in making the UK a leader in divestiture and later public private partnerships; this might not be a coincidence.

Figure 7 - Revenues from privatization: OECD countries vs. Rest of the World (1977-2004)



Y = revenues and X = years (Imported from Davis, 2008, p. 17)

1.7 The diffusion of a product

Private partnerships using modern project finance coupled with a SPV developed first in the North Sea and from there spread throughout the world. Over time, the firms who had developed and had experience with PF were ready to sell the product tested in the North Sea under New York and English law around the world (Project Finance International, 2000).

We know now that “Project finance has historically been a financing mechanism for the private sector” (Suzie Harris & Krueger, 1999). In this context, it is interesting to note that modern PF was used in the private sector extensively in the UK first and foremost. Only later did the divestiture and PPPs first started in the UK become common across the OECD and then in the rest of the world. These have been operated by the same firms who had mastered the process under New York and English law (ibid); most notably, as with a private partnership, bankers were organizing the transaction, lawyers were drafting the legal documentations and management consultancies were assessing the deals. Again, PPPs involve the same actors of the FES as private partnerships and divestiture, but with better scope for profits: “Full-scale privatizations are stronger targets for revenue,” (Project Finance International, 1999, p. 56), but PPPs are, in turn, stronger targets for revenue than privatization (International Monetary Fund, 2006). Project finance, after the North Sea experience was being sold as a product to an increasing number of areas:

Project finance has spread worldwide and includes numerous industrial projects such as power stations, gas pipelines, waste-disposal plants, waste-to-energy plants, telecommunication facilities, bridges, tunnels, toll roads, railway networks, city centre tram links and now the building of hospitals, education facilities, government accommodation and tourist facilities. The technique has also been applied to aircraft and ship financing (Merna, Chu, & Al-Thani, 2011).

As we will discuss shortly, since private partnerships, divestiture and public private partnerships were occurring before international governmental organization (IGO) started to diffuse ideas about those, something else must have been at play.

IGO's, such as the International Monetary Fund or the World Bank, later played a role in the diffusion of these ideas, but by that time, the concept was already in use internationally. We know now that the PF technique was *imported* by members of FES into Europe from the US - where it has been invented by GAO and financed by a Dallas bank - to finance large projects such as the North Sea oilfields in the late 1970s (Merna et al., 2011; Tinsley, 1996).

1.8 Turbulent times

Acknowledging the fact that project finance was applied to the private sector, in the countries studied here -- but in the rest of the world also -, before any privatization or any public private partnerships is central to this thesis. It is central because as we assumed in Chapter 1, for PPPs to thrive the industry needed to be developed enough and experienced with the PF formula in prior applications. It is central also because this study proposes that the material origin of PPPs predate ideas about them. Stated simply, ideas have been created to sell the product to the public sector after it had been successful in the private sector. This demonstration it is not intended to minimize the importance of other events, for example, stagflation. To help put the evolution of project finance in context, we will highlight briefly the turbulent times in which PF emerged in the North Sea.

After the infamous financial crisis of the 20th century and the rising of Keynes the government was promoting public goods without much criticism. WWII further shielded the public sector's involvement during what has been dubbed the post-war "glorious thirties" where economic growth of an unprecedented scale - ultimately linked to many variables, such as a demographic explosion and infrastructure development. However, the

way scholars conceptualized public good provisions by the public sector began to change in the late 1960's.

Taking inspiration from many sources, several academics mounted attacks on the classical understanding of welfare economics. Revolutions were taking place in many sectors; with the recent publications of Nash's 1953 *Two-Person Games*, Olson's 1965 *Logic of Collective Action – collective action* (the first step toward the creation of the, yet-to-be-named, public choice field), Friedman's 1967 conference address at the American Economic Association the start of the neo-classical revival, and Niskanen's 1971 *Bureaucracy and Representative Government*. This re-emphasis on the self-interestedness of the individual helped articulate the public-failure problem that was at the core of Niskanen's first significant application of the model to bureaucracy. Niskanen then joined Reagan's administration and his book deeply influenced Thatcher: "Niskanen's book so influenced Margaret Thatcher that she urged all of the members of her first cabinet to read it when she took office in 1979" (Colin, 2005). For this newly formed public choice approach, many market-failures were actually created by government interventions. In parallel to the academic debate, some phenomenon, such as Stagflation, were occurring causing political debates which helped in nourishing the academic debate and vice versa.

In the UK, early 1960's inflation began to rise to alarming levels and by 1965 the inflation was accompanied by stagnation: the term "stagflation" was then coined by the spokesman on economic issues of the UK's conservative party, Ian Macloed :

We now have the worst of both worlds—not just inflation on the one side or stagnation on the other, but both of them together. We have a sort of "stagflation" situation. And history, in modern terms, is indeed being made (Nelson & Nikolov, 2002).

In July 1966, a six-month wage and price freeze was initiated in the UK (ibid). In the US, by December 1969, inflation had topped 6 % and “Inflation had disturbing international implications because ... the US was committed to backing every dollar overseas with gold” (Lowenstein, 2011). For almost two decades following the Bretton Woods convention, the system was working quite well: “Japan and Europe were still rebuilding ... and the US owned over half the world’s official gold reserves” (ibid). But in the 1960’s, the US share declined as other nations rebuilt successfully. Hence, other nations “had less need for dollars” while the US “spending on Vietnam and domestic programs flooded the world with dollars” (ibid).

On August 12, 1971, Britain requested that the US guarantee the value of \$750 million. The next day, Nixon convened his advisors at Camp David. The plan was to stop the conversion of dollars to gold, to impose then a 90 day price and wage freeze and to tax imports with an additional 10 % (Lowenstein, 2011). Nixon was re-elected, but by 1974, when he resigned following the Watergate, inflation was still high.

Coupled with the instability of the currency beginning in 1971, the Yom Kippur War of October 1973 engendered the oil crisis by an embargo from the Organization of Petroleum Exporting Countries (OPEC). This embargo was proclaimed in October 1973 following Nixon’s decision, on October 12, to supply the Israeli military against Egypt and its Arab allies after the Soviet Union began sending arms to Syria and Egypt. The embargo’s effect was to raise by 70 % the price of a barrel of oil putting it at \$5.11 overnight. The market for oil then rose up to \$12 - with a high \$17.40 per barrel Iranian oil (Smith, 1973). In reaction to the oil embargo, improvements in efficiency were desired, but also new domestic oil production was needed too: it is in this context that the North Sea’s

deep water oil resources were seen as a highly attractive and valuable asset to develop and project finance was key to this development as we have seen.

In the UK, by 1974-75, inflation had peaked at 26.9 % and the government tried to contain inflation by several phase of pay increase cap throughout the end of the 1970's (BBC, 1997; Soteri & Estaway, 1993). Starting in 1978, several strikes occurred during the winter: the most notorious was the unofficial strike by 80 gravediggers. Despite the low number of strikers, the symbol of unburied bodies was a strong political image (Travis, 2009). The "Winter of discontent" swayed 12.5 % of voters from Callaghan's Labour to Thatcher's Conservatives in two month and another 7.5 % the following month (Feb 1979) and this paved to way for the Conservatives in the Spring. Thatcher introduced "a series of political and economic initiatives intended to reverse high unemployment and Britain's struggles in the wake of the Winter of Discontent and an ongoing recession" (Kumar, 2013).

In the US, Ronald Reagan was elected while double-digit inflation affected the economy and at a time when interest rates were high. To reduce inflation, "Reagan promised to restore the free market from excessive government regulation and encourage private initiative and enterprise" (Ronald Reagan Presidential Library, 2014). In its first year, Reagan proposed to Congress a:

\$39 billion in budget cuts into law, as well as a massive 25 % tax cut spread over three years for individual, and faster write-offs for capital investment for business... Although inflation dropped from 13.5 % in 1980 to 5.1 % in 1982, a severe recession set in, with unemployment exceeding 10 % in October 1982" (Ronald Reagan Presidential Library, 2014).

While Reagan was credited for much of the growth to come early in the 1990's, it "came at a cost of a record annual deficit and a ballooning national debt... exacerbated by a trade deficit" in which Reagan's free trade stance was contributing: "Americans continued to buy more foreign-made goods than they were selling" (Ronald Reagan Presidential Library, 2014). This, coupled with the tax cuts which were enacted on an unprecedented scale - the top marginal rate fell from 70 % (1981) to 28 % (1988) – further reduced the revenue of the state and opened the way for unprecedented structural deficits (Tax Foundation, 2011). Although Reagan revised the US tax policy after two years and reintroduced selected increase "to control rising deficits", it was not enough to alter the structural deficit created. With Niskanen part of Reagan's economic advisory team and Thatcher being deeply inspired by Osborne and Gaebler's "steering rather than rowing", "cutting government" was made a priority in the UK and the US, but not as much in Canada.

In Canada, the world economy had similar impacts on the country's own economic situation. Large budget deficits, high inflation and high unemployment made the Liberal government of Pierre Elliot Trudeau unpopular. Joe Clark's Conservatives campaigned on slogans such as "Let's get Canada working again" (Ottawa Journal, 1977). In his campaign, Clark promised to cut taxes to create growth. However, once in office he proposed an 18 cents per gallon tax on gasoline to curb the budget deficit (Doder, 1979; MacEachen, 2009). Clark's minority government lasted less than nine months and was defeated on the budget vote: the gasoline tax was to be fatal to Clark's government. The Trudeau Liberals won a majority by campaigning on the broken promise of Clark's government to cut taxes. It is only in 1984 that the Conservative Brian Mulroney was to be elected under the slogan "Canada is open for business again" (Mulroney, 2011; Thatcher

Foundation, 1985). This has delayed Canada from the “cutting government” *doxa* seen in the UK and the US and by the time Mulroney was elected, the severity of the world economic situation had diminished and, as a corollary, the enthusiasm for such reforms (i.e., cutting government, privatization), although being present, was not as strong as in the UK and the US. While there was privatization in Canada (see Chapter 5 for details), the extent was not comparable to the UK, and no tax-cut *à l'américaine* happened. Canada had just been through a new constitutional debate following the 1980 Québec's secession referendum and Mulroney - elected by a grand rainbow coalition of socially conservatives, Québec nationalists and fiscally conservatives - didn't have the *carte blanche* that Thatcher and Reagan had in their first mandate (Dunn, 2008, p. 48).

Academic debate, world economics, home political reality and the state of development in the market in general all interplayed together in those turbulent times: idea about privatization interplayed with politics and at a time where the financial engineering sector, discussed in the previous section, was ready to make such reforms a reality in the wake of the North Sea experience. To be sure, those essential “ingredients” were mixed and matched differently in each country, as we will see in the following pages. While deregulation and massive privatization of state owned enterprises (SOEs) took place throughout the 1980's, less privatization occurred in the US than in the UK, since the former had fewer SOEs than the latter. Canada saw privatization too, but was more timid than the UK. If the 1980's were the decade of privatization in Canada, the US, the UK, and elsewhere, albeit at different levels, the 1990's would see a new phenomenon arise as the momentum for privatization started to lessen: PPPs.

1.9 From PF, divestiture to PF as PPPs

It is clear that “The trend toward privatization of infrastructure has increased the opportunities for private investors. Private players are participating in designing, building, advising on financing, and maintaining infrastructure assets alongside governments” (Davis, 2008, p. 16). For Yescombe, “It has also been promoted by the internationalization of investment in major projects: leading project developers now run worldwide portfolios and are able to apply the lessons learned from one country to projects in another, as are their banks and financial advisers” (2002, p. 5).

The International Monetary Fund, in a report called *Public-Private Partnerships, Government Guarantee and Fiscal Risk*, argues that:

By the late 1990s privatization was losing much of its earlier momentum, yet concerns about infrastructure remained in many countries. It was at this time that PPPs began to be widely seen as a means of obtaining private sector capital and management expertise for infrastructure investment, both to carry on where privatization had left off and as an alternative where there had been obstacles to privatization. After a modest start, a wave of PPPs is now beginning to sweep the world. Yet, as in the early days of privatization, the driving force behind the expansion of PPPs may be a quest not only to increase economic and social efficiency, but also to bypass expenditure controls, to move public investment off budget, and to move public debt off the government balance sheet (International Monetary Fund, 2006, p. 2).

For Osborne, “PPPs grew out of the privatization era” (2010, 153).). The nodal point of material diffusion was London because of the North Sea, after PF techniques were imported from the US to the UK, but what has not been emphasized enough is that privatization couldn't have started strongly in the UK if the FES hadn't been developed enough and had real experience with private partnerships. The type of financial engineering knowledge required for the divestiture of large SOEs came, not from “management” experiences solely, but from the financial engineering of the private partnerships and it is also from this expertise that public private partnerships grew, albeit with the initial help of the insiders management consultants on secondment from accounting firms involved in divestiture and other market reform such as New Public Management (D. Saint-Martin, 1998, p. 320). They would have “clearly played an important role in packaging, selling, and implementing" such reforms (Greer 1994, 29).

1.10 What to conclude from this?

The goal of this chapter was to show, through a discussion of the evolution of PF, that the material development of the PF product was occurring *before* the commonly argued story regarding ideational diffusion, caused either by the intrinsic influence of academic ideas, political actors such as Thatcher, Reagan or Mulroney, or by international governmental organizations, governments, and non-governmental organizations found in the literature. The fact that the project finance product was diffused - in various forms - before it was discussed by formal organizations (e.g., OECD, World Bank, IMF) or the academic literature is consistent with my contention that the financial engineering sector (FES) evolved at first by selling PF in the North Sea and only adapted its product to increase its market share later on as we will discuss in the following chapter. That this

important fact has been excluded from the classical account is problematic, because it hides the material drive behind the phenomenon. While it seems intuitive that enormous private interests were behind the phenomenon (nobody would press for PPPs if conventional construction and public financing would be a better target for profits), discussions about this connectedness, and its implications have not yet been made. Obviously, these organizations were not in a position of diffusing ideas about a product yet to be invented. It is only after the product was created, tested and offered that they started to advocate its usage.

It is only by acknowledging that the “material availability” of the PPPs is an evolutionary process and not simply the result of an “idea” (even if those ideas are necessary), that it is possible to understand the variation observed in the countries studied here: the UK (Chapter 3), the US (Chapter 4) and Canada (Chapter 5). In the remaining chapters, we will investigate how modern project finance has been used in each country and highlight the key players of the FES in each country. Now that we have highlighted how PF was created and that it predated divestiture and PPPs, the goal is to discover how private corporations have and still are diffusing ideas about the usefulness of PF product for the public sector. We will then analyze the ideational translation done by NGO’s such as CCPPP and the like. We argue that by understanding how the FES’s PF products were being sold in the UK differently than in the US and Canada, it is possible to understand better why Canada adopted PPPs later and why the US is considered to be a laggard by the industry. The plan is to start by highlighting the particular context, then look at the key FES actors and then how they have been involved in diffusion efforts directly or indirectly through the creation of hub like CCPPP or NCPPP.

CHAPTER 3 – THE UNITED KINGDOM: THE BIRTH OF A SOPHISTICATED FINANCIAL ENGINEERING SECTOR

“We have a national interest and a right to expect that our view is heard more than others when it comes to financial services, ... If the UK doesn't have the most influence... it would be like saying the auto industry should be overseen by Latvians or the wine industry should be run by Estonians.” - Andrew Hilton, director of the Centre for the Study of Financial Innovation, a forum for bankers and regulators funded by institutions including the Bank of England.

The United Kingdom (UK) has been, in an historical and comparative perspective, one of the strongest exponents of public private partnerships (sometime referred to as Private Finance Initiative, but hereafter as PPPs) in the world. The UK has been leading every wave of applications of the project finance (PF) product. As explored in Chapter 2, the North Sea development through project finance happened first and then led to the growth of a financial engineering sector (FES). Lawyers, bankers and management/accountant consultants specialized in complex financial operations would begin, by the end of the 1970's, to work increasingly together on financial deals under US

and UK law. Compared with Canada and the US, the UK was a strong and early mover.

Why is this so?

This chapter will demonstrate that the FES was active decades before the enactment of John Major's PFI policy, and in fact contributed to the early development of privatization, and then of PPPs through different diffusion mechanisms, be they internal through secondee programs or external through lobby groups such as PartnershipsUK, International Financial Services London, and the City of London Corporation, or the firms' own publications and lobbying, all of this to an extent that was not possible in Canada or the US (see Chapter 4 and 5 for each country and 6 for a synthesis). As we will see in the next chapters, the US was a very active ground for PF in power generation, but the particularities of the Public Utility Regulatory Act (PURPA) acted as a trap. It is only with the creation in 1991 of the National Council of Public Private Partnerships (which had been the Privatization Council since 1985) that the industry would be able to start the diffusion process for PPPs. In Canada, the nationalization of power generation and the lack of petroleum activities coupled with the absence of a strong financial centre kept the PF activities low until 1990's and delayed the diffusion process.

1.11 A contextual historical evolution creating special channels of diffusion

It has been widely acknowledged that "PPPs in the UK have developed mainly through the Private Finance Initiative (PFI), first announced in 1992 by the then Conservative Government. Since 1997, the Labour Government has continued with PFI under its own PPPs policy" (Bing et al., 2005), but PPPs in fact started earlier (i.e., 1985's UK-France Eurochannel, 1987 Dartford's Thames bridge, 1990 Severn bridge, and the 1991 Skye bridge) before any direct policy or IGO's were supporting the scheme.

As seen in the previous chapter, by the end of 1970's, the financial engineering sector had developed an expertise in structuring large and complex financial transactions for private partnerships that were central to the development of the North Sea. This expertise and the related capacity gave credibility to the proponents who were arguing that it was possible to structure such large deals in the public sector. Management consultants stemming from consulting arms of accounting firms, as Saint-Martin noted in an early discussion:

“clearly played an important role in packaging, selling, and implementing the ‘New Public Management’ reforms” ... With the rise of the NPM in the 1980s, management consultants became a powerful group in advising government, “contributing important ideas about how to manage large and complex organizations” ... Hood and Jackson coined the term “consultocracy” to describe the growing power of management consultants ... while others described consultants as a “new nomenklatura” (1998).

While “management” knowledge, as discussed by Saint-Martin, was not enough for complex financial engineering solutions, consultancies have been involved along side lawyers and bankers in PF in the North Sea since its début. In a 1994 report, the Efficiency Unit argued that “the initial stimulus for the government’s increasing use of management consulting services ‘came in the mid to late 1980s, primarily from privatization’” (ibid).

But while privatization might have increased their role, management consultants taking part in the FES were already present in government since the early 1970's: “Central government expenditures on such services increased from £20,000 in 1964 to £830,000 in

1969 to £4.8 million in 1972” (ibid). Once in power, Thatcher abolished the Civil Service Department (CSD) “to bypass the bureaucracy and bring in allies who worked in small organizations often attached to the Cabinet Office which inherited the responsibilities of the defunct CSD” (ibid). This worked as intended and those actions increased the influence of management consultants; their small number, compared to post-1985, was more than compensated for by the fact that they - the consultants - were senior partners, close allies of the Prime Minister, who were there to advocate “solutions” from which they would heavily profit. Once inside the machinery of government, management consultants were advocating all of the services they and the FES offered:

[They] promoted the belief that the private sector could build infrastructure more efficiently. Management consultants, in particular, benefited from the huge fees involved in *advising government departments as well as those bidding on the PFIs* (emphasis added, Craig & Brooks, 2006).

Saint-Martin, in his seminal work on the management consulting industry, was right to argue that:

It is misleading to believe that the growing influence that consultants now have in the policy process has only been caused by Thatcherism or the rise of the New Public Management (NPM). Of course, these factors may well have contributed to the development of a “consultocracy” within the British government. *But if consulting had been a poorly developed industry and if, as a result, British consultants had never been involved in bureaucratic reform in the past, it is unlikely that they would*

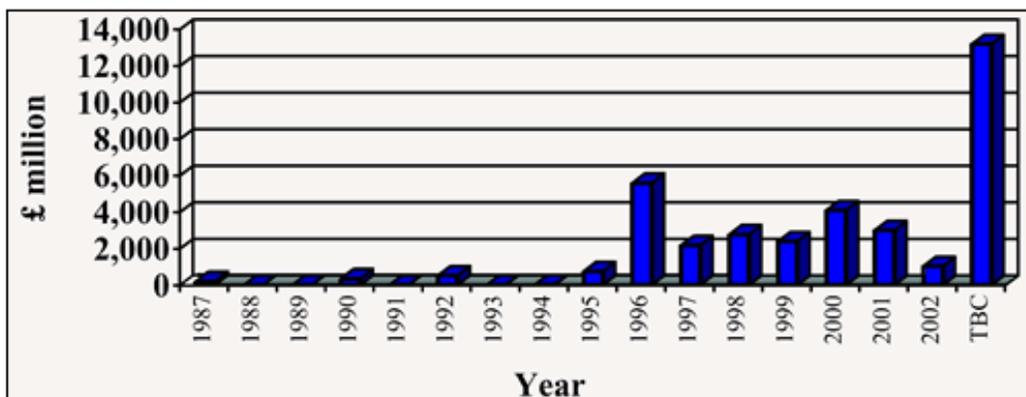
have been in a position to become more influential during the 1980s
 (emphasis added, D. Saint-Martin, 1998).

Similarly, the experience gained by consultancies in structuring PF in the North Sea mixed with bureaucratic reform helped the introduction of complex financial products into the public sector realm.

1.12 PPPs are not stemming from an idea or a policy in the UK

Consultancies involved in private partnerships along with bankers and lawyers saw divestiture and PPPs as a way to apply the complex techniques, expertise and products developed for private partnerships to the public sector. The financial engineering sector was able to offer the PPP product years before John Major's policy. As **Figure 8 - UK PPPs capital expenditure** shows, expenditures for PPPs at the national level started – even if weakly – six years before classical accounts of the 1992 Conservative policy for PPPs and thirteen years before any major institutional reform such as the creation of PartnershipsUK. This is not to say that PPPs haven't boomed mid-1990s - Figure 8 is clear about that -, but only to shows that they existed before John Major's policy on PFI.

Figure 8 - UK PPPs capital expenditure



where X = years and Y = value (imported from Mainelli, 2002)

Of course, management consultants from accounting firms who were brought in for their experience with private-partnerships came with their own “tool box”, in which modern project finance type deals were the main product on which their financial engineering expertise was based at the time.

There are so many “reform reports” à la *Next Steps* that can be sold by consultants. The bread and butter of management consultants - as most firms being derivative of accountancy firms - in the private sector were financial advisory functions on complex deals, particularly risk analysis, tax implications, discounting and cost-benefit analysis, not “pure management” advice: accounting firms have developed their management consulting network with conservative politicians during the 1970-1980s (D. Saint-Martin, 1998, p. 346). They were coming from the “hard” financial world into the “soft” management field; bureaucratic reforms and other soft relatives were a new market, not the core business nor the area where they were most experienced.

Privatization was a complex product with “business case preparation, arranging finance, and advising public bodies and governments” (UNISON & University College London, 2002). PFI/PPPs were even more complex and required Value-for-Money and Public Sector Comparator (PSC) analysis, which generated more revenues than privatization for management consulting firms as well as the law firms. Moreover, PFI/PPP opened new ways of increasing business: “More recently fees have been earned from refinancing existing PFI deals ... PricewaterhouseCooper (PwC)) was appointed to lead the deal that could hand Carillion, United Medical Enterprises, and venture capitalist

Innisfree around £20 million extra profit from refinancing the Dartford and Gravesham Hospital.” (UNISON & University College London, 2002, p. 4)

In Chapter 2, we highlighted that by the time PPPs emerged, divestiture was already a massive business in the UK, involving the same actors of the FES as with the private partnerships:

Privatisation became a major earner for UK accountancy firms when Mrs. Thatcher came to power in 1979. By 1985, Price Waterhouse as it then was had set up a new section to deal with the burgeoning programme of privatisation. By the end of 1999 PwC had been responsible world-wide for privatisation deals worth about £22 billion, and in 2000 it led the table of PFI signings having advised on 90 UK PFIs worth £8.3 billion, nearly 40 % of total signings by the big five in the UK. Only Arthur Andersen, with a quarter of PwC signings, achieved a higher value in that year (£9 billion). In 2000 PwC handled 222 privatisation deals for international clients valued at \$5.1 billion and described itself as “the market leader in project finance and privatisations”. PwC now boasts that it has “acted on more privatisation than any other financial advisor, from steel and heavy manufacturing to utilities, public transport, health and education services (UNISON & University College London, 2002, p. 4).

A 2003 report from International Financial Services London (IFSL) argues that “The Private Finance Initiative emerged in the UK as a result of previous UK government initiatives and has been the *third state of a process* that began with privatisation and

competitive tendering” (my emphasis, International Financial Services London, 2003, p. 7). But the “Big Five¹⁸”, due to their unique position inside government, helped “devise and develop government policy by providing secondees and sitting on government working groups” (UNISON, 2003) and were fuelling the process that IFSL refers to. By providing secondees, the FES was able to influence the policy. “After considerable resistance, the Treasury eventually agreed to publish a full list of people seconded to it as at 21st January 2002, among which were Rachel Austin from Deloitte & Touche, Nick Buxton from Pannell Kerr Forster, James Close of Arthur Andersen” (ibid). According to the Observer:

PwC, Ernst & Young and Pannell Kerr Forster have all ‘given’ the Treasury secondees. All have also won large consulting contracts from the Treasury. Arthur Andersen has provided secondees to the Labour Party prior to its 1997 election victory, to prepare its taxation plans for implementation in government (Barnet, 2001).

Management consultants were advising bidders, recommending which tenders to accept on individual contracts, tendering themselves for contracts, sponsoring projects requiring that they analyze the PFI/PPP formulae to get the Value-for-Money on each bid, advising foreign governments on the UK’s PPP success and, last, but not least, releasing “independent” reports claiming efficiencies and public sector costs savings with the product.

Among the Big Five:

¹⁸ The Big Five was composed of PwC, Anderson Worldwide, KPMG, Ernst & Young and Deloitte Touche Tohmatsu. Today, through mergers, the Big Five has become the Big Four composed of PwC, Ernst & Young, Deloitte and KPMG. It is common to say Big Four + Grant Thornton.

[KPMG] has been particularly heavily involved in the development of PFI policy and practice through the head of its PFI unit, Tim Stone. Stone is the chair of an advisory group to the UK Government on PFI. He is also the MoD's advisor on the largest PFI deal to date, the 'Future Strategic Tanker Aircraft'. Other roles undertaken by Stone include being chair of a PPP working group at IFSL; a private sector led lobby group, which works with the UK Government and the European Union to promote, among other things, the use of PPPs. Target markets include Mexico, Spain, Germany, Denmark, Poland, Canada, the Czech Republic and Egypt. KPMG has been involved in promoting the concept of PFI and PPPs in other ways, too. It sponsored the Institute of Public Policy Research's inquiry into PPPs. And it is a sponsor of the New Local Government Network, which promotes the use of PPPs (Maguire, 2001; UNISON, 2003).

KPMG's special PPP Advisory Services describes itself as having extensive experience in PFI/PPP as an advisor of both public and private buyers of the product in an international perspective. The "International Chairman" of KPMG's PPP Advisory Services is Dr. Timothy Stone, the same Dr. Stone who chairs IFSL's PPP group. However, KPMG was not the only one producing pro-PPP ideas. The Cornerstone report advocating PFI/PPPs and legitimizing the enterprise with "an average savings of 17 %" was produced by Andersen consulting. The Daily Mail described this report as being "at variance with more sceptical reports by others" (Daily Mail, 2002). PwC has also produced many reports. It describes itself as:

The leading provider of financial, procurement, tax and accounting advisory services to the public and private sectors on PPP projects around the world... Our experience in the international PPP market includes supporting Governments in establishing PPP frameworks in Ireland, South Africa and Japan and advising the private sector on a variety of projects in Europe, Asia, Africa and North America. Examples include the London Underground PPP, the largest PPP created to date, the Albert Luthuli Hospital Equipment Project in South Africa, defence equipment, accommodation and technology projects in Australia, and the William Osler Project for new health facilities and services PPP in Ontario, Canada (International Financial Services London, 2003).

The University College London, through its Health Policy and Health Services Research Unit, produced a report that argued similarly that the “government has used two reports to defend PFI, the Andersen Report (Value for Money Drivers in the Private Finance Initiative, January 2000) and the PricewaterhouseCoopers Report (Public Private Partnerships: A clearer View, October 2001)” (UNISON & University College London, 2002).

The report contends that:

Companies profiting from privatisation are also running privatisation policies. The UK Government relies on the reputation and expertise of the Big Five accountancy firms [...] to develop, promote and implement Public Private Partnerships (PPPs) and the Private Finance Initiative (PFI) whilst

the management consultancy arms of the Big Five profit hugely from the Government's flagship policy (ibid).

To the Select Committee on Environment, Transport and Regional Affairs of the House of Commons, PwC reported that it was involved in 165 bodies in England and Wales "operating from centres of excellence in London, the Midlands, Norwich, Manchester, Newcastle and Cardiff" (House of Commons, 2000). Obviously, it is uncontested that the accountancy profession "provides the indispensable public services of true financial reporting and auditing" (UNISON & University College London, 2002). What happened, however, as Saint-Martin has reported on extensively, is that the accountancy profession leapt from audits to management consultancy (1998, p. 328). The 'link' between the two practices helped the 'Big Five' in their sell, because "accountancy companies were well placed to step in as management advisors... Their reputation as independent auditors undoubtedly gave their client confidence." (UNISON & University College London, 2002); this leap has proved lucrative as "The accountancy industry now derives as much profit from management as it does from auditing" (ibid). It has surpassed the simple standing of accountants and are representing themselves on the "Management and technology [...] advice on tax, corporate finance and recruitment" consulting side of the business (ibid).

The temptation of pushing for a decision that might benefit the advisor is so strong that the Securities and Exchange Commission, in its S7-13-00 ruling,¹⁹ expressed concerns that impartial auditing is taking a back seat to "more profitable consultancy work. Loss of independence means less trustworthy financial statements" (UNISON & University

¹⁹ 17 CFR Parts 210 and 240. [Release Nos. 33-7919; 34-43602; 35-27279; IC-24744; IA-1911; FR-5.

College London, 2002, p. 3). The director of the London School of Economics' Greater London Group argued, in an interview with the magazine Project Finance, that:

There is a serious problem that the more the companies involved in bidding – whether consultants, banks, construction companies or lawyers – pool their expertise the more difficult it becomes to ever get independent scrutiny of the process as a whole, or of particular projects ... Everyone involved has a vested interest in getting projects the go-ahead (Gosling, 2002).

But if management consultants were highly involved in the techniques required to make market solution available to the public sector, what is different with PF, as compared with management reforms (e.g., reorganisation of the audit function in a department, not involving PF), is that any single actor cannot do it. PF requires the participation of financial lawyers, bankers and management/accountant consultants working together, pooling expertise, to engineer the deals.

Consultants, lawyers and bankers had been working together under US and UK law since the first PF closed at the City for Forties Field (see Chapter 2) and those experiences with financial engineering were necessary to engineer divestiture and public private partnership deals in the UK and abroad.

1.13 Structured finance

City firms had a *chasse-gardée* over much of the project finance undertaken in the UK from 1960 up to the mid-1990's (Project Finance International, 1999, p. 52). Much of the project finance as private partnerships in the North Sea and as divestiture of the UK's State

Operated Enterprise (SOE) were done under UK law at the City: this is the same for PFI/PPPs.

Lawyers “as much as everyone hates to admit it, [they] are an essential component to project finance. Without [...] tight legal documentation a project can explode in the developers face” (ibid).

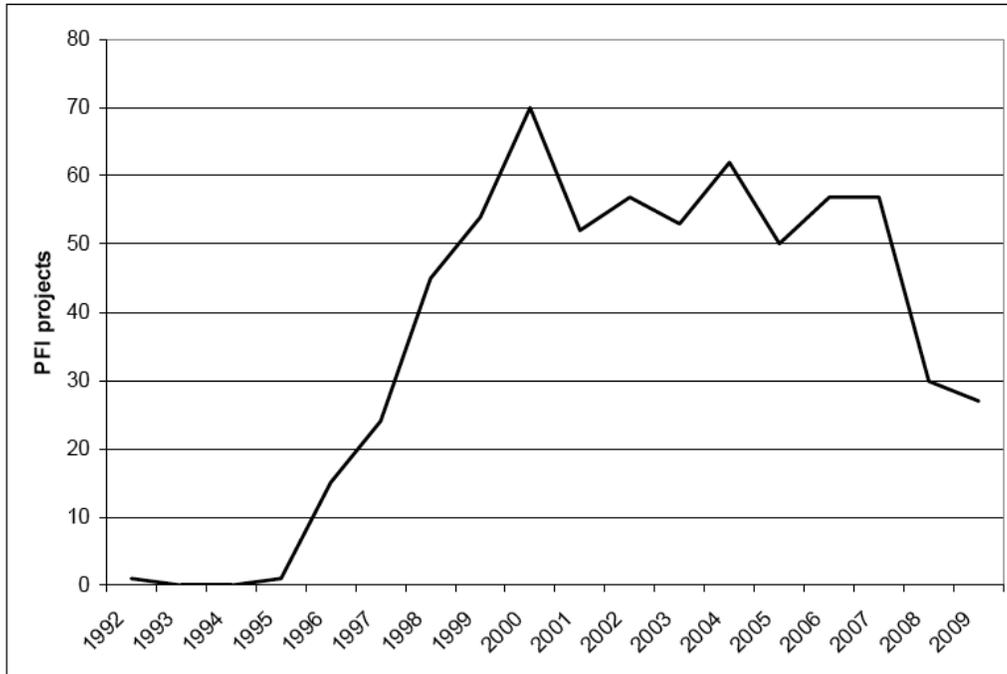
While law firms certainly reap the benefits of project finance, with fees piling into coffers... Bank lawyers can run up staggering costs... And with developers paying both sets of fees this can prove to be an expensive business. Problems are further compounded with some financiers’ attitudes. One senior banker points out: “Price is not an issue as the developer picks up the tab” (ibid).

But clients’ feelings and law firms’ balance sheets are separate things: “Pearson refers to a recent PFI transaction for £20m, which a law firm offered a capped fee of £190,000, but presented him with a fee of £850,000” (Project Finance International, 1999, p. 52). Fees do, of course, vary; other examples include £4m for a transaction that totalled £160m while Greenwich Hospital had £1.6m in fees for a £100m deal. Project finance projects, PP’s, IPP’s, privatization, PPPs, are profitable. As one senior partner in a London based projects group says, “Look at a corporate finance partner who bills for seven or eight hours a day or even shorter than that, while a projects partner is billing 10 hours a day and that goes on for years” (ibid).

As the number of projects finance in the pipeline started to grow in the early 1980’s, City firms started to specialize. Group 19 at Linklaters, “now headed by Alan Black, would set the precedent for what we now know as the project finance department.”

(Project Finance International, 1999, p. 52). It has been reported that Group 19 got the idea from Price Waterhouse (now PricewaterhouseCooper, PwC). In fact, in 1985, PwC (UK bureau) had set up “a new section to deal with the burgeoning programme of privatization” in the UK (Project Finance International, 1999, p. 53). Clifford Chance’s partners rapidly emulated Linklaters and the other big City firms quickly followed them; “the project finance department has become an established feature in most major City firms” (ibid). This is an interesting case of corporate policy transfer, which happened before PPPs were known worldwide. As Figure 9 - PFI project in the UK (1992-2009) shows, the law firms were developing themselves around project finance and divestiture well before the PFI/PPP surge of 1995 (see Chapter 2 for the historical development of project finance).

Figure 9 - PFI project in the UK (1992-2009)



X = years and Y = number of projects (Krumm & Mause, 2010)

City firms recognized early that the project finance product “is not a static product.” As Steve Hughes, head of PFI and projects at Bevan Brittan in Bristol, said in an interview for The Law Society, “It is always moving forward at the same time” as it is being applied (Ward, 2004). Project finance could sometimes be sold through variations in the technique and under a different name. The City’s ‘Magic Circle’ (big Five City firms) had been working in tandem with the “Big Five” management consulting firms since the début of the North Sea’s project finance to do just that. While “Big Five” management consulting firms were in the business of financial ideas, the Magic Circle was in the business of translating those ideas into laws so as that would allow bankers to lend to new projects and areas and, more importantly, earn higher interest than with traditional public lending.

One of the leading firms was Norton Rose, which was a sponsor of an IFSL report published in 2003 and which promoted PPPs. Norton Rose, the international law firm:

Has an outstanding PFI/PPP practice based on our renowned expertise in project finance, construction and employment law. The firm received the top ranking for PFI/PPP deals by value in Infrastructure Journal's 2002 league tables. Our PFI/PPP experience extends across many industry sectors, notably roads, rail, aerospace, defence, ports and marine transport, utilities, hospitals, schools, government accommodation and industrial plant. Norton Rose has advised on many of the largest PFI projects closed in 2002, including the Home Office's new London headquarters, the AWSR Ministry of Defence project and the Tower Hamlets Grouped Schools project. In addition, Norton Rose is advising the arranging banks on Tube Lines' successful bid for the JNP Network of the London Underground, the biggest PPP deal in 2002 (International Financial Services London, 2003, p. 20).

A big name like Norton Rose was important, but as the head of the construction group at global law firm Clifford Chance, Tim Steadman, says: “The PFI clients tend to care more about the individuals they are getting rather than the organisational niceties... Whether the individuals have this or that departmental designation is neither here nor there to most PFI clients” (Ward, 2004). While in the application of private finance for private partnerships, or as divestiture, there are two core clients, in the version applied to the public sector, the PPP, there are three: “two private and one public, each with a law firm,

around each deal table” (Ward, 2004). This increased the number of contracts of The City’s Magic Circle at first, and then gradually to other City firms:

As PFI has grown and evolved, the profile of the law firms involved has changed as well, with PFI having become routine enough to take it away from the cutting edge of legal knowledge. In the early days the Magic Circle dominated, now the work has spread more widely to large national firms and sometimes beyond. Some smaller firms can make a niche, such as City-based Trowers & Hamlin in the social housing market, or west London firm Capsticks in health (ibid).

As the number of projects completed accumulated, “It is being seen as requiring less of the specialty the Magic Circle might provide. Quite frankly, a lot of [it] is just the cost. They don’t want to pay £400 plus per hour” (ibid).

In 2004, the ‘Magic Circle’ was still at the forefront of ‘cutting edge work’. For example, the St James’s PPP²⁰:

[Was] the first of a new credit guarantee finance scheme for a £175 million wing at St James’s University Hospital in Leeds, built by a consortium owned by Bovis Lend Lease and HBOS, and funded by the government. Linklaters advised the Treasury and the secretary of state for Health; Clifford Chance advised HBOS; DLA advised the consortium Catalyst; and Newcastle firm Dickinson Dees advised the hospital.

Instead of using private funding from the City, the government has for

²⁰ Using the UK definition, this hospital would have been a PPP, but not a PFI. With our definition, this would have been a complex building contract.

the first time arranged the debt itself [in 2004]. HBOS was involved because it will guarantee repayment of the debt facilities the government is offering to Catalyst (ibid).

This *première* effort to push aside “private funding from the City” as a way to save taxpayers’ money was not well received by the banking industry actors involved in the financial engineering sector. While technically this was not going to change the number of hours that management firms and lawyers would have in the future, the margins for investors - with banks at the forefront - would be gone in their original form. Even the head of project management at DLA firms, Mark Swindell, stated, “the new model will save the Treasury money” (ibid), but the real question is about how many of those deals could be done. It is clear that “fewer organisations [would be] willing to see deals financed in this way than by conventional PFI” (ibid). This was the first and last time the City finance was let out of the loop in the public-private partnerships scheme it had created.

1.14 Lending for project finance

If the management firms are ‘doing the math,’ and the City firms are ‘doing the writing,’ then the investment banks are ‘doing the lending.’ Investment banks have been involved in highly structured transactions since the North Sea, where the banks started to cooperate with the new management consultancy industry involved in risk assessment for petroleum extraction. The city’s Magic Circle was involved in the transaction and the management, law, and banking sectors developed formal and informal channels of cooperation to ease deals flow while the investment side of the banking industry typically will:

Employ analysts who publish their opinions on the worth of shares, advising whether investor clients should buy, sell or hold stocks. Investor clients may also engage them to sell large quantities of shares at the best price. Other clients may engage them to underwrite or arrange new share issues. Clients may also use investment banks to advise whether to ‘spin-off’ a division. Investment banks may own substantial quantities of shares themselves. They may also have investment management divisions that decide on the shares, bonds and other investment vehicles that pension funds should own (UNISON, 2003).

It has been argued that, in the case of PFI, “investment banks will typically advise a public sector client on a potential deal,” and that “other investment banks with expertise in PFI and PPP” will “advise a private sector client on its approach to a potential deal” (ibid), but the banking industry also has insiders providing policy advice. Those individuals are ‘on leave’ from their respective bank and have a government advisory position called a ‘secondee.’ In January 2002, The Financial Times reported that “Geoffrey Spence was being seconded from Deutsche Bank to the Treasury to develop private finance policy within Partnerships UK” (ibid). This secondee “is the managing director of Deutsche [Bank] in London and the bank’s head of project finance for Europe. Deutsche Bank is heavily involved in PFI/PPP deals, both as financier and financial adviser to bidders” (ibid). Among others, Robert Jennings of the investment bank UBS Arburg “was acting as a transport advisor” for PFI solutions (ibid).

A KPMG senior director, Neil Morgan, recognized that “key players in the sector include many large and listed construction and support services groups such as WSAtkins,

Balfour Beatty, John Laing, Mowlem, Si Robert Mc Alpine and Serco,” but that the core of the project finance stems from “Financial institutions active in the [UK] sector [which] include Barclays, Royal Bank of Scotland, Deutsche Bank, HBOS and Lloyds TSB. A significant number of [those bank] advisers have large and strong PFI focussed teams” (Morgan, 2005).

Financial institutions such as Barclays, for example, “play a variety of roles relating to the PFI and PPP. They may underwrite the financing of a particular contract or the share issue for a company established specifically to fulfill a particular contract. The banks finance some deals, which may involve them acting as full contract partners” (UNISON, 2003). It has been argued that “Some investment banks have invested heavily in venture capital funds which themselves have invested in PFI or PPP schemes” (ibid). For example, Barclays argues that:

“Barclays Private Equity is a long established investor in infrastructure, focusing on investment in government backed PFI/PPP projects.

Including BIIF, the BPE Infrastructure team has successfully raised and managed six infrastructure funds since its inception in 1996. Initially focusing on the UK primary PFI market, the BPE Infrastructure team now considers investment in primary and secondary PFI/PPP projects throughout Western Europe. The team has offices in London and Paris (Barclays, 2009).

In many instances, “the investment banks’ main role may be to pull in other investors,” but that is not all:

The investment banks are also intimately involved in creating an infrastructure and culture to promote PPPs. *Several investment banks heavily invested in the company Partnerships UK that was created to encourage more PFI and PPP deals to be signed.* In other words, they financed the advice structure that has assisted them to earn tens of millions of pounds of income. Their influential role in Partnerships UK is striking. Adrian Montague is deputy chairman of Partnerships UK and perhaps the key driver of the company, having previously been chief executive of the Treasury PFI Taskforce. He was formerly at the Dresdner Kleinwort Benson bank. Another member of the Taskforce was Fred Maroudas who was employed by Dresdner Kleinwort Benson (emphasis added, UNISON, 2003).

In 1997, Paymaster General Geoffrey Robinson “welcomed the appointment of members of the Treasury’s Project Taskforce, set up in response to the Malcolm Bates review of the PFI” (Treasury, 1997). The Paymaster was quoted as saying:

Today is an important step forward in harnessing private sector finance and expertise to fulfill the Government's determination to deliver high quality value for money projects in the public sector. I am pleased to see such a range of talent and experience coming forward to contribute to achieving the immense benefits to be gained from good PFI and Public Private Partnerships. Previously the lack of concentrated expertise, a proliferation of unprioritised projects and constant reinvention of wheels used to stand in the way of success. The Taskforce is going to provide

the assistance and impetus required to improve projects and deliver a sound basis for future business (Treasury, 1997).

Malcolm Bates spoke at the same 1997 press conference as the Paymaster. Bates was later attributed the paternity for the taskforce and then PUK. He had held, among other positions, a senior executive at BICC, a holding of Balfour Beatty, then at GEC and served as Chairman of HHG PLC. Bates stated that:

I was convinced that a small, highly skilled team of project - focused individuals inside the Treasury was vital to PFI success. But those people also had to command respect from Departments and the private sector alike. This team, whom I helped select from an impressive group of applicants, are all renowned in their own fields and bring with them a wide range of skills. They should do well (Treasury, 1997).

But it was the Taskforce Chief Executive, Adrian Montague, who expressed best how the taskforce was going to mould policy in favour of PFI's. "This is a really strong team of young Turks", he said regarding:

- Martin Buck; aged 38. An experienced project manager, who spent nine years with Nicholls Associates. PFI credentials include work on the Docklands Light Railway Extension, Croydon Tramlink, and the London Underground Prestige Project.
- Kate Cohen; aged 30. A former management consultant recruited from the Office of Passenger Rail Franchising, where she was Assistant Director. Responsible for franchising the Gatwick Express and Great Eastern Railways.
- David Goldstone; aged 35. Recruited from Price Waterhouse, where he has over 10 years experience of working with the public sector. Had been on secondment to the

Private Finance Panel Executive, and has experience of a variety of local authority PFI contracts, including Colfox School in Dorset.

- David Lee; aged 31. A project finance lawyer, recruited from Allen and Overy. PFI credentials include work on the Bridgend, Lowdham Grange, Agecroft, Pucklechurch and Kilmarnock Prisons, the Docklands Light Rail Extension, and the Channel Tunnel Rail Link.
- Fred Maroudas; aged 34. A project finance banker, recruited from Dresdner Kleinwort Benson. Has experience of arranging and advising on financings for PFI hospitals, roads, prisons, light rail and defence schemes, including South Bucks and Bromley hospitals, the M40 DBFO road, and the MOD Staff College.
- Richard Powell; aged 28. Recruited from Johnson Controls; a specialist in facilities management. PFI experience includes the MOD Naval Recruitment and Training Agency, the Home Office Central London Estate, and the new British Embassy, Berlin.
- Douglas Sutherland; aged 32. Recruited from a software development company, InteResource Ltd, where he is director/owner. He has a military background, and was previously with the Private Finance Panel Executive, where he was involved in structuring PFI property transactions, including the DSS estate in Longbenton. (Treasury, 1997)

According to Montague, these young individuals “have the qualifications, the experience in PFI deals and, above all, the feel for what the private sector wants from the PFI to be a really effective bridge between the public and private sectors” (ibid). One can wonder how much ‘deep experience’ they really had being in their early thirties. Only one

member was missing from the press conference description, and he was described as “a banking expert” (Treasury, 1997). However, despite its high billing, the Taskforce was to be short-lived.

After its first year, it has been realized that it would be more profitable to get out of HM Treasury and to set up their own corporation to advocate for their own financial interest. A corporation of the sort where the private sector would hold the majority of the shares could then be used to promote PPPs to a world market with the UK as its showcase. Though, of course, a fee would be collected for each PPP contract.

Bankers on the Taskforce discussed, with their colleagues from the European Investment Bank, “the European Union’s financing arm, whose priorities include the promotion of development of PFI/PPP projects in Europe” and received support from them to create a private diffusion hub (ibid). While Partnerships UK (PUK) “was established on a commercial, but non-profit maximising basis,” it has been crafted “to introduce a cultural shift in the way that PPP support is provided within the public sector” as will be seen shortly (PartnershipsUK, 2011a).

1.15 Institutionalization of the financial engineering sector

PUK describes itself as having interests “aligned with those of the public body” (PartnershipsUK, 2011a; UNISON, 2003) but even the chairman of the Advisory Council of PUK, Andrew Turnbull, “a former permanent secretary to the Treasury,” rang the bell in 2002 about conflict of interest; Turnbull “was concerned that both shareholder and directors have a variety of commercial involvements in schemes in which Partnerships UK acts as an adviser” (T. Webb, 2002).

At the time of the Turnbull report, the director of PUK, Steve Robson, was on secondment from the Royal Bank of Scotland and Cazenove and was the banks' advisor to "John Major's government on the privatization of Railtrack" (UNISON, 2003). The chairman of PUK, Derek Higgs, was cross-appointed to eighteen other directorship positions; "Directorships include British Land and Allied Irish Banks, while interests include being senior UK adviser to UBS Warburg - which happened to be adviser to PUK on the sale of its shares" (ibid). PUK director "Glen Folwell is non executive director of two HBOS (Halifax Bank of Scotland) companies" (ibid). Major shareholders in Partnerships UK include: "Halifax/Bank of Scotland, owns 8.8 %, worth £4m Abbey National, which owns 6.7 % of equity, worth £3m Barclays, owns 6.1 %, worth £2.8m Royal Bank of Scotland, owns 6.1 %, worth £2.8m" (PartnershipsUK, 2011a). Other shareholders are the facilities management companies: Serco holds a 3.3 % stake in Partnerships UK, worth £1.5m; Group 4 holds a 2.2 % stake in Partnerships UK, worth £1m; Jarvis holds a 2.2 % stake in Partnerships UK, worth £1m (ibid).

By investing in PUK, which was advising on PPPs, "shareholders have contributed to the development of an effective PPP market in which they can participate alongside others" (PartnershipsUK, 2011a). PUK was an evolution from an 'old model' of 'revolving-door secondment' in which private interests had to go 'inside government' to advance their own interests, while, with the evolution of PUK, the FES was no longer in need of access to governmental structures, since they now had their own decision making center to be used for building and managing the PFI/PPP pipeline. With PUK, project were planned, managed, financed and implemented without traditional departmental process and the public servant managing them. "Since PUK was launched, over 900 PFI projects worth

£70 billion have been procured and PUK has played a major part in the development of this market” all the while being staffed by the industry's secondees (ibid).

In terms of policy diffusion, the birth of PUK - a public private partnership in itself own by the industry - was to bring legitimacy and an articulated discourse as ways to foster and protect the enterprise with packaged ideas about infrastructure renewal. In its Five Year Review report, PUK illustrates this well, when it states it was animated by a ‘unique public sector mission’ in which its purpose was to “Support and accelerate the delivery of infrastructure renewal, high-quality public services and the efficient use of public assets through better and stronger partnerships between the public and private sectors” (PartnershipsUK, 2005).

The PUK Chairman, Derek Higgs, in his foreword, identifies clearly that the institutionalization has created an environment for diffusion that was favourable as they “have responded positively to PUK’s contribution and involvement in a range of programmes and initiatives across the public sector” (ibid). PUK “has been a great support [to the] business” and was supported and “reinforced by a market [i.e., FES] that has developed sound partnerships to deliver infrastructure and service improvement” (ibid). While Higgs recognizes that PUK works for business (its own and the shareholders) it advertises that it “works solely with and for the public sector” (PartnershipsUK, 2005, p. 3).

Symbolically, PUK was a great interface for the FES. The staff was mainly provided by the FES as Higgs acknowledges, “PUK’s achievements are a tribute to the excellence of its staff [which] has been a major factor in the strength of PUK’s business” (PartnershipsUK, 2005, p. 3). A senior banker or management consultant who was on

‘secondment’ before the institutionalization of the diffusion scheme (i.e., the creation of PUK) was not seen as having the same selflessness as a staffer at a legitimate formal organization, sponsored formally by the government of the day, such as PUK. The new structure helped break loose the hierarchical chain that was an impediment to diffusion. By bringing PUK staff into a ‘peer-like position’ outside this hierarchy, it helped in the creation of formal and informal channels “with key policy makers on the structure and development of markets, managing the introduction of best practice guidance and standardised contracts, and supporting the implementation of projects” (PartnershipsUK, 2005). Over five years, PUK “has played a major part in the development of this [PFI/PPP] market” with “nearly £40 billion” spent on “over 400 PFI projects” back in 2005 (PartnershipsUK, 2005). This success, PUK recognizes, could not have been achieved without an ‘intimate’ “collaboration with public sector clients and the support of *financial, legal and technical advisers without whom these projects could not have been complete.*”: this is a recognition of the importance of the FES expertise (emphasis added, *ibid*). PUK works with the FES members and create an interface for them to work with greater ease with the public sector.

PUK was not only in the business of diffusing its product through ideas, it was “also a market developer using its people and capital to stimulate new projects and programmes” (PartnershipsUK, 2005). Structural initiatives and programs such as:

the ‘Standardisation of PFI Contracts (SoPC) [program] which has continued to evolve as a framework for PPP projects in the UK. SoPC effectively commoditised PPP in the UK, thereby enabling the Project Finance market (its contractors, advisors and lending community) to

support a tremendously high volume of PPP contracts, some with transaction values as low as USD 40m which would otherwise be regarded as economically unviable due to the transaction costs and long lead times associated with most project financings (Gardner & Wright, 2014).

By playing a “pivotal role” PUK was able to ‘pioneer’ “new forms of delivery... and has actively supported a range of transport projects” (PartnershipsUK, 2005)... Moreover, PUK “has a dedicated property capability that has supported a range of innovative estates projects” (ibid).

As the former Chief Executive of Barts and the London NHS Trust, Paul White, once said, “The Trust has found the support from PUK invaluable. Assistance with detailed commercial issues was outstanding. Despite complex and time-consuming challenges, PUK kept to its fixed cost proposal agreed in 2000” (PartnershipsUK, 2005). For Ian Andrews, the second permanent under secretary at the Ministry of Defence, “PUK played a full and active role. They provided the financial resources and the necessary skills and experience to help us deliver a successful, timely, cost effective and efficient procurement, which would not have gone ahead in this form without their engagement” (PartnershipsUK, 2005). As the Chief Information Officer (Home office), Vincent Geake, said: “In my experience PUK provide timely, high quality, value for money advice and unique insights based on their wide experience and supported by relevant evidence” (ibid, 29).

PUK also developed ‘programmes’ such as “Building Schools for the Future”. This particular programme helped “PUK [in working] closely with the Department for

Education and Skills to create BSF and to form Partnerships for Schools as the delivery vehicle for BSF” (PartnershipsUK, 2005). PUK had taken the “initial leadership” by:

Providing and recruiting interim staff to establish the programme and organisation. PFS carried out an extensive modelling exercise of how a comprehensive national programme of local investment would be delivered – a programme which it is now rolling out. PFS also devised the model for Local Education Partnerships to invest sustainably in local areas across the country. Extensive consultation with the market on the innovative approach was conducted, successfully creating major market interest, to the extent that over 20 consortia are actively involved in bidding for contracts (PartnershipsUK, 2005, p. 18).

The chair of Partnerships for Schools, Michael Grabiner, has stated that PUK’s involvement “in establishing Partnerships for Schools and the BSF programme has been vital” (PartnershipsUK, 2005, p. 19). In another case, PUK created the programme Partnerships for Health in which PUK “provided the initial chief executive, staff, and the project direction” to the Department of Health. In this particular programme, PUK went so far as to “batch” several small contracts under “standardised terms”; it was the “first time these techniques were used for PPPs” (PartnershipsUK, 2005, p. 20). Batching made projects manageable to PUK’s small team and helped “[attract] larger construction firms into the market” (ibid), many of which were PUK sponsors. Through PUK’s ‘leadership’, the programme Partnerships for Health generated an interesting “pipeline of further investment” (ibid) for projects that PUK’s sponsors, and others, could rely upon. Moreover, the “introduction and regular updating of standard contract forms has been of

great value to the private sector” (ibid), said the director general of the business services association, Norman Rose.

On top of “programmes and policy initiatives, PUK provides a range of services that support the PPP market across the board:

PUK operates a PPP helpdesk that provides ready access to information and advice to callers from public and private sectors... PUK contributes to and sponsors a number of research activities on PFI and PPP. As well as supporting the National Audit Office on its many reviews of PFI and PPP projects, PUK regularly contributes to private sector research and best practice publications to help inform the market and improve performance... PUK has satisfied a significant market need by investing at its own cost in developing a projects database (PartnershipsUK, 2005, p. 36).

After a few years of operation, UK’s Treasury (HMT) Operational Taskforce (OT)) was set up within PUK. Contrary to what PUK argues, this development was not a recognition of “the perception of the success of PFI and PPP,” it was a recognition that PUK was not fully operating for its clients. A ‘control bridge’ was being rebuilt to HMT following worries about “major variations, refinancing and benchmarking” (PartnershipsUK, 2005, p. 36) were dealt with, required an intervention. HMT’s OT was brought in to provide “guidance ... to projects on how to benchmark costs which included timetabling, advice on the optimum involvement of the private sector and how to respond to proposals for cost increases” (PartnershipsUK, 2005).

Consultants, lawyers and bankers were not only acting in the UK; they were highly involved in international diffusion. While PUK was used to foster diffusion domestically, it was a very helpful institution for the international diffusion of the product, because of the legitimacy it gave to the enterprise. International Financial Services London (IFSL) partnered with KPMG, PwC and Norton Rose to launch a joint document with PUK in 2001; *Public Private Partnerships, UK expertise for International Markets*. This was a seminal document in UK-based international diffusion. The document was constructed around the need “to develop commercial opportunities” internationally in place of the national public service in “health, education, transport, prisons and defence” sectors, and its first edition was offered only in Mandarin, before subsequent translations into Spanish and French. The English version was the last to be released (UNISON & University College London, 2002, p. 5). One of the key contributors to this document was IFSL. The latter was a lobby group animated by the FES’s secondees to promote the City based financial services industry. British Invisible (BI), involving the founding firms like PwC and KPMG, was renamed International Financial Services London (IFSL) and then renamed again some years later as TheCityUK in 2010.

That IFSL was ‘sponsored’ by KPMG, PwC, and NR to produce a report should not come as a surprise; as in the case of PUK, which had its logo on the report, private multinational corporations were using proxies for ideational diffusion. Dr. Tim Stone, the chair of the PPP export group at IFSL (and on secondment from KPMG) has stated that IFSL “is taking a leading role in the promotion of PPP around the world” (International Financial Services London, 2003, p. 2). Apart from the rhetoric of efficiency at the beginning of the document, it is clear that the main goal of this report is “to show how PPP has developed in

the UK, a process to which advisers and consultants based there have made a substantial contribution” and “to explain the role of advisers and show how firms based in the UK, be they consultants, law firms, banks or contractors have developed the expertise that can be applied to any situation” in which the FES’s PF product will be used (ibid). For IFSL, London is undoubtedly the “leading centre of expertise” to the point that many international projects could run either centrally or locally since major firms “have the resources and capability to handle projects on the ground in other countries” with their wide network of alliances (ibid).

When IFSL ‘promotes’ the FES’s expertise, it backed the PFI/PPP product by emphasizing the “accumulated expertise of UK-based legal and financial advisers, banks and other technical consultancies.” The product that IFSL advertises would be “like any commercial contract” and would go through a “series of stages” where the FES is indispensable. PFI comes with the involvement of the FES because “this involves the development of the business case, selection of bidders, short listing, negotiations, the award of the contract, financial close and the commencement of the service” (ibid). The PFI/PPP process “*requires* inputs from technical, financial and legal experts, and the full range of experience is often not available within some departments,” hence requiring the involvement of the FES to apply the PPP formula (emphasis added, International Financial Services London, 2003, p. 13).

Figure 10 - Illustrative role of advisers acting for the public sector procurer

	Legal advisers	Financial advisers
1. Development of business case Identify business need Set out options	Inform timetable	Options appraisal Clarify objectives Review data Inform timetable
2. Work up business case Procurement strategy Procurement team Output specification Risk analysis	Outline project documentation Procurement rules Relevant legislation Establish vires position of public sector	Bid strategy Indicative VFM analysis Initial view on accounting treatment Affordability assessment Identification, costing and allocation of risks
3. Selection process: Tendering and Negotiations Invite expressions of interest Pre-qualification Select short list of bidders	Prepare Project Agreement	Determine evaluation criteria Assist in preparation of tender document Inform short listing criteria Evaluate tenders
4. Negotiations Competitive interviews on services required, contractual terms and evaluation criteria Select preferred bidder	Negotiation of contractual issues Addressing employment and pensions issues	Financial evaluation of bid Analysis of funding options Negotiate with short listed bidders Risk-adjusted VFM analysis Establish accounting treatment
5. Award of contract Final test of: - Key risk transfer - Value for money - Affordability	Inform negotiations on detail of contracts	Final value for money comparison Input to production of full business case Assist with financial close
6. Service commencement		Assistance with contract monitoring and performance evaluation

(adapted from table 2 in International Financial Services London, 2003)

While Figure 10 - Illustrative role of advisers acting for the public sector procurer illustrates the process for one public sector procurer, each ‘partner’ will do the same, creating a formidable consulting business in the process. Since the UK’s FES was an early mover it is now “supplying advisory services to the international PPP market” and major providers have been identified in Figure 11 - Major firms in the UK providing services to the international PPP market below.

Figure 11 - Major firms in the UK providing services to the international PPP market

Legal advisers	Banks acting as providers, arrangers or advisers
Allen & Overy	Bank of Scotland
Ashurst Morris Crisp	Barclays
Clifford Chance	Deutsche Bank
CMS Cameron McKenna	Dresdner Kleinwort Wasserstein
Denton Wilde Sapte	HSBC
DLA	Lloyds TSB
Freshfields Bruckhaus Deringer	Royal Bank of Scotland
Herbert Smith	
Linklaters	Other firms providing advice
Lovells	International Capital Partnerships
Norton Rose	Mobsby Associates/PPP Solutions
Simmons & Simmons	Willis
Stephenson Harwood	
Financial advisers	PPP
Deloitte & Touche	Partnerships UK
Ernst & Young	
KPMG	
PricewaterhouseCoopers	

(adapted from figure 3 in International Financial Services London, 2003)

IFSL, now known as TheCityUK, recognized the FES's involvement in the development of privatisation and then PFI/PPP, and later, the "PPP programme developed in the UK during the 1990s, a growing number of countries both elsewhere in Europe and throughout the world have embarked on a PPP program and shown that it is a concept that is *exportable*" (my emphasis, International Financial Services London, 2003, p. 16). Organizations like IFSL and PUK, want to diffuse the product by showing that "PPPs work" in the UK, as Charles Lloyd of PricewaterhouseCoopers argues (ibid, 18). IFSL developed alternative to the fiscal constraint argument as another argument needed because many countries, such as "Ireland and the Netherlands as well as the UK, which have not had budget deficits for years, have proceeded with PPP" (ibid, 18); the efficiency argument and value for money analysis were presented when deficits disappeared (see also Chapter 1). This was not an easy task, but reports made by the Big Five, PUK, and IFSL were

supporting a “growing acceptance of efficiency arguments” (ibid). IFSL, PwC, KPMG, Norton Rose and PUK recognized that “The centralized system of government in the UK facilitated the development of PPP” (ibid, 19). Therefore, we can expect that the decentralization in Canada or the United States was an impediment to their diffusion efforts (Chapters 4-5).

Sharon Beder, in the book *Suiting Themselves: How Corporations Drive the Global Agenda*, lays out the empirical history of the IFSL (then known as British Invisible), this “UK business coalition” which “played an active role in forming and running national and European business coalitions” (2006). IFSL:

seeks to identify and remove barriers to its members operating in overseas markets and to ‘ensure that the objectives and priorities of the UK-based industry are high on the agenda during the forthcoming WTO negotiations (ibid).

This powerful lobby group, although not created in the 1960's specifically for PPPs, was involved in the diffusion of the PFI/PPP concept internationally. To be sure, IFSL:

Works closely with the UK government and EC through the Liberalisation of Trade in Services (LOTIS) Committee. It markets the "expertise of UK firms" which it says is "crucial to the budding international market for public private partnerships." The expertise "has been built on the 400 PFI contacts worth over £17 billion signed in the UK up to the end of 2000" ... it is currently active in promoting PPPs in Mexico, Spain, Germany, Denmark, Poland, Canada, Czech Republic and Egypt. The IFSL has a PPP working group chaired by Tim Stone of

KPMG that runs training sessions for foreign governments. Stone is also the MoD's advisor on the largest PFI deal to date, the 'Future Strategic Tanker Aircraft' (UNISON & University College London, 2002).

According to Beder, the UK and the US financial sectors were the most active on the diffusion scene because they were unmatched in size. "Christopher Roberts, formerly UK director general of trade policy and chair of LOTIS, recognizes that "The greatest pressure for liberalizing financial services comes, as one would expect, from the EU and US. The views of both reflect substantial input from the private sector" (S. Beder, 2006, p. 146). The size of the sectors foster "The prominence of business coalitions in the UK and the US in promoting services and creating business networks, global and regional, to augment their efforts reflects the fact that these are the two largest exporters of services in the world" (ibid). They are "supported in their efforts to gain unrestricted access to global markets by think tanks and organizations such as the OECD" (ibid).

Recently, IFSL has changed its name again; it is now known as TheCityUK. On its new website, TheCityUK describes its purpose as follows:

TheCityUK's purpose is to promote the competitiveness of UK financial services - to make the UK the best place in the world to establish and grow a financial services business and, in turn, to maximise the sector's contribution to the UK. We have a global export focus with a commitment to help UK based firms grow their business in other parts of the world (TheCityUK, 2011).

More specifically, TheCityUK is engaged in ideational diffusion that puts the interests and, hence, the products of the FES, at the forefront. This lobby group "provide[s]

constructive advice and the practitioner [’s] voice;” they “conduct extensive research and run a national and international events programme to inform the debate” they have a ‘senior team’ that “regularly engages with regulators and policy makers at home and overseas, ensuring the sector’s views are represented at the highest levels” (ibid). All of which are part of the mission they got from the industry. “We are tasked with creating a new vision for the financial services sector” (ibid). The board is composed of FES representatives, and chaired by Stuart Popham, “previously Senior Partner at Clifford Chance,” and finally, the Advisory Council is overseen by Sir Win Bischoff, “Chairman of Lloyds Banking Group” (ibid). The lobby group maintains the pretence of being “independent and politically neutral” (ibid).

There are two committees operating ideational diffusion at TheCityUK: The Domestic Promotion Committee, and The Overseas Promotion Committee. The former’s role “is to develop and execute campaigns to build a deeper pool of support for the financial services industry” (ibid). The Domestic Promotion Committee (DPC) is composed almost exclusively of representatives from the FES, but as an institutional bridge built into the mayoral office (see

Table 3 - TheCityUK's Domestic Promotion Committee's membership).

Table 3 - TheCityUK's Domestic Promotion Committee's membership

Chairman	Steve Perry	Executive Vice President, Visa Europe
Member	Mark Boleat	Deputy Chairman of Policy, City of London Corporation
Member	Steve Cooper	Managing Director, Barclays Business, UK Retail Banking, Barclays
Member	Howard Dawber	Strategic Advisor, Canary Wharf
Member	Alan Houmann	Managing Director, European Government Affairs, Citigroup
Member	Luke Johnson	Chairman, Risk Capital Partners
Member	Jon Hogan	Head of Financial Services, CBI
Member	Matthew Fell	Director - Company Affairs, CBI
Member	Geoffrey Pelham-Lane	Chief Executive (UK), FD
Member	Roland Rudd	Co-founder and Senior Partner, Finsbury
Member	Julian Skan	Managing Director UK Banking, Accenture
Member	Patrick Waldron	CEO, Post Office Financial Services
Member	David Waller	Director of Communications, GLG Partners
Member	Andrew Mitchell	Finsbury
Member	Anthony Browne	Policy Director, Mayor of London's office
Member	Jeremy Skinner	Mayor of London's office
Member	Jennifer Cosco	Executive Director, Goldman Sachs
Member	Stuart Popham	Chair, TheCityUK

(imported and adapted from TheCityUK, 2011)

The Overseas Promotion Committee is charged with ‘overseas promotion campaigns.’ Although not fully composed of bank representatives, other FES industry representatives are appointed to this important committee, such as the advisor from Grant Thornton, and a representative from the law sector, namely Christian Wisskirchen (see Table 4 below).

Table 4 - TheCityUK's Overseas Promotion Committee's membership

Role	Name	Organisation
Chairman	Robert Gray	Chairman, Debt Finance & Advisory, HSBC
Vice Chairman	Sir Thomas Harris	Vice Chairman, Standard Chartered Bank
Secretary	Wayne Evans	Director of Overseas Strategy, TheCityUK
Chairman - Legal Services and Dispute Resolution Group	Khawar Qureshi QC	Vice-Chairman of the International Committee, Bar Council of England & Wales
Representative - China Group	Sir David Brewer	Chairman, China-Britain Business Council
Representative - India Group	Gerry Grimstone	Chairman, Candover Investments & Standard Life
Representative - Islamic Finance	Richard Thomas	CEO, Gatehouse Bank
Representative - Russia Group	Danny Corrigan	Managing Director, Rouble Business, ICAP
Representative - Champions Group	Roy Leighton	Chairman, British Expertise
Representative - ETQ Group	Sir David Howard	Chairman, Charles Stanley
Representative - Regional Forum	Mark Chadwick	CEO, Liverpool City Region
Representative - PPP Group	Stephen Harris	President and COO, Global Infrastructure Group
GCC Champion	Nick Edmondes	Partner, Trowers & Hamlins
Representative - Brazil Group	Colin Johnson	Advisory, Grant Thornton
Member	Anthony Belchambers	CEO, Futures & Options Association
Member	Gary Roberts	Head of Financial Services Strategy, HM Treasury
Member	Miles Celic	Director of Group Public Affairs and Policy, Prudential
Member	Graham Hand	CEO, British Expertise
Member	Tristan Clarke	Head of Financial Services, CBI
Member	Nankunda Katangaza	International Policy Manager, The Law Society of England and Wales
Member	Richard Kaye	JP Morgan, Managing Director Government Affairs
Member	Owen Kelly	CEO, Scottish Financial Enterprise

Member	Tracey Pierce	Head of Primary Markets, London Stock Exchange
Member	Jose Ribeiro	Director, International Markets and Business Development, Lloyd's of London
Member	Tony Sims	Director of Service Industries, UKTI
Member	Peter Sissons	Head of International Affairs, City of London Corporation
Member	Christian Wisskirchen	Head of International Relations, The Bar Council
Member	Sir Stephen Wright	Senior Advisor, TheCityUK
Observer	Neil Chrimes	Head of Programmes, Lord Mayor of London's office

(imported and adapted from TheCityUK, 2011)

Stephen Harris holds the ‘Representative - PPP’ position on the Overseas Promotion Committee (OPC). These DPC and OPC networking platforms give the membership – and the seconder organizations – what TheCityUK exposes as “excellent opportunities to shape your business environment through increased access to decision makers, market data, events – formal and social, international visits and policy consultations” (ibid). It is clear that TheCityUK is in the business of creating “new opportunities for the industry as a whole” (ibid).

In the document Partnering Prosperity, it is recognized that PPPs, among other financial products, are diffused by the DPC – under the leadership of its chair, Dame Clara Furse, from Nomura International and Legal & General - through a series of thought-leadership seminars and round tables for practitioners, academics and government to determine the right landscape for UK-based financial services ... and a series of meetings with senior political stakeholders to explore ways in which financial services practitioners can work with government to develop the future landscape of financial services (TheCityUK, 2010).

PPPs are also diffused by the OPC – under the leadership of its chair, Robert Gray, also Chairman Debt Finance & Advisory at HSBC (ibid, 11). LOTIS (Liberalisation of Trade in Services Committee), chaired by John Cooke, works in partnership with DPC and OPC to find, among other services, “A collective approach to removing barriers to access to global financial and professional services markets.” The committee also prominently features PPPs (ibid, 6). The “banking, insurance, fund management, foreign exchange, property, securities dealing, shipping, legal and accounting services and management consultancy sectors” all benefit from the ‘promotion’ that TheCityUK provides for the FES (TheCityUK, 2011).

PPP implementation

In the report *PFI in the UK: Update* published by IFSL in 2006, it is clearly stated that “Public private partnerships (PPP) have been more widely developed in the UK than anywhere else in the world” (TheCityUK, 2011). The fact that the UK was an early mover helped it in going further than the initial transportation sector into “new facilities in school, hospitals, prisons” (ibid). According to the report, by 2005:

780 PFI projects in the UK had been signed, with a capital value of over £53bn ... Based on the year in which contracts were signed, the total value of PFI projects has been in the region of £3bn to £5bn since 2000, although the total of £18.3bn in 2002 was much higher as a result of the contracts for the London Underground valued at £16.3bn. The 2005 total of £4.3bn was down on the £5.2bn of the previous year, but higher than the £3.5bn in 2003 (ibid).

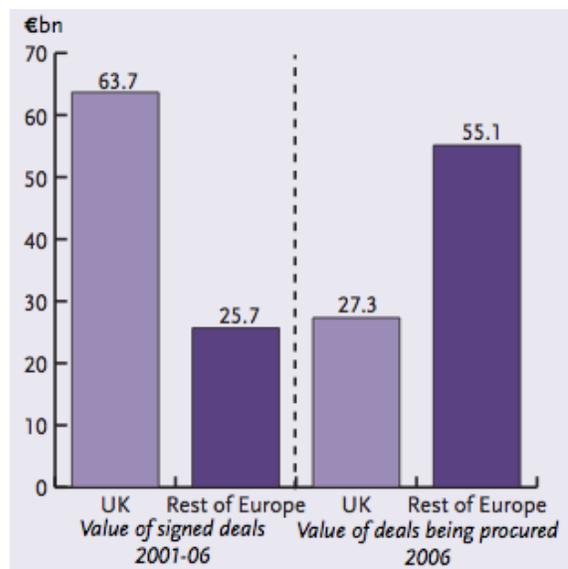
The secondment program and then the institutionalisation of the FES into a legitimate and recognized body such as PUK helps to better appreciate the progression of the project pipeline. While few deals were signed between 1979 and 1992, the number began increasing before John Major's 1997 institutional reconfiguration, when a Task Force was created in HMT filled with secondees. While Major's policy and the advent of PUK in 2000, representing further institutionalization, helps explain the growing pipeline, there has been iterations before. As IFSL reports:

Only a few PFI-type projects were signed in the early 1990s, including a large contract of £4bn for the Channel Tunnel rail link in 1996, with most having been signed since 1997, typically at least 60 each year. The number of deals peaked at 112 in 2000 before declining to 61 in 2003. They jumped to 99 in 2004, as a result of a particularly large number of deals in the health sector - 51 signed during that year alone - but returned to 61 in 2005 ... The total value of PFI projects is likely to increase by a half to nearly £80bn over the next four years with 200 PFI projects valued at £26bn in the pipeline in early 2006 and likely to be signed by 2010. Added to the £53bn signed by end-2005 these projects will bring the total to nearly £80bn in 2010 (International Financial Services London, 2006).

While the UK was a strong and early mover based on a particular historical evolution, the diffusion was working well, and was at this point made by the FES through various means, such as lobby groups and quasi-governmental organizations. The 2007 IFSL report on the state of the PPP business shows it well through a figure from the Public

Private Finance and DLA Piper data. Figure 12 - Trends in PFI in UK and PPP in Europe demonstrates the shift in the size of the project pipeline in the EU compared to the UK. While the UK was the leader in PPPs in the 20th century, and continued to be throughout the beginning of the 21st, as diffusion of the model was taking place, the EU took the lead from 2006. While it is clear that the EU has more potential for PPPs - it is larger, has higher infrastructure needs, and a bigger economy as a whole - and it has the national resources to implement PPPs, it took nineteen years for this to happen. But the phenomenon, which started slowly, has been accelerating since then.

Figure 12 - Trends in PFI in UK and PPP in Europe



(International Financial Services London, 2007, p. 4)

More specifically, the UK with 436 contracts signed in 2006 (computed over 2001-06 period) was surely the front runner followed by Spain with 30, Germany with 21 and France with 13; even taking the whole EU zone brings the number of projects to only 137 (see Figure 13 - PPP in Europe and in the UK in an historical and comparative perspective).

The sheer magnitude of those numbers shows clearly how the UK saw the development of PPPs, primarily because of the special involvement of the FES which had developed to a large part in London due to the North Sea project and the material needs that this oil and gas exploration was requiring; it gave more than just a head start.

Figure 13 - PPP in Europe and in the UK in an historical and comparative perspective

Value of signed contracts, €m 2001-06				Total number of signed deals	
	2001-04	2005	2006	Total	
Italy	890	2145	3436	6471	18
Spain	1000	1154	367	2521	30
France	0	1788	255	2043	13
Belgium	1300	480	---	1780	4
Netherlands	1302	---	431	1733	6
Germany	440	830	205	1475	21
Ireland	720	121	623	1464	9
Bulgaria	0	715	563	1278	5
Greece	0	798	450	1248	2
Austria	49	0	850	899	5
Portugal	278	---	32	310	5
Other countries	2690	1254	500	4444	19
Total (exc.UK)	8669	9285	7712	25666	137
UK	44831	6250	12586	63668	436

(adapted from International Financial Services London, 2007, p. 4)

With the number of deals increasing, their average value increased apace: the IFSL report – in partnership with City of London Corporation (which “promotes the world’s leading international finance and business centre”) and UK Trade & Investment (which “helps UK-based companies succeed in international markets”) - in the 2008 document *PFI in the UK & PPP in Europe*, it is noted that “Recent years have seen a rise in the average deal size which was £122m in 2007. This was down on the peak of £150m in 2006 but much higher than previous years: around £55m in 2003 & 2004 and £71m in 2005” (International Financial Services London, 2008). From an historical perspective, the transportation sector was the first and most important target of the PPP, but this has been

changing as the product has expanded into other sectors. A comparison of Figure 14 - PFI/PPP in UK government departments in a comparative and historical perspective and Figure 15 - PFI in UK government departments shows that while Transport remained on top of the list in terms of value, over a 20-year period, health is closing in, both in total capital expenditure and as a percentage of the whole PPP enterprise.

Figure 14 - PFI/PPP in UK government departments in a comparative and historical perspective

Cumulative total, 1987-2007				Average size of contract
Department	Number	£m	% share	£m
Transport	62	17754	29.7	195*
Health	269	12555	21.0	47
Defence	62	8321	13.9	134
Educn & Skills	156	6427	10.8	41
Cabinet Office	107	5285	8.8	49
Scottish Exec.	68	2500	4.2	37
ODPM	52	1400	2.3	27
DEFRA	22	1333	2.2	61
HM Treasury	34	1189	2.0	35
DCA	22	625	1.0	28
Welsh Assembly	7	522	0.9	75
DTI	9	393	0.7	44
DCMS	4	353	0.6	88
HM Cust. & Rev.	2	342	0.6	171
DWP	12	302	0.5	25
FCO	2	128	0.2	64
Home Office	5	123	0.2	25
N.Ireland Ass.	3	101	0.2	34
Others	3	94	0.2	31
Total	901	59745	100.0	40

Source: Public Private Finance *Excluding LU contract

(adapted from International Financial Services London, 2008, p. 2)

Figure 15 - PFI in UK government departments

Cumulative total, 1987-2005				Average size of contract
Department	Number	£m	% share	£m
Transport	58	27222	51.2	127*
Health	236	7839	14.7	33
Defence	56	4647	8.7	83
Educn & Skills	129	3418	6.4	26
Scottish Exec.	87	3177	6.0	37
Office of Deputy PM	55	1507	2.8	27
Home Office	51	1354	2.5	27
Environment	16	737	1.4	46
Welsh Assembly	20	566	1.1	28
Work & Pensions	7	522	1.0	75
N.Ireland Ass.	27	417	0.8	15
Trade & Industry	9	393	0.7	44
Customs & Revenue	4	353	0.7	88
Cabinet Office	2	342	0.6	171
Constitutional Affairs	12	302	0.6	25
HM Treasury	2	128	0.2	64
Foreign Office	3	101	0.2	34
Culture, Media & Sport	3	48	0.1	16
Others	3	94	0.2	31
Total	780	53165	100.0	42

**Average size of transport contract excludes LU & Channel Tunnel totalling £20.4bn*
Source: publicprivatefinance

(adapted from International Financial Services London, 2008, p. 2)

From a 51.2 % sectoral share, Transport – over two years – fell to 29.7 %, while Health grew 5.3 % and education 4.4 %. This demonstrates that the product's diffusion and the effort to expand PPPs to other sectors is working well.

Conclusion

Building on the previous chapter, this chapter has shown that the components of the FES were active throughout the evolution of the enterprise in the UK and before policies positive to the business were enacted. If it is clear, as Osborne argued in 2001, that the UK was the “primary exponent for the PPP phenomenon,” it is less clear that the birth of PPPs can be attributed to “John Major government’s reform program in the UK in the early 1990s” (Hodge in Osborne, 2010, p. 151) or to PartnershipsUK even if they later played an

important role in the diffusion of the model. To be sure, the FES had implemented PPPs before any policy was created (e.g., 1985 Euro-channel).

We have shown that several PPPs happened before Major's 1992 initiative; private consultants, City firms and the banking industry – all of which form the FES - had an interest in the PPPs that was as strong as, if not stronger than the interest they had for the previous rounds of privatization. To be sure, PPPs are more complex and lucrative than privatization (International Monetary Fund, 2006). While the early penetration of management consultants to the pinnacle of political power was an important factor, as Saint-Martin (1998) as shown, it is the fact that they had been involved with private partnerships for a decade that has been overlooked.

As member of the FES involved in project finance since the 1970's in the North Sea, the 'Big 5' consultants developed alongside the 'Magic Circle' with close collaboration by investment banks. This feature, and the pure channel of internal diffusion built by consultants, helped in removing the necessity of establishing an external diffusion organization like the NCPPP, established in 1991 in the US, or CCPPP in 1993 in Canada.

If the UK was the strongest 'exponent' as Osborne has said, it was also the only country studied here without any external advocacy 'council' dedicated to PPPs: PUK was the results of a policy from the government, while in Canada and the US, CCPPP and NCPPP have been created by the FES without any policy from the government and several years before the advent of PUK.

A slow process of incremental institutional modifications started in 1987 and culminated in 2000 with the establishment by the banking community and PPP operator of PUK all of which were destined to increase the use of the PPP formulae. From the penetration of

consultants into government to the secondment programme culminating in PUK, the FES was at the forefront of the diffusion of the model, either through ideas, grants, symbolic programmes, and legal incentives.

CHAPTER 4 – THE US EXPERIENCE WITH PROJECT FINANCE: FROM POWER GENERATION TO PPPS

“PURPA created a whole new market, and a whole new opportunity for us” - John B. Wing, general manager of General Electric’s new cogeneration department.

At the same time that the UK was going through deep transformations of its public sector in what has been dubbed the “Thatcher era”, the US was under the “Reagan era” and, similarly, the public sector was under attack (Pierson, 1994). But while both states were ‘ideologically’ in line with each other, the development of PP’s, PFI’s and PPPs was very different.

The US has been very ‘timid’ in terms of PPPs compared to the UK and the different institutional arrangements cannot by themselves explain this difference. In the Canadian case, to follow, which has (as does the UK) a Westminster-type political regime, the development was ‘timid’ for a long period (as in the US) even if the Mulroney government was fiscally conservative. As in the UK, many factors were at play in the development of PPPs in the US.

This chapter will show how the evolution of the use of project finance in the US led to the development of the financial engineering sector’s diffusion capacity, which is central to the development of the PPP enterprise, and how this development was, in turn, shaped by the structure of the institutional arrangements found in this particular case. To be sure,

even if the PF was available and the FES experienced, the constitutional prohibition against PF in many states was an obstacle to the development of PPPs in that country.

1.16 The evolution of project finance in the US

The US went through different types of economic mechanisms for projects: 1) the petroleum exploration of the 1930's, 2) inner city infrastructure and regional development, 3) the power market, and 4) the modern infrastructure-finance era. Acknowledging how project finance evolved in the US is key to the development of an understanding of the weakness – in a comparative perspective – of the speed of the evolution of PPPs in that particular arrangement. After the appearance of primitive project finance, explored in Chapter 2, the product was used for specific domains (petroleum, power, and then public infrastructure); it was a response to very specific demands. Later, industry was able to generate its own demand; this will be the focus in this chapter.

1.17 Urban renewal

In 1937, the US Housing Act was executed as the first positive action to alter the economics of housing. In 1965, an agency was created under the Department of Housing and Urban Development Act to undertake the administration of programs and policies related to the housing discrimination (i.e., race) and the social unrest that it was fostering. Culminating in 1968 with the assassination of Dr. Martin Luther King Jr., riots were occurring in major cities across the country, but the housing situation was not a new problem, as it has been reported for more than a decade before those events. In reaction to this situation, the Civil Rights Act, which contains a title also known as the Fair Housing Act, banished most housing discrimination. Enforcement of the legislation was given to the Housing and Urban Development department (HUD). The same year, the Fair Housing Act

of 1968 established the Government National Mortgage Association (Ginnie Mae) to expand the availability of mortgage funds as a tool of economic development. Ginnie Mae was a new entity born out of a rearrangement of the Federal National Mortgage Association (Fannie Mae). This tool was used to “expand availability of mortgage funds for moderate income families using government guaranteed mortgage-backed securities” (Allie Mae, 2011) In 1977, President Jimmy E. Carter appointed as HUD Secretary Patricia R. Harris to head the new Urban Development Action Grant (UDAG) to “give distressed communities funds for residential or non-residential use” (ibid).

UDAG has been reported as a form of PPP in the US (Rubin & Stankiewics, 2001, p. 135), but this author’s contention is that this was not the case; UDAG was more a directed grant than an instance of project finance. This is important because if this is correct, PPPs are much more recent than what has been previously reported and this is essential to understand *when* and *how* the diffusion started. Hence, it is worth exploring.

UDAG was not a grand innovation, it was a reformed program; it “evolved from preceding programs in aid of distressed communities, including permitting local officials and private businesses wide berth in making deals for UDAG utilization and actively recruiting small cities to participate” (Dreussi, 2000, p. 120). This federal aid was not entirely new and the Carter administration was, in fact, building on previous forms of the same type of aid:

Lessons learned from preceding aid programs, such as urban renewal and Model Cities, provided the platform upon which UDAG was constructed... compared UDAG with an antecedent, the urban renewal program, which he termed ‘a rather blunt instrument for economic development.’ Like its

predecessors, UDAG fostered economic development in distressed cities by subsidizing private investment in blighted areas (Dreussi, 2000).

Unlike preceding federal urban aid programs, “UDAG was considerably more flexible in that it provided direct assistance to leverage private development dollars” (ibid).

Dreussi describes the flexibility of the grant program as follows:

UDAG's malleability to the specific needs of cities and firms was a characteristic that distinguished it from previous aid programs. UDAG provided eligible cities, great latitude to craft creative responses to perceived needs... HUD's rules for how UDAG awards could be applied to alleviating distress were “remarkably vague and permissive” ... Cities could expend UDAG funds for land banking, infrastructure improvements at or near project sites, direct project assistance or as grants or below-rate loans to developers for diverse projects (Dreussi, 2000).

While it is true that UDAG’s program was giving the opportunities for private firms to receive public money, the program required that businesses prove their case to receive any grants: “businesses seeking UDAG assistance were required to prove that their proposed projects could not go forth ‘but for’ UDAG assistance and that their proposed ventures were market worthy” (ibid). The funds were not private, but public. There was no project finance involved even if “HUD's UDAG staff included market-savvy bankers, developers and others who evaluated the viability of proposed projects” (ibid). Carter’s initiative was structured to be user-friendly; “that is, to accommodate developers and assist communities in securing UDAG funds” (Dreussi 2000).

UDAG funds were to stimulate new economic activity, either by luring businesses into distressed cities from other locations or encouraging businesses already located in blighted cities to remain, modernize or expand... (Dreussi, 2000; Webman, 1981).

President Carter's initiative was not implemented through the model of PPPs; UDAG was a targeted grant program. The modern project finance at the core of PPPs was absent in the second era, and reports stating that HUD's UDAG program was an early instance of modern PPPs are misleading. This problem has masked the real time of birth of PPPs and has blurred the importance of the project finance industry in the diffusion of the PPP product in the US.

Partnerships can only be seen to have happened if we accept that the public sector was supporting the private sector, but this is a rather limited form of 'partnership'. Other 'ingredients' of the modern PPPs formula were present in President Carter's initiative such as having industry representatives (e.g., bankers) appointed to UDAG's board to scrutinize applications for grants, but the private sector was not applying for joint-venture capital, neither was the project finance-based in any systematic way. The grants were, as Webman rightfully reported, used to attract businesses to, and to keep open those located in, distressed communities (1981).

This is in line with the role that the Federal Housing Administration (FHA) was playing since 1934, before it became the Department of Housing and Urban Development's Office of Housing in 1965; that is, to help temper free market correction, bubble and failure.

Those grants, guarantees and interventions through the emergency financing cannot be seen as PPPs; the project financing component was absent. The grants were governmental assistance for the market, and its cycle, which is far from the modern PPPs. Can the interventions from HUD, UDAG, and FHA be seen as a form of partnership in the largest meaning of the term? UDAG's board and actions had some components that were very close to the PPP model, such as secondment for firms and joint-dialogue, but without the project finance, the FHA actions were closer to the traditional interventions repertoire of the State.

1.18 Power generation

In the US, modern project finance became increasingly used mainly because of a piece of legislation – Private Utility Regulatory Policies Act (PURPA) – which favored private finance on a per project basis. As Yescombe reported in his *Principles of Project Finance*:

Finance for independent power projects ('IPPs') in the electricity sector (primarily for power generation) developed first after the Private Utility Regulatory Policies Act ('PURPA') in the United States in 1978, which encouraged the development of cogeneration plants, electricity privatization in the United Kingdom in the early 1990s, and the subsequent worldwide process of electricity privatization and deregulation (Yescombe, 2002).

While PURPA was the structural force behind the rise of IPPs' appetite for Power Purchase Agreements (PPA) it was contingent on the very specific history of utilities in the US.

In 1935, the Public Utility Holding Company Act (PUHCA) was passed and this would change the course of the industry's development (Department of Energy (US), 1993, p. 1). PURPA was, at least in part, a reaction to PUHCA's maladaptation to a changing political economy, which continued to evolve over time. PUHCA was born out of arguments not far removed from those used today to praise the worthiness of the consortium system at the heart of the worldwide, modern PPPs: increased expertise and efficiency, economy of scale, technical proficiency, lower interest on capital and a more effective and coherent control.

Protected by this argumentative shield, "the public utility holding company gained control of more and more operating utilities during the 1920's and the 1930's" (Department of Energy (US), 1993). The reason behind the enthusiasm for this type of structure arose from the basic financial engineering that the pyramid made possible. For example:

[U]se of the holding company structure allowed for the inflating of asset values through pyramiding, as described later. This would not have been possible under a simple merger where the assets of the operating company were absorbed and the operating companies ceased to exist as legal entities (Department of Energy (US), 1993).

The holding company was working in similar ways as the special operating company or special purpose vehicle at the core of PPPs. In fact, the holding system can be seen somewhat as the father of the special purpose vehicle and off-balance sheet accounting so often used at the beginning of the PPP enterprise. As the Federal Trade Commission reported,

It follows from the practice of pyramiding that the inflation of and [write-up] of securities became comparatively easy, particularly in an age where securities regulation was in its infancy. The FTC in its investigation of the 18 largest holding companies, their 42 [sub-holding] companies, and the 91 operating companies which they controlled found combined assets amounting to \$8.5 billion. The FTC found that these assets were overvalued by at least \$1.5 billion. The FTC report indicated three ways by which these writeups were accomplished and the inflated values were achieved: (1) Inflated construction costs; (2) Inflated values of the shares of subholding companies and operating companies due to the internal sale of those shares at above market prices; (3) Writeups of values of the consolidated company based upon optimistic judgments of the economies that would be achieved by the consolidated company with a resulting overestimation of the potential earning power of the holding company (Department of Energy (US), 1993, p. 5).

The tendency was toward less competition, fewer players and more leveraged financial structures. Quite surprisingly, in 1927, the Federal Trade Commission issued a report “which found no conclusive evidence of the existence of a “power trust” and asserted that the power company consolidations which were taking place were necessary in order to raise capital, reduce fixed costs, and provide adequate returns to investors” (Department of Energy (US), 1993, p. 5).

That report so inflamed Senator Thomas J. Walsh of Montana that he demanded an entirely new study be conducted by an independent committee. This suggestion was vigorously opposed by the industry. A compromise resolution was passed by the Senate which called for a new FTC investigation with widespread public participation in the investigation. This provision, along with the change in FTC personnel, ensured that the new investigation would not be another “whitewash.” This investigation was conducted over a 7--year period involving thousands of pages of testimony and meticulous analysis. It was the opinion of the report that there were five aspects of the holding company system which called for some form of regulation (Department of Energy (US), 1993).

The five aspects were:

- 1) The States had made no substantial progress in effectively regulating holding companies.
- 2) Holding companies performed no producing function and therefore contributed nothing to the supply of power or to the general economic well-being of the Nation.
- 3) Public investors often had no voting rights or the voting rights they held were so widely disbursed that management could not be effectively opposed.
- 4) Only appropriate Federal legislation could be effective and could serve to neutralize the leniencies under which many holding companies were organized.

5) There was a concern that if the trends of the past decade continued, there might have eventually been the concentration of all operating public utilities into one monopoly holding company system (Department of Energy (US), 1993).

Hence, just a few years before PUHCA, the Federal Power Commission (FPC) acknowledged that there was a very high level of concentration in the holding system, and that this was leading to a few companies having overwhelming power over electricity, an essential service to all Americans.

Two solutions were proposed: either suppress the holding companies by banning interstate electricity commerce or the selling of securities in interstate commerce; or tolerate the holding system by regulation based on a) taxation, b) statutory inhibition, c) compulsory Federal licensing, or d) a Federal corporation act.

These proposals were received enthusiastically by President Franklin Roosevelt, who believed that “centralization of wealth and power in the electric industry amounted to private socialism.” In this respect, Roosevelt was following the thoughts of Supreme Court Justice Louis Brandeis who believed that concentrations of economic power should be disbursed because these concentrations resulted in inefficiency and political corruption (Department of Energy (US), 1993, p. 8).

Following the release of the report from the FPC, Congressional hearings were held in 1935. Two bills were introduced, the first by Sam Rayburn, a congressman from Texas who wanted to control and eventually eliminate holding companies. Senator Burton K. Wheeler of Montana introduced in the Senate a second, somewhat similar piece of

legislation. “These two pieces of legislation became known as the Wheeler--Rayburn Bill” (Department of Energy (US), 1993).

There was tremendous and not unexpected opposition by the holding companies to both bills. Public utility holding company investors were concerned that the bills if enacted would destroy their investment. From this quarter there was opposition to any fundamental reorganization of the utility industry (ibid.).

The holding and banking companies were not happy with the legislation restricting their ability to organize financial leveraging tools. They used all the tools the legal system was able to provide. “As a result, 58 cases were brought challenging the law's constitutionality. These cases led to some of the most colorful and intricate legal manoeuvring of the New Deal years” (Rauh, 1983).

The most significant case was that which involved the Electric Bond and Share Company... The company contended that the law requiring registration was not proper regulation under the Interstate Commerce Clause of the Constitution. When the Supreme Court rejected this case it became obvious to the holding companies that they would have to register and many began to comply (North American Co v. Securities and Exchange Commission, 1946).

Constitutional challenges were brought for several years, until it became clear that the legislation was constitutionally valid. The US Supreme Court made explicit its conclusion that “it would not substitute its judgment for that of Congress on the appropriateness or inappropriateness of economic structures for corporations and found

that Congress had acted within the sphere of its legislative power” (Department of Energy (US), 1993).

By 1947, virtually all holding companies had undergone some type of simplification or integration and, by 1950, the utility reorganizations were virtually complete. At least one authority has viewed the enactment of the Public Utility Holding Company Act and the resulting breakup of the utility holding companies as one of the most “far reaching accomplishments of the Roosevelt Administration” (Seligman, 1982).

For the Energy Information Administration, it was “this high level of concentration and control, as well as the collapse of the utility holding companies” that ultimately led – along with the Great Depression - to PUHCA (Department of Energy (US), 1993). The poor performance of the private utilities “ultimately led to demands for their regulation” and Roosevelt answered that demand (ibid).

1.19 From PUHCA to PURPA and the creation of an engineered financial product in the US

Following a decade of legal challenges, by 1950 the reorganization was almost completed. During the 1950’s, 1960’s, and 1970’s, “[t]he Commission had not exercised stringent oversight of the activities of the holding companies” (Department of Energy (US), 1993, p. 21). This, coupled with the perception that the act was not being applied consistently (the 1935 legislation contained exemptions that the Securities and Exchange Commission (SEC) could apply arbitrarily on the basis of vague criteria), this meant the SEC could proceed to “the reorganization of a holding company [when it ought] to be in the interest of the public, investors, or consumers” (Department of Energy (US), 1993, p. 21). For almost 35 years, exemptions had been mostly automatic and reviews rare. The

Commission had not been using the institution's surveillance prerogatives or exercising its power to the full extent that the act enabled. "Between 1935 and 1970, over 2,500 holding companies had been exempted from the registration requirements of the 1935 Act" (ibid). Starting in the early 1970's, PUHCA was increasingly under attack by the industry that was seeking ways to get out of the PUHCA umbrella and diversify again.

Many utilities were affected by systemic market risk; the "[c]ost of fuel rose quickly due to the shocks in 1972, 1974, 1979, and 1980. Environmental costs associated with plant construction also accelerated" (Geddes 1992). This situation which was impacting the balance sheet of utilities "was further exacerbated by the exhaustion of economies due to increased scale of plant and coordination with other utility systems" (Department of Energy (US), 1993, p. 21). Tangibly, "[t]he result was that by 1981, as a group, electric utility stocks sold for less than book value, earnings fell below the cost of debt, and most utilities failed to earn the rates of return allowed them by their regulatory commissions" (ibid). This situation, coupled with the fervor for deregulation gave power to the arguments of those who wanted to re-open the door to financial engineering for public electricity generation and delivery.

In 1973, a landmark judgment was made by the US Supreme Court, whereby the "public monopoly" was questioned. "The US Supreme Court rules in favor of four small communities who sued a private utility company in the late 1960s to force it to allow low-cost electricity from a federal hydroelectric project to be sent over its distribution lines" (Galvin Electricity Initiative, 2012). This ruling created what has been considered "a small crack in the monopoly system, slightly opening the door to competition" (ibid). Between 1973 and 1977:

The utilities continue building, labor costs associated with construction rise and utilities begin to face up to harsh economic realities. Reluctant to face the political — and investor — fallout associated with higher rates, many utilities simply stop building capacity or upgrading existing technology. [In 1977 a] summer blackout, caused by a small malfunction in the system, affects 9 million New Yorkers and leads to mass property damage as looters and rioters tear through the blackened streets. This outage finally convinces utility companies to shift money from building new power plants to upgrading the existing distribution system. The capital expenditures are passed along to consumers in the form of rate hikes, which lead to increasing public criticism of the utility monopolies (ibid.).

This build-up led “President Jimmy Carter to call for a national energy plan,” which would eventually lead to PURPA. As Daniel Yergin reported in *The Prize: The Epic Quest for Money and Power*,

The most singularly significant event was the creation of additional competition in the generation of electricity, which resulted from the passage in 1978 of the PURPA. PURPA was passed during the height of the oil crisis brought about by the Iraq/Iran war, which had followed closely the Arab boycott of western oil markets during the early 1970’s. Both events had created considerable consternation in this country about the security of our oil supplies in particular and our capacity to meet our future needs for energy in general. A good portion of the

discussion focused upon the general question of achieving energy self-sufficiency, not just in the production of fuels, but in the generation of electricity as well (1991).

In the final draft of the bill, “[a] small section of PURPA, added in at the legislative last minute, creates incentives to build and operate small, more fuel-efficient electricity generators and creates limited market competition” (Department of Energy (US), 1993, p. 31).

Immediately, “Utilities sue[d] to stop the law from going into effect” (ibid). While the legal battle was unwinding during the following year, “[t]he nation’s first highly publicized and potentially serious nuclear accident occurred at Three Mile Island, about three miles from the Pennsylvania capital, Harrisburg” (ibid). Following this accident:

Americans turn against nuclear power and demand stricter and more expensive regulation. Meanwhile, the cost of building many of these reactors turn out to be far greater than anticipated [and a few years later, in 1983], [t]he US Supreme Court upholds PURPA. The decision states that it is in the national interest to “provide a significant incentive to the development of cogeneration and small power product, and that ratepayers and the nation as a whole would benefit from the decreased reliance on scarce fossil fuels and the more efficient use of energy” (ibid.).

The net effect of PURPA – “which was intended to be an environmental statute [...] was to introduce competition into the generation sector of the electricity marketplace, thus challenging the utilities' claim that the electricity market encouraged a natural monopoly” (Public Broadcasting Service, 2012).

The so called ‘last-minute section 210’ created a new political economy in the US’s energy sector and led to the creation of the new project finance product and of an industry that would then spill over to other sectors. Hence, even if project finance was created in Texas in the 1930’s, it is with the concurrence of the electricity sector that the industry would grow dramatically in the 1970-80’s in the US because of a new legislative requirement discussed below.

1.20 The birth of modern project finance in the US

PURPA created an obligation for utilities to buy power from Independent Power Producers (IPP’s).

It was the purpose of PURPA to assure that nonutilities who either cogenerated or used dispersed renewable generation would be able to sell their product to utilities if the power could be produced at competitive prices. This was accomplished under section 210 by requiring that a utility offer to buy this power at a rate which would not exceed the cost to the utility of generating its own electricity or the utility’s “avoided cost.” By employing this concept of avoided cost the consumer was protected in that the electricity purchased would not be more expensive than the cost of power which the utility would have generated on its own (Department of Energy (US), 1993, p. 32).

PURPA restructured the incentives and the market responded to this new configuration. The Federal Energy Regulatory Commission (FERC) was in charge of the administration of the criteria set by section 210 and the decisions rendered based on it. “FERC was to designate which cogeneration and small power production facilities met the

criteria of the law and designate them as qualifying facilities (QF)” (Department of Energy (US), 1993). But while FERC was to decide which facilities were going to become a “QF”, the method employed to calculate the “avoided cost” fell under the authority of each State’s regulatory commission²¹; many states created many methods and opportunities for lobbying. But PURPA would do even more to (re)open a market, which had been closed to financial engineering since 1935.

Because PUHCA would create major burdens for nonutilities who wished to develop qualifying facilities, PURPA specifically exempted in section 210 developers of QF facilities from PUHCA. If this had not been done, then nonutility companies wishing to develop QF’s would have been forced to submit themselves to SEC regulation which in most instances would have forced them to divest themselves of their nonutility related business—which, at least for cogenerators, was their principal business activity. FERC’s regulations also allowed a utility to participate as a partial owner of a QF so long as its ownership share did not exceed 50 %. Many utilities responded to PURPA by creating subsidiaries through which they could invest in such projects.

Registered holding companies were not allowed this option until 1986 when federal legislation amended PUHCA to permit holding companies the same rights as public utilities (ibid).

²¹ In many ways, the “avoided cost” calculus is the relative of the Public Sector Comparator (PSC) so widely used to justify PPP’s in the countries studied in this thesis as we shall see.

Acknowledging the importance of this particular evolution is key to understanding the timing of the birth of the modern project finance in the US and, hence, the peculiarities of the PPP enterprise in that country,

[O]ne of the most important effects of the law was to create a market for power from non-utility power producers, which now provide 7 % of the country's power. Before PURPA, only utilities could own and operate electric generating plants. PURPA required utilities to buy power from independent companies that could produce power for less than what it would have cost for the utility to generate the power, called the "avoided cost" (Union of Concerned Scientists (UCSUSA), 2012).

But while IPP's proliferated, the market conditions had changed and very soon the experimental project finance was viewed as maladapted in some instance.

Much has changed since PURPA was implemented. The price of oil has declined and supplies of natural gas have increased, driving down the cost of electricity. Many independent power producers signed contracts in the 1980s with prices that are higher than current spot market prices. Critics of PURPA say it is unfair to make utilities honor those contracts, and they blame independents for high power prices (ibid).

The syndrome depicted here stems from the PPA contract (Power Purchase Agreement). In the 1970-1980's PPA's were the second generation of forecasted cash-flow loans (we saw the first generation in Chapter 2 with oil extraction), but they were the first generation of "revenues-guaranty imbued contracts."

There are various forms of Power Purchase Agreements; these are differentiated by the source of energy harnessed (solar, wind, etc.). Financing for the project is delineated in the contract, which also specifies relevant dates of the project coming into effect, when the project will begin commercial operation, and a termination date for which the contract may be renewed or abandoned. All sales of electricity are metered to provide both seller and buyer with the most accurate information about the amount of electricity generated and bought. Rates for electricity are agreed upon in the contract between both parties to provide an economic incentive to being a Power Purchase Agreement (California Solar Energy Industries Association, 2012).

The PPA's were the *sine qua non* condition for project financing of IPP's. PURPA, by requiring utilities to buy from IPP's, restructured the sector's incentives and gave rise to the development of a systematic use of project finance for the private-to-private sector partnerships.

The PPA is often regarded as the central document in the development of independent electricity generating assets (power plants), and *is a key to obtaining project financing for the project*. Under the PPA model, the PPA provider would secure funding for the project, maintain and monitor the energy production, and sell the electricity to the host at a contractual price for the term of the contract. ... One of the key benefits of the PPA is that by clearly defining the output of the generating assets (such as a solar electric system) and the credit of its associated revenue

streams, a PPA can be used by the PPA provider to raise non-recourse financing from a bank or other financing counterparty (emphasis added, Ameresco, 2012).

Beginning in 1979, PPA's were signed with IPP's who used the agreements to leverage project finance to design and build their installations; it was the first time that a legislative base existed to develop the project finance product in the US. This was going on before PPPs were created anywhere in the world, before most greenfield projects in the US (see Appendix 2), and seven years before the creation of the US Privatization Council (renamed in 1991 Council for Public-Private Partnerships). At the same time in the UK, the magnitude of the proven oil reserves was enough to guarantee the PF projects, without any legislative basis, as we have seen. In Canada, as we will see in the next chapter, there was no activity at all because of the absence of oil and because of the nationalized electricity sector.

1.21 From project finance to PP's and PPPs in the US

In Chapter 2, we have shown that the first ad hoc instance of primitive PF were related to the oil field, a primitive technique pioneered by the General American Oil. While the oil sector would still be prone to PF, the new power generation sector, created by PURPA, would see the emergence of a very structured PF practice. For the first time, the PPA would guarantee long-term revenues, which could then be managed through a special purpose vehicle. This was an innovation from the risky primitive PF only backed by prospective sale of the estimated oil reserve. It is clear that the modern project finance – which is at the core of the PPP enterprise – as been used primarily in the US as a response to the restructuring of the economic incentives presented by the long term PPA created for

IPP's while in the UK it emerged from the North Sea's harsh conditions and the associated risk for the companies. As we have seen in the US:

These long term revenue streams were required by rules implementing PURPA, the Public Utilities Regulatory Policies Act of 1978.

Originally envisioned as an energy initiative designed to encourage domestic renewable resources and conservation, *the Act and the industry it created* led to further deregulation of electric generation and, significantly, international privatization following amendments to the Public Utilities Holding Company Act in 1994. The structure has evolved and forms the basis for energy and other projects throughout the world (emphasis added, Marsh, 2012).

But while PURPA fuelled the emergence of the Financial Engineering Sector (FES) in the US, the FES's modern PF/SPV product was to be applied for the first time at a later date. To understand the phenomenon in the US, we need to grasp the particularities of the institutional arrangement in which PURPA - as a new institutional reconfiguration - fuelled an industry of project finance at a rate that was different than in the UK.

While PURPA was legislation with the potential to reshape incentives so as to create an industry, in the US, the legal culture makes court challenges a routine; before the state of affairs has been securitized by precedents, it can take a few years for legislation to have full effect. Hence, in the mean time (i.e., while waiting for precedents), project finance was not evolving as rapidly as it could have.

As one entrepreneur interviewed by Sine, Haveman and Tolbert put it, “The greater the legal uncertainty, the more lawyers we hire, and the less chances we take” (Sine, Haveman, & Tolbert, 2005).

Uncertainty over the legal status of PURPA was an important obstacle to entrepreneurs considering entering the independent-power sector. Early court battles between qualifying facilities and utilities created uncertainty and increased the difficulty of obtaining important resources, especially financing (Betts, 1983).

“On May 16, 1983, the Supreme Court upheld PURPA’s mandatory-interconnection and avoided-cost provisions” (ibid). In total, it took four years for the essential component of the Law (mandatory interconnection and purchase from IPP’s) to be crystalized and the uncertainties removed once and for all. This had the effect of easing the financing of PPA’s for IPP’s:

This verdict did not keep some utilities from contesting the law on other grounds, it did provide a strong endorsement of the sector. In the words of several analysts, the Supreme Court decision removed the "legal clouds casting a shadow over the development of small power plants and cogeneration" ... and was "the strongest possible endorsement for FERC’s [the Federal Regulatory Commission’s] avoided costs and interconnection rules" (Sine et al., 2005).

Beginning in 1984, more PPA’s were soon to be signed, but IPP promoters were still nervous; there was a danger that utilities would use their financial power to skirt the

IPP's through the threat of a long-lasting court battle – a battle they financially wouldn't be able to sustain. Sine *et al.*:

Reveal[ed] that potential independent power entrepreneurs were initially very pessimistic that utilities would honor contracts with qualifying facilities [but] [a]s more qualifying facilities contracted with utilities, generated electricity, and sold electricity to utilities, their very existence eased the concerns of all potential entrepreneurs, those who preferred green and brown technologies alike (Sine et al., 2005).

Concurrently, media coverage was increasingly reporting the 'interconnection' and this helped in creating the 'it works' idea so essential for the accelerating development of the sector.

Early on, entrepreneurs and potential investors were sceptical of the sector, particularly when utilities refused to interconnect with and purchase electricity from qualifying facilities (Righter, 1996; Hirsh, 1999). As the press documented successful outcomes of qualifying facilities' efforts to interconnect with utilities, entrepreneurs and investors gained assurance that the rules governing the new sector would be adhered to and that independent power generators could succeed (ibid.).

While court rulings, contracting exploration (prudent phase) and feedback from contract successes were helping in building the IPP sector, the pinnacle of the sector's development was the creation of the 1982 Independent Energy Producers Association of California (IEPA) and the 1986 Independent Power Producers of New York (IPPNY).

1.22 Diffusing project finance for PP's and then PPPs

“In New York and California, the most powerful collective representatives in the independent-power sector were two trade associations” stemming from an industry which was based on PPA's who were themselves at the core of the project finance enterprise in the US (Sine et al., 2005, p. 218). These new organizations advocated many things on behalf of the industry, but they were also actively involved in defining the parameters enabling PPA's - the *sine qua non* of financing for new IPP's.

The IEPA lobbied the state government on such issues as interconnection with utilities, tax credits, *the formula used to define avoided costs, and the creation of standard contracts*. The IPPNY also promoted legislative changes that benefited its members. Both associations collected, codified, and distributed information about the independent-power sector. For example, the IEPA held annual conferences at which experienced entrepreneurs and technologists were invited to discuss the costs and benefits of particular power-generating technologies. At these conferences, entrepreneurs met and shared stories with owners and managers of other generating facilities and thus learned what really worked—so-called “best practices.” ... Finally, both organizations promoted the industry to the media by issuing numerous press releases. In these ways, state-level trade associations distilled, codified, and diffused norms across the independent-power sector and so influenced entrepreneurs' technology choices (Sine et al., 2005).

The early experiences of project finance in the UK and US were linked to energy development (see preceding chapters) and although primitive project finance started first in the US, modern project finance was used first and foremost in the UK. The North Sea and a favorable regulatory environment helped the evolution of the project finance industry in the UK and explain why it was to be more than a decade before PF was being used broadly in the US. This is not to say that there were not any *ad hoc* instances in the US before PURPA created an institutionalization of PF's usage for IPP's, but to underline the fact that PF's usage is part of an evolutionary process that an industry and/or a technology has to go through. This evolution is linked closely to the creation of ideas about the industry's products and this contention is central to this thesis.

In the US, the PURPA legislation created opportunities for IPP's to be created, but they necessitated PPA's to be secured so as to build the infrastructure required to produce the energy sold to utilities under the contract. As the industry developed and matured, through multiplying interactions, consciousness developed itself and would lead, ultimately, to the creation and financing of bodies of representation (i.e., lobby). This evolution happened in the emerging energy sector first because of PURPA.

The early existence of these associations can be contrasted with the UK. In the US, lobbying was needed by the industry since it didn't have access to centralized power such as in the UK. The institutional arrangement of the US has been known to favor lobbying to an extent unknown in Westminster regimes such as Canada and the UK (Bennedsen & Feldmann, 2002). To be sure, lobbying regulations started in the US Congress (*since* 1947) more than 40 years before any other country (e.g., Québec since 2002; Canada since 2008; EU since 2008) (Denis Saint-Martin, 2011). This can help explain why those organizations

representing the new energy sector have made their appearance so rapidly. As the California lobby group advertises on its web site, “IEP has been active in representing the interests of the industry before California's regulatory commissions and the legislature since 1982” (Independent Energy Producers Association of California, 2012).

While these organizations were valuable in New York and California, there was a need for a national undertaking to map the energy PPA's to other sectors such as transportation PPPs. The Privatization Council (PC) was born out of these developments in 1985, which was to become the National Council for Public Private Partnerships (NCPPP) a few years later, following tremendous disappointment with privatization in the US as will be seen.

1.23 Diffusion and advocacy in the US

With the restructuring of incentives operated by PURPA the energy field bloomed. A whole new industry was being created and leading entrepreneurs would soon discover the infinite possibilities that the PF product offered. Robert Hebert was one of them. In 1972, while a Judge in Fort Bend County, he founded ECO resources, Inc., a small company which was to be acquired in 1985 by Southwest Water Company. Herbert was a visionary and saw the market potential for consulting and arranging deals, and was inspired by the energy sector's development in the US and by what was happening in the UK. Starting in 1979, Herbert and six other colleagues were watching Thatcher's program of privatization unfold and, as consultants, they saw the need for consultations with PF. Their idea of creating a hub of diffusion like IEPA or IPPNY for the application of financial engineering throughout the US – in any sector - was becoming increasingly attractive. The goal was to create a national hub for the whole sector. If project finance was

applicable to the energy sector's IPP's, it could be done for other sectors, particularly those that were considered public, such as highways and airports.

Herbert started to work on the idea with two others: Roger Feldman, an attorney who was working on energy and resources project finance deals at Bingham Dana LLP, and Steve Steckler, formerly of the Reagan Administration's Office of Management and Budget, who was described as "one of the primary architects of Ronald Reagan's President's Commission on Privatization and the White House Office of Privatization," all of this while serving as the leader of the transportation finance practices at Price Waterhouse (Arena profile, 2012).

Feldman, the project finance lawyer, Steckler, the management consultant from Price Waterhouse, and Herbert started The Privatization Council (PC) in 1985 with four other individuals involved in the sector. Price Waterhouse was already highly involved in the UK's privatization program and was trying to find ways to sell consulting services for financial arrangement and engineering on privatization deals in the US as well. It financed the initiative, as they would do in the Canadian case with Canadian Council for PPPs a few years later. Expertise, knowledge and experience were already flowing across the Atlantic, from the London to the New York offices and vice-versa. But, one of the founders discovered the potential was low in the US for a UK style privatization program: its narrow focus on privatization almost forced the PC to shut its doors in the years following its creation as discussed below. It appears from the PC experience that pure privatization à la UK was not a good match for the US: more diversified financial engineering perspectives were needed. (National Council for Public Private Partnerships, 2005)

As Herbert explained to an enthusiastic audience in 2005, at the 20th anniversary address of the PC (NCPPP since 1991), because of the lack of “diversification” some members “had to make personal loans to the Council ‘to keep the doors open’” but “‘now we have a better understanding of what we are able to do’ and the creation of the institutes has been a better reflection of what is happening in the marketplace of PPPs” (National Council for Public Private Partnerships, 2005). Herbert was referring to the fact that diversification was needed for a viable business that was important enough to sustain a permanent organization such as the PC; it was because the industry was new and weak that PC almost disappeared. Something new was needed; a formulae which would create more important consulting possibilities than privatization deals alone and help NCPNP to grow.

This diversification came in the name of PPPs. It was only by the application of PF to a wider base, and by the creating of a new secure market (the public sector) that “a more stable situation for the Council” was achieved (National Council for Public Private Partnerships, 2005). Hence, PPPs - as applications of the FES’s PF product - were not developed extensively before the name change from of PC to NCPNP in 1991, contrary to most of the assertions found in either the scientific or private sector’s literature pertaining to the US’s history of PPPs.

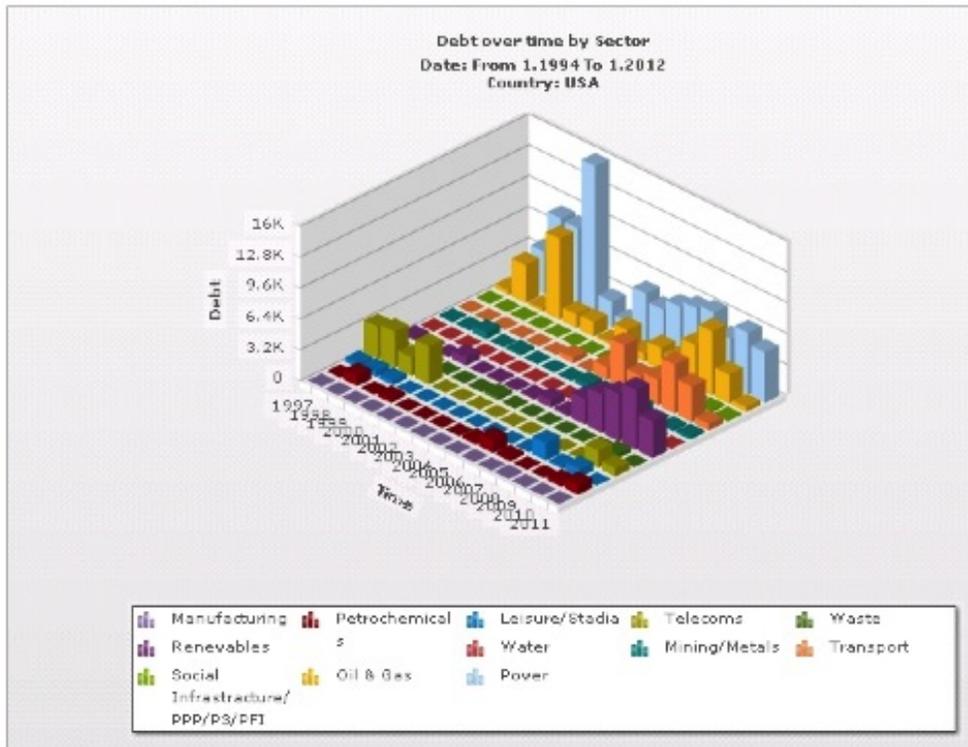
1.24 Privatization experience

Starting in 1979, the UK’s massive privatization program was seen in the US as a consulting cash cow by consultancies. The same consulting services – legal, management, and banking - could be sold in the US by the FES. But PF was already being sold in the US with the IPP development, and in the UK with petroleum exploitation (see Chapter 2). The application of financial engineering techniques to levy the financing necessary for private

operators to buy public assets - generating steady cash flow - was a disappointment to key players in the US industry. Even if privatization deals were sometimes organized differently, it was always possible to engineer a PF loan for a private party to buy some particular organization or part of it in some hybrid financing form. In any case, the FES was always involved: financial engineering was required to structure the deals, no matter how they were organized.

The reported disappointment comes from the weak level of activity and, hence, very weak consulting level and debts underwriting. One of the main reasons behind this is obvious and has been reported widely: the US had few nationalized sectors to privatize. Contrary to the UK's vast pre-1979 public sector entities (such as railroads and telephones), the US was devoid of such important public involvement in the economy. To show this, the following will demonstrate how active the FES was in structuring deals for PP's in areas that were being privatized in other countries, and particularly in the UK. As we saw, the energy sector was the base of project finance deals in the US. Figure 16 - Debt over time by sector in the US (Project Finance) shows this clearly.

Figure 16 - Debt over time by sector in the US (Project Finance)



(Project Finance International, 2011)

Dating back to 1994 (activities started in 1997), Figure 16 - Debt over time by sector in the US (Project Finance) shows that project financing was used in the sector of Oil & Gas and Power while, at the same time, the PPPs are so low as to be not apparent in terms of debts. Those sectors were using PF for PP's (PF for IPPs with a PPA) and because they were already devoid of government involvements, no important privatization was possible. To be sure, the only active sector in the 1990's were Power and Oil & Gas with a short burst of Telecoms related to the cellular boom – which was also PF for PP - and the need to develop transmission towers, among other things.

Transport, which is not classified in the PPP sector – but that we acknowledge as PPP²² – is insignificant before 2003.

The lack of an extensive privatization experience in the US has impeded, in part, the development of the FES's important insider access that was used in the UK to sell the PPP concept further. This made lobbying more important. To be sure, in the UK lobbying externally was not considered essential by the FES and that no UK lobby group, such as PC/NCPPP created in 1991 or the Canadian CCPPP created in 1993, was created in the UK is not a coincidence. To be sure, let's recall that PUK was owned by the government at 49 % and 51 % by the members of the FES: it was the result of the divestiture of the Treasury's Taskforce on PFI in 2000 - 9 years after NCPPP and 7 after CCPPP.

The US was not the best example to sell the consulting required for privatization because the logic of privatization was based around an application to existing public infrastructure. PPP would be a much more suitable product for new constructions. NCPPP changed its name as soon as it understood this potential. Moreover, the FES preferred Greenfield projects for its PF product because there is less uncertainty with new constructions, which can be incrementally standardized by international consortia (e.g., the same bridge or hospital can be sold a hundred times in a greenfield project). In the US, the only interesting areas for privatization were public water services, and roads, bridges and highways. Water privatization was not appealing partly because the aging water systems of most cities were considered risky by project lenders and because many homeowners had already paid for their infrastructure at the time of purchase.

²² Airports, Availability roads, Bridges, High-speed rail, Highway maintenance, Parking, Ports, Rail, Real toll, Shadow toll, Street lighting, Trams, Tunnels and Underground/metro, and Benchbase's classification for Transport sector can all be PPP. Notably, highways, toll systems, roads and metro are usually PPP's.

As the founder of the Privatization Council, Bob Herbert, reported several years later, their focus on water was not a good strategic choice; too complicated, too risky, unpopular and without much potential for ‘big business’ as they were mostly located amongst more than 100,000 local governments (National Council for Public Private Partnerships, 2005). As Herbert found out, firms involved in financial engineering didn’t want to get glued in small town transactions with high transaction costs and low markup on consultation fees more so since standardization and volume were to be absent in the foreseeable future. To be sure, as Figure 16 - Debt over time by sector in the US (Project Finance) shows, Water never took off as a viable PF application in the US.

The same is true for the Transport sector up to 2003. One of the main reasons was that Americans deeply identify themselves with the Eisenhower Highway Interstate system and considered it a “wonder of the world” and the American dream of freely driving from state to state²³ (Federal Highway Administration (US), 2006).

It has been acknowledged that road privatization was hard to sell because of this strong feeling that every American – as part of his American Liberty - should be able to roam the US totally free of charge from private firms²⁴. While there are toll roads, most were still owned by the States in the 1980's and 1990's. This ‘friction’ is described by Morgan Stanley’s Veech as “very asset-specific” in the US (PricewaterhouseCoopers, 2010b, p. 13). While privately owned and operated parking facilities or power generation don’t spark any political opposition, on the other hand, real ‘trophy’ assets often have a more complicated political dynamic. The New Jersey Turnpike, for example, is “close to a

²³ Cultural stories about The Road are everywhere and it defines Americans more than any other nation; Harley Davidson’s legendary motto “Live to Ride, Ride to Live” is an example of this.

²⁴ While there a toll in the US, most of them predate PPPs and are administered by States government. Many States are constitutionally prohibited from using PF for public infrastructure.

cultural icon and evokes a wide range of opinions and emotions whenever the issue of selling it is raised” (PricewaterhouseCoopers, 2010b, p. 13).

The same ‘cultural’ characteristic which was working against privatization of the transport sector has had an enduring effect: “Such public-perception issues have generally slowed the acceptance of more PPPs, at least in transportation” (PricewaterhouseCoopers, 2010b, p. 13).

The biggest market potential for PF was definitely the Transport sector early on, but something else was needed to sell to the public sector the FES’s PF product and its related consulting services in the US. “A sound public communication strategy is essential: By communicating a PPPs benefits, such as the expected savings to taxpayers, and demonstrating the use of local labor and other resources in the project, they are more likely to win [the] popular backing” (PricewaterhouseCoopers, 2010b, p. 14). A more appealing discourse was needed, which could help win the rhetorical battle of ownership of public infrastructures and, hence, open a new -- government-risk free -- market for the FES’s PF product. PPPs diffusion hub would be used for that purpose.

1.25 The creation of the biggest hub of diffusion worldwide in a country which has few PPPs

Privatization was not getting enough traction for the Privatization Council. Consulting fees were still anemic, when compared to the UK, though New York’s FES was capable of arranging deals similar to what was being done in London. Management consultants, some law firms and some of the international investment banks were diffusing what was happening in the UK internally. It was in their own interest to speed up the process in the US. PwC was highly involved in the Privatization Council since its inception

but after a few years of operation, proposals were made to change the name of the organization: the Privatization Council would become the National Council for Public Private Partnerships (NCPPP) in 1991.

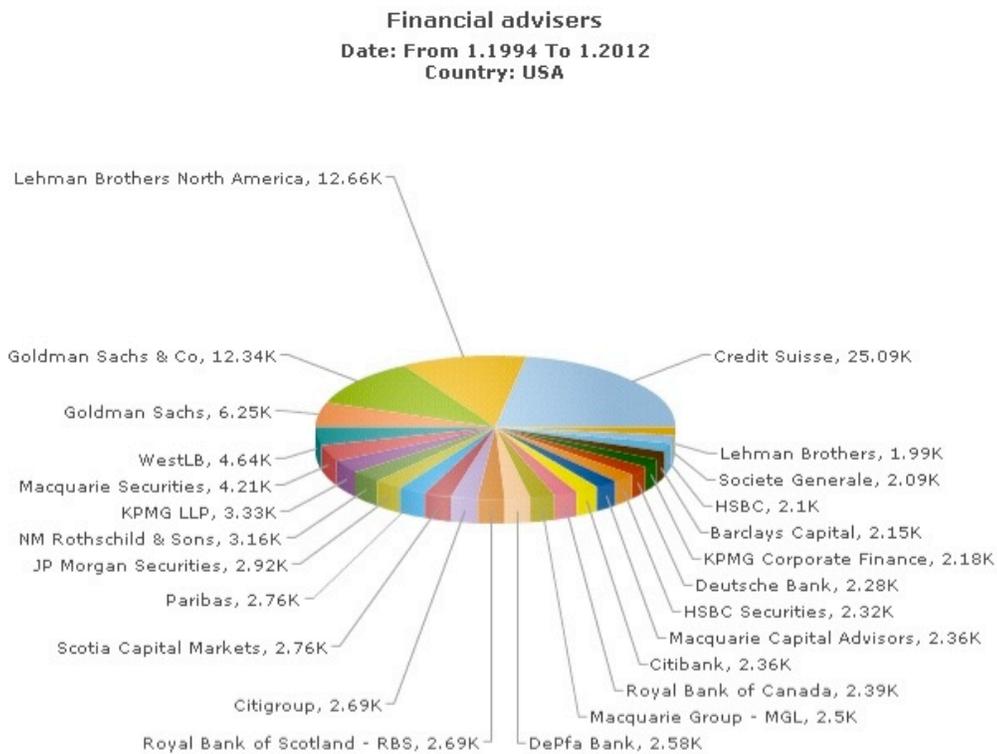
NCPPP created the broad membership that the PC had not been able to achieve by becoming the voice of a coalition of interests connected to the application of PF to the public sector in the form of PPPs. Figure 17 – Sponsors and Sustaining Members of the NCPPP shows a segment of the industry key players, demonstrating their diversity.

Figure 17 – Sponsors and Sustaining Members of the NCPPP

ACS - a Xerox company	Alliant insurance services, inc.
Aon risk services	American iron & steel institute
Aon construction services group	Balfour Beatty construction
Bank of America Merrill Lynch	Barclays capital
Bostonia partners llc	Brownstein hyatt farber shreck
Ch2m hill	Fluor enterprises, inc.
Fort bend county, texas	Grant Thornton llp
Hawkins, Delafield & Wood	Herzog contracting corporation
Hunt companies inc.	Jacobs
Johnson controls	K & I gates
Lea+Wlliott, inc	Lochner mmm group llc
Longbow partners llp	Management analysis, incorporated
	Metropolitan Atlanta Regional
Mckenna Long & Aldridge	Transit authority
Miller/Wenhold capitol strategies, llc	Mwh
National association of water companies	Nossaman llp
Pannone Lopes Devereaux & West llc (pldw)	Reason foundation
Strategic technology concepts	Southwest water
(The National Council for Public-Private Partnerships, 2011a)	

Figure 18 - Financial advisors - deals closure in the US shows some of the top financial advisors who are either sustaining or sponsoring members of NCPPP (e.g., Barclays Capital). Others are legal advisors, lenders, or maintenance, construction or project sponsors.

Figure 18 - Financial advisors - deals closure in the US



(Project Finance International, 2011)

Table 5 - Legal counsel - 1994-2012 - shows the top 25 legal counsels by total debt arranged²⁵. Interestingly, of the top twenty-five legal advisors, none are members of NCPPP. In fact, it appears that most of the thirty-five law firms members of NCPPP are foreign-based firms such as the Canadian Davies, Ward, Phillips & Vineberg LLP or much smaller ‘national only firms’ such as Ballard Spahr LLP who don’t have the same entry and network as the top 25 and can use NCPPP as a vehicle to increase their visibility in the market.

²⁵ The ranking by total debt arranged shown here is a standard way of assessing the performance of a firm in the PF sector. The value (debt) of all projects is summed up and is used to rank the firms.

Table 5 - Legal counsel - 1994-2012 - US

Rank	Legal counsel	Total debt amount (\$m)	Number of deals
1	Latham & Watkins	64280.91	156
2	Milbank Tweed Hadley & McCloy	45313.12	129
3	Simpson Thacher & Bartlett	27920.29	49
4	Skadden Arps Slate Meagher & Flom	24254.07	50
5	Chadbourne & Parke	23709.28	54
6	White & Case	21102.54	34
7	Shearman & Sterling	20954.15	37
8	Dewey Ballantine	17856.41	28
9	Orrick Herrington & Sutcliffe	11344.9	19
10	Vinson & Elkins	10654.49	21
11	Baker Botts	8291.95	12
12	Dewey & LeBoeuf	7744.97	21
13	Bracewell & Giuliani	7714.6	6
14	Andrews & Kurth	6061.9	11
15	Bracewell & Patterson	5721.9	8
16	Winston & Strawn	4768.33	20
17	Allen & Overy	4742.5	7
18	Cravath Swaine & Moore	4167	5
19	Mayer Brown Rowe & Maw	4149	7
20	Jones Day	4067.85	10
21	King & Spalding	3572.65	9
22	Hunton & Williams	3452.17	13
23	Troutman Sanders	3170	3
24	Morgan Lewis & Bockius	3119.51	12
25	Washburn, Briscoe & McCarthy	2933.25	3

(Project Finance International, 2011)

Latham & Watkins, the leader with 156 deals, is a global law firm and “operates worldwide as a limited liability partnership organized under the laws of the State of Delaware (US) with affiliated limited liability partnerships conducting the practice in the United Kingdom, France, Italy and Singapore and as affiliated partnerships conducting the practice in Hong Kong and Japan” (Latham & Watkins, 2012). New York’s office is “the firm's largest office with approximately 300 lawyers, [and] features a highly regarded, full-service business law practice. The New York office combines highly ranked transactional

and litigation practices that both have strong US and international capabilities” (ibid). London and New York have historically been the locations of choice for international finance. As Latham & Watkins LLP states that they are:

Situated in one of the most sophisticated markets for legal services, the New York office is connected to nearly every investment bank on Wall Street and offers companies access to one of the world's leading financial markets. A cover story in *The American Lawyer* entitled “New York Giants” ... noted that the office “serves a client list that reads like a Wall Street directory” (ibid).

As with the UK’s Magic Circle law firms, the US’s New York Giants law firms are deeply involved in complex financial engineering. At Latham & Watkins, as in any other top 25 law firm, there are departments, which specialize, in financial engineering.

Our New York finance attorneys represent financial institutions, borrowers, sponsors and developers in various transactions, including significant leveraged acquisition finance and working capital financings, asset and real estate securitizations, structured finance bank acquisitions, leveraged leasing and restructuring transactions. In addition, the New York Project Finance group works on all aspects involved in the financing and development of large-scale projects throughout the world (ibid).

Law firms in the US are at the heart of deal structuring and earn fees proportional to the complexity of the financial engineering involved. The greater the financial

engineering used to privately finance a project and the greater the complexity of the financing mechanism, the better firms will do.

Latham & Watkin won the 2011 Americas Power Deal of the Year for the structuring of a PPA for an IPP and a utility, a practice – as we saw with PURPA’s story – pre-dating PPPs.

Another influential law firm, ranking second in the top 25, is Milbank. As a leading international law firm, “Milbank has helped shape the legal landscape since its founding in New York City in 1866. Influential industrialists, financiers and entrepreneurs turned to us for the strategies that empowered the economic development of the US and the world.” (Milbank, 2012).

The banking and leveraged finance practice at Milbank, so they claim, is “one of the largest and most experienced teams in this field. We assist clients on some of the most advanced and complicated leveraged finance transactions in the world” (ibid). The number of deals reported by Project Finance BenchBase support those claims. The Project Finance Group at Milbank is the most developed: its “Project Finance Group comprises more than 100 dedicated Project Finance attorneys, including 20 partners, in [their] offices worldwide” (ibid). Literally creating a private hub of diffusion²⁶, the Project Finance Group “operate on an integrated basis with project finance teams in each of our offices in the US, São Paulo, London, Frankfurt, Singapore, Hong Kong and Tokyo” (ibid).

²⁶ Private firms organized internationally as network have create internal hub of diffusion. While it is more common to think of those hub of diffusion as organizations composed of multiple actors external to firms, the latter can act as a hub in some situation.

Milbank's Project Finance Group is the oldest in the US, dating back the creation of PURPA's IPP's. As it claims:

We were among the first international law firms to form a dedicated Project Finance Group over three decades ago, and since then we have pioneered the application of limited-recourse project finance techniques internationally (ibid).

Like Latham & Watkin, Milbank won recognition for its Project finance practice.

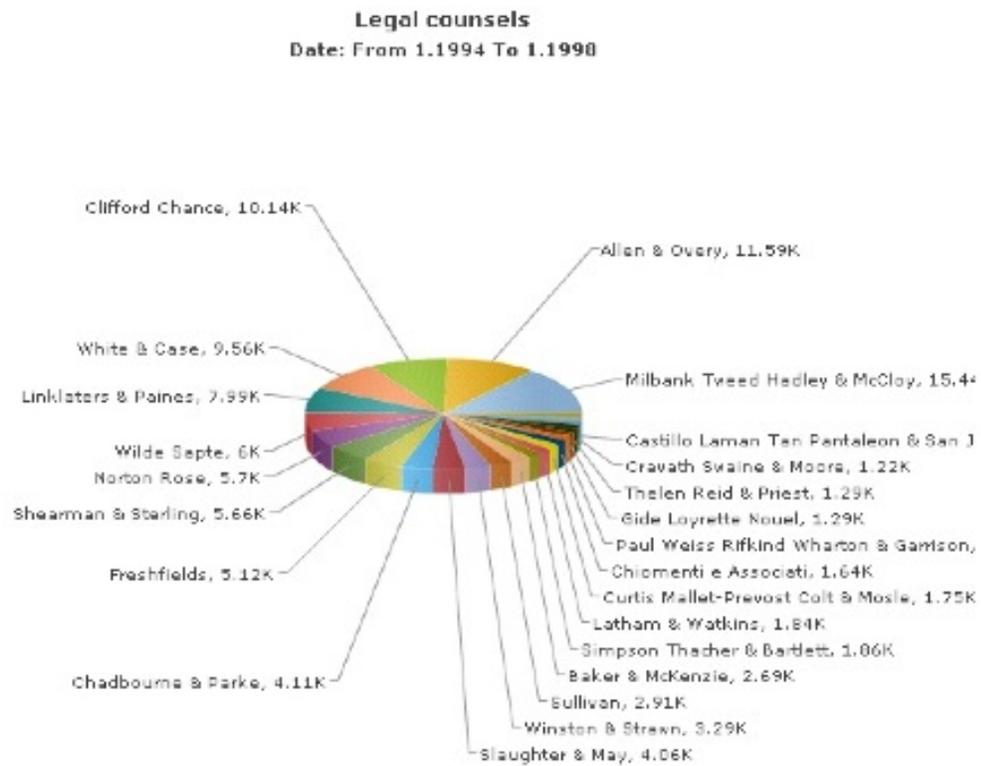
Chambers Global, Chambers US and Chambers UK each rank us in the top tier of law firms for project finance. We have recently been designated as the Global Project Finance Team of the Year by *Project Finance International* and have twice in recent years been recognized as the Global Project Finance Team of the Year by each of *Chambers Global* and *Who's Who Legal*... Our lawyers were asked both to edit and contribute to Oxford University Press's *International Project Finance – Law and Practice*, which is widely viewed as one of the leading practitioners' guides in the field (ibid).

All of the top 25 law firms now have well-developed Project Finance Groups which connect and span across jurisdictions and financial markets. "Other law firms with origins outside of the US, including Allen & Overy and Freshfields, have been active in the US P3 space, combining their US practice with legal expertise gained in P3 transactions in the UK" (Project Finance International, 2009, p. 55).

Most of those groups, such as Milbank's, pre-date the PPP era of diffusion and application. New York Giants were organizing project finance deals for private-to-private-

partnerships (e.g., IPP's PPA and Oil & Gas) and developed expertise and experience in them. Figure 19 - Legal counsels - 1994-1998 shows that the top Legal counsels worldwide from 1994 to 1998 are US organized LLP's and UK organized firms such as Norton Rose and Clifford Chance (see chap 4 for UK law firms' project finance groups historical practices).

Figure 19 - Legal counsels - 1994-1998



(Project Finance International, 2011)

NCPPP encompass not only the law firms' interests – the fact that some law firm are not member doesn't change this – but also the management consultant sector's wide interests, as well as investment banking, while indirectly fostering other industrial interests such as construction and maintenance conglomerates. In the UK, as we saw in Chapter 3,

law, management and investment sectors were at the heart of PF's ideational translation for public sector application; a product they had been selling for decades to private clients with whom they were familiar. For PPPs to happen, ideational translation and diffusion were needed in conjunction with a rallying rhetoric.

In contrast to the UK, the management consulting industry didn't have centralized access to power in America. The US, like Canada, has a decentralized system of government, where states or provinces have their own prerogatives over infrastructure financing for themselves and local governments. This fact is acknowledged by the industry itself as a hurdle to close PPP deals. PriceWaterhouseCooper (PwC), in a report entitled *Public Private Partnerships: The US Perspective*, reported that only 25 states have "enabling-legislation" and that without it:

Counties, municipalities, regional transportation authorities, and even state agencies do not have the authority to move forward with the most effective method of procurement. This is especially true for public-private partnerships because they typically require transacting a structured finance deal (PricewaterhouseCoopers, 2010b).

Whereas in the UK, where centralized access to the executive was enough to diffuse the idea of a wide application of PF to the public sector, in the US legislative changes had to be made by the legislature before the executive – even if they had been convinced - could buy the PF product. Supporting the NCPPP was an important investment for the FES. Both PwC and KPMG – which are also top financial advisors in the UK (see Chapter 3) – are respectively funding members and sponsors of NCPPP; their offices span the Atlantic.

However, the financial advisory market in the US is dominated, not by management consulting firms as in the UK or Canada, but by the investment arms of banks (e.g., Macquarie) or by investment banks (e.g., Barclays). In Canada, the investment activities of banks have been regulated to an extent unseen in the US where there is a separation between deposit banks and investment banks. In the US market those legislative limits are nonexistent and they are allowed not only to offer to underwrite new debt, but they also advise PF clients to an extent unmatched in the countries studied here and compete directly with UK management consultancies such as PwC and KPMG. Table 6 - Financial advisors - 1994-2012 - shows the top 25 financial advisors to the PF's US market.

Table 6 - Financial advisors - 1994-2012 - US

Rank	Financial adviser	Total debt amount (\$m)	Number of deals
1	Credit Suisse	25093	34
2	Lehman Brothers North America	12656.4	14
3	Goldman Sachs & Co	12338	11
4	Goldman Sachs	6251	3
5	WestLB	4635.3	8
6	Macquarie Securities	4205	2
7	KPMG LLP	3334.63	3
8	NM Rothschild & Sons	3163	2
9	JP Morgan Securities	2921	4
10	Paribas	2758	1
10	Scotia Capital Markets	2758	1
12	Citigroup	2693	3
13	Royal Bank of Scotland - RBS	2690	5
14	DePfa Bank	2583.91	3
15	Macquarie Group - MGL	2502.88	3
16	Royal Bank of Canada	2386.83	2
17	Citibank	2360.4	4
18	Macquarie Capital Advisors	2357.06	4
19	HSBC Securities	2322	2
20	Deutsche Bank	2282	2
21	KPMG Corporate Finance	2176	2
22	Barclays Capital	2155	3

23	HSBC	2102.2	2
24	Societe Generale	2088.4	4
25	Lehman Brothers	1987	2

(Project Finance International, 2011)

The banking industry has been involved in private-to-private project finance since the beginning of its application in the US and particularly following the structuring by PURPA of the IPP market, which banks have financed without much recourse to management consultancy firms. For investment banks, PF has a component of risk which, like the Collateralized debt obligation²⁷ (CDO's) they created in the 2000's, can be overpriced, and hence is the target of larger revenues than traditional loans (Longstaff & Rajan, 2006). Big banks, like big consultancy and big law firms – which can be found in the Project Finance Sector's Top 25 – have offices internationally: Credit Suisse, ranking first in the US, has 405 offices in 55 countries.

As a global bank with a long tradition, Credit Suisse is strongly anchored within its industry and the regulatory environment. The bank also plays an active part in the social and cultural life of its target markets. This results in an *extensive network* of organizations and authorities, *with which Credit Suisse maintains an intensive exchange of ideas and information* (emphasis added, Credit Suisse, 2012).

Goldman Sachs, a renowned investment bank founded in 1857 in New York, has a long history of financial engineering for state and local governments. As the bank states,

²⁷ As Longstaff put it: “It is easiest to think of a CDO as a portfolio containing certain debt securities as assets, and multiple claims in the form of issued notes of varying seniority. The liabilities are serviced using the cash flows from the assets, as in a corporation. Although CDOs existed in various forms previously, it was only in the mid-1990s that they began to be popular” (Longstaff & Rajan, 2006, p. 3).

“[f]or over half a century, our firm has helped state and local governments get the funding they need to strengthen their infrastructure and build projects that promote growth” (Goldman Sachs, 2012). But investment arms of banks like Goldman Sachs don’t simply lend to already completed projects, they also sell advisory services, which promote greater use of their own services.

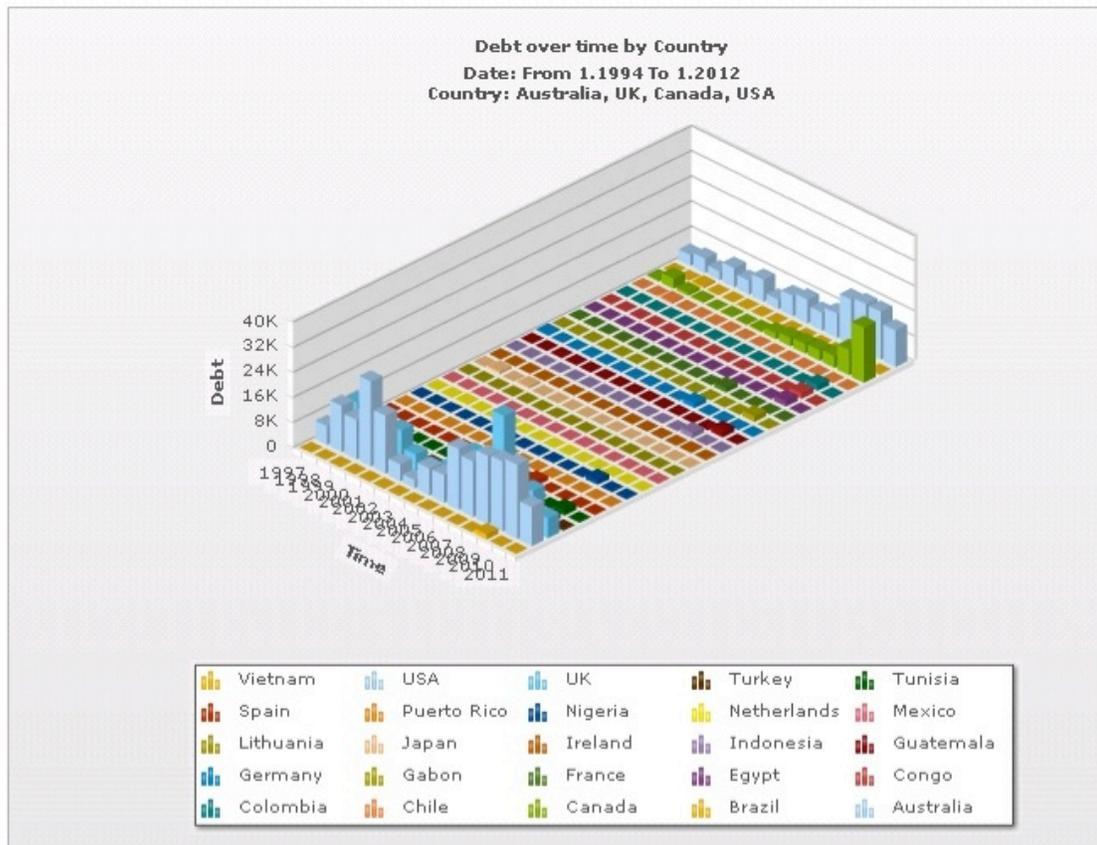
We assist issuers in *creating a financing structure, marketing and placing debt for both public- and private-supported facilities*. In the public-private partnership context we provide *advisory services to assist our clients in the negotiation and bidding process* (emphasis added, *ibid.*).

Advisory services include “water and wastewater systems, civic and convention centers, schools, libraries, airports, highways, mass transit and housing” per project financing scheme. As management consultant experts, Sachs “professionals work closely with these issuers or clients, providing financing, underwriting, risk management and public-private partnership investment banking services” (*ibid.*). Credit Suisse and Goldman Sachs practices aren’t unique; the top 25 investment arms of banks all offer such services.

In the US, investment banks benefited from the long history of engineered finance to become the leaders of the new project finance product in the 1980’s. The long history of bond financing coupled with the development of PURPA’s IPP’s could have enabled the US to become the leader in PPPs: but it didn’t happen, even if they were, and still are, leaders in the consumption of the PF product for private-to-private partnerships (see Figure 20 – PF debt by country – 1994-2012). To reap the full potential of the massive public market, the case for the “US will require demonstrating to public officials and taxpayers

alike the tangible benefits in cost savings and efficiency” through positive efforts be they direct or indirect (PricewaterhouseCoopers, 2010b, p. 2).

Figure 20 – PF debt by country – 1994-2012²⁸



(Project Finance International, 2011)

Lobbying and diffusion of ideas about PPPs were needed to bring down this particular barrier in order for the product to be saleable in the public sector. Without entry to a centralized decision making center, with legislative barriers, and in some cases, constitutional prohibitions, the idea of PPP needed to be diffused differently in the US than

²⁸ Debt is defined as Project Finance International's definition of Project Finance debt: non-recourse and limited recourse, non exclusively (2011).

in the UK, since a positive discourse was necessary to foster legislative action. The NCPPP would become rapidly, with growing financial support, the hub of diffusion for an industry's ready-made product.

1.26 Making explicit the diffusion efforts

It is really early 2000's that NCPPP would increase its diffusion effort to a notable level. In 2000, a 'Three-Year Business Plan' was adopted by NCPPP's Board and Executive Committee (National Council for Public Private Partnerships, 2000). Among the Plan's goals:

- Increase membership by 35 %;
- Raise the visibility and credibility of the NCPPP;
- Conduct two regional conferences and one special event;
- Establish two institutes;
- Broaden programs to include more state / local concerns; and
- Increase and diversify the NCPPP revenue stream (ibid.).

Only a year into the Plan, "the Council has been successful in meeting a high percentage of these goals. Membership has grown by 28 % (YTD), through the efforts of Vice President for Membership Ken Butler (*Capital partnerships*)" (emphasis added, National Council for Public Private Partnerships, 2000). To boost the diffusion power of NCPPP, credibility had to be gained through visibility; NCPPP had to become the 'Reference' in PPPs. This was achieved with actions such as:

- Members and staff made nearly twenty (20) speaking engagements on behalf of the Council;

- Articles illustrating the value of partnerships are now appearing in major publications, such as *Engineering New-Record* and *City and County*;
- *Insights* was revised, offering improved content and produced at a lower cost;
- A revised Membership Directory has just been published;
- The role and content of the NCPPP web site has been expanded, resulting in a 50 % increase in the number of "hits"; and
- Working relationships have been established with a number of key public interests groups (National Council for Public Private Partnerships, 2000)

The year 2000 marked not only the start of a new millennium, a new century, and a new decade, it opened a new set of initiatives aimed at diffusing the PF product for the public sector in the US. The new concept of Regional Conference Development was launched, as well as a series of new workshops.

[T]hree highly successful sessions were held, focusing on contract monitoring, financing of partnerships, and human / labor relations. In each, an outstanding faculty of experts from both the private- and public-sectors discussed key points in a format that is highly interactive with meeting participants. The result has been extremely high ratings on the value of these sessions, so much so that this series will be repeated in 2001, with additional sessions held outside of the Washington area (National Council for Public Private Partnerships, 2000).

While workshops are interesting, the marquee event of NCPPP for 2000 onward was, and still is, the ‘Leadership Dinner.’ This highly prized event is reserved for ‘Sponsor

Members' only. In 2000, the Leadership Dinner was held with US Congressman Tom Davis. What Sponsors look for in an event like this, is that “[t]his informal setting allowed for a candid discussion between nearly 50 NCPPP members and the Congressman. Additional Leadership Dinners are being planned for later this year and next” (National Council for Public Private Partnerships, 2000). This is the perfect environment for soft lobbying on enabling legislation.

The same year, the first Federal Executive Technology Partnerships Forum was organized. “Over two dozen senior people from NASA, DOD, NIH, USDA, and a host of other agencies participated in this day long exchange of techniques for developing effective partnerships in the area of technology development” (National Council for Public Private Partnerships, 2000). This new arena for diffusion was acknowledged as very interesting, with a great deal of potential for development. In fact, “[t]he response to the meeting was so positive that a second forum will be held in 2001” (National Council for Public Private Partnerships, 2000). NCPPP was co-sponsor, with the UK based City & Financial Corporation (see chapter 4 for the full analysis of C&F Corp), for the development of the Global Summit for PFI/PPP, which started in 2000.

The development of the memberships from 1990 to 2000 led to the idea of segmenting the diffusion process. As the Annual report states, “[e]fforts to develop Institutes within the NCPPP have continued, with expectations that several (one for the water industry) could be formed within the next few months” (National Council for Public Private Partnerships, 2000). It is important to note that “[t]hroughout all of these activities, there has been a conscious effort to represent the *broad range of interests* reflected in the Council's Membership” (emphasis added, National Council for Public Private Partnerships,

2000). The industry's broad range of interest is part of the coalition of interest fostering PPPs worldwide.

Over 2001-2002, NCPPP continued the "process of growth and rejuvenation." Particularly, "2001 saw the Council provide more programs, expand cooperation with industry associations, improve its financial position, expand staff and relocate its offices" (National Council for Public Private Partnerships, 2001). Examples of diffusion interface abound. For 2001 alone:

- Design-Build Institute of America's Water/Wastewater Odyssey: NCPPP was a cosponsor and provided a full afternoon of sessions on public-private partnerships in water/wastewater. The meeting generated a small income for the Council. Leadership Dinner with Angela Styles, Administrator of the Office of Federal Procurement Policy. This event for Sponsor and Sustaining Members led to the formation of the OFPP Task Force ... The meeting generated a small income for the Council.
- DoD Enhanced Leasing Workshop: This was the most successful workshop NCPPP has conducted to date. Senior DoD personnel and NCPPP Members provided program content, with an audience of nearly 100 attendees (overwhelmingly from the public-sector). The meeting generated a good income for the Council.
- New York Conference Of Mayors (NYCOM): NCPPP worked with NYCOM and the Maxwell School of Business to provide a workshop on development of public-private partnerships, financial management and human relations. Over 60 mayors, city managers and directors of public works

participated. The response was sufficiently positive that a second "follow-up" meeting is being planned for 2002. The meeting generated a small income for the Council.

- American Road & Transportation Builders Association's Public-Private Ventures Conference: NCPMP was a cosponsor of this event, with a number of Council members serving on panels. This may be the first step in developing a more coordinated series of programs with ARTBA (see Institutes, below). This meeting did not generate any income.
- Board Forum with Assistant Secretary Lynn Scarlett: To be held in conjunction with the Annual Conference. This meeting will not generate any income for the Council.
- 14th Annual Conference, October 24-26: While turnout has been affected by aftermath of the September 11 incidents, turnout will exceed that of the 2000 meeting. This meeting may only break even, as a result of lower registration numbers than expected.
- Federal Technology Partnership Forum: Scheduled for November, this repeat of last year's event appears to be forming a core of people interested in creation of an institute within NCPMP. This meeting will generate some income for the Council and in addition, general funding support for on-going activities may be coming from several federal agencies (National Council for Public Private Partnerships, 2001).

With new staff increasing the administrative capacity of NCPMP in 2001, the “groundwork was laid for cosponsoring of a two or three day conference with the Illinois

Municipal League (Spring, 2002), as well as possible additional co-sponsorships with DBIA, ARTBA and water-related associations” (National Council for Public Private Partnerships, 2001). Starting with the link that the founder and president Robert ‘Bob’ Herbert had in the industry’s water sector, the NCPPP started to incorporate industrial associations directly in its structure.

During the first two quarters of 2001, integration of the former Water Industry Council into the NCPPP was completed, with the formation of the Water Institute of the NCPPP. A meeting of senior people of almost all of the national water companies was held in Woodcliff Lake, NJ in June to facilitate this process. The newly elected Chairman of the WI is Wayne Morgan (American Water). Full development of programs and activities was delayed for a short period with the creation of another association, the Water Partnerships Council, until a clearer definition of relationships between the WI and WPC could be determined. Programs for the NCPPP's group are now beginning to be developed. To date, the WI has assisted with the development of programs for the DBIA conference and the NYCOM meeting (both noted above). In addition, the WI will be conducting a series of seminars on GASB-34 for local officials, under a \$10,000 grant from the EPA (National Council for Public Private Partnerships, 2001).

A real estate institute and a transportation institute were also under review for incorporation into NCPPP in 2001-2002. More specifically, “[u]nder the leadership of John Stainback (LCOR), this group is taking shape. Meetings to develop cooperative programs

were held with the Urban Land Institute and other related associations” (ibid). At the same time, “Ken Butler (CAPITAL PARTNERSHIPS, Inc.) [spearheaded] discussions [...] between the NCPPP and ARTBA as to how to most effectively combine the resources of both organizations” (ibid).

The industry created venues where soft lobbying could be exercised. Starting in 2000, the Federal Technology Partnership Forum, an industry group, was created – with public sector financial support - to enable ideational translation to the public sector. “This group's first meeting was in November of 2000. Over 20 federal agencies are participating in the second Forum, scheduled for November of this year, and supporting funds for the activities of this institute are projected to be received from several agencies” (National Council for Public Private Partnerships, 2001). This first trial was successful; the “[r]esponse to this session was very positive and has led to discussions for the formation of an institute within NCPPP for this unique subject area” (ibid). While the creation of those venues for interrelations between the industry’s broad range of sectoral interests and the public sector are interesting, it is truly with the increase in the positive actions of NCPPP’s leadership toward communication exercises that we can acknowledge its importance to the industry.

According to NCPPP, “The addition of professional staff in this area has led to a substantial improvement in the quality of NCPPP publications and the scope of these publications and communications efforts” (National Council for Public Private Partnerships, 2001). Among those,

- Through a series of E-mail outreach efforts and improved content of our web site, the number of visits per month has increased at a remarkable rate

(from approximately 2,000 per month to over 35,000 per month). Reformatting of the web site and a substantial increase in the content of that site are expected to begin before the end of this year...

- Press inquiries for interviews with print media continue to increase (largely from trade and regional press). In addition, an interview of Rick Norment was included on ABC's Business Now show in August, as part of a report on a Council Member, MAI.
- Rick Norment continues to have a number of speaking engagements. Other than at NCPPP sponsored or cosponsored events, Norment has also spoken to:
 - Southern Growth Policies Board -- a keynote address to over 300 state economic development directors and the Governors of 15 states at their Annual Conference held in Hot Springs, AR.
 - Volpe Transportation Center of DOT -- a two-day seminar of 75 public- and private-sector people on partnerships in transportation, held in Boston, MA. A publication of the proceedings will follow within a few months.
 - Performance Institute Conference on Partnership in Delivery of Public Health Services in Atlanta, GA with an audience of approximately 150.
 - Academy for Educational Development (a non-profit contractor for the US State Department) -- two briefings held in Washington, DC for international delegations (largely from the third-world).
 - Fairfax County, Virginia Millennium Series -- a keynote address to over 400 county employees (including a closed circuit telecast), followed by a panel discussion of public-private partnerships.

- Performance Institute Conference on A-76 in Washington, DC with an audience of approximately 80 people, largely from federal agencies (National Council for Public Private Partnerships, 2001).

Other proof of industry's use of NCPPP as a diffusion tool is that "Council Members are dedicating an increasing amount of their corporate resources (corporate personnel time and that of their consultants) to this effort" (ibid). Hard lobbying was intensified for the first institute early in 2002.

NCPPP has been active in providing information to balance the report provided by the *Water Infrastructure Now* coalition's public policy efforts. This effort included a briefing for staff of Members of the US Senate Environment and Public Works Committee ... This issue has led to a closer working relationships with the US Conference of Mayors, ... Finally, the NCPPP has made a number of submissions to the General Accounting Office (GAO) in support of their study of partnerships in water/wastewater (National Council for Public Private Partnerships, 2001).

Starting with the NCPPP's 2002 Annual Report, we can clearly see the increase in administrative capacity of the Council, which required offices to be relocated in 2001. For the first time, the report is not simply a one-page Word document with bold formatting, but professionally laid-out report. The new resources and the increasing funding "has greatly improved the ways in which the value of PPPs are communicated to public officials, the press and the general public" (National Council for Public Private Partnerships, 2002).

To give a sense of the power of ‘partnering’ compared to ‘privatizing’, NCPPP’s past as the PC is never mentioned and the official story is that NCPPP was created in 1985 with the “primary purpose to inform and educate all sectors about how to develop and successfully execute public-private partnerships” (National Council for Public Private Partnerships, 2002). The decentralized nature of the US was a hurdle for industry and the Council’s meeting acted as a venue to address those problems and share ‘what works’ to get a project to ‘move forward’ past the many veto points.

While meetings were originally organized for industry players, incorporating public officials directly into the events began to be an objective in 2002. “Response to this approach has been impressive, with as many as 100 public officials attending individual meetings” (National Council for Public Private Partnerships, 2002, p. 7). For the first time, the NCPPP would move out of Washington, DC for the purpose of diffusing meetings. The leadership started to realize that PPPs in the US would not be fostered with an exclusive ‘education’ at DC legislators’ level.

Some of those meetings were organized for public actors to give away information about market possibilities in their own organizations. For example, the DOD *Enhanced Use Leasing Workshop* brought key officials to discuss, in front of the industry’s sectoral interest, the details and ‘how to get it right’ of the new regulations “included in the 2002 Defense Appropriations package.” At this event, “attendees were educated about the provisions of the new authority and how public-private partnerships can be developed on underutilized federal properties” (ibid).

At another meeting entitled ‘New Developments in Partnerships: Changing Opportunities at the Federal and State/Local Levels’ the conference was bringing “leaders

from the municipal, state and federal levels” to industry for ‘education’ and soft lobbying.

For example,

Keynote speakers included Senator George Allen (R-VA), Mayor Bob Elliott (Croton-on-Hudson, NY) and Dr. Paul Vance (School Superintendent, Washington, D.C.). Each discussing their different viewpoints of public-private partnerships and the experiences they have encountered. As a special session for NCPPP members, Lynn Scarlett (Assistant Secretary for Policy, Management and Budget, Department of Interior) reviewed President Bush’s Management Agenda and its plans for use of partnerships (National Council for Public Private Partnerships, 2002).

Finally, the *Leadership Dinner*, started a few years ago, “in the series of events for Sponsor and Sustaining Members” had a more diverse list of speakers. In another example,

Congressman Pete Sessions (R-TX 5th) discussed legislation that will encourage private-sector companies to manage under utilized government facilities, through the Federal Asset Management Reform Act (HR 3947). As a sponsor of HR 3947, Sessions told NCPPP members that he would like to see public-private partnerships as an option to the asset management problem (National Council for Public Private Partnerships, 2002, p. 9).

As it is now clear, “educating the public on public-private partnerships” is NCPPP’s main focus and this is why “the communication programs of the Council are one of its most important” (National Council for Public Private Partnerships, 2002, p. 10). As

shown, with the usage of different types of diffusion tools, “NCPMP is effectively communicating its message about public-private partnerships to federal officials, state and local decision-makers, private companies and the general public” (National Council for Public Private Partnerships, 2002, p. 10).

Recommendations were also made through the production in 2002, by NCPMP, of a White Paper on Partnerships entitled *For the Good of the People: Using Public-Private Partnerships to Meet America’s Essential Needs*. This White Paper was heavily geared toward diffusion: “The paper includes the practices, benefits, values and numerous case studies and evidence from credible sources that public-private partnerships are for the public good” (ibid). Then the document was sent to key public officials to educate them about PPPs, but has been also diffused through public organization working as NCPMP’s hub repeater and amplifier. “It has been circulated to numerous public officials including Congressmen, Mayors and Town Officials, and was included in information packets at the National Council of Lieutenant Governors and the Conference of Mayors meetings” (National Council for Public Private Partnerships, 2002, p. 11).

All of this diffusion is done on behalf of the industry through the NCPMP. At a glance, the Board of Directors’ composition reveals that industry’s interests govern the Council. Members of the Board are:

- Ken Butler, Capital partnerships, Inc.
- Steve Claiborn, Lehman Brothers
- Michael Deane, United Water Resources, Inc.
- Dan Elias, Elias Group
- Roger Feldman, Bingham McCutchen, LLP

- Robert Hebert, ECO Resources, Inc. Douglas Herbst, CH2M Hill
- Don Levine, USFilter Operating Services, Inc.
- Ronald Lobel, Ernst & Young
- William Malarkey, Thames Water
- SUSn Mays, OMI, Inc. Wayne Morgan, American Water Works Company
- Brian Oakley, Scully Capital Services
- Keith Oldewurtel, Earth Tech
- Gabrielle Pugin, ACS State and Local Services
- Eric Petersen, Hawkins Delafield & Wood
- Deborah Photiadis, Maryland Council on Management & Productivity
- David Seader, Seader Associates
- Art Smith, Management Analysis, Inc.
- Diane Shute, Grant Thornton, LLP
- Eric Schweizer, US Water
- Richard Splete, HDR Engineering, Inc.
- John Stainback, Stainback Public/Private Real Estate LLC
- Mark Wagner, Johnson Controls, Inc.
- Walter Winrow, Poseidon Resources Corporation

The same is true of the executive committee composed of:

- Chair: David Seader, David Seader Associates
- President: Robert Hebert, ECO Resources, Inc.
- President Elect: Don Levine, USFilter Operating Systems, Inc.
- VP, Finance/Secretary: Art Smith, Management Analysis, Inc.

- VP, Information: John Stainback, Stainback Public/Private Real Estate LLC
- VP, Marketing: Brian Oakley, Scully Capital Services
- VP, Membership: Ken Butler, CAPITAL PARTNERSHIPS, Inc.
- VP, Policy: Michael Deane, United Water
- VP, Programs: Mark Wagner, Johnson Controls, Inc.

Members of the board of directors, and executive committee, highly involved in their own networks and organizations, felt that the need for public education in the US is strong, and improvements were suggested. Following the reforms of the organization in the early 2000's, the industry's membership started to grow quickly. "Key to this has been the expansion of programs and services, coupled with the efforts of some current NCPPP members to assist in recruiting new members" (National Council for Public Private Partnerships, 2002). By 2002, 46 new organizations had joined the ranks of the organization, "with a majority of them supporting NCPPP at the Sponsor or Sustaining levels" (ibid). But the really interesting fact is that "Public Membership is an increasing area of focus for recruitment." There are no better ways to diffuse the idea than by having organization's leadership internalizing positive ideas about the usage of PPPs than by having the public sector onboard.

While the amount of public agencies paying dues has reached a record number, and attendance by this sector at NCPPP meetings is at an all time high, the mission of NCPPP can be best fulfilled by making this segment of membership *as inclusive as possible*. Accordingly, the Council has initiated new programs to encourage public sector membership, which include: Meeting/Membership packages, multi-

year membership packages, E-partnerships, and a Dues Credit program for recruiting members (emphasis added, National Council for Public Private Partnerships, 2002, p. 12).

These actions for the public sector are coupled with Partnerships and Leadership Awards for an even deeper internalization. Public servants and politicians could be recognized for their dedication to PPPs in their own organizations, such as Senator Walter Stosch (VA) who was the 2002 recipient of the Leadership Award. The Partnerships Awards were simultaneously presented to both the public and private partners. These prizes are aimed towards diffusion by showcasing those who “have excelled in the public-private partnership arena [and] to people who have proven their leadership in utilizing and promoting public-private partnerships” (National Council for Public Private Partnerships, 2002, p. 14).

1.27 Conclusion

This chapter has demonstrated that the product of PF was not used widely in a systematic way before PURPA’s restructuring neither of the energy market nor in any other sector. PURPA’s requirement for utilities led to IPP’s that necessitated PF to be made available, in a systematic way, through the guarantee offered by the PPA. This was something more complex than the first generation of PF used in 1930 by General American Oil, which were not guaranteed. To be sure, until PURPA the first PF products, such as those used by General American Oil, were used in an ad hoc fashion without any legislative support. PURPA re-structured the market by providing a new form of guaranteed revenue stream that, in turn, necessitated more complex financial engineering and generated a more steady flow of projects.

Associations were created as industry interests grew for the product. The first associations were founded in 1982 for the energy sector, but soon other associations were created with a broader scope, such as the PC in 1985 and the NCPPP in 1991.

By describing the history of PF's usage, it has been shown who was advocating and diffusing it. The industry was structuring PF partnerships itself before associations were created to advocate for the product. Legal firms were in a good position to diffuse the product through their many offices worldwide – as banks and management consultants – and we saw that they had dedicated practices before hubs of diffusion were created, but this was not enough to generate the growth in a new market.

The US was too decentralized and legislative changes were needed at all levels – something only possible through long lasting 'educational development.' NCPPP, renamed in 1991, slowly took shape as a credible actor by the public sector around 2000; it had taken a decade. Its educational efforts would contribute to the enactment of enabling legislation in 50 % of the states by 2009, hence, opening the door to PPPs comparatively late and for a limited number of states only. Hence, the institutional arrangements in the US have significantly delayed PPPs, when compared to other countries.

The lack of privatization experience prevented many of the large consulting firms from gaining the experience and connections that they achieved in the UK, at first creating an eclectic coalition of interests which had difficulties in proposing enabling legislations. The NCPPP would only later become the coalition's voice to help alleviate the constitutional impediment to PF and, hence, PPPs. The decentralized nature of the institutional arrangement created a need for 'education' that was stronger than in the UK; to be sure, in the latter there was no hub, no association or organization doing the

'education' done by NCPMP or CCMPMP (to be seen in the next chapter). Institutional barriers retarded the applications of PF in the public sector and much of the lobbying efforts were devoted to removing them. While the PF product was the same in the US and the UK from the 1970's forward, the timing of its application and development was – and still is – dependent on those variables. This is how we can explain why the US, after having seen more PF deals closed than any other country, and having been the first country to experience primitive PF, has been qualified 'a laggard' in PPPs by the industry.

CHAPTER 5 – THE CANADIAN EXPERIENCE: WEAK PROJECT FINANCE, MODEST PRIVATIZATION EXPERIENCE AND LATE PPPS DEVELOPMENT

The new members of the Board of Directors bring a tremendous amount of business acumen to our organization. They possess an impressive cross-section of Canadian private sector expertise in fields such as engineering, banking, finance and the law. Their senior executive experience is matched by an entrepreneurial passion well-suited to a new Corporation such as PPP Canada. – Greg Melchin, Chair of the Board, PPP Canada, 2009

Public-Private Partnerships are *en vogue* in Canada. From bridges to highways and schools to hospitals, the number of PPPs – completed, underway and in the project pipeline – is impressive. “Canada is a blooming market for PPPs” advised the Finance minister at an industry dinner organized by the Canadian Council for Public Private Partnerships in 2008. While it is clear that the project pipeline is growing, as we shall demonstrate, most of these deals are at the provincial level. Since 1987, when the federal Department of Public Works published a request for ‘expressions of interest’ for the construction of a fixed link to Prince Edward Island, institutional development has mainly been driven by a few provincial leaders; first advocated in BC by PartnershipsBC, then diffused in Ontario through Infrastructure Ontario, and in 2005, translated into French in Québec with the Agence des PPP. But the provincial dominance would change with the creation of Public

Private Partnership Canada (PPP Canada) in 2008. These Canadian developments happened later than in the UK and with a very decentralized flavor.

The US's PPP experience was shaped by PURPA's effect on the PF market; the many veto points characteristic of this institutional arrangement; few experiences with privatization; and the legislative and constitutional impediments to project finance. Conversely, Canada is, like the UK, a Westminster regime with the associated politico-administrative model for decision-making. While the UK and Canada share this system of government, Canadians have experienced a very late – even later than the US - and heterogeneous development of the application of PF for public infrastructure.

The main purpose of this chapter is to highlight the importance of the maturity of the PF industry in Canada relative to the same period in the US and the UK as an important variable while describing the different phase of diffusion. Canada hasn't had the experience of the US and the UK in the development of their energy sector where the birth of primitive and modern project finance happened. In fact, in Canada, PF techniques were not used until 1981 (Kleimeier, 1995) even if oil started to be exploited in 1914 at Turner Valley and later, the oil sands in 1962, at Fort McMurray all the while the electricity sector was being nationalized.

1.1 Toward nationalization of independent electric supplier

In Canada, in contrast to the UK and US, project finance was not used in the energy sector in the former to the extent they were in the latter, as we will see shortly. While petroleum extraction created the UK's market for project finance, as the independent power producer did in the US, Canadians in BC (1961) and Québec (1963) would move toward nationalization of their independent electricity providers (Ontario had nationalized independent power producers in 1901, as had Nova Scotia in 1920). This had the effect of

eliminating one of the possibilities for a 'natural market' for the PF product as seen in the US. As will be seen in Figure 21 below, PF wasn't used extensively before the end of the 1990's in other sector such as transportation and telecom. This is not to say that it hasn't been used before, as reported in Chapter 2 from Kleimeir's data, but only to highlight that it wasn't being used as extensively as it was in the US and the UK at the same time.

Similarly, as we will see in the next section, while the oil sands' slow development would lead in 1975 to a joint-venture between governments and oil companies, PF was not used. This particular trajectory would delay the development of an experienced FES and, hence, contributed to the delay seen with the PPP phenomenon in Canada.

In Ontario, 'nationalization' of the electricity sector began in 1902 with the creation of the Ontario Hydro Commission. It would be the "world's first publicly owned power authority" (Niagara Falls Thunder Alley, 2012). Having almost depleted their fuel-wood supply, a great deal of coal was being imported from Pennsylvania and Alberta to fuel the sector. Concurrently, private monopoly power started to be felt by consumers (Freeman, 1992, p. 179). "The Toronto Electric Light Company had a near monopoly on supplying electricity to cities." The "[p]roblems with privately owned companies started to be felt politically" as "[t]his company was over charging its customers for electricity and being selective as to how much power a particular industry would get" (Niagara Falls Thunder Alley, 2012). The same problem existed with utilities in the US as we saw in Chapter 5, but Canadians had a different solution than the regulatory apparatus of their counterpart.

During the Ontario Provincial election of 1905, the main issue became "Niagara Power." At the urging of Adam Beck, Mayor of London Ontario, the Provincial Conservative Party ran on an election platform of "water power of Niagara should be free." The Conservative Party

won the election. Premier James Whitney immediately declared that no further private franchises would be granted for the generation of hydro-electric power at Niagara Falls. [They] created Ontario Hydro Electric Power Commission... the world's first publicly owned power authority. Private companies fought hard to oppose its creation (Niagara Falls Thunder Alley, 2012, but see Freeman 1992 for a longer discussion).

As a proponent of the project, Adam Beck soon discovered that the private utilities didn't wanted to invest in improvements to their transmission lines. This situation had economic effects, and was negatively impacting the development of Toronto. Since Beck was not able to generate power at that time – he only had the power to buy and distribute it – replacing the 60,000 volt transmission line became his first priority. “The first major project of the Ontario Power Commission was to build a 110,000 volt transmission line from Niagara Falls to Toronto” (Niagara Falls Thunder Alley, 2012).

Neil Freeman, in *The Politics of Power: Ontario Hydro and Its Government, 1906-1995*, explains that by 1920, the Commission was producing power and was overseeing its delivery with the political mandate of electrifying rural areas of Ontario (1996). From 1920 to 1960, the Commission built infrastructure through budget allocation from the province and was operating as an integrated organization. Being a public monopoly with extensive planning capacity and the possibility of cohesive actions to foster development, created the possibilities for technological advance. For example, by 1960, the Commission was the first in North America to plan (1960), develop (1967), and install ultra-high voltage transmission lines capable of transmitting up to 500,000 volts. These lines were used to carry power from hydro sources in northern Ontario to areas of heavy consumption, such

as the urban areas of Toronto, London and Ottawa. This development continued throughout the 1970's as part of the comprehensive plan to deliver electricity reliably and efficiently to all parts of Ontario and achieve a common provincial standard.

In 1974, the Power Corporation Act reorganized the Commission into a crown corporation: Hydro Ontario was born. From 1974 until Mike Harris' *Energy Competition Act* of 1998, Hydro-Ontario was plagued by several crises notably the Darlington Nuclear Generating Station construction problems and the other nuclear facilities' maintenance problems. Those problems led to various reports, including one from the Macdonald Committee, which can be seen as the key to the opening of the energy sector to competition:

Electricity industry restructuring in Ontario began in 1996 with the release of the Macdonald Committee's report on competition in Ontario's electricity system. In 1997, the provincial government's White Paper described its plan to reform Ontario's electricity industry and led to the passage of restructuring legislation: the *Energy Competition Act, 1998*, and the *Electricity Act, 1998* (Ontario Power Generation, 1999, p. 14).

The legislation was based on the belief that competition would lead to lower rates, and included two core elements:

1. Competition in energy sales at both the wholesale and retail levels;
2. The breakup of Ontario Hydro, the vertically integrated electric utility monopoly in Ontario, into an unregulated generation business, a regulated wires business, an Independent Electricity Market Operator (IMO)) and two smaller specialized entities (ibid).

As a result, in April 1999, Ontario Hydro's assets were split into five successor entities.

Ontario Power Generation Inc. (OPG) assumed the generation business formerly operated by Ontario Hydro. Hydro One Inc. (formerly Ontario Hydro Services Company) operated the transmission, distribution and energy services businesses. The remaining three, operating on a not-for-profit basis, are the Electrical Safety Authority, the industry's safety inspection agency; the IMO, responsible for operating and administering the new market and ensuring reliability and access to transmission and distribution systems; and the Ontario Electricity Financial Corporation, which is responsible for managing and retiring Ontario Hydro's outstanding debt and other obligations (Ontario Power Generation, 1999, p. 14).

The Ontario energy sector (power generation) was not in a state where PF could prosper and develop. In the US PURPA created a PF market in 1979, but Ontario's publicly owned energy sector had a negative impact on the development and maturity of the PF's utilization experience in Toronto's financial market. Ontario was not an exception. BC and Québec had similar developments, which prevented the early development of PF that the US and the UK had experienced in the energy sector.

1.2 Nationalization à la québécoise with Hydro-Québec

Nationalization took place later in Québec than in Ontario, but was based on the same 'problems' (1930's), but with a *touche* of nationalism in the second phase of the nationalization (1963). Throughout the Great Depression, rates were unreasonably high in the 'trust de l'électricité' and the declared profits of private utilities were higher than

‘normal’ (Université de Sherbrooke, 2012). Québec’s Francophone majority was dependent on utilities owned by what they saw as an Anglophone economic elite. Philippe Hamel, René Chaloult and T. D. Bouchard saw that Ontarians had already nationalized their private utilities and had greatly benefited from this nationalization. The rhetoric was clear: if it were good for the Ontarians to get rid of the private trust, why wouldn’t it be good for us?

When Philippe Hamel, a dentist by profession, took a closer look at the actual ‘trusts’ in 1929, his findings were that “les grandes compagnies d’électricité s’épaulent mutuellement et que les mêmes intérêts dominent une large part du domaine de l’électricité” (Université de Sherbrooke, 2012). Hamel was able to argue that the rates were too high, and that the population was abused by the ‘trusts’. At the same time, Ernest Robitaille, who was writing in *Le Devoir*, published a piece in which he demonstrated, through the analysis of the annual reports of the utilities, the same problem as Hamel and concluded similarly that an intervention was necessary (Université de Sherbrooke, 2012). This would eventually lead to a public commission (ibid).

With the election of Maurice Duplessis’ Union Nationale, Lapointe’s recommendations were adopted and the Commission de l’électricité was amalgamated in a larger Commission on public services in which a Régie de l’électricité was created. Starting in 1938, the Régie would investigate the rates of the utilities, and would require a disclosure of their assets so as to evaluate their value, their internal costs, and their obligations. However, it would take until 1942 before The *Montreal Light, Heat & Power* (all of the utilities had English names, exacerbating the rhetoric at the time, hereafter MLH&P) would finally comply with the Régie.

Adélar Godbout, who became premier in 1939, was extremely vocal in arguing against the private utilities. They were acting as a “dictature économique crapuleuse et vicieuse” (Gallichan, 1995, p. 63). During 1941, several actions were made to nationalize private electricity assets. First, the minister Pierre-Émile Côté warned the Beauharnois Light, Heat & Power that Québec would take possession of its assets, either unilaterally, or with a bilateral agreement. Second, the emphyteutic lease²⁹ of the National Hydro Electric Company was cancelled on the basis that the company didn’t respect its obligation toward the development of the region of Carillon’s facilities. At the same time, the report on MLH&P was released and demonstrated clearly that its value had been inflated in order to charge higher rates. This inflated value had been used to justify rate increases before governmental bodies.

On October 8th 1943, premier Godbout introduced Bill 17 with the intent to take control of MLH&P, Beauharnois, and of all of their subsidiaries operating the Montreal trusts. The bill created by Louis-Philippe Pigeon of Université Laval was deeply influenced by a similar piece of legislation drafted in the US for Roosevelt’s New Deal, which had created the Tennessee Valley Authority (TVA). Pigeon would create, as with the TVA, a commercial company with public ownership, called the Commission hydroélectrique de Québec. Its mandate was to produce power for the Montréal metropolitan area as cheaply as possible and, as in Ontario, to start the renovations and updates to an aging network, and to provide services to rural areas (Bellavance, 1995). After acrimonious debate, the bill was passed on April 15th 1944. The private utilities argued publicly that the days of private enterprise were numbered, while premier Godbout

²⁹ A type of lease specifying that the lessee must improve the property with construction.

attacked the MLH&P as ‘bandits’, exploiting natural resources and the population (Gallichan, 1995).

From 1944 to 1960, the number of employees in the sector more than doubled. Francophones were for the first time a majority of the workforce, and the first francophone engineer was hired. Demand would grow faster than Hydro-Québec’s supply. With the election of Jean Lesage’s *Équipe du tonnerre* in 1960, hydroelectric development continued apace. The new minister of Ressources hydrauliques et des Travaux publics, René Lévesque, would continue with the development of additional facilities (Carillon and Manic-Outardes). By the time Lévesque took office, a provincial divide had taken place between Montréal and rural areas (“*les régions*”). As in Ontario, rural areas were not well serviced by the utilities and rates were highly variable on a region-by-region basis, and much higher than in Montréal. Particularly, Lévesque would engage the Shawinigan Water and Power Company (SW&PC), which, through the pyramid amalgamation of Southern Canada Power, Saint Maurice Power, and Quebec Power, had a clear regional monopoly. SW&PC would, among other projects, collaborate for the first time on a financial engineered project in Labrador with a group of British investors operating under the British Newfoundland Development Corporation (BRINCO) to develop Hamilton Falls’ potential (Bellavance, 1995). This wouldn’t change the problem for Lévesque; Quebecers needed a coherent approach, as had been done in Ontario.

Lévesque requested a study by a small team of elite public servants of the whole ‘administrative mechanic’ required to finalize the nationalization of electricity in the province. The ‘solution’ to the ‘problem’ was simple: the nationalization of all of the remaining utilities and producing facilities apart from those used by heavy industrial companies.

The government requested secret advice from Roland Giroux and Jacques Parizeau to assess the economics of nationalizing all of the utilities. Giroux and Parizeau went to New York, not Toronto, to enquire about the possibility of getting the necessary financing through bonds. They came back with New York's assurance that the financing was possible (Hogue, 1979). Throughout 1962, Lévesque explained his plan in every forum possible, and was able to get the support of Gérard Pelletier (*La Presse*), André Laurendeau (*Le Devoir*) and Yves Michaud (*La Patrie*) who, by their own writings, would foster the sentiment that Lévesque's nationalization program was not only an economic question but an identity question as well, hence, boosting the Québécois' support. After a meeting at the fishing camp of Lac à l'Épaule, the decision was made to call an election on the basis of the nationalization of hydro-electricity. 'Maître chez nous!' was Lesage's electoral slogan and the election was won, providing a clear mandate for nationalization; it was Lévesque's victory as well. On the 28th of December 1962, Lesage's government moved, at the closing of markets, with a hostile proposition to buy the shares of Shawinigan Water & Power, Quebec Power, Southern Canada Power, Saint-Maurice Power, Gatineau Power, la Compagnie de pouvoir du Bas-Saint-Laurent, Saguenay Power, Northern Quebec Power, la Compagnie électrique de Mont-Laurier, la Compagnie électrique de Ferme-Neuve, and La Sarre Power. The executives, to avoid a hostile nationalization, recommended the purchase offer, and from the 1st of May 1963, Hydro-Québec has been the sole producer, distributor and provider of electricity in the province of Québec – apart from a few cities' own production facilities.

These facts show that the PF product was not being sold in the energy sector in the province of Québec and Ontario for important infrastructure projects because the utilities were being nationalized. While in the UK and US the energy sector was creating a mature

PF market in which the FES evolved, this was not the case in Québec and Ontario. As discussed in Chapter 1 and 2, PF is a central ingredient of modern PPPs (defined as PPFA in Chapter 1) and the FES gains experience in PF through its application; a weak and late usage of PF doesn't foster an early development of the FES' experience with the product. But Ontario and Québec were not exceptions; British Columbia (1961-2), Nova Scotia (1919, 1973) and New Brunswick (1920) would nationalize their energy production.

After having shown that the PF product was not used and had not been developed in the electricity sector, another very important sector where it could have been used intensively – at that time – was oil development, as was the case in the US and in the UK during the 1960's and 1970's. As shown in Figure 21 below, some PF were occurring in the mining sector since 1983, but only a handful of them occurred.

1.3 Developing the oil (tar) sands

While oil extraction was heavily financed through PF in the UK and in the US, Canada's oil sands were not. As we will see shortly, this was mainly due to the fact that there were technological problems until late the 1970's, and because the government of Alberta had put in place a production cap of 5 % to protect the regular oil market. The latter regular oil market started in 1904 with the Laurier Petroleum Bounty Act “which paid producers a subsidy of 1.5 cents per gallon of oil produced anywhere in Canada. By 1914, when Alberta started producing oil significantly at Turner Valley, that subsidy amounted to about \$12.75 per barrel in 2008 dollars” (Finch, 2008). From 1914 to 1948's Atlantic No.3. blowout, endeavor were financed by individual investors mostly and no PF techniques were used: in fact, the Conservation Board, under the authority of the Oil and Gas Conservation Act was seizing from time to time “wild wells” to better manage them (ibid). “The Board's draconian intervention [in oil and gas] was immediately noted ... [and]

not applauded by New York's vigilant financial community.” who could have been interested in PF investment (ibid). As Yescombe's study also point out is that Canadian Banks were not in the business lending the type of loans required for PF at the time - they simply weren't allowed to do so (2002, p. 485). With New York worried of take-over and with the absence of the Canadian banks, individual investors were frequently financing themselves.

Notwithstanding the type of financing, the regular oil production was still very low (relative to the demand) and the only alternative to reduce importation lay in the oil sands. The first oil sands project approved by the government was Fort McMurray in 1962. But “Centuries before the sands were used as a source of fuel, members of Canada's First Nations knew about their existence and used the tarry material to patch canoes. Peter Pond first noted the existence of a black, tar-like substance oozing from the ground in 1778.” (Chastko, 2004) The tar sands weren't developed in any way until the government's acquisition of the Rupert's Land from the Hudson's Bay Company in 1869: “Robert Bell's 1882 expedition to the Athabasca Basin would be the most important and far-reaching ... [he] examined the oil sands and concluded that the oil sands were part of a vast underground petroleum reservoir” (ibid).

In 1942, C.D. Howe reported that “The report that I have received to date do not indicate that we can be optimistic about obtaining a large commercial outlet for this product” (ibid, 46). Chastko proposes that “the simmering conflict between oil sands investigators in the federal government and the Province of Alberta played an important part ... Instead of combining efforts, the simmering conflict between the two groups allowed the oil sands issue to become subsumed within the federal-provincial battleground over natural resource development” (ibid). Hence it took another 20 years before the

provincial government gave the Great Canadian Oil Sands (GCOS) limited authorization to build and operate a 10,000 cubic meters per day facility. To make sure the new production didn't displace the (already hard to market) oil product,

[t]he provincial government established a policy that would limit oil sands production. According to this policy, synthetic oil from the oil sands could supplement conventional oil sales, but could not displace it. Oil from the plant could not exceed 5 per cent of total volumes in markets already supplied by conventional Alberta oil (McKenzie-Brown, Jaremko, & Finch, 1993).

In this context and because GCOS had financial limitations preventing sufficient equity from being put forward in the Fort McMurray's plant, the plant's construction was delayed during the search for a new investor. When a partner was found – Sun Oil Company (today Suncor) – the plant's projected capacity was expanded by 7,500 cubic meters. At the same time, the project went from \$122 million to \$190 million. “The larger plant received approval in 1964 and went into commercial production in September 1967. The final cost: \$250 million” (McKenzie-Brown et al., 1993).

The Suncor plant was a landmark in oil sands development. It pioneered technology for bitumen extraction and upgrading, and it was the world's first large-scale commercial plant. In the early years it was not particularly profitable, but the plant was nonetheless able to cover operating expenses from the sale of its own production. And in 1979, when federal policy permitted the company to charge world price for its oil, the plant finally became a money-making asset to Suncor. The plant found solutions to the problems of extracting a commercial grade

of oil from the sands - *problems that had been the concern of financiers, chemists, petroleum engineers, metallurgists, mining engineers, geologists, physicists and many other scientists and pseudo-scientists for many decades* (emphasis added, *ibid*).

But the Fort McMurray project was not the only one on the table in 1962. “Cities Service Athabasca Inc. proposed a 16,000 cubic meters per day plant at the site of its Mildred Lake pilot project. Including a pipeline to Edmonton, the plant was to cost \$56 million, with construction beginning in 1965 and completion in 1968” (McKenzie-Brown et al., 1993). While GCOS was approved, the Oil and Gas Conservation Board had concerns, not about conservation, but overproduction, which would lower the price of regular oil on the market. “It therefore decided not to bring too many oil sands plants on stream at once, and rejected the Cities Service proposal in favor of the GCOS project” (*ibid*). CSA would reapply a few years later with an enlarged facility (Syncrude plant). Finally, CSA would get clearance for this second project in 1969.

But between the clearance and 1973, the cost exploded and \$1 billion was needed to finish the plant.

For the consortium (formed of Cities Service Canada, Gulf Oil Canada and Imperial Oil), the choice was clear: “getting government participation in the Syncrude project” as no other vehicle for financing such a project was available (*ibid*). Mooney would get his team busy with ‘smoothing’ meetings where ‘cold calls’ had to be warmed up.

The team of seven made a dozen cross-country trips in 17 days. One breakthrough came toward the end of January, when Mooney walked unannounced into Minister of Energy, Mines and Resources Donald Macdonald’s office suite. Hearing that Macdonald was too busy to

see him (meetings all day), Mooney decided to wait him out. When Macdonald returned from Cabinet, Mooney accosted him: 'I've got to see you.' During a brief meeting the minister outlined the concessions the federal government was willing to make. As Mooney was leaving, Macdonald said 'If you tell anyone about this I'll call you a goddamned liar' (McKenzie-Brown, 2011).

The result of the team's efforts was a historic meeting for oil sands. Phone calls and informal and formal meetings would bring together many influential decision makers for a 12-hour discussion.

The chairmen of Cities Service, Imperial, Gulf and Shell were there, along with other executives from their companies. Three provincial ministers accompanied premier Lougheed: energy minister Bill Dickie, intergovernmental affairs minister Don Getty and attorney general Merv Leitch. Ontario Premier Bill Davis also brought key ministers to the negotiations. Federal players included Macdonald and Jean Chretien, president of the Treasury Board (McKenzie-Brown, 2011).

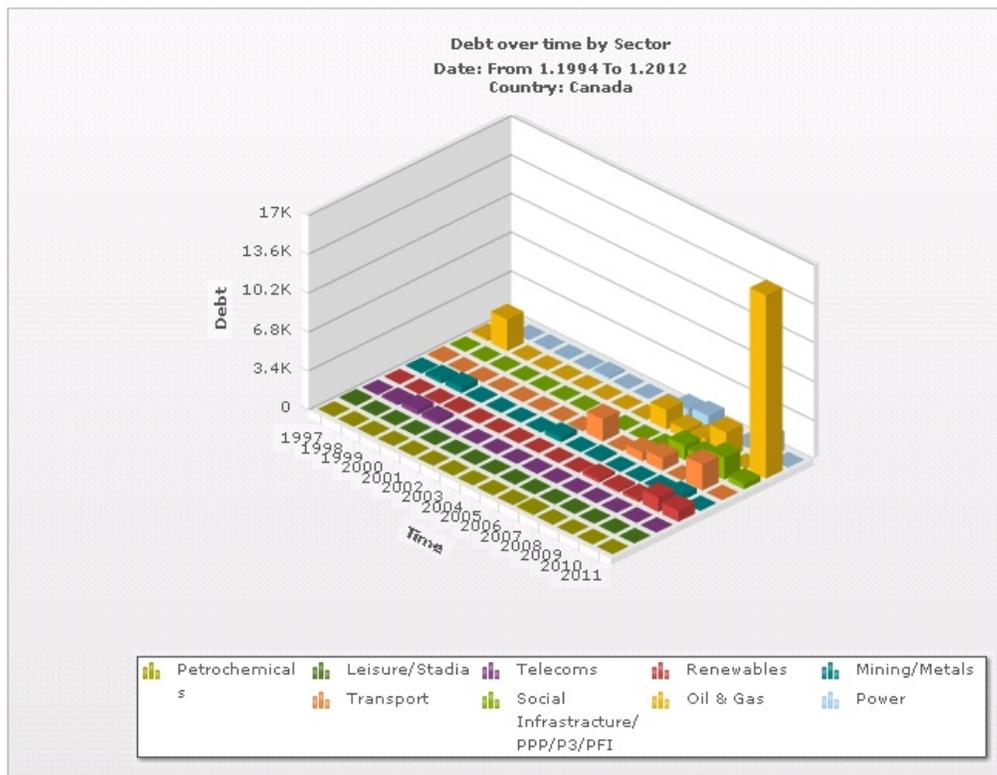
The meeting was a success. It took 18 months for corporate lawyers to draft the agreement, which would bring public monies to the rescue of the project, by taking the risk that big oil and the investment banks wouldn't take.

The plant opened in late 1978 and would lead Syncrude to a dominant market share as oil producer with the help of the 1979 oil crisis and resulting high crude prices.

The FES's project finance product was not available at the time the oil sands were being developed and the same was true with the major infrastructure project for Canadian

gas. Figure 21 - Debt over time by sector - Canada confirms the weakness of the FES – for all types of complex finance products - in Canada and its very late application, when compared to US and the UK. Let's recall that Canadian banks weren't allowed to lend for much of the maturity required by PF project initially and it undoubtedly didn't help PF becoming widely used at first (Yescombe, 2002).

Figure 21 - Debt over time by sector - Canada³⁰



(Project Finance International, 2011)

This particular unavailability is linked to the degree of development of the FES itself. To offer the PF product largely, the FES needed to mature. The market was sensitive to new risk and it takes times to build confidence in the market for a new product when the

³⁰ Debt is defined as Project Finance International's definition of Project Finance debt: non-recourse and limited recourse, non exclusively (2011).

government does not guarantee it. Such a requirement sends a strong signal to the market and it, in turn, reacts to the incentives. In Canada, this was not happening; there were no guarantees or large scale demand which could have structured the development of PF to a mainstream product (Ernst & Young Corporate Finance, 2006, p. 11). From 1970-1996, only 17 projects were financed by the FES in all sectors. According to Kleinmeier (appendix 1), the first three PF projects only occurred in 1981. Contrary to the UK's or the US's first experiences with the PF product – which was sectorally homogeneous - large either in number of projects (US) or their value (UK), Canada had a heterogeneous first wave of application (1980-1990).

Table 7 - PF loan per type in Canada - 1970-1996

Project Name	Location	PF Type	Date (of financing)
Bullmoose coal mine	Canada - BC	LR	1983
Coal mine, British Columbia	Canada - BC	LR	1983
Gas field, Newmart International	Canada	PF	1983
Quintette coal	Canada - BC	PF	1983
Aluminium Austria alu smelter	Canada	LR	1991
Inter provincial pipeline	US-Canada	PF	1991
Iroquois pipeline	US-Canada	PF	1991
Fort Saskatchewan ethylene plant	Canada - SA	PF	1992
Rio Algon	Canada - ON	LR	1993
Nova Scotia highway 104	Canada - NS	PF planned	1995
Tomago alu smelter	Canada	PF	approx 1981
Hibernia oil field	Canada – North At	NR	approx 1992
Ocelot methanol plant	Canada - BC	PF	pre 1981
Redpath-Labatt syrup facility	Canada - ON	PF	pre 1981
Come-by-chance refinery	Canada - North At	PF	pre 1986
EMC Kali	Canada	PF	pre 1988
Saltz-Deminson potash mine	Canada - SA	PF	pre 1988

(Kleinmeier, 1998)

1.4 Later development, later availability

PPPs were the FES's PF product application to the public sector for the UK experience, and the US's and Canada's were no different. To be able to translate the PF

product to public-private partnerships, the firms had first to develop their experience with PF, as it is a core component. Building this experience is essential to be able to show public decision makers – many of whom are institutionally incentivized to be risk averse – that ‘it works’ and that it is ‘feasible’. As with early PURPA projects in the US, where the perceived risk was high until many PPA’s had been signed and the legal challenges’ dust had settled, the Canadian FES needed a steady pipeline of PF projects to demonstrate its ability; this was not the case right from the start. Canada was the turtle, not the hare of PF.

This means that some part of the Canadian FES was not able to directly benefit from the American energy or the North Sea experiences. Stated differently, each actor needs to have his own experience closing deals with the product and with the particular law of the jurisdiction for a firm to be able to develop expertise and sell it. To get this experience instantly, either one can hire or merge. For exemple, “Jamie Logie’s move from Norton Rose to Sullivan & Cromwell ... really got the London legal market buzzing. This seemed to run against Sullivan & Cromwell’s strategy of not practising English law... but if Sullivan & Cromwell is to practice projects this side of the Atlantic then it cannot survive purely by practising US law.” (Project Finance International, 1999)

The more the law firms have a track record of ‘closed deals’, the better they are able to reduce the perceived risk and increase the probability of closure, hence, gaining more experience which can be marketed for the next deal - adding partners from a particular jurisdiction can help overcome the practice limitations. For example, the bar restrictions were felt strongly in the province of Québec where there was – and still are - two additional constraints: 1) the language of practice and 2) the *Code Civil*. Contrary to the rest of Canada where common law governs contractual arrangements, in Québec it is

the Code that does so. There is a hermetic separation between both ‘worlds’ as common law lawyers cannot practice in Québec and vice-versa not only because of the bar, but because the law in itself is different so as the language of practice. Those bar restrictions didn't affect only Canadian firms - international firms are limited too by local bar associations:

The UK Law Society has been locked in discussions for years with the domestic bar to open up the country, which has a similar common law structure to the English system. In fact, the UK went as far as to reform its own code this year to allow Indian lawyers the chance to qualify under UK law (Project Finance International, 1999).

1.5 Canada’s privatization experience

The privatization seen in Canada was nothing like the “massive privatization” that the UK had been through following Thatcher’s victory in 1979. While in the US there was virtually nothing to “privatize” in Canada there were a few small and subsidiary organizations ripe for privatization. **Figure 22 - Major Canadian Federal Privatization** shows major Canadian federal privatization collected by Boardman, Laurin and Vining (2003). Only a handful are noticeable for their financial importance (+\$500 million): Teleglobe Canada (1987), Air Canada (1988), Petro-Canada (1991) and Canadian National Railway (1995). Most of the other privatizations were fairly small, such as AECL’s \$15 million transaction, Pêcheries Canada Inc.’s \$5 million or Nanisivik Mines’s \$6 million auction. While Canada had a much smaller privatization program than the UK, it was an important policy change. As figure 22 shows, from 1985 to 2011, the “privatization program” brought only around \$12 billion while in the UK the figure is seven times more

important and also started eight years prior, in 1977 (\$0.9 billion were received before Thatcher took office).

Figure 22 - Major Canadian Federal Privatization

Date	Company	Sector	Former Owner	Buyer and Privatization Process	Proceeds (\$M)
1985	Northern Transportation Company Ltd.	Marine shipping	CC	Inuvialuit/Nunasi Consortium (negotiated sale)	53
1985	Canada Development Corp.	Conglomerate	ME	Two public offerings in 1985 and 1987	361
1986	de Havilland Aircraft Canada Ltd.	Airplane manufacturer	CC	Boeing (negotiated Sale)	99
1986	Pêcheries Canada Inc.	Fishery	CC	La Coopérative Agro-Alimentaire Purdel (negotiated sale)	5
1986	Canadian Arsenals Ltd.	Munitions manufacturer	CC	The SNC group	92
1986	Nanisivik Mines	Zinc-lead mining	ME (18%)	Mineral Resources International Ltd. (qualified auction)	6
1986	CN Route (CN subsidiary)	Truck transportation	CC	Transport Route Canada Inc. (negotiated sale)	29
1986	Canadair Ltd.	Air transportation	CC	Bombardier Inc.	143
1987	Northern Canada Power Commission (Yukon)	Electric utility	CC	Yukon Power Corp. (negotiated sale)	76
1987	Teleglobe Canada	Telecommunications	CC	Memotec Data Inc. (qualified auction)	612
1987	Fishery Products Int. Ltd.	Fish harvesting and processing	Joint ¹	Public offering	104
1987	Varity Corporation	Farm equipment	ME	Public sale of shares and private placement	40
1988	CN Hotels (CN Subsidiary)	Hotel industry	CC	Canadian Pacific Railway Ltd. (negotiated sale)	265
1988	Air Canada	Transportation	CC	Two public offerings in 1988 and 1989	708
1988	Northwest Tel Inc. (CN Subsidiary)	Telecommunications	CC	BCE Inc. (qualified auction)	200
1988	Terra Nova Telecommunications Inc. (CN Subsidiary)	Telecommunications	CC	Newfoundland Telephone Company (negotiated sale)	170
1988	CNCP Telecom	Telecommunications	ME (50%)	Canadian Pacific Ltd. (negotiated sale)	235
1991	Petro-Canada	Oil and gas	CC	Four public offerings in 1991, 1992, 1995 and 2004	5,693
1991	Nordion International Inc.	Health sciences	CC	MDS Health Group Ltd. (qualified auction)	165
1991	Cameco	Uranium mining	Joint ²	Five public offerings of the 51% federal share in 1991, 1992, 1993, 1994, 1995	444
1992	Telesat Canada	Satellite communications	ME (53%)	Alouette Telecommunications Inc. (qualified auction).	155
1992	CN Short line in Nova Scotia	Rail shipping	CC	RailTex Inc.	20
1992	Co-enerco Resources Ltd.	Oil and gas	CC	Two public offerings in 1992, 1993	75
1995	CN Exploration (CN Subsidiary)	Oil and gas	CC	Smart on Resources Ltd.	97
1995	CNR (Canadian National Railway)	Rail shipping	CC	Public offering	2,079
1996	Canarctic Shipping Comp.	Maritime shipping	ME	Fednav Ltd. (qualified auction)	0.3
1997	Canada Communication Group	Printing, warehouse, dist.	CC	St. Joseph Corporation	7
1997	National Sea Products Ltd.	Fish harvesting and processing	ME	Scotia Investments Ltd. (minority stake)	6
1998	Theratronics International Ltd.	Health sciences	CC	MDS Inc.	15
2011	AECL's Commercial Division	Nuclear Power	CC	SNC-Lavalin Group Inc. (qualified auction)	15
				Total	11,968

¹¹ Boardman, A.E., C. Laurin, and A.R. Vining, 2003, op. cit.

(A. E. Boardman & A. R. Vining, 2012, p. 4)

Compared to the UK's privatization program, Canada's was small and happened late. Most of the financial transactions were organized by the FES without the involvement of PF; they were operated traditionally through auctions, negotiated sales and public offerings. While nothing PF techniques could have been used, they weren't. At the provincial levels, privatizations were even smaller in scale with around \$9 billion for the ten provinces (see Figure 23 - Major Canadian Provincial Privatization). Pioneer provinces in PPPs, such as BC and Ontario, didn't have any significant experience in privatization, neither did Québec. It is true that BC had operated a share distribution of British Columbia Resources Investment Corporation in 1979, but the proceeds were insignificant. The provinces of BC, Ontario and Québec are the most populous and they contained – and still contain - an important share of the infrastructures that could have been privatized. Contrary to the UK's "privatization decade" (1980-90), it is clear by the bare numbers that Canadian provinces (apart from Saskatchewan who was more active) haven't embraced privatization to any significant extent.

Figure 23 - Major Canadian Provincial Privatization

Date	Company	Sector	Former Owner	Buyer and Privatization Process	Proceeds (\$M)
1975	Alberta Energy Company	Oil and gas	Alberta CC	Two (or more) public offerings in 1974 and 1994	75
1979	British Columbia Resources Investment Corporation (BCRIC)	Holding company	B.C. CC	Share Distribution to British Columbians	0
1986	Prince Albert Pulp Company	Pulp	Sask. CC	Weyerhaeuser	300
1986	Saskatchewan Oil and Gas Corp.	Oil and gas	Sask. CC	Public offerings in 1986, 1987, 1989, 1990, 1997	402
1987	Fishery Products International (FPI)	Fish harvesting and processing	Joint ¹	Public offering	62
1987	Donohue Inc.	Forest products	Quebec ME	Quebecor Media and Robert Maxwell	320
1987	SOQUIP Alberta	Oil and gas	Quebec CC	Sceptre Resources Ltd.	195
1988	BC Hydro's mainland natural gas division	Natural gas distribution	B.C. CC	Inland Natural Gas	741
1988	Saskatchewan Power Corporation's (SaskPower) oil and gas business	Oil and gas	Sask. CC	Saskatchewan Oil and Gas (Saskoil)	325
1989	Potash Corporation of Saskatchewan	Potash mining	Sask. CC	Two public offerings in 1989 and 1991	1,237
1989	Manitoba Forestry Resources Ltd.	Forest products	Man. CC	Repap Enterprises Inc.	132
1990	Alberta Government Telephones (Telus)	Telecommunications	Alberta CC	Two public offerings in 1990 and 1991	1,766
1991	Cameco	Uranium mining	Joint ²	Four public offerings of the 49% provincial share in 1991, 1994, 1996 and 2002	1,081
1992	Novatel's systems business	Telecom	Alberta CC	Northern Telecom Ltd. (Nortel)	38
1992	Novatel's cellular telephone manufacturing	Mobile Telecom	Alberta CC	Telexel Holding Ltd.	3
1992	Nova Scotia Power Corp	Electricity generation	N.S. CC	One public offering	816
1992	Suncor	Oil and Gas	ME	Public offering	299
1993	Alberta Liquor Control Board Stores	Retail (liquor)	Alberta CC	Owner-Licensees	51
1993	Syncrude Canada	Oil and Gas	ME	Murphy oil (5%)	502
1995	Vencap Equities Alberta	Financial Services	ME	Onex	174
1997	Manitoba Telephone Systems	Telecommunications	Man. CC	Public offering	860
2002	Ontario Power -4 Hydroelectric Stations	Electricity generation	ON. CC	Brascan Ltd.	340
2002	Skeena Cellulose	Pulp and lumber	ME	NWBC Timber and Pulp Ltd.	6
				Total	9,726

Key: CC=Crown Corporation, ME = Mixed Enterprise (with % of federal Government ownership)

1 Jointly-owned by the federal government (62.6%) and the New Foundland Government (37.4%)

2 Jointly-owned by the federal government (38%) and the Saskatchewan Government (62%)

Source: Adapted from Boardman, A.E., C. Laurin, and A.R. Vining, 2003, "Privatization in North America," in David Parker and David Saal (eds.), International Handbook on Privatization, Chapter 7, Cheltenham, UK: Edward Elgar, 2003, 129-160 and updated.

(A. E. Boardman & A. R. Vining, 2012, p. 5)

As we saw in Chapter 3, the FES had access to executive power in the UK, though this was not the case in the US (see Chapter 4) and in Canada (at either the federal or provincial level). In the US, even if management consultants, bankers, and lawyers had their way at the Capitol, the legislative branch, either formally³¹ or informally through hard and soft lobbying, legislation had to be passed in Congress where there are two chambers to be lobbied. Moreover, the decentralized nature of the US and the fact that most of what is ‘public infrastructure’ is spread across 100,000 local governments in 50 states, are hurdles that require a different diffusion-building program to succeed in the long run. For Canada, which is less decentralized than the US, but has an arrangement in which the provinces have most of the powers over infrastructure to be privatized, built (greenfield), or upgraded (brownfield), the possibilities are different for the FES than in the UK. Moreover, in Canada, as we will see, at the federal level, the FES didn’t have the ‘virtual tunnel to the executive’ that was available in the UK (Denis Saint-Martin, 2000). The same was true at the provincial level.

If direct influence is impossible, indirect influence through the diffusion of ideas about the advantage of partnering can create the enthusiasm required to make deals ‘move forward’.

1.6 The management consultant in Canada: left on the side road

To help develop and translate the PF product into PPPs in Canada, management consultancies needed experience with the product, the analysis, and projections required - as did the lawyers and bankers -, but only the consultants were involved in managerial changes. For consultancies, ‘working with governments’ is important to develop

³¹ E.g., Secretary H. Paulson, an investment banker, became a member of the inner circle of the President.

legitimacy and help give credibility to their managerial solutions and services. Previous credible experiences in the public sector can be marketed to the public sector so as to create links that are useful to introduce ideas about partnerships' benefits and possibilities and generate consulting opportunities.

In his seminal work on the management consulting industry, Denis Saint-Martin demonstrated that even if the management consultants "originally followed a path very similar to the one found in the British case ... [they] have generally pressed their views ... through 'non-political' bodies that convey a sense of non-partisanship and that are located outside the executive machinery ... [all of which] has made the 'link up with politics' process much more difficult than in Britain" (ibid, 118). Furthermore,

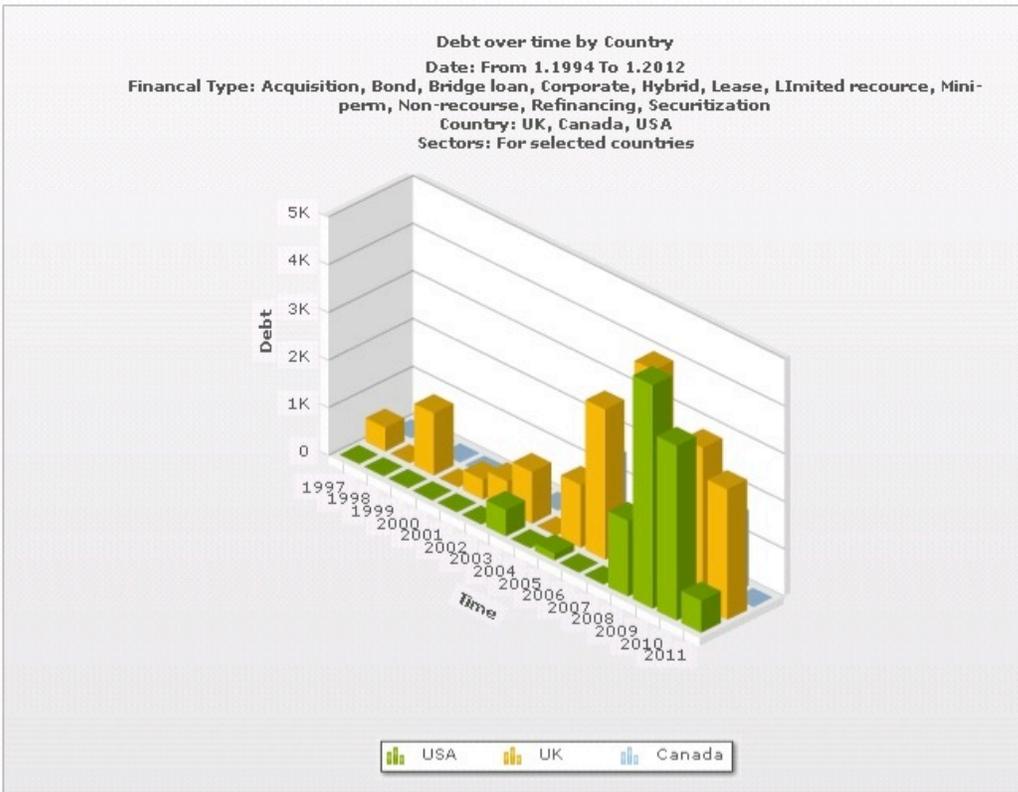
[i]n Canada, government support for the managerialist views often pressed by the network of consultants linked to the Auditor General has been weak, not because policy makers in government disagreed with the need for greater flexibility, 'entrepreneurship', 'risk taking', and 'empowerment' that managerialist innovation call for. Support has been weak because managerialism was packaged by the OAG with issues dealing with parliamentary accountability that were not popular with decision makers in government (ibid, 119).

What was true for the diffusion of managerialism that Saint-Martin describes at length in his *Building the Managerialist State*, was true for privatization and PPP ideas. The 'situation' in the Office of the Auditor General (OAG) from which "management consulting interests have promoted managerialist ideas within the Canadian state" (ibid, 161). According to EB Mellett, the fact that the private sector advisory committee of the Nielsen TaskForce was presided over by "a senior partner from Cooper & Lybrand and

also included Ted Netten of Price Waterhouse and president of the [Canadian Association of Management Consultants] CAMC ... [indicates] that [CAMC] 'stature in Ottawa was improving' (Denis Saint-Martin, 2000). But the Nielsen Taskforce was very much disliked by the public service and, according to Donald Savoie, "the Mulroney government proved reluctant to involve the private sector again" (Mellett, 1988). The OAG was therefore the only venue to exert influence over the federal executive. This was acting like a 'sand trap' for the PF and PPPs ideas because the consultant were not, a contrario of the UK, inside the executive branch of the government at the federal level: the OAG was not the right place to be to push for PPPs. It is partly because of this state of affairs that PwC favored and financed the creation of the CCPPP (D. Savoie, 1990).

If its true that those ideas (managerialism, privatization, and PPPs) could be advanced by consultancies which then benefited from them, only privatization and PPPs involve financial engineering and, subsequently, the lawyers and bankers at the core of the FES. When consultants introduced "the alphabet soup of past reforms" (D. J. Savoie, 1995, p. 117) such as Planning, Programming and Budgeting System (PPBS), Policy and Expenditure Management System (PEMS) and Zero Base Budgeting (ZBB), for example, they were mostly working alone; law firms and banks were not involved in managerialism as they didn't have any direct interest, expertise or utility. The extent of penetration of managerialism cannot explain the enthusiasm for PPPs alone, because without the FES, the PPPs (defined as in Chapter 1 as PPFA) are not possible and the use of managerialism is not an indicator of the FES's existence or ability to carry complex financial transactions.

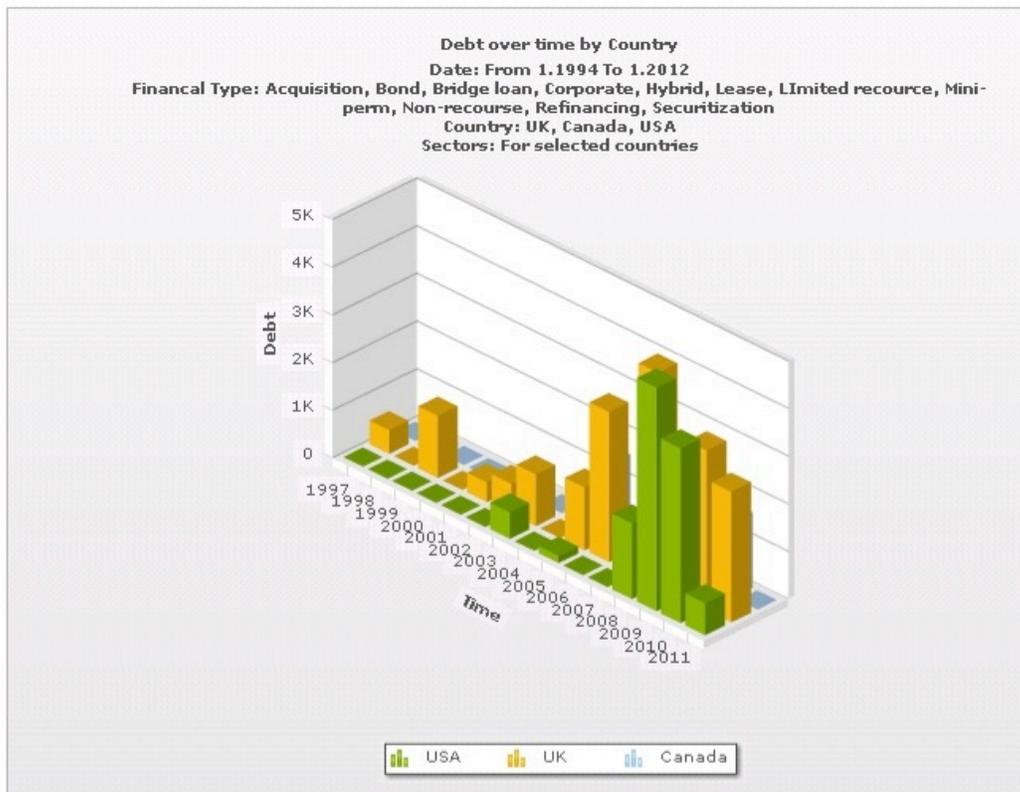
Figure 24 - Debt over time by Country - UK, CA, US



(Project Finance International, 2011)

shows clear evidence that, when compared with the UK and the US, Canada had weaker financial engineering activities, not only in relative terms, but also in absolute value. The type of debts shown are used by PF extensively and several privatizations (Project Finance International, 2011). If the FES had involved in PF transaction to a comparable extent than the UK or the US, Figure 24 would demonstrate this.

Figure 24 - Debt over time by Country - UK, CA, US³²

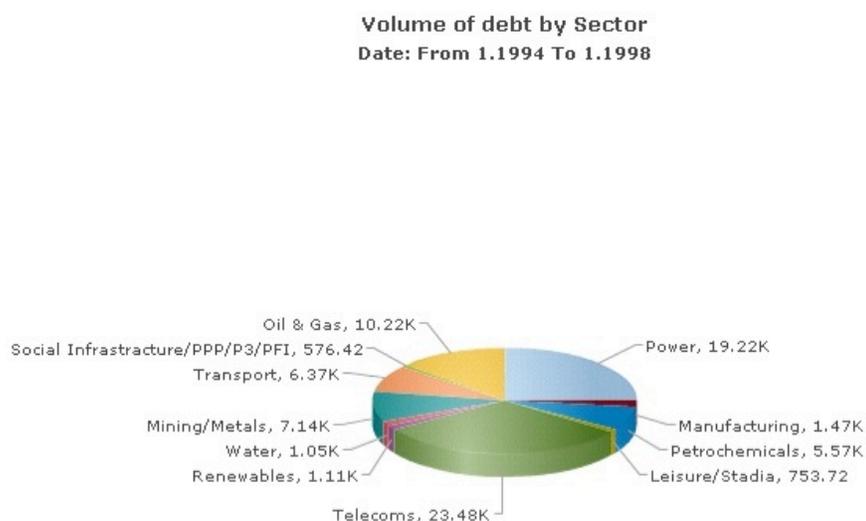


(Project Finance International, 2011)

³² Debt is defined as Project Finance International's definition of Project Finance debt: non-recourse and limited recourse, non exclusively (2011).

It is really with PF's private usage and, to a lesser extent, privatization that the idea of doing PPPs – that is applying PF to the public sector – would be put forward by the FES. Convincingly, Figure 25 - Volume of debt by Sector – World (94-98), which we will compare to Canadian figures shortly, shows that PPPs are only a slight part of the PF debt pie. To be sure, the PPPs' pie is growing increasingly since its inception.

Figure 25 - Volume of debt by Sector – World (94-98)³³



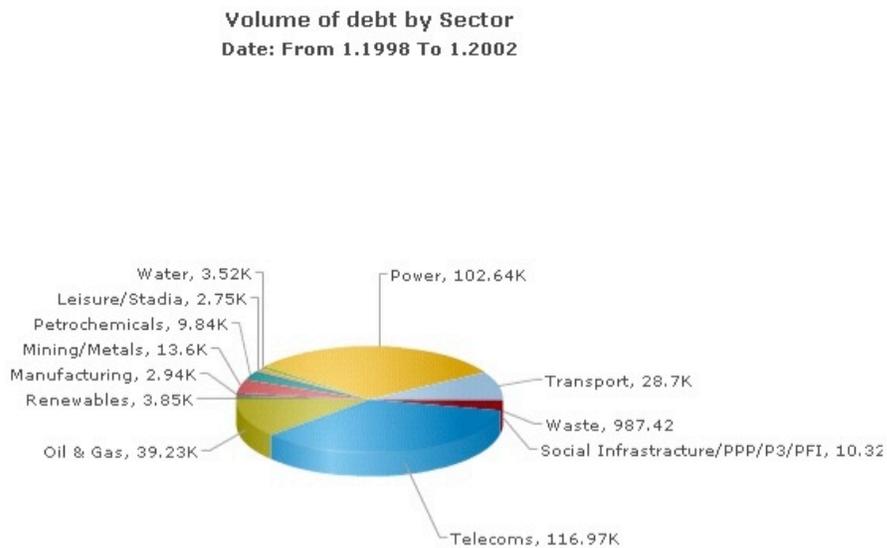
(Project Finance International, 2011)

This is because PPP didn't predate PF, either worldwide or, as will be shown, in Canada. Figure 26 - Volume of debt by Sector - World (98-02) shows how important the

³³ Debt is defined as Project Finance International's definition of Project Finance debt: non-recourse and limited recourse, non exclusively (2011).

acceleration of debt by volume was over a four years period when the product started to be applied to the public sector, among others. Globally, PPPs saw an increase of 1,000 % (total debt value) from 1998 – 2002, while more mature markets such as Power saw a 500 % increase, Oil & Gas 400 % and Telecom 600 %.

Figure 26 - Volume of debt by Sector - World (98-02)³⁴



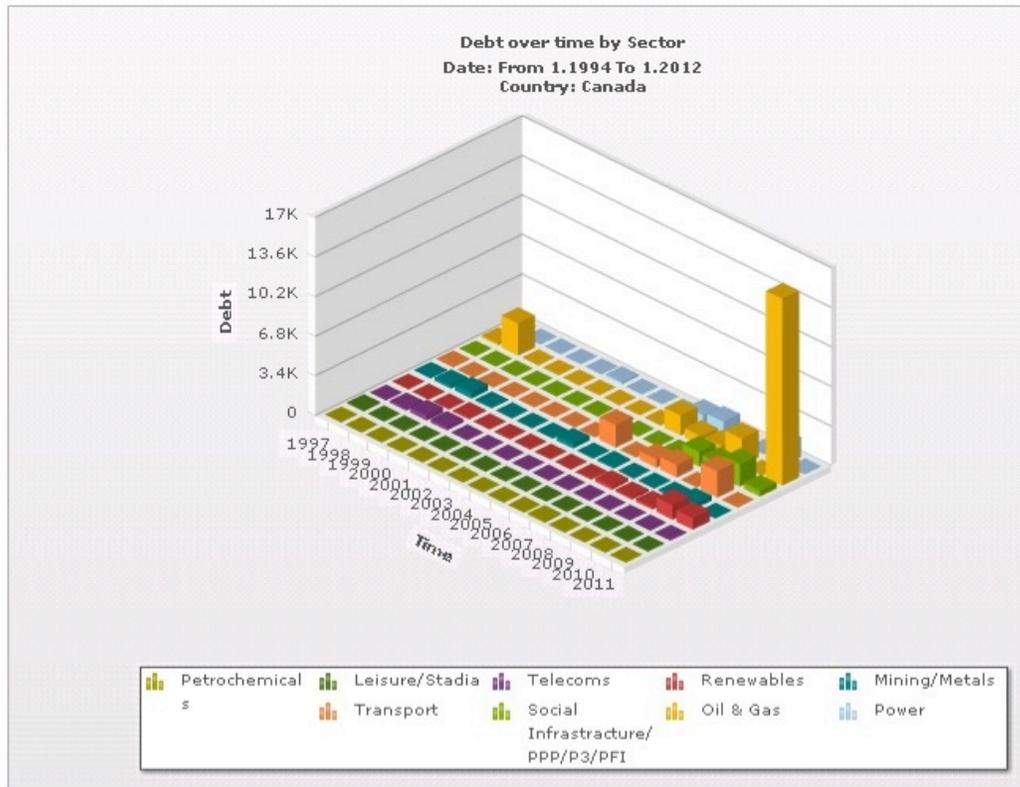
(Project Finance International, 2011)

At the same time no such boom in debt closure was happening in Canada. Figure 27 - Debt over time by Sector - Canada (94-12) demonstrates clearly that Canadian

³⁴ Debt is defined as Project Finance International's definition of Project Finance debt: non-recourse and limited recourse, non exclusively (2011). All the figures in this study stemming out of this source use the aforementioned definition and we will not repeat the definition from now on.

activities were low, when compared with the UK and US (chapter 3-4), and when compared with the world trend as well (figures 5 and 6).

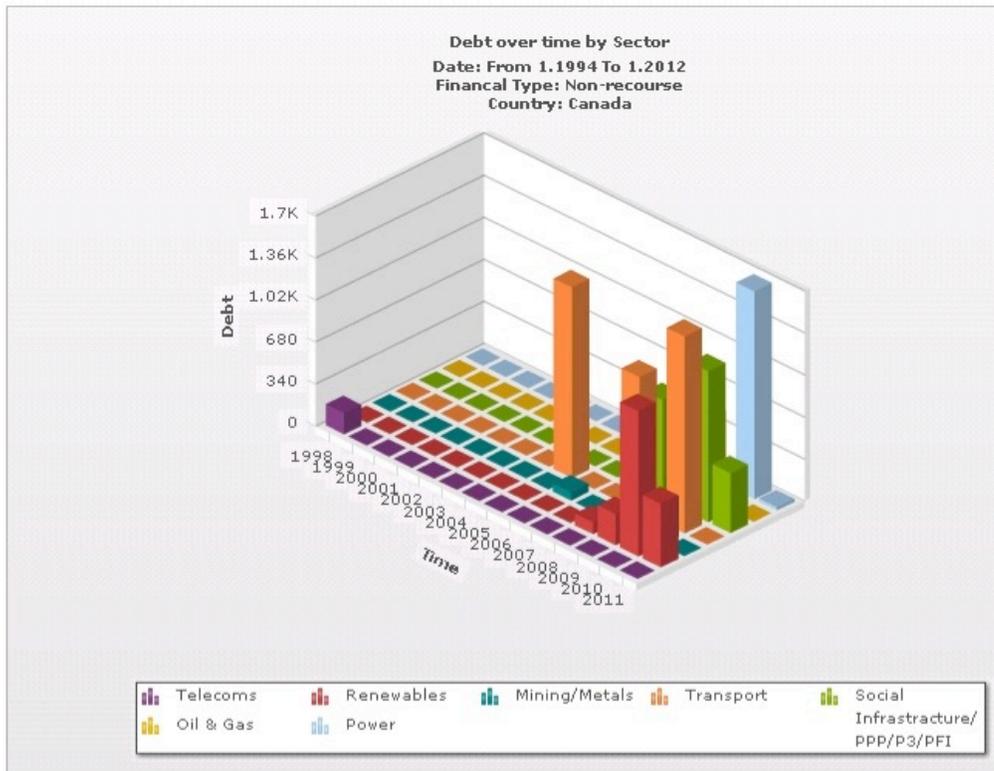
Figure 27 - Debt over time by Sector - Canada (94-12)



(Project Finance International, 2011)

Isolating PF over the total debt in Figure 28 - Debt over time by Sector - PF - Canada (94-12) confirms that its usage was late when compared with the UK and US.

Figure 28 - Debt over time by Sector - PF - Canada (94-12)

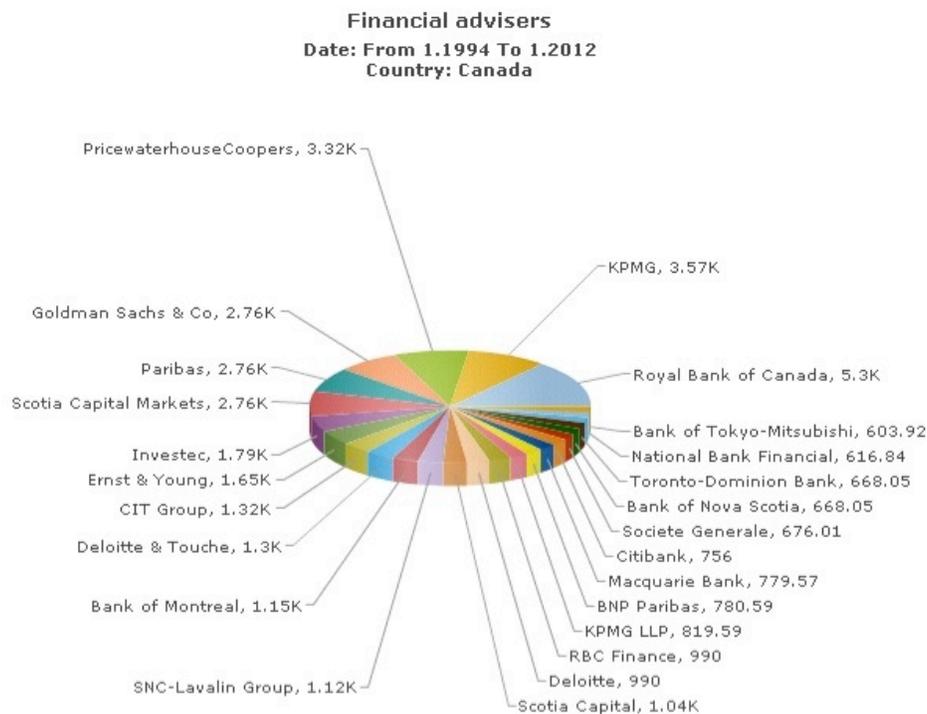


(Project Finance International, 2011)

1.7 The management consultant – competing for advisory roles

In Canada, financial advisors are not identical to those in the US or UK even if there are some overlaps. Figure 29 - Financial advisers - Canada shows the actors involved in Canada. Many banks also compete for advisory roles in the Canadian market.

Figure 29 - Financial advisers - Canada



(Project Finance International, 2011)

PricewaterhouseCoopers (PwC), KPMG, Ernst & Young, and Deloitte, which are important actors in Canada, were active in the UK's top ten consulting firms during the same period (Denis Saint-Martin, 2000, p. 57, see also chap 4). Particularly, PwC, the UK leader and one of the Canadian leaders, had been very active in producing diffusion material even if Canada, at a macro level, has seen weaker activities.

In Canada, consultancies have now developed their capacity – which were lacking at first – since early 2000's. Today, PwC and “its related entities have more than 5,200 partners and staff in offices across the country” (PricewaterhouseCoopers, 2008c). This Canadian network is connected worldwide to more than 155,000 individuals “in 153 countries ... [who] share their thinking, experience and solutions to develop fresh

perspectives and practical advice” (PricewaterhouseCoopers, 2008c). PwC is a diffusion hub in itself:

PwC's PPP experience lies in its Infrastructure and Project Finance (IPF) practice. Organized by infrastructure and service industries, the practice is a connected global network of over 400 PPP advisors who provide personal, hands-on service. In Canada, more than 20 experienced professionals with strong industry and technical skills deliver advice through our Toronto, Montréal and Vancouver offices (PricewaterhouseCoopers, 2008c).

Consultancies, as hubs of diffusion, worked on ideational translation for the whole FES. As Rod Johnston, PwC partner and National Infrastructure & Project Finance practice leader, explained “PwC has worked on a number of important PPP projects, helping to link the public and private sectors to develop a clear and common purpose” (PricewaterhouseCoopers, 2008c). This ideational translation was happening in a material context where the FES had to operate. The conditions were improving as the FES’s usage of PF was becoming more regular and the market became less nervous. Shamshad Madhok, managing director of PwC's Infrastructure & Project Finance practice, highlights this clearly when, following the 2008 credit freeze, he stated that, “*Despite continued difficulties in debt markets and constraints in construction capacity*, the pipeline of PPP deals in Canada is growing” (emphasis added, PricewaterhouseCoopers, 2008c).

PwC states that “PPPs are complex and recurring issues continue to hinder their development” and that governments should “build national PPP Centres of Excellence” (PricewaterhouseCoopers, 2006, p. 5). It is clear that, as the other big consultancies, “PricewaterhouseCoopers is at the forefront of the global PPP and project finance market,

spearheading important developments in deal structuring and project innovation” (PricewaterhouseCoopers, 2010a).

PwC piloted most of the first PPP products for the FES and “has consistently been the leading global advisor on infrastructure and [PPP] projects since the mid 1990s. By the end of calendar year 2007, the IPF practice had advised on and successfully closed over 344 projects around the world, involving private finance of over US\$94 billion” (PricewaterhouseCoopers, 2008b). Even if Canada has seen a weaker and later development than the UK, PwC has been the leading figure in the diffusion of PPPs and its specialized PPP group which “has been ranked as the #1 Financial Advisor from 2004-2008 by *Project Finance* magazine, both in terms of deal value and number of deals for PPP” (PricewaterhouseCoopers, 2008b). In a brochure, PwC explained that it ‘teaches’ the public sector “on how best to develop, structure and negotiate PPPs, allowing the private sector the opportunity to deliver efficient solutions” (PricewaterhouseCoopers, 2008b). Moreover, they also “develop the right procurement approach, and advise and train on the principles and implementation of PPPs” (PricewaterhouseCoopers, 2008b) for public decision makers.

Other top global advisors such as KPMG and Ernst & Young (E&Y) are highly involved in the Canadian market. While there are increasingly more banks involved in the advisory as the FES becomes more and more integrated, “global advisory is [still] dominated by the accountant-owned firms active in the public private partnership (PPP) market” (Project Finance International, 2005, p. 45). For example, in 2003, “PwC and Ernst & Young once again traded places in terms of mandates won in the year with PwC coming out top this time. KPMG and Macquarie swapped places too with KPMG coming third this year and Macquarie fourth” (Project Finance International, 2005, p. 45). Going

back to 1999, “Most of their business is on private finance initiative (PFI) style deals in UK and Australia” (Project Finance International, 2005, p. 45).

For its part, KPMG “is a known industry leader and has advised on over 1,700 PPP transactions with a value of over US\$285 billion” (KPMG, 2012). It has “provided cutting edge, industry-leading advice for Public Private Partnerships (“PPP”) and major infrastructure project transactions on a global basis for over 15 years” (KPMG, 2012). More importantly, their “team of seasoned professionals has been involved in the evolution of PPP financial and contractual frameworks” (KPMG, 2012). On one hand, the firm assisted “government authorities to develop PPP project parameters, developed effective PPP policies, and implemented several PPP projects.” On the other hand, they advised “a large number of bidders on privately financed PPP and infrastructure projects [with] the development of successful and creative bidder strategies, negotiation of financial terms, and creation of optimal capital structures” (KPMG, 2012). KPMG would provide “best-in-class solutions because [they] understand the stakeholders of the PPP industry” (KPMG, 2012).

Another important firm that has worked in the development, translation and diffusion of the PF product for the public sector is Ernest & Young (E&Y). The firm advertises that since the first pilot PPP it has been “a leading public–private partnership (PPP) advisory group, having accumulated considerable experience of work with public authorities throughout the world, including expertise in debt advisory” (Ernst & Young, 2012). Clear evidence of the importance of the FES’s financing capabilities is the acknowledgement by E&Y that “Along with PPP and concession projects ... where *PPP schemes of financing are not new and the debt financing market is strongly developed*, Ernst & Young *has performed pilot* PPP projects in CIS and other emerging market

countries” with the help of a network of more than 152,000 individuals in 140 countries (emphasis added, Ernst & Young, 2012).

While it is clear that PwC, among all of the top financial advisors, is the consultancy which creates and diffuses most of the material (e.g., brochures, corporate reports), each of them plays an important role in the diffusion through their networks and their increased interaction with the public sector in Canada – as more and more deals go through the firms’ pipelines. As we will see, they have rapidly penetrated the new ‘specialized agencies’ they were advocating for in Canada, and around the world. In the meantime, they were advertising both sides, while developing indicators, methodologies and policies for the public sector. Through those efforts, they have been able to play an important role in the development of the PF product for the public sector.

Canadian banks were getting increased traction for their advisory services in the country as the FES was able to provide a more steady flow of PF, but their main activities have been lending, and this is still the case.

1.8 Canadian banking: much more deposit oriented than the US and the UK

Harry Guenther in *Banking and Finance in North America* argues that “there were numerous similarities in the early histories of banking in the United States and Canada ... however, banking structure, bank regulation and bank regulatory structure developed along quite different lines, and today, especially with regard to banking structure, they are not remotely similar”(emphasis added, Ernst & Young, 2012). In a paper published by the Bank of Canada, it is also readily acknowledged that there are “differences between the US and Canadian financial systems [which] account for many of the divergences seen in banking system developments in the two countries over the years” (1981, p. 50). A brief

highlight will help put the Canadian banking specificities in perspective only for informational purpose.

Historically, the Canadian financial system was based on five principal groups: chartered banks, trust and loan companies, the co-operative credit movement, life insurance companies, and securities dealers.

These groups were characterized by their core business activities and, to a lesser extent, by the jurisdiction under which they are incorporated and supervised—federal, or provincial, or a combination of the two.

For example, banks are under exclusive federal jurisdiction for their banking activities, while trust and loan companies and life insurance companies can be incorporated through either federal or provincial charters. Chartered banks are incorporated and supervised by the federal government and have always been involved in commercial lending. Since the mid-1950s, they have become significant sources of personal loans and residential mortgage credit. In addition, over the years, banks have developed substantial international business operations (Freedman, 1998, p. 3)

The Canadian financial sector is regulated in ways that prevent certain types of operations. Upstream links and downstream links have been limited since 1967. The ‘upstream’ limit to 10 % sole or group ownerships has been dubbed the ‘widely held’ regime. “Successive federal governments chipped away at the four pillars through a series of Bank Act revisions ... For the first time [1967], the banks were allowed to make conventional mortgage loans and the 6 % interest-rate ceiling was lifted” (Freedman, 1998, p. 8). .

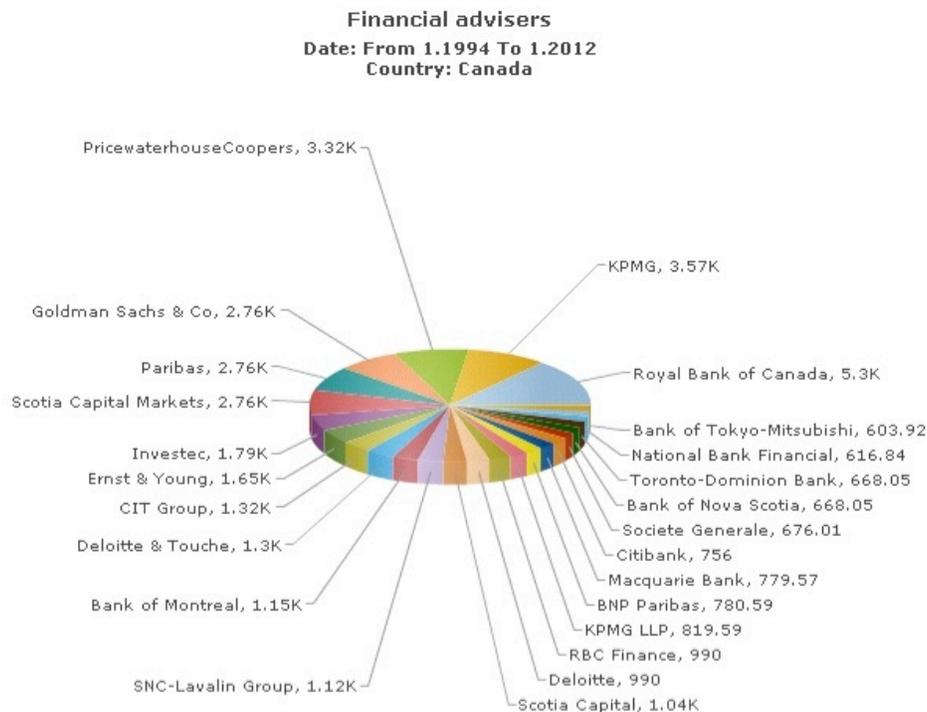
The culture of investing was not a trend of deposit-taking banks, and their activity in the commercial sector was mostly geared toward classic corporate loans. This has created ‘risk-averse’ banks (which would ultimately shield Canada from the banking sector collapse that the US has seen in the wake of the 2008 crisis). All of this played an important role in creating a small number of banks – through the mergers that the ‘widely held’ regime helped generate – and a vast number of branches. Until the 1987 amendments, which removed the constraint, the banking and securities businesses have been kept separate in Canada. While dealers were seen as a possible venue for the alternative financing needed, “the concern [was] that securities dealers would not be able to generate the larger amounts of capital that would be needed in the future” (Freedman, 1998, p. 10).

Those changes benefited the banks who were allowed to enter the financial market, but it would take until 1987 for the banks to be allowed to buy securities dealers (Freedman, 1998, p. 8). This has hindered the development of numerous investment banks and other related entities like those seen in the US and the UK. Early 1990, “the banks had, in a series of billion-dollar deals, grabbed up all but one large independent brokerage house” (ibid). The Federal Bank indicates that “the increasing use of securities markets by corporate borrowers was probably the single most important factor driving the integration of the banking and securities industries” (Whittington, 1999, p. 112).

In 1992, another amendment was made which would finalize the opening of the ‘pillars’ and would give the ability to the Canadian financial institutions to develop into a financial conglomerate. To be sure, “With their acquisitions ... the banks realized a tremendous financial advantage as they gradually moved away from their standard role as deposit-takers” (Freedman, 1998, p. 10).

The historically weak short term financing opportunities for PF has led to the involvement in Canada of foreign sponsors such as the UK's well-developed Innisfree or Spain's Concesiones de Infraestructuras a trend in line with early observation from Guenther who saw the need for imported capital for development and infrastructure projects (Whittington, 1999, p. 113). Instead, as the Figure 30 - Canadian Financial Advisers shows, the Canadian banking sector has played an important role in the advisory functions and shares the market with big consultancies as seen in the above figure, but because its development was structured differently than the US's and the UK's, Canada has not seen the emergence of large investment banks, so characteristic of the US and the UK's.

Figure 30 - Canadian Financial Advisers



(Project Finance International, 2011)

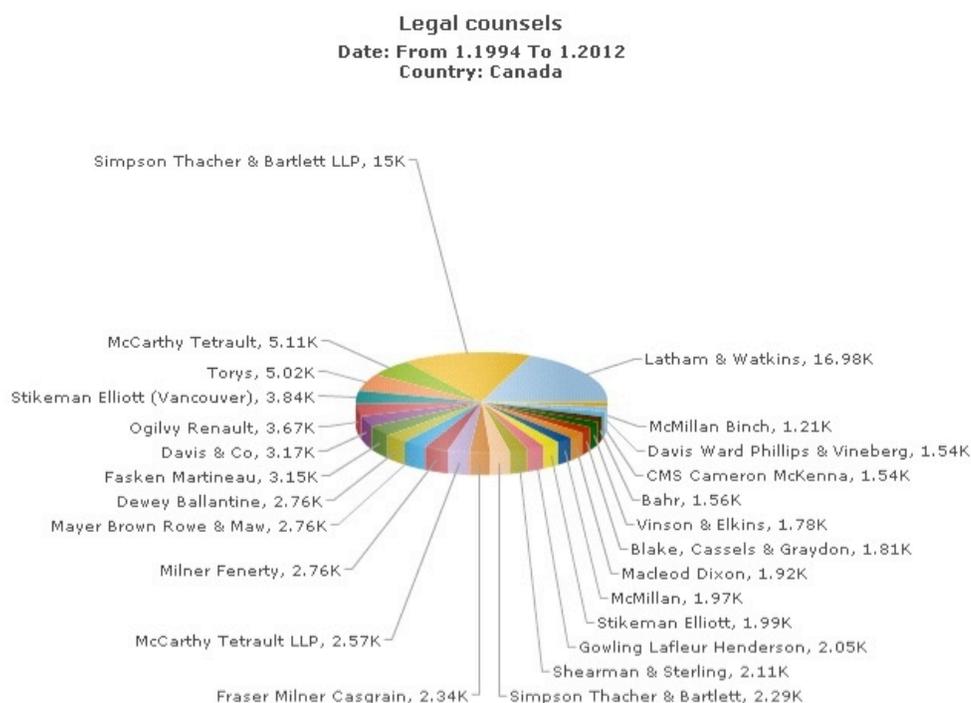
The feedback effect of the regulation pertaining to the banking sector created an incentive structure in which the traditional deposit-taking banks were not investing in PF and PPPs while the investment banks of the UK and the US were more involved. This contributed to the delay in the development of a strong PF and PPP practice in the 1970s and 1980s in that country. According to Ernst & Young Orenda CF inc., “A truly national Canadian P3 market will emerge if and when there is a predictable flow of large projects that justify the major investments necessary, from both industry and government, to deliver them; when governments coordinate their projects; and, when industry develops the capacity to deliver those projects” (Ernst & Young Corporate Finance, 2006).

To be sure, still mid-2000's, “Rick Byers, head of the Government Investment Banking Group at BMO Nesbitt Burns said, 'Canadian banks like to recycle our capital much more quickly and we don't lend long term and the fact we haven't lent long term means we haven't been very involved in financing these projects to date. That's a challenge, and it goes two ways. Either we get there and get comfortable with that long-term lending or we don't participate in the projects.'”(ibid). For Mike Marasco, PBC's vice president of partnerships development, “There may not be enough large deals [still in 2006] for equity players like pension funds that want to participate [since it started around 2002], 'I think the challenge on the equity side is that there are not enough big deals' [still in 2006]... The industry should and can cope with the delay or cancellation of one or two projects, provided the entire [governmental] program continues to bring projects to market.” (ibid, 11)

1.9 Neither Giants nor Magic: Canadian law firms

Legal counsels for the Canadian FES espoused the unique development of PF for private and public application. The historical ‘advantage’ that New York’s Giants had over Canada’s has created a situation in which the biggest share of financing deals (the legal of it) goes to two Giants with the remainder being spread evenly between Canadian firms. But while Canadian firms have most of the pie now, Figure 31 - PF debt of Legal Counsels - Canada (94-12) shows the two biggest US ‘deal closers³⁵’ in terms of debt, Simpson Thatcher & Bartlett LLP and Latham & Watkins, were, and still are, highly successful.

Figure 31 - PF debt of Legal Counsels - Canada (94-12)



(Project Finance International, 2011)

³⁵ ‘Deal closing’ means to be able to bring a proposal to the signature and, hence, get a new mandate.

This unique feature, that is the dominance of two US law firms, albeit with some Canadian antennas, is related to the evolution of the PF product in Canada. As a corollary, Canadian firms were not able to penetrate US or UK markets early over PF. This is because they were located in a country where the stage of development in the PF practice was not as advanced, which made it difficult to market an expertise from the homeland in the 70's and 80's. As was highlighted earlier, experiences play strongly in the favor of those who are able to market them; an early entry gives an edge to build a reputation and valuable experience used to answer governmental Request for Proposal (RFP). Canadian firms didn't have that edge and were facing a sophisticated market in which the Giants and the Magic Circle were already well established. Canadians were not in a position to influence the early stages of the US's or the UK's PF development, and they were not an obstacle to the Giants, who had clients who desired sophisticated and experienced PF lawyers. In 2011, Norton Rose, a UK based firm, had proceeded to the acquisition of Ogilvy Renault (see Figure 31 - PF debt of Legal Counsels - Canada (94-12)) in order to enter the Canadian market - as the pipeline was growing.

The Montréal based McCarthy Tétrault's Infrastructure Group is the biggest Canadian player in the PF market. As the firm proudly states, "In the last few years, we have acted on many of Canada's most significant infrastructure transactions and projects, on behalf of a wide variety of interests both in North America and abroad" (McCarthy Tétrault, 2012). In 2011, Infrastructure Journal ranked the firm as Canada's foremost legal advisor on PF and fourth in the US (it has also been the only Canadian firm able to penetrate the US market mid-2000's after having gained Canadian experiences).

McCarthy is a small diffusion hub in itself; it is advising most of the players and it works hand-in-hand with consultancies. While consultancies do the 'math', legal advisors

such as McCarthy put the ‘math’ into ‘law’. By working closely with every actor of the FES, McCarthy can claim that it ‘understands financing.’ The firm explains it this way:

We are leading advisors to borrowers and lenders on Canada's most complex infrastructure, public-private alternative procurement and infrastructure financing deals. We have forged close relationships with virtually every major bank and lending institution in Canada, as well as with leading public pension funds that have infrastructure interests, insurers and foreign lenders who commonly finance these projects
(McCarthy Tetrault, 2012)

Over time, McCarthy has been able to develop experience in the “procurement models and the design and implementation of an effective RFQ/RFP process,” and incremental experience with the “deal and tax structures that work,” as well as the typical “allocation of risk amongst participants in these transactions” (McCarthy Tetrault, 2012).

This ‘experience,’ is then diffused inside the firm’s own network. For example, McCarthy claims that they “integrate best practices and best practitioners through our national team” (McCarthy Tetrault, 2012). With offices in Québec City, Montréal, Vancouver, Calgary and Toronto specializing in PF deals, the firm was able to internally diffuse experience and then apply lessons learned nationally.

Ogilvy Renault, a renowned firm founded in 1878 in Québec as Carter, Church & Chapleau, was absorbed by one of the UK’s Magic Circle’s firms – Norton Rose – in June 2011. Infrastructure would be one of the “Norton Rose Group’s key strengths” (Norton Rose, 2012). Norton Rose contributes to the diffusion by their involvement with “major international corporates, commercial banks, government bodies, ECAs, and multilaterals

[who] rely on our global infrastructure team for its wide-ranging expertise and innovative thinking” (Norton Rose, 2012).

Legal 500, an important magazine in this FES sector, based on a ranking published in 2011, states that “Norton Rose LLP is a ‘big team for project finance’, ‘far more commercial than other firms’, and valued for ‘genuinely structuring deals tailored towards the client’” (Norton Rose, 2012). By way of the merger between Ogilvy and Norton Rose (Ogilvy already had an important PF practice in Canada), the diffusion hub of the firm increased in size as their “[l]awyers from across our global team [will] work in close co-operation sharing experience of models being used to finance infrastructure internationally” with the Canadian partners (Norton Rose, 2012). This “global infrastructure team has unique insight into the range of different models being used internationally” and work closely with the other FES partners to set “standards acceptable market terms” (Norton Rose, 2012).

Strikeman Elliot was the first Canadian firm to have offices both in London and New York³⁶. Even if they are not leading the PF practice amongst the US and UK players, they are a top Canadian firm (see Figure 31 - PF debt of Legal Counsels - Canada (94-12). “Chambers Global's *The World's Leading Lawyers for Business* ranks our Projects and Infrastructure practice among Canada's leaders, citing lawyers in Vancouver, Toronto and Montréal” (Strikeman Elliott, 2012a). IFLR1000 notes the firm as “a leader in project finance” and “*The Canadian Legal expert Directory* identifies Stikeman Elliott banking and infrastructure finance lawyers in each of the four Canadian offices as leading practitioners in their field” (Strikeman Elliott, 2012a). The expertise of this member of the

³⁶ The firm has been dissolve in February 2014.

FES has been built in similar ways to other legal advisors in Canada, but in the UK and the US, it has been through interaction with other members of the FES in different PF deals.

As Strikeman Elliot explains:

Our project finance capability draws on the skills of our banking, corporate, energy, real estate, securities and tax groups, as well as experience accumulated through privatizations and public-private partnerships. We have worked on non-recourse or limited-recourse projects in a variety of contexts, including electric power co-generation and the development of other natural resources, real estate development, public and private-sector infrastructure financings and securitizations (Strikeman Elliott, 2012a)

This firm, like all of the others, uses its experience in the first private-to-private PF to sell PF to the public sector in the form of PPP. The firm proposes that its “broad-based experience in the sector gives [Strikeman] considerable insight into current market realities and the strategies employed to allocate, transfer and mitigate risks in the transaction” (Strikeman Elliott, 2012a). For example, Strikeman’s “Canadian project finance expertise” can be related to projects such as “the \$942 million financing of a power production station in Ontario, one of Canada's largest project finance deals to date,” or “the \$266 million financing of the Northwest Anthony Henday Drive highway project in Alberta,” which was “selected for the 2008 Silver Award for project finance by the Canadian Council for Public-Private Partnerships” (Strikeman Elliott, 2012a).

1.10 Fuelling the Canadian pipeline through CCPPP

In 1993, the Canadian Council for Public Private Partnerships was created to increase the demand in PPPs by the principal efforts of PricewaterhouseCoopers and McCarthy-Tétrault (Walmsley, 2012). CCPPP describes itself as a “member-sponsored organization with representatives from both the public and the private sectors” (Canadian Council for Public Private Partnerships, 2010). As with the NCPMP in the US, the private sector fuelled the organization and then brought onboard public sector representatives for better diffusion. CCPPP acts “[a]s proponents of the concept of public-private partnerships (PPPs). The Council conducts research, publishes findings, facilitates forums for discussion and sponsors an Annual Conference on topics related to PPPs, both domestic and international” (ibid). CCPPP’s mandate is to “influence the way in which public services are *financed* and *delivered* in Canada” (emphasis added, ibid). More specifically, CCPPP is:

- Encouraging public-private partnerships;
- Providing information on public-private partnerships;
- Sponsoring conferences and seminars on partnerships;
- Stimulating dialogue between public and private sector decision-makers on the financing and delivery of public services;
- Educating the public;
- Conducting objective research on key issues that influence the effective use of partnerships (ibid).

With the sponsors’ contributions, the Council is able to deliver a wide range of activities geared toward diffusion of ideas favorable to PPPs. Among many activities,

CCPPP is involved in direct “promotion and facilitation of public-private partnerships across Canada” a “compilation of a resource library on PPP issues and projects” an “annual conference” and a series of “regional events on a wide variety of PPP topics”. Also, CCPPP publishes “informative newsletters (P3 Quarterly) on Council activities, news and issues discussed at the national conference” and produces “Council-sponsored publications, including research papers, case studies, guidelines, opinion surveys and national inventories on key public-private partnership subjects” (ibid).

From a few founding members in 1993 to a member directory that reads like a Bay Street Who’s Who with more than 443 members 20 years later, CCPPP now contains most of the FES actors in Canada (complete list in appendix 3).

Sponsor members of CCPPP have the opportunity to grow their business by acting “as a resource to CCPPP on issues and government interface,” by assisting “in setting the Council’s agenda and priorities,” by being “the first to sponsor CCPPP events” and to “[l]ead Advisory Groups,” and, finally, by receiving official “recognition on Council materials” (Canadian Council for Public Private Partnerships, 2010). All of this contributes to the diffusion of the PPP product at the federal and provincial level.

Since 1998, CCPPP has handed out, once a year, three awards entitled National Award for Innovation & Excellence, similar to what is being done at NCP3P in the US (Canadian Council for Public Private Partnerships, 2012). The ceremony and awards are designed to:

Honour governments and/or public institutions and their private sector partners who have demonstrated excellence and innovation in the establishment of public-private partnerships. The awards are presented annually to showcase Canadian excellence and innovation in project financing, service delivery,

infrastructure investment and/or generation of economic benefit, which result in enhanced quality of public services and facilities (ibid.).

As with NCPPP in the US, CCPPP proposes the Champion Awards that are presented to “individuals who have made an outstanding contribution to PPP in Canada in the public and/or private sector” as way to incentivize and recognize individuals advancing PPP ideas and projects (ibid). Champions such as Monique Jérôme-Forget (ex-minister behind the Agence des PPP in Québec), Gordon Campbell (ex-prime minister and proponents of PPPs in British-Columbia) and Michael Wilson (currently of Barclay’s Capital Canada but was Canada’s finance minister starting in 1984 and then Chair of CCPPP) are praised by the FES and the rest of the industry for their contribution to the diffusion of the PPP product. This model is an exact copy of the US’s – a model also sponsored by the same FES actors (e.g., PwC).

1.11 Provincial PPP agencies blossom

Gordon Campbell, a Champion Awardee of the CCPPP, received this honour because he spearheaded, while being Premier of BC, the first provincial agency for PPP in Canada. “Established under the Company Act in May 2002, Partnerships BC is part of the government’s strategic plan to deliver public services effectively and affordably” (Partnerships BC, 2002). Partnerships BC (PBC) is the tool the then Campbell government created because, for his government, “P3s are a cornerstone of the Province’s program to improve service delivery and encourage economic development. The company’s [PBC] clients are public sector agencies, including ministries, Crown corporations and local authorities such as district and boards” (ibid). The core values of PBC are innovation, protecting the public interest, accountability, strong fiscal and risk management, and respect and integrity (ibid).

In addition to working for the public interest, PBC, in the diffusion of the PPP product, works actively “to communicate the benefits of P3s; and to create a climate that stimulates the growth of P3 expertise and investment” (ibid). One of the goals of PBC is to “increase provincial public-private partnerships capacity” or what was described in Chapter 1 as the capacity of the supply side. To increase the supply capacity, among other things, PBC “[b]uilt strategic alliance with other provinces, and with P3 organizations such as Partnerships UK” and “[w]orked to expand British Columbia’s base of P3-related knowledge, understanding and expertise through activities such as forums, seminars and public presentations,” all of this while establishing “strong working relationships with provincial agencies such as the ministry of transportation and health” as a venue to press for more PPPs (ibid).

The challenge in early 2003, as posed in Chapter 1 and above, was “limited market capacity to undertake simultaneous major capital projects; limited experience, in both the public and private sectors, to carry out complex P3 projects; and risks related to project delays, which could affect the company’s cash flow and revenue projections” (ibid). PBC is committed to reducing those hurdles for the industry and to mitigate risks for the FES and, hence, to “implement successful P3s that will pave the way for further growth and development in this emerging sector” (ibid). This development was praised by the FES and advocated by CCPPP since its inception.

Two years later, *Building a Better Tomorrow: An Infrastructure Planning, Financing and Procurement Framework for Ontario’s Public Sector*, a plan from the McGuinty government, was released. “For the first time in Ontario’s history, a provincial government has established a comprehensive framework to guide the Ontario government, municipalities and broader public-sector partners in choosing the best options for planning,

financing and procuring public infrastructure assets,” expressed the Minister of Public Infrastructure Renewal of the time, David Caplan (Ministry of Infrastructure, 2004, p. 5). The framework is said to have been developed in consultation with “hundreds of stakeholders representing communities, businesses and infrastructures partners from across the province, and incorporates research and best practices from other jurisdictions” (ibid). Similar models such as PBC and PUK have been scrutinized and best practices from CCPPP and NCPPP have been incorporated.

The first year (2004-2005) the plan was carried out by the Ministry of Public Infrastructure Renewal, but a PBC model was enacted in July 2006 in the Ontario Infrastructure Projects Corporation Act which amalgamated the short-lived Ontario Strategic Infrastructure Financing Authority (OSIFA)) and Infrastructure Ontario (IO)) created a few months before (Infrastructure Ontario, 2007, p. 2). The new corporation (IO) presented itself as a “motivated, focused and results-oriented organization of more than 130 professionals working to build a strong reputation. We want industry to know us as tough (but fair) negotiators, acting in the public interest” (ibid, 4). IO will “leverage private financing and expertise to strategically rebuild and maintain vital infrastructure” and IO “recruited more than 100 highly-skilled, motivated professionals” trained in private project finance deals (ibid, 6). “They have played [by their experiences and qualifications] a major role in establishing our excellent reputation” (ibid).

IO is a corporation without share capital, composed of the members of its board of directors. The Board of Directors “provides strategic oversight” and “is also responsible for approving policies relating to risk assessment/management [and] approves projects that are within scope and expenditure limits” (ibid, 9). In 2007, the Board of this Government of Ontario crown agency was composed of: Tony Ross, acting as Chair, a former vice-

chairman of Merrill Lynch Capital Market group; Felix Chee a former executive vice president at Manulife Financial; Patrick Dillon a former business manager at the Provincial Building and Construction Association; J. David Livingston, acting as president and CEO of IO, a former Executive Vice President at TD Bank Financial Group; Isabel Meharry, a former consultant to the CEO of Sun Life Financial; Gadi Mayman, acting as CEO of the Ontario Financing Authority, but was at TD Bank before joining the Ministry of Finance; Linda Robinson a senior partner at Osler, Hoskin & Harcourt LLP; Jim Schwindt a former president of Traugott Construction Limited; Darija Scott acting as the managing principal of SCOTT Associates Architects inc. highly involved in PPPs around the world; and Harry Swain, a former head of the banking at Société Générale Canada (ibid, 12).

IO has partnered with the industry and has “committed to working with industry and partnering with them on decision-making.” IO has consulted with industry associations, service providers and consulting firms and “these consultations have been a driving factor to achieve success” in the diffusion of the product in Ontario. IO created a Strategic Opportunities Committee (SOC) in 2008 to bring together its client (the public sector) and the industry “to work together.” Richard Ellis, MHPM and SNC-Lavalin were included in the SOC. All of this work was geared toward increasing the number of PPPs. IO diffused the model also when it “provide[d] commercial procurement advice to municipalities” for example, but it was foremost by producing and delivering PPPs “on behalf of the Province of Ontario” that IO has contributed to an expansion of PPPs.

In Québec, in 2004, the Charest government, with the *Projet de loi 61: Loi sur l'Agence des partenariats public-privé du Québec*, paved the way for PPPs in the *Belle Province*. CCPPP made representation for the creation of the Agence des PPP at a parliamentary commission on the 11th of November 2004, where the value of PPPs for

Québec has been stressed. CCPPP stated, in the parliament chamber before a commission, that the government of Québec and the Agence des PPP should be in the business of educating public officials and the public opinion on the benefits of PPPs. Those benefits that CCPPP presented as being an empirically valid, were: job creation, economic development, reduction in governmental subsidies, boosting the credit rating of government and helping create new small businesses and new competencies (2004). CCPPP stressed at the hearing that Agence des PPP was needed because the “advantages were clear, but they were not known and accepted by the public” (ibid). But, most interestingly, the Council expressed the need for ‘normalization’ to create more opportunities for the FES, something that the agency needed to work on as a sine qua non for the private sector’s availability for more projects (i.e., small and medium projects) (ibid). Moreover, Bill 61 was not enough, CCPPP requested, as in BC and the UK, more favorable taxes and environmental legislation: “modifications to some laws and policies would facilitate PPPs in Québec” (ibid).

After heated debates at the hearings, Bill 61 was adopted and the Agence des PPP (APPP) was created in April 2005. It has been replaced in 2010 by Infrastructure Québec. Its mission statement was:

PPP Québec a pour mission de contribuer, par ses conseils et son expertise, au renouvellement des infrastructures publiques et à l'amélioration de la qualité des services aux citoyens dans le cadre de la mise en oeuvre de projets de PPP. Ainsi, PPP Québec est chargé, entre autre, de fournir aux organismes publics tout service d'expertise relatif à l'évaluation de la faisabilité en mode PPP de leurs projets d'infrastructures, d'équipements ou de prestation de services publics, au processus de sélection de leurs partenaires, ainsi qu'à la

négociation, la conclusion et la gestion de tels contrats (Agence des Partenariats Public Privé, 2006b)

In the Business Plan: 2006-2009 of APPP, the CEO, Pierre Lefebvre, who was at PriceWaterhouseCoopers before, stressed that:

In order to fulfill this mission, [PPP] Québec exercises a variety of functions under two separate headings. The first covers “advice and information” functions pertaining to [PPPs]. [PPP] Québec advises the government and its various entities on all matters relating to [PPPs], specifically with respect to project selection and prioritization. PPP Québec also informs public agencies, the business milieu, and the general public with respect to the public management concept of the [PPP] method, and ensures that best practices are promoted in this respect. This aspect includes the administrative functions that are inherent to its mission. The second heading entails providing public departments and agencies with expertise pertaining to the evaluation of the feasibility of projects carried out through [PPPs], the selection of a private partner, and the negotiation, signing, and management of partnership agreements. These functions relate to the analysis and progress of projects under the terms of a [PPP] (Agence des Partenariats Public Privé, 2006a, p. 6)

To launch PPPs in Québec, APPP gave 2 contracts, without tendering, in 2006 to Raymond Chabot Grant Thornton (\$775,000) and to PriceWaterhouseCoopers (\$807,970) to prepare the business case of the first projects (Dutrisac, 2009). A close friend to Monique Jérôme Forget, the head of the Treasury Board at the time, (now at Osler, Hoskin & Harcourt LLP), Pierre Lortie, from Fraser Milner Casgrain, was recruited for consulting

work for the government without any process (ibid). Pierre Lortie was then cross-appointed 'pro bono' to the 'Comité consultatif' where he was advising the government's officials on the best way to procure the projects in PPPs (ibid).

Two PPP flagships project, the Centre Universitaire Santé McGill (CUSM) and Centre Hospitalier Université de Montréal (CHUM), - billion dollar university hospitals - became so contested, after the auditor general's many negative reports, that Pierre Lefebvre, head of the APPP, was fired by Monique Jérôme Forget, head of the Treasury Board, in June 2009. Shortly thereafter (the following autumn), a new Bill (65) was presented at the Assemblée nationale to replace APPP with Infrastructure Québec (IQ) a model similar to Infrastructure Ontario. To be sure, the Auditor General's report stated that there was "aucune évaluation critique, experte, et indépendante" in the studies done on behalf of APPP by the hired consultants (Dutrisac, 2009).

In 2010, the transition to Infrastructure Québec was completed. On the 17th of March 2010, the new board of directors took office. As an implicit recognition of the enthusiasm of private actors for diffusion of the model who were involved in APPP, the new board was almost exclusively composed of deputy ministers apart from a representative of the Chambre immobilière, one architect and one engineer (Québec, 2010). This 180-degree turn on the Board composition was motivated by the need to give back the credibility and legitimacy that APPP has lost. To be sure, this has reassured the media. But the biggest differences between the APPP and IQ lie in the fact that IQ has the ability to look at all the types of infrastructure realization modes, while with APPP public organizations were forced to submit any projects they had to APPP for consideration (i.e., for a PPP mode). If a PPP was possible, judged by APPP as such, then the PPP mode was an obligation for the public organization. With IQ, this obligation has disappeared from the

Act and blurred the media in thinking that PPPs were taking a step back, but IQ has kept the power to select which mode will be enacted and its creation has been welcomed by the Institut pour le Partenariats Public Privé (a provincial organization like CCPPP in the business of policy diffusion, hereafter IPPP) which has seen an improvement in the business opportunities created by the larger mandate of IQ – not the other way around (Institut pour le Partenariat Public Privé, 2012).

IPPP, like CCPPP, is hosting events where the industry can meet public officials, many of whom are from IQ. The Comité Exécutif was formed in 2012 of representatives of the FES, More specifically, the President was Johanne Mullen from PricewaterhouseCoopers, the Treasurer was Frédérick Brassard from Fiera Axiom Infrastructures, the Secretary was Nicolas Roy from Fraser Milner Casgrain, the Vice-President was André Dufour from SNC-Lavalin, and the Second Vice-President was Nicolas Truchons of Raymond Chabot Grant Thornton. Representatives from other firms such as Johnston Vermette, Samson Bélair/Deloitte & Touche, Pomerleau, Fasken Martineau, Banque Nationale, Blakes, Cassels & Graydon and Ernst & Young are members of the board of directors. While IPPP was organizing diffusion activities for IQ and public officials in general, CCPPP, after many years of diffusion, welcomed the Building Canada Plan.

1.12 The Canadian diffusion building program³⁷

In 2007, the *Building Canada Plan* was announced as a seven year, \$33 billion plan for investment in infrastructure. The Minister of Transport, Infrastructure and Communities, Lawrence Cannon, in the *Building Canada* policy paper said that “Since

³⁷ The following discussion on PPP Canada has been published by the author (2012) and part of it is reproduced here with adaptations. The sources have been updated and the data actualized.

Confederation, national government have built infrastructure to allow Canadians to travel, communicate and do business across our vast country. Government investments in infrastructure created Canada’s early canals, national railway, the telegraph system, the St. Lawrence Seaway, ports, airports and the Trans-Canada Highway – the very foundation for building a nation and helping it grow and prosper” (Infrastructure Canada, 2007). From there, Cannon stressed that “It is as true today as it was when Canada was built ... the time has come to exercise leadership by working more effectively with provinces, territories and communities to build a modern Canada founded upon world-class public infrastructure” (ibid). In order to realize this, “Canada’s Government is making an historic infrastructure investment of \$33 billion under the new Building Canada plan [to] invest in infrastructure that will support a stronger economy, a cleaner environment and more prosperous communities. In short – a stronger, safer, and better Canada” (ibid).

The \$33 billion Building Canada Plan (2007-2014) is comprised of several categories:

• Municipal GST Rebate	\$5.8B
• Gas Tax Fund	\$11.8B
• Building Canada Fund	\$8.8B
• Public-Private Partnerships Fund	\$1.25B
• Gateways and Border Crossings Fund	\$2.1B
• Asia-Pacific Gateway and Corridor Initiative	\$1.0B
• Provincial-Territorial Base Funding	\$2.275B
• Total	\$33.0B

Source: Canada, *Building Canada* 2007.

The P3 Fund is created by the Government of Canada, it is argued, because “Private capital and expertise can make a significant contribution to building infrastructure projects faster and at a lower cost to taxpayers” (Ibid). This is why PPPs have been “expanding rapidly” around the world and why “many countries [are] taking practical steps toward the development of programs aimed at fostering stronger P3 markets” (ibid). Canada would be ‘lagging behind’ other jurisdictions, the document states, and “as a result of a lack of P3 opportunities to be found within Canada ... Canadian pension funds are often investing in public infrastructure projects in other countries” (ibid). For these reasons, the Government needs to “take a leadership role in developing P3 opportunities” (ibid). This ‘leadership role’ is exercised through two venues: 1) the P3 Fund itself, and 2) the creation of a “P3 Office [that] will facilitate a broader use of P3s in Canadian infrastructure projects” with the help of a requirement prescribing that it consider the ‘viability of a P3 option’ for all projects involving more than \$50 million from the ‘federal partner’ (ibid; 27).

1.13 The symbolic protection of a crown corporation: favoring an industry

According to the first *Annual Report Public-Private Partnerships: Building Infrastructure*, tabled in 2008, the Governor-in-Council approved PPP Canada’s Corporate Plan, thus allowing the Corporation to move forward with its initial staffing and administration (PPP Canada, 2009a).

On February 12, 2008 an interim Board of Directors was constituted. Among other responsibilities, “The interim Board of Directors oversaw the development of PPP Canada’s inaugural Corporate Plan” (PPP Canada, 2009a). On January 19, 2009, the Minister of Finance, Jim Flaherty, “appointed Mr. Gregory Melchin as Chair of the Board of Directors for PPP

Canada” (ibid). Mr. John McBride was also appointed by the Minister in the position of Chief Executive Officer of PPP Canada and ex-officio member of the Board of Directors, on the 16th of February 2009 (ibid). A few months later, four individuals were appointed to the Board of Directors of PPP Canada. The former President and Chief Executive Officer of SNC-Lavalin Group Inc., Mr. Jacques Lamarre was nominated alongside the former President and CEO of BMO Financial Group, Mr. Tony Comper, Ms. Carol Pennycook from Davies Ward Phillips & Vineberg and the founder, Executive Chair and Chief Executive Officer of the Armstrong Group, Mr. Peter Armstrong. These nominations were justified by the fact that they “come with a remarkable depth and breadth of knowledge and experience, whether from the public sector or *as leaders in their respective industries*” (ibid, my emphasis). Moreover, “Their direction will ensure the Corporation can fulfill its mandate to make *strategic recommendations on policy development* and *provide best-practice advice* based on their corporate and public-sector experience” (Bordeleau, 2012)

PPP Canada is not only a Crown Corporation that advises the government; it also has at its disposal a Fund to ‘stimulate’ PPPs. As the Corporation acknowledges, the Fund is “one of its most important instruments ... a \$1.2 billion fund designated to support the innovative application of P3 procurement across Canada” (ibid). The P3 Fund is part of the *Building Canada Plan*, announced in 2007, and PPP Canada had a clear mandate in 2008 to ‘move forward with investment’ as this was and still is “a high priority for PPP Canada” (ibid). Officially, PPP Canada proclaims that it:

“Will work to foster the growth of a P3 policy framework to improve interactions between the public and private sectors. By developing and

advising on a federal policy framework, PPP Canada can facilitate bringing federal P3 projects to market which would further support the overall growth of Canada's P3 market" (PPP Canada, 2009a).

What is intended is for the government to adopt the P3 policy framework developed by PPP Canada to 'ease' the flow to the 'project pipeline' and to "facilitate the implementation of P3 projects at a federal level" so that the industry offering P3 on the "marketplace can further grow and diversify" (Bordeleau, 2012).

In its second Annual Report, *Public-Private Partnerships: Improved Infrastructure Delivery*, the Chair of the Board, Greg Melchin, states clearly that PPP Canada "aspires to be a national leader and focal point for P3s in Canada" and the Corporation is working hard to gain "credibility in the P3 market" by working with the 'P3 industry' – with a particular interest "in the increasing engagement of a new market segment" - so as to bring "their perspective to bear on policies and processes" to foster PPPs (original emphasis, Bordeleau, 2012). PPP Canada will "broaden the application of P3s" by "encouraging the use of P3s by provinces, territories, municipalities and First Nations" through the bearing of "its [own] influence and expertise" (ibid). The CEO of the Corporation, John McBride, acknowledges that "The input and ideas of the P3 industry are an important element of *shaping PPP Canada's strategies and plans*" and that "many industry players ... *have shared their views*" (original emphasis, Bordeleau, 2012). According to the CEO's message, the CEO will personally look, "to broadening and deepening PPP Canada's engagement with all elements of the P3 industry" (ibid).

PPP Canada wants to develop itself to become a 'hub' for "dialogue" aimed clearly at homogenizing policies regarding PPPs in Canada; something that the industry strongly desires here and abroad. The policy diffusion role that PPP Canada desires to play with

each “jurisdiction across the country” is aimed at establishing “their needs” so as to offer “solutions to support their development of knowledge and capacity to implement P3s” (ibid).

The goal is to create “strategic partnerships with key federal policy leaders to create clarity and consistency in decision-making and P3 procurement practices” (ibid). This informal network should bring the “flow of P3 projects” to a “reasonable” level, permitting industry to benefit from “the largest opportunity in the federal market” that the “P3 procurement of services, and other non-traditional P3 arrangements” represents (ibid). Hence the Corporation does more than inform departments on ‘best practices,’ it fosters the PPP enterprise through the promotion and diffusion of ideas.

1.14 Conclusion

This chapter has shown that PPPs in Canada started later than in the UK and the US because the PF product was less used and the FES less developed than in the other countries studied in the preceding chapters. An important part of the cause is to be found in the important role played by the government in the natural field of PF, such as power, transport and oil and gas. The nationalization of electricity in the Canadian provinces prevented the development of IPP’s as seen in the US in the early 1970’s and the lack of oil reserves, apart from the late ‘discovery’ of the tar sands, prevented a ready transfer from the expertise produced in the UK and the US. Moreover, the way the banking sector was structured prevented the same level of risk taking that was seen by the investment banks in the US and the UK and hindered the supply of short-term capital for two decades, until a sectoral reform was put forward.

To speed up the development of PPPs in Canada, the FES financed the creation of the CCPPP in 1993 to diffuse ideas about the product in Canada. The CCPPP was based on

the NCPPP model and shared the same missions, objectives, and types of activities. This thesis has shown that CCPPP has advocated for the creation of public PPP agencies throughout Canada. CCPPP was proposing models similar to the one experienced by the FES in the UK, namely of PartnershipsUK (PUK). In the early 2000's, PartnershipsBC was born with a mission similar to PUK. PBC would rapidly be followed by other agencies in Canada. The most important were covered, such as Infrastructure Ontario and Agence des PPP Québec (restructured as IQ in 2010) and, finally, the latest PPP Canada which was based on the PPP Québec model but with a \$1.2 billion PPP Fund to incentivize public officials at all levels in the federation. It has been shown that those public agencies are in the business of diffusing the PPP product for the industry much more than has been acknowledged by the scholarly literature. The important participation of the industry, for board directors and executive staffers positions, is to help make sure that the public agencies continue to diffuse the product in a way that is attuned to the industry in the future. But too much perceived involvement of the FES into state agency can cause feedback effect into civil society, the unions, and the media; as alluded above in the APPP's case (p.250-254), restructuring was needed to calm the product's opponents. By introducing more public officials in IQ, the opponents were reassured, but the opportunities for diffusion haven't disappeared entirely.

CHAPTER 6 - CONCLUSION: WHY ARE WE DOING PPPS AND 'SO WHAT'?

This study is about the creation and diffusion of ideas as much as it is about PPPs. Ideas do not *always* stem from material practices and incentives, but even if this is currently not fashionable to assert, they often do. If this is indeed true, then studying how interested actors were able to diffuse ideas about their product³⁸ will be worthwhile so as to expose the real value and societal implications of the phenomenon.

Surprisingly, for almost three decades, the political agenda of Thatcher or Reagan seems to have been accepted as a general introduction to the economics of PPPs. Even in seminal and sophisticated public policy books the discussion on PPPs has been weak. For example, in Howlett's *Designing Public Policy*, in the only paragraph of the book that is dedicated to PPPs, it is stated that "government[s] encourage private sector firms to build and operate public infrastructure... in return of a government guarantee of a long term lease," there is no explanation of the emergence of PPPs, nor is there any discussion of their implications (2011, p. 79). This may be due to the fact that many approaches to PPPs don't take the idea's creation and diffusion into account; they take ideas mostly as given and this can hinder the fullness of their implications. It is to solve this somewhat 'big bang' problem (i.e., where this first 'hot plasma' came from) that the sustained comparison of the emergence and diffusion of PPPs has been written. It is by understanding the first moment of PPPs that we can see the logic of the policy diffusion at play today. It is also necessary to understand where we are going and what the implications are, not only for present governance, but future governance as well.

³⁸ In Hodge, Greve and Boardman (2010), PPP's are acknowledged as "simultaneously a form of governance, a public policy delivery tool and a language-game involving multiple grammars," but they are not recognized as a product to be sold to an owner or owners.

We saw in Chapter 1 that utilitarian accounts for the emergence of PPPs have emphasized the fiscal constraints of the state, efficiency arguments, a return to the natural role of the private sector and ideological accounts. Let's recall that the fiscal constraint of the state explanation suggested that states were forced to consider the PPP formula. Similarly, efficiency has been posited by some as the major independent variable: PPPs are used because of their intrinsic superiority compared to traditional models; it is often presented as a pure economic choice, which benefits society by being Pareto efficient. Some normative accounts argue that PPPs have always existed, predating the modern democratic state, and that they have simply 're-emerged;' a return to the 'normal' state, where the private sector delivers public services. This explanation is in fact explaining nothing by posing the return to a normal, unproblematic, state of affairs; it would not be something new, which would require implicitly vast inquiries to test its goodness. For their part, ideological accounts state that it is a neoliberal phenomenon advanced by political parties such as those headed by John Major's (UK) and Ronald Reagan (US). By this argument these politicians created PPPs through their policies to advance their neoliberal agenda and to 'encourage' the private sector to enter into this type of procurement. As discussed previously, none of these explanations are totally consistent with the empirical realities.

The countries studied have always kept a credit rating high enough to borrow at a lower rate than the private sector. They were never in a situation where they had to rely on PPPs because of a *sui generis* fiscal constraint (i.e., the impossibility to borrow at a better rate than the private sector), nor at the beginning of the emergence of the phenomenon, even if, in some cases, that rhetoric might have had more contextual appeal because of self-imposed no-deficit policies. While there was some political appeal to such an

argument, it has to be regarded as a discourse. The fact that it might apply in some countries not studied here doesn't change anything if only that an empirical investigation shows that this explanation is not universal. In any case, this can't explain the differentiated development of the phenomenon. As shown in Chapter 1, the intrinsic efficiency explanation has been rebutted by as many as seven auditor generals in as many jurisdictions after “flawed and/or erroneous hypothes[e]s and assumptions” were discovered as the source of the proclaimed gain to be ripped from the product (Lachance, 2010). HM Treasury (UK) concluded after two decades of PPPs that the “windfall profits” made by proponents of PPPs bring into question the alleged value for money of such deals (HM Treasury (UK), 2012). The most recent study conducted at the University of Toronto concluded that, on the 28 Ontario projects analyzed, PPPs incur an average of 16 % higher costs as compared to traditional projects implementation³⁹ (Siemiatycki & Farooqi, 2012).

As the main ideational support for the enterprise, the fact that ‘PPP works’ (i.e., that a highway or bridge *can* be delivered by a private financed consortia) does not prove the efficiency point as proponents often induce it. In any case, even if one accepts the superior efficiency of PPPs, this alone cannot explain the change discussed in this study. Viewing modern PPPs, as a ‘natural return’ of the pre-democratic ‘partnerships’ from as far back as the Roman Empire is highly entertaining as a preface for a Project Finance manual; it provides rhetorical legitimacy, and can surely seduce some individuals into

³⁹ This is before the VfM analysis is done. But the value of the VfM is debated as it had been judged by the Auditor General of Ontario that the risk transfer premium is “excessive” (2008). In Farooqi’s analysis it amounts to an average of 43 % (2012) while empirical analysis of the “Peterborough Regional Health Centre—a hospital built under the traditional procurement approach during the same period—were about 5 % of the total contract value” (Auditor General of Ontario, 2008, p. 112).

favoring PPPs over traditional procurement. However, the comparison doesn't hold. As has been shown, states have changed on an historical perspective, many 'partnerships' were simply pre-democratic, pre-modern economy laissez-faire, and the core of modern PPPs (i.e., PF and SPV) were not invented at the time of the Roman Empire, Florence, or medieval Britain. In any case, there is no explanation to be found in those accounts of the timing of the return of the 'historical partnerships'. Finally, linking PPPs to particular right-wing governments or policies might be appealing, but empirically political parties from left to right have embraced PPPs (see Chapter 1). Quantitative studies have found no strong relationship for PPPs when treating political parties as the independent variable. Similarly, we have reviewed the political history of PPPs and this argument cannot be supported. Hence, the timing of the creation, diffusion, acceleration, and the differentiated spread of the product cannot be explained by these accounts alone.

These unsatisfactory explanations can't answer basic questions such as: where are PPPs coming from? What is the driving(s) variable(s) of the phenomenon? Why are we doing PPPs in developed countries such as Canada, the UK and the US? Why such a sudden enthusiasm for PPP in Canada and its provinces, but not that much in the US?

In Chapter 1 several assumptions were put forward following the preliminary research. Let's recall that:

- In order for PPPs to thrive, a specific economic structure must have already matured to grant the required financing and manage a pipeline of projects: referred to as the "capacity of the supply side" (timing). Simply put, PPPs cannot be a persuasive option if the industry is unable to deliver them to any significant extent.

- The material availability had to be packaged in a legitimate and interesting ideational form to get diffused. Several “hubs of diffusion” were involved in the packaging of PPPs (e.g., NCPPP, CCPPP, OECD, the World Bank, PriceWaterhouseCoopers).
- The state of involvement of private consultants in privatization was important since those transactions gave them the necessary legitimacy to push those new ideas stemming from the material evolution of financial markets.
- The supply and demand of PPPs comes from a coalition of interests seeking to gain from the enterprise.
- Previous institutional arrangements act as an impediment that can hinder the “demand” for PPPs and as the supply gains maturity, institutional change will be desired by the coalition of interests (e.g., enabling legislation), but could be limited by constitutional arrangements and even culture.

The preliminary research has shown that there was an explanatory gap and, from this acknowledgment, more precise questions have been developed such as: *How and when have PPPs been created and diffused as a legitimate public policy and implemented by private firms with a varying degree of success?*

This question speaks to the complexity of the phenomenon *a contrario* of the simplistic accounts that were presented in the introduction of this study. In those accounts, PPPs were posited implicitly as a *technical mode* or project implementation or a *policy*, never as a *product to be sold to an owner*. The acknowledgement of the latter reveals a novel vision of PPPs: they became part of a sales process evolving through time – the PPP phenomenon. This research question is original because it recognized for the first time that *a specific economic structure must have already matured to grant the required financing*

and manage the pipeline of PPP projects; this might easily be termed the ‘capacity of the supply side.’ Hence, *the specific state of evolution of the industry was important for the availability of the PPPs* supply and any ideas one can have about them. As seen in the cases studied, PF always predate PPPs because the latter require the former to exist and the experience gained in PF is essential to bring PPPs to the market and execute them; gaining this experience takes time.

As we have seen in each of the countries examined, the keys to the emergence of PPPs are the availability of PF and an experienced FES, diffusion efforts to legitimize the application of PF to the public sector (PPPs) and the resulting demand from such efforts, non exclusively, in PPPs by government and ultimately by specialized PPP agencies required to consider PPPs first and foremost. Once PF was being applied successfully to the private sector, to bring to product into the public sector, the material availability of PF for the public sector had to be packaged in a legitimate and interesting ideational form to get diffused, because the higher costs of PF needed to be politically justifiable. *Without such a packaging*, the enterprise *wouldn't have been possible* in any sustainable way the public sector. Several hubs of diffusion were involved in the packaging of such ideas. But before those hubs made their appearance – financed at first by the members of the FES – the state of involvement of private consultants in the previous round of privatization was noticeable, since those transactions might have helped the FES actors in gaining experience working with the public sector, making valuable networking connections and building the necessary legitimacy to push the new ideas stemming from the material evolution of the financial market. As we have seen, the degree of privatization experience in the FES of the UK and Canada seems consistent with our hypothesis: the UK saw more privatization efforts and also saw the most important PPPs implementation, Canada was a

weak and late privatization case and is seeing a late and moderate PPP implementation. In the US, privatization was not a notable feature because of the lack of a critical mass of SOE's ripe for privatization. One thing is sure, PPPs are a better target for profits for the FES than privatization (International Monetary Fund, 2006). While this is true because PPPs are more complex, what needs to be acknowledged is the fact that it is the same industry, which design, implement and execute PF, privatization and PPPs. To be clear, the aim of this thesis was not to argue that privatisation (or divestiture) is the independent variable explaining PPPs, but simply to show that it is part of the same historical development in the financial market.

The interests of the FES in selling PPPs is not something that will, on a large scale, move public servants or politicians, let alone civil society in the direction required to build a steady pipeline of projects; something else, more appealing, is required. The FES recognized this early and financed heavily councils and associations to promote for them ideas about the product they wished to sell: NCPMP and CCMPMP proposed early 1990s such ideas to favor PPPs in the public discourse. Ideas are shortcuts about defined complex elements. The shortcut may be true or false; that is, it can be disconnected with reality while still giving the impression of being grounded in it. The efficiency idea of PPPs can be seen as a false affect heuristic, relying on a belief in the efficiency gains of PPPs, an overweighed positive affect. This is, in part, why it took so long to discover that these ideas were hiding the interests of those who are dedicated to the advance of PPPs for other reasons. Ideas about the benefits of partnering, risk sharing, and later, efficiency, were diffused as ways to mask the real benefits of off-budget project accounting, increases in spending power at a particular time (much like a credit card allows one to increase spending power in the present, by deferring payment to the future) and the increased usage

of the FES's services and higher interest on capital. Hence, the 'demand' for a 'supply' of PPPs came from a coalition of interests gaining from the enterprise in various ways. Obviously, compared to the traditional scheme, the FES gained more financially, but the demand from the buyers of the product came more from a new politically efficient product than the *sui generis* economies they have actually brought. This is so, because even if a PPP costs more, a VfM analysis can produce an artificially lower cost (VfM; Wall & Connolly, 2009 in Siemiatycki & Farooqi, 2012). Incredible profits made by PPP proponents raise serious questions about the real value for money of such scheme in the UK (HM Treasury (UK), 2012). Boardman and Vining go so far as to state that "most of the criteria explicitly or implicitly used by governments to justify the use of PPPs – such as deferring expenditures, placing expenditures 'off- budget', 'value for money' and 'on time and on budget' – are either inadequate or just plain wrong" (A. Boardman & A. Vining, 2012). While they may be wrong, there are strong incentives for their use by politicians, due to non-monetary benefits such as increasing spending 'off the radar' of public scrutiny and creating more opportunities for announcements so crucial to re-election - all of this under the idea that PPPs are more efficient than traditional government-run projects.

In Chapter 1, the theoretical proposition was that the coalition of interests has matching incentive structures for its demand and supply. If, in each country, we assume that the state of the industry (the supply capacity) is constant and equal we see that previous institutional arrangements can act as an impediment that can hinder the 'demand' for PPP. The very intense pressure to pass 'enabling legislation' in the US, suggests this hypothesis is sound. Federalism has delayed the phenomenon in Canada - as different provinces had their own legislation to pass and public agencies to create -, while the UK, a centralized Westminster regime, was acting as the counterfactual. This thesis also posited

that, with all else being held equal, as the supply gains maturity, institutional changes will be sought by the coalition of interests (e.g., PPP agencies, special procurement), but could be limited by constitutional arrangement and the feedback effect of prohibitions on contextual politics. This hypothesis seems to have been supported by the US, where PPPs are still banned in some jurisdictions, and in the Canadian case, where PPP agencies have mushroomed, while in the UK internal lobbying seemed sufficient to diffuse the scheme to an extent unmatched in the other countries studies without the need for FES funded PPP organization such as CCPPP or NCPPP seen respectively in Canada and the US. To be sure, the goal here was not to studied the institutional arrangement as an independent variable, but the evidence gathered in the cases supports the assumption that the demand for this product can be limited and that the FES will work to remove those limitations to increase demand. To be sure, as discussed in Chapter 5, in the US, NCPPP's diffusion effort are highly focused on the introduction of 'enabling legislation' in the two dozen states were it is still impossible to do any PPPs: it is clear that institutional arrangement can affect the demand even if PF is well developed.

What is clear from the material evolution of the FES is that no matter the realities of the PPP product, the protective belt of ideas covering the product had to be positive to give public 'champions' the required extrinsic political protection⁴⁰ and the intrinsic desire and aspiration to initiate change⁴¹.

⁴⁰ I.e. it is a new way to deliver infrastructure faster and cheaper to taxpayers.

⁴¹ Ideas about PPP efficiency can provide for motivated reasoning (see Tasic 2011). Similarly, they play the role of an affect heuristic (ibid). Finally, the focus on efficiency can itself create a focusing illusion, "a bias that appears when people consider the impact of one factor on the overall situation and overestimate its importance (Kahneman et al, 2006)" (ibid). By concentrating on efficiency, ideas about efficiency stemming from VfM analysis creates a focus illusion where attention on the effect of an increasing use of PPP's on society is downplayed for efficiency measures and it might

1.1 The construction of intellectual shortcuts and symbolic images: the generation of ideas

The literature has been responsible for some of the change seen in the field of public policy, which deeply impacted the way societies have organized themselves and managed their economies⁴². The literature would be the generator of ideas that would give meaning to actors' actions in many cases. New Public Management, Public Choice, and now, New Public Governance would have been highly influential; reforms would have been initiated following their appearance. But in the specific case of PPPs, the contention of this study is that the essence of PPPs - the application of PF to the public sector - was not created by some academics' theoretical propositions⁴³; the ideas have evolved from the material practice of PF in the North Sea in its modern form (which was imported and adapted from the primitive PF developed at first by General American Oil co. This is not to suggest that academic debates on accountability or proper discount rates, for example, haven't raged in the literatures of public administration/management, public policy/political economy, and governance (for an excellent review, see A. Boardman & A. Vining, 2012). Simply that the academic literature in public policy, for one, has taken stock of the PPP phenomenon in the aftermath and hasn't been involved in the discussion around the application of PF to the public sector. PPPs have been enacted, and the

be forgotten that VfM might not be the most important thing in the comparative procurement of capital intensive projects (e.g., collusion, corruption or concentration of economic power might be dominant concerns).

⁴² It is often the case. Typically cited example are John Meynard Keynes, John Nash, Niskanen's work and the NPM guru – both consultant - such as Osborn and Gaebler.

⁴³ This is not say that incremental – and sometime theoretical - discussions of the model haven't led to significant improvement in the PPP process along the way, but the model was driven by the material interest first and foremost.

literature has reacted by starting the description process and debate about classification⁴⁴. It is possible that this lack of involvement prevented an early recognition that PPPs are a product to be sold to an owner. But the fact that PPPs, as an application of the PF product to the public sector, were first created to meet the material needs of corporations involved in oil extraction and energy production has yet to be recognized – this is our thesis. These observations not only change the way we look at PPPs, but also how diffusion has been operated and generated. As Boardman and Vining have rightly argued:

Firms know that PPP contracts operate within a milieu where governments seek to maximize votes (as we discuss below) and they will exploit this opportunistically, for example, they may pander to government's desire for lower expenditures in the short run, expecting that they will be able to extract more profits later through renegotiation of incomplete contracts ... This raises the possibility that proponents of PPPs are falling prey to the nirvana fallacy⁴⁵.

Lets assume for a moment that Boardman and Vining might be right to point to a potential “nirvana fallacy” and that those ideas contributing to the fallacy are diffused by the industry and its hubs, then when Loxley reports - in the Canadian case - that “The

⁴⁴ This normal science, in the Lakatos sense, started with almost a decade of delay. It constituted the first phase. See also Hubbard and Paquet who argued recently that we were still at that particular stage: “In dealing with PPPs, we are still at a stage of development akin to the one stage where biology still classified animals according to the number of their legs.” (2011)

⁴⁵ The nirvana fallacy could have a number of distinct elements in the PPP context. The first is the fundamental belief or assumption of primarily *cooperative* behaviour (a ‘partnership’) between the major entities. A second mistaken assumption is that governmental actors are trying to maximize social value, rather than short-run political self-interest (current politicians might be imposing costs on future politicians). A third mistaken assumption is that firms engaged in PPPs are interested in minimizing government expenditures, as opposed to maximizing their profits” (2012). While we concur with Boardman and Vining’s contention, they don’t discuss diffusion of the policy through time and space.

federal Conservative government is ideologically committed to this approach and considers the academic and public policy debates on their efficacy as being settled. Finance Minister James Flaherty stated, "The time for study is over; this is the time for action" it seems clear that the debate is not over and that if PPPs are a product sold by an industry a second sober look is necessary (Loxley & Loxley, 2010).

This study is a clear case of a material practice pre-dating any *sui generis* theories or ideas about PPPs. It is no coincidence that the first writings on PPPs have been mostly descriptive and that at the turn of the century, classification efforts over the 'types' of PPPs were still consuming the energy of many authors and filling the space of many journals. It is unsurprising then, that credible explanations were impossible to advance in such conditions - where descriptions have led to atheoretical technical debates. Similarly, Hubbard and Paquet wrote that "The terrain of public-private-social partnerships is plagued by the multiple meanings of partnership label, by ideological referents, and by the paucity of meaningful evaluation of the thousands of experiments carried out throughout the world ... As a result, ideology and presumptions are having a field day" (Hubbard & Paquet, 2007). It is possible that this state of affairs led practitioners and politicians alike to a certain fatigue which, ultimately, could be seen in Flaherty's call. This study, has defined a different way to see PPPs that – hopefully - will be helpful in moving research into a more fruitful direction.

Interestingly, ideas about risk-sharing and increased efficiency were first generated in the corporate literature, at a time when academics were still taking stock of the

phenomenon. The academic literature would later enter these debates⁴⁶. As shown, much of the first raw data about efficiency was generated by corporations (e.g., the famous 17 % increased efficiency), then used by HM Treasury (UK) and later PUK; many academics have used this government ‘base number’ as a given when discussing efficiency. The coupling of the 17 % efficiency cornerstone report from Andersen consulting⁴⁷ – which was reported as experienced in the UK by the government – and the ‘on time’ demonstration led to the ‘it works’ argument. The literature might have been blurred by this “efficiency debate.” Hence, the diffusion of the ideas advanced by corporations has been mostly ignored⁴⁸.

We have shown that the diffusion literature could direct us into a more fruitful analysis by stressing the importance of ideas in explaining change. For PPPs to be diffused in different jurisdictions and to allow for the emergence of public champions the product had to be surrounded by an ideational protective belt; one can hardly imagine public champions of a product that does harm to their organization. Stated differently, the PF product existed and the industry was ready to sell the public sector’s derivative of its private sector version, all of this before ideas had been created and diffused by the FES regarding the benefits of an application of PF to this new market. Ideas have been created to act somehow as a “lubricant” for the product’s diffusion. To be sure, the FES has even

⁴⁶ This is not a criticism; academic research by its design is sometime in a reaction mode of social phenomenon... It is simply a recognition that academia hasn’t been the prime exponent of PPP’s; the product was created and diffused before scholars devolved attention to the phenomenon, starting by a classification effort and disparate case studies.

⁴⁷ See also chapter 3 for a complete discussion on this reports and others.

⁴⁸ Since those ideas about the value of PPP’s participate in the attribution of meaning and legitimacy to the actions of the public champions (who then push the needed reforms intraorganizationally), much of the explanation on PPP’s has been left out.

created and heavily funded hubs of diffusion to help legitimize its own *ad hoc* efforts, such as PUK, NCPPP and CCPPP.

As Leslie Pal argued in his account of OECD's importance in policy diffusion processes, more than NPM *per se*, what is interesting is "how it spread and how deeply it was affecting governments around the world" (2012, p. 9) – the same is true for PPPs. How it spread had never been examined in a sustained comparison. For Pal, the potential importance of IGO's "as venues or sites for policy diffusion and lobbying" started to be recognized in the literature by the mid-1990's, and was being better appreciated at the beginning of the 2000's (ibid, p.15), but while important policy hubs, IGO's were not involved early on in the diffusion of PPPs in Canada, the UK and the US. The OECD and the World Bank's Public-Private Infrastructure Advisory Facility, for example, had been involved in the diffusion of PPPs in developing countries, but only in the mid-1990, while the FES had been providing financing for projects since the early 1980's⁴⁹ in the same countries. For Schmitter, the policy reform field has ignored international pressures for too long and "it was time to look more seriously at them" (Schmitter, 1996), something that Pal does with the OECD case (2012, p. 9). But while this is true, we have seen that there was another big absentee in the international diffusion model - the FES. PPPs are used in this study as one empirical observation of ideas stemming from material life while showing at the same time the diffusion capacity of the private sector. We acknowledge this for the first time, but this capacity or influence has yet to be acknowledged for other political economy reforms, past, present and future in the public policy literature.

1.2 Material pre-condition to ideational diffusion of PPPs

⁴⁹ For example, in 1986, Canada entered into its first PPP - the Confederation bridge.

It has been made clear that PF and SPV are required for any form of modern PPPs⁵⁰; without *both*, the procurement is traditional - even if it requires a complex contract with the public sector⁵¹. Hence, there was a need to understand how PF has developed because PPPs are a derivative of the primitive⁵² and modern⁵³ private-partnerships (PP's). While some have argued that "Project financing can be traced back to the medieval times" (Buljevich & Park, 1999), this thesis has demonstrated that it is the 'Spindeltop strike' of 1901 in Texas, and the intense petrochemical development that followed, that led to the creation of the first primitive project finance organized by General American Oil. Other American firms were in need of such financing and the product has evolved incrementally over time with the development and specialization of the FES on Wall Street (US) and in the 1970s in The City (UK). Empirically, this thesis has shown that the first company involved in what might be called primitive project finance, was the General American Oil Company of Texas.

As seen in Chapter 2, primitive project finance developed at that time for three reasons: firstly, in the enthusiasm for prospecting, firms were created in a hurry and did not have any credentials or history usable to establish credit worthiness. Second, with the mass production of the personal automobile, the prospect for a long-term unlimited demand for oil was assuring lenders that the oil would be sold. Finally, the development in Texas was taking place in a country united economically. The uniqueness of American common law made it possible for New York's most developed and sophisticated financial market to get

⁵⁰ PPP's of the type we have described in Chapter 1. Our definition is somewhat different than the usual, so a second reading of our definition is suggested in case of doubts.

⁵¹ For us, as defined earlier, collaboration, sponsorship and other types of contractual arrangements lacking PF and SPV are not PPP's organized by the FES.

⁵² PF financed only.

⁵³ PF financed through an SPV.

involved in the first steps of oil field project financing, because it was possible to register all transactions under New York's law, thus facilitating the standardization of transactions and the interplay⁵⁴ between New York's lawyers and financiers – the original actors of the FES⁵⁵.

The UK would see, for its part, the development of modern PF techniques in the 1970s⁵⁶. The uniqueness of the physical conditions in the North Sea would set the incentives stages for an innovation; the special purpose vehicle (SPV) and its coupling with PF. Contrary to Texas – and then the rest of the US – onshore drilling and extraction, the North Sea was more capital intensive and the risks associated with offshore and deep-water drilling and extraction were greater in magnitude and their probabilities higher. It was to face these risks that an innovation was created by the FES; the special purpose vehicle, as has been shown in this study, is at the core of the modern project finance used for the North Sea and later the application of PF to the public sector.

The development of the FES through PP deals and the experiences gained from each PP project have helped law firms, big consultancies, and banks (all part of the FES) in organizing privatization of large SOEs. As experienced with PP's, the Magic Circle was drafting the divestiture legal mechanism, the management consultants were operating risk matrices and revenue flows, and the banks were organizing the type of financing required by the sponsor. The fact that some divestitures were not financially operated as PF, doesn't

⁵⁴ In our study, the interaction between the actors is conceptualized as evolving processes where the nature of the interactions is refined through time and some interests become shared through intersectoral practices.

⁵⁵ As discussed in Chapter 3, the first iteration of project finance was pioneered by American General Oil and the lawyers and financiers of New York.

⁵⁶ The UK is remarkable for the magnitude of the PF that was involved with the North Sea. SPV's have been adapted to this particular case by the FES, as seen in chapter 3.

change the historical realities that the FES emerged strongly from PF first and was able to organize and engineer deals, whether they were entirely PF or not (Yescombe 2002, 10). Privatization experience was influenced by the PF experience of the FES⁵⁷ and the privatization deals – whether they were PF or not – have helped the FES in gaining experience and legitimacy to apply the PF product to the public sector as PPPs⁵⁸. Recall that from the 1930's to the 1980's, PF was applied solely to the private partnerships (PP's) without any ideological content or rhetoric about its usefulness⁵⁹.

In Canada, PF started during the 1980's and the number of PF projects was very low. At the beginning of the privatization era, the FES wasn't experienced as much as the UK's or the US's in structuring large and complex deals⁶⁰. The nationalization of the energy sector in most of the provinces had removed the natural *vivier* of PF and, hence, delayed the interaction of the FES actors in Canada. The privatization experience in Canada was therefore weaker⁶¹. In turn, the weakness of the privatization era in Canada delayed the arrival of PPPs not because of any ideological opposition, but simply because the market wasn't developed enough to tackle a large pipeline of deals, *in contrast to* the US and the UK. This is not to say that at some point opposition wasn't present, nor that this hasn't caused friction, but simply to underline that the FES' state of development has

⁵⁷ Having been able to organize complex PF in the private sector for several decades has helped the FES in selling privatization transactions.

⁵⁸ Similarly, after having been involved in privatization of the public sector, the FES actors were better able to sell the more lucrative PF to the public sector.

⁵⁹ While the FES was selling PF to the private sector exclusively, it was acknowledged without any debate that PF was more expensive than traditional loans.

⁶⁰ As we saw in Chapters 4, 5, and 6, the actors involved in the FES of each country studied were different, while some actors were involved in multiple countries at the same time. Particularly, law firms and banks were having a *chasse-gardé* in Canada and this impacted the level of experience readily available.

⁶¹ Experience building was hence delayed in Canada, compared to the UK's early North Sea and the US's early energy developments.

to be at the core of any explanation of the intensity and timing of PPP implementation. Stated simply, 50 years of PF experience in the US and almost three decades in the UK can't be caught up to overnight by a new PPP enthusiast country; Canada was a clear recipient of ideas flowing from the UK through the Canadian FES first⁶², but even if ideas travel fast, material life doesn't adapt instantly; as with lightning and thunder, distance necessarily creates a certain lag. While it is clear that the FES has been highly involved in creating and diffusing PPPs, the political system variables are important; for example, the US decentralized political system acted as an impediment to the FES' efforts.

While it is not possible in this first macro study to fully detail the evolutionary process and *ad hoc* interactions, our aim was to present a new way of thinking about the phenomenon. This vision helps to understand that the demand for PPPs comes from a coalition of interests in which politicians and administrators take part for various reasons. While further research will shed light on this micro process, as was shown in the corporate literature review⁶³, decision makers gain from PPPs by being able to advance projects they wouldn't otherwise be able to, through normal budgets, and the ideas created by the FES about the efficiency of the scheme shielded decision makers from criticisms. In the UK⁶⁴, the FES presented the virtues of PPPs as 'off the budget accounting' before any rhetoric about efficiency, risk sharing, and partnering came about. Decision makers used PF as a credit card; it increased their spending power instantly, albeit at an overall higher cost.

⁶² The Canadian government acknowledged that it was inspired by "the knowledge and experience of more mature financing markets such as the United Kingdom," as was shown in a chapter entitled Public Private Partnership and the PPP Fund, the first PPP in Canada was the Confederation Bridge but the model was the application of PF to this public good and the proposition was an unsolicited PF proposition stemming from the industry.

⁶³ See Chapter 1.

⁶⁴ See Chapter 4.

This was good politics: new infrastructure announcements and increased political capital without the costly politics of a budget, and a bill postponed for decades to a time when one might not be around to be criticized.

In the US⁶⁵, the dynamic was different because the demand was impeded by the nature of its institutional arrangement: most states' administrations couldn't enter into PF unless enabled by the necessary legislation, while many other states were constitutionally forbidden to enter into PF ventures. For these reasons, the industry needs enabling-legislations to sell PPPs and NCPFP was given the mandate to support the implementation of that legislation through the diffusion of positive ideas about PPPs. These proscriptions, coupled with the many veto points characteristic of the US system of government, created friction. Getting the legislative branches to enter into the politics of removing constitutional prohibitions and to passing the required enabling-legislation was a hard sell that the FES continues to work on. Coupled with the decentralized executive, the demand for PPPs was impeded, while the PF for PP's was at a very high level. Certainly, an administrator can desire a PPP, but if it is constitutionally prohibited, the enthusiasm of the champion is not enough. In the US, bureaucratic interactions with politicians are much more limited than in decentralized agencies, states, and local bureaus, as they are removed from the legislative arena, providing an added level of complexity for the FES.

In Canada⁶⁶, politicians' interests are the same as in the UK (as Westminster-type systems), but by the time PPPs were available in Canada, off-the book accounting was no longer proposed as a good reason for PPPs (in the UK this justification had been replaced by efficiency rhetoric). The latest reforms in accounting norms and the later

⁶⁵ See Chapter 5.

⁶⁶ See Chapter 6.

implementation of accrual accounting has removed much of this financial manoeuvre's appeal due to the ethical and accountability questions it raised in the aftermath of the Enron scandal, and therefore a stronger argument was required. Hence, praising off the book accounting in Canada didn't have much rhetorical appeal.

For simplicity's sake, in this study, demand has been assumed to be constant, and the concept of a coalition of interests has been used to allow for a macro public policy analysis of diffusion of this highly complex phenomenon from a comparative and historical perspective. Acknowledging this complexity was necessary, but it comes at the cost of precision. One could now undertake an analysis of a particular type of participant in this coalition – politicians, bureaucrats, management consultants, accountants, bankers, lawyers, project sponsors, insurers, bond marketers and so forth - from an historical perspective, while another might be interested in a microanalysis of the incentives of the demand *per se*, while yet another could try to interview key FES actors and public decision makers involved in the first deals from the 1970's, 1980's and 1990's in a more anthropological, historical or sociological style of research. Assuming that a minimum demand exists is not a stretch because PPPs are an alternative that has to be selected by decision makers; it has never been an obligation. Hence, a real or perceived need has to be present in some form. It is assumed that the base demand is as described above, but this is not to say that demand was not affected by the diffusion effort, or to propose that diffusion is linear.

This study described the construction effort put into hubs of diffusion by the FES for the diffusion of ideas about PPPs; efforts were made to create hubs, seen as more disinterested than single corporations, that would diffuse ideas to generate an increase in the demand and to cover the real interests of those who were favourable to PPPs under the

premise of representing ‘broader interests’. Stated otherwise, on a continuum of credibility and legitimacy, a single private firm is at the bottom (least credible and legitimate), CCPPP in the middle and PPP Canada at the top. In every jurisdiction, the historical perspective has allowed acknowledgement that this obvious legitimacy continuum was also mapping the evolution of the FES. The FES created and financed hubs such as NCPPP and CCPPP for those reasons and then those hubs were able to influence policy making over time so as to get the best diffusion mechanism, here the official agency or one posing as such (e.g., PUK). As seen in this study, agencies, such as PPP Canada, can do even more than diffusion; they can structurally incentivize to force one mode over another. Diffusing ideas to sell a product consumes significant resources, but after positive legislation has been put in place to incentivize the recourse to the PPP product, the flow of deals become much more important, steady, and predictable. In all jurisdictions, the FES has worked toward that goal. New research should detail those particular reforms to refine the grains of the explanation put forward in this study.

1.3 Theoretical implications of this study

The empirical reality presented in this study acts as a falsification agent on some explanations and theories about PPPs. At the same time, it presents elements that can be used toward increasing the sophistication of other theories.

The first set of corrections proposed is geared toward the four broad classes of explanation presented at the beginning of the study. Recall that they each offered an explanation for the use of PPPs. The first class of explanation argued that PPPs have made their appearance because governments were fiscally constrained and had to rely on PPPs to deliver critical infrastructure. In this vision, it was not a question of choice or ideology, but a question of necessity. As shown in this study, this explanation doesn’t hold because in

each country the government was still able to borrow at a lower rate than the private sector. While it is clear that, if politicians have to play with a decreasing budget – either because of economic flux or because of a particular ideology’s application – PPPs will become more attractive, and their demand will increase; high deficits make PPPs highly attractive politically. But they are also attractive in a *sui generis* fashion because politicians can’t have enough infrastructure and services to announce, if the fiscal impact is invisible and unfelt in their own political time span. One could argue that the fiscal constraint is related to the infrastructure gap and that it is impossible for countries like Canada or the US to renew their infrastructure as well as build new infrastructure in the traditional way: credit rating agencies evaluate total liability either in the traditional way through PPPs. Without entering into a sterile debate, it is clear that an increase in tax on revenues of top earners could help close the infrastructure gap. The fiscal effect would be felt but this is clearly a normative statement about the level of social distribution: if the PPP route is chosen to avoid raising tax a user fee will be used to finance the private consortia. Loxley even proposes that “instead of taxation being regarded as a burden, it should be considered the necessary price to pay for modern, efficient public services.” (2010). One thing is sure, by removing expenditures from the general budget and channelling them through PPPs, financed by usage or user fees, the practice has immense distributional effects which have been largely ignored.

In any case, PPPs use either user fees or a shadow fee paid directly by the government or the users. Governments around the world have used tolls on their public highways – and still do in many US states - and could still collect the same amount directly that the PPP operators collect today. It is clear that the product might be very practical in many situations, but this comes at a price, both in real terms and with distributional costs.

If a shadow toll is used and the charges are being paid on a constant budget, then it will have the effect of either increasing public debt or transferring funding away from other allocations within the budget. If PPPs are paid with new revenues, then revenues must be taken from the economy in some way; either the PPP operator or - in a traditional project - the public agency can have the same tolling revenues or benefit from the same shadow toll revenues. Hence, a similar amount (empirically, it would be less because public debt costs less to finance) could be taken directly from the economy to pay for the traditional procurement or a 'turn key' infrastructure. Hence the choice of the PPP scheme is not about an economic panacea, because the same amounts apply to either traditional and PPP projects, while the financing is more expensive for the PPP and has to be repaid with the same revenues and generate an important mark-up for investors. It could be that there is a "taxpayer fatigue" - that is paying tax in itself is so negatively constructed that politicians are willing to use PPPs as a way to avoid them even at a higher total cost – but this is more of a political efficient choice than any economic efficiency per se. In any case, PPPs had to exist for this option to be available for politicians.

The second set of corrections is directed toward the 'efficiency' class of explanation, which claims that the superior efficiency of PPPs compared to 'traditional' methods explains PPP popularity among decision-makers. The 'efficiency' explanations are ahistorical and cannot explain the timing of PPPs in different jurisdictions. It assumes instant availability and then explains the proliferation of PPPs as the simple choice between efficient and inefficient procurement alternatives. The explosion of PPPs is then a proof of their superiority. They would not need to be 'advanced,' 'pushed,' or 'diffused' by anyone or anything, they are simply 'better, faster and less risky' than 'old-fashioned traditional bureaucratic procurement.' Empirically, independent or public auditors, in as

many as seven jurisdictions, haven't been able to account for any *sui generis* efficiency⁶⁷.

After correcting for false, abusive or erroneous assumptions and adding shadow costs, they have discovered that PPPs were much more costly (e.g., in the case of the CHUM in Montréal, up to \$500 million more for the PPP). Vining and Boardman found that :

“In fact, some *ex post* evaluations find that PPPs do not have lower costs. Edwards et al. (2004), for example, concluded that in the UK the Highways Agency paid a 25 % premium on construction cost on its first four PPP road projects. This was to ensure that they were built ‘on time and to budget.’ Similarly, Blanc-Brude et al. (2009), in their examination of European road project PPPs undertaken between 1990 and 2005, conclude that *ex ante* construction prices were approximately 24 % higher than for traditionally procured roads. They found that this is roughly equivalent to reported *ex post* cost overruns for traditionally procured PSA projects” (Vining and Boardman 2012).

While proponents have debated public auditors' conclusions, and they have made some interesting counter-arguments, it is clear that efficiency is not automatic and ‘religious beliefs’ about their efficiency should be avoided. In the UK, after two decades of PPPs experience, HM Treasury concludes that the windfall profits made by proponents of PPPs raise doubts about value for money analysis (2012). It is through an in-depth analysis

⁶⁷ Before any treatment, Siemiatycki and Farooqi found empirically that PPP's were costing 16 % more than traditional procurement (2012). Vining and Boardman highlight that “VFM studies often use inappropriate discount rates (Johnston 2010). Moore et al. (2004) and Boardman, Moore and Vining (2010) argue that the appropriate real discount rate to use on a government project is in the region of 3.5 %, while VFM studies often use real discount rates in the region of 7 % to 8 %. In some extremely biased VFM studies, PPP impacts are discounted at the consortium's weighted average cost of capital, while PSA impacts are discounted at the government's borrowing rate, which is much lower.” (2012).

of PF that one can discover how efficiency might not be automatically to the benefit of the public sector⁶⁸: to be sure, if this recognition would have been made earlier, many of those problems could have been foreseen and dealt with by the public sector. In the private sector, is it recognized as a 'law of finance' that PF cost more than traditional loans and it is legitimate to question how this could become more efficient all of a sudden once being sold in to the public sector. In the case of the CHUM hospital construction, \$5.2 billion has been awarded to the consortia that in turn gave to Pomerleau a turn-key contract worth \$739 million. Pomerleau could have constructed the hospital, turn-key, for any other consortia at the same cost. It is obvious that the government could have requested the same turn-key contract from Pomerleau (or any other firms) and would have received the same 'on-time' features or proclaimed 'efficiency' for the same price (Loxley & Loxley, 2010). *Using infrastructures as a prism, it becomes clear that the difference has to do with PF. As soon as one accepts that the public sector can buy a turn-key contract for infrastructure, as any PPP consortia do, the rhetoric vanishes as one is left with a more expensive PF. In both cases, the private sector will build the infrastructure and deliver it to the buyer 'turn-key', but in one case it will be financed at higher cost without an increase in actual risk - in the countries studied here (might be different in an unstable developing country) - for the buyer because the latter is buying the feature of a guaranteed turn-key infrastructure - the risk bears on the constructor, not the buyer. This is not to say that private businesses are*

⁶⁸ “The committee of public accounts criticises the Treasury for failing to find alternative ways to finance public sector projects during 2009, when banks became reluctant to lend and held up 101 PFI projects worth £13bn. It suggests that the government should have temporarily abandoned PFI to directly fund some projects, instead of allowing the banks – many of which were being bailed out with billions of pounds of public money at the time – to increase their charges. The cost of loans increased by up to 33 % during 2009, costing the taxpayer an additional £1bn over the next 30 years” (Treanor & Curtis, 2010).

not often more efficient than government, partly because they have less accountability procedures to follow, partly because the incentives structure is different (e.g., an owner is much more motivated by cost saving and efficiency improvement than an employee), but to say that if the private sector is constructing the infrastructure in a turn-key contract, it doesn't matter if the buyer is the government or a consortia on the level of efficiency one can claim⁶⁹. Hence, one is left with PF and the FES' complex contractual arrangement and all of the transaction costs and agency problems.

Similarly using discount rates – as is often the case in practice - to create bogus perceptions, while leaving aside the shadow and transaction costs, cannot be left without correction. Again, this is not to say that PPPs are not useful in many situations and different environments – yes they can be even after those corrections, but, in a scientific perspective, those theoretical problems cannot be left aside. To be sure, PPPs can be more *expensive and still be desirable politically or socially*. Obviously, they could also be more efficient in some circumstances and be socially disputed as to become unattractive politically. The *demand comes from a politically efficient solution*, not necessarily because PPPs have intrinsic efficiency - debated or not. It is on this political efficiency that the diffusion of ideas about PPPs can play in creating a demand and it is why the members of the FES invest massive sums of money to finance organization that do just that.

The following two major corrections are therefore presented: 1) the assumptions about universal and intrinsic efficiency from which PPPs have been claimed don't agree with the empirical reality. This flaw must be addressed, bearing in mind that it is from this

⁶⁹ One could even argue that if the buyer is a public monopoly, the incentives to perform are even higher than in a multi-buyers private market situation, because if the monopoly bans the firm, the market perspectives are eliminated for the latter.

flaw that PPP models have won the support of many citizens and caught on internationally, or alternatively, prescriptions must stop being made on the efficiency basis solely; 2) because transaction cost theory hasn't been used to any significant extent in the PPP analysis, the risk transfer assumptions are flawed. More specifically:

PPP consortia are usually unwilling to accept revenue risk, which depends on use or demand and price (tolls). Not surprisingly, private sector participants will accept use risk and revenue risk if the PPP is taking over existing facilities, because these have relatively much lower revenue risk, e.g., US road concessions where traffic volumes (at least at current toll levels) are easily verifiable (Loxley & Loxley, 2010).

Empirical reality has shown that, as transaction cost theory predicts, the *ex ante* configuration was incomplete and *ex post* refinancing was possible for the private sector consortia⁷⁰: this is a clear empirical proof. This has led to numerous scandals in the UK. The HM Treasury concluded recently that contracts are increasingly complex and difficult to manage, but the cost of the management and monitoring hasn't been assessed (HM Treasury (UK), 2012). In Canada, it has been posited that the solution to incomplete contracting was fully comprehensive contracting, but the costs of 'comprehensive contracting' - if it was possible - have not been estimated. In any case, the trend is toward contract models and standardisation to reduce cost, not fully comprehensive contract development. Our explanation can correct this class of explanations. Indeed, as we have highlighted, PPPs can cost more than the traditional method, but they still can be portrayed

⁷⁰ See Bordeleau for a discussion on the transaction cost involved in PPP's in general and in the specific case of PPP Canada. Similarly, Vining and Boardman argue that "VFM studies measure production costs. GS, however, is the sum of government production costs and government transaction costs. Very often transaction costs are ignored, but they can be very high (2012).

through PSC analysis as more efficient even if they are not (in some case they may be more efficient, but the interesting case is when they aren't). This way, the analysis protects the public champions, and PPPs can be chosen on the grounds of efficiency and communicated as such. Hence, it can be politically efficient and not economically efficient at the same time⁷¹. Most of the actors involved in the decision processes can't recalculate or refute assumptions used in the PSC, and those analyses become as *Les Tables de la Lois*. Decision makers can't be blamed necessarily; few individuals are able to deconstruct the reports and analyses made by expert consultants⁷²; analyses that are sometime made on the public agencies' behalf (e.g., Partnerships BC). The correction hence implies that *some actors can move and choose PPPs, thinking it is really more efficient, while it might not be the case, all of this without knowing the bigger interest at play behind PF's application to the public sector*. The diffusion of the idea about PPP efficiency has worked out relatively well and the PSC has been used as a support for the idea.

The third class of explanation, the return to a state of nature, has to be removed from the explanatory field. Let's recall that this explanation argued that the welfare state era was an anomaly, and that partnerships between the public and private sector had always existed. This normative historical explanation, used as a legitimizing agent by some, never had any theoretical grounding and thus can't be corrected in any way.

⁷¹ Bordeleau (2012) and Vining and Boardman (2012) concur that when transaction costs are taken into account, the claimed superiority of PPP's vanishes. "Based on a series of case studies, Vining and Boardman (2008a) argue that transactions costs can be high in developed countries, although they do not provide numerical estimates. It is reasonably clear, however, that when government transaction costs are added to government production costs, the potential superiority of PPPs from a production perspective is considerably diminished or eradicated" (2012).

⁷² "Edward Leigh chairman of the Commons Public Accounts Committee said the consortium which financed and built the Norfolk and Norwich Hospital - Barclays, 3i, and their partners Innisfree, John Laing and Serco - had bamboozled inexperienced executives at the local National Health Service Trust" (Lea, 2006).

The final set of corrections is aimed toward the ideology class of explanation. This class of explanation stated that PPPs made their appearance because of the conservative agenda of, among others, Margaret Thatcher, Ronald Reagan and Brian Mulroney. It was their ideology about the place of government and the market that could explain the timing of PPPs. Empirical investigation has shown that ideology is not the most important independent variable. In the jurisdictions studied here, parties from both sides of the spectrum have embraced PPPs. The correction proposed, aims at giving the ideological variable an intermediary role, among others. In this model, *politicians whether they are from the left or right side of the political spectrum have an interest in increasing the number of projects at no immediate cost to them.* This macro conceptualization helps explain why parties diverging ideologically have embraced PPPs upon taking power, even after having spent years criticizing them while in opposition. Moreover, removing ideology as a central variable corrects the problem that this class of explanation had with different institutional arrangements such as the US's; in the US, decentralized bureaucrats championing PPPs can't be explained by party ideology, a class of explanation inspired by the Westminster-type experience of the UK, Canada, New Zealand and Australia. PPPs could not be moved forward in many US states where right wing parties were the majority, not because of the ideology variable, but because of the particularities of the institutional arrangement, that is the many constitutional and legislative prohibitions against PF for public entities.

While this political demand has been tacitly acknowledged, it has never been integrated in an explanation of the diffusion of the phenomenon. Moreover, this correction puts, for the first time, the role of ideas about PPPs at the center of the political demand - that is incentivized politicians looking for public announcements and other form of

projects ceremonial in which they can take the front seat can only do so if there is a 'protective belt of positive ideas' revolving around PPPs - and reinforces the important role of the FES and of its diffusion efforts - direct and indirect - in creating and maintaining this protective belt of positive ideas.

As one will have recognized from these corrections, each class of explanation was too simplistic even if some part of them were empirically valid all the while feeling very intuitive; this study put forward a vision based on the fact that reality is complex and our understanding of social phenomenon too often facile. But just because one can't quantitatively define *all* of the variables in a model at a particular time does not mean we should not try to increase the explanatory power of our understanding of a phenomenon; this was the modest goal. Modest because to lay out a new 'wireframe' of a model far from being finite in hoping for more development is not always seen as a contribution in public policy - the appetite seems to be more for neat micro model which work in a nutshell.

In this study, empirical reality has been taken into account and flaws have been deduced in the available explanations with the help of general public administration and public policy, law, and economic knowledge so as to create a new explanation based on a rearrangement of available theories into a more synthetic one, albeit with a high level of granularity. Hence, it is deliberate that this study hasn't micro-quantified through time the FES in each country, or described micro-organizational actions that led several industry actors to organize themselves to create hubs of diffusion. Others will be able to define those variables with less granularity - from coarse to fine; this study sets forward a new set of research questions for the community by clearly showing that PF predate PPPs and that the FES was involved in PF since its début and throughout the privatization era until PPPs made their appearance - this was the goal of this thesis.

1.4 Implication for policy diffusion

By looking at PPPs through the lens of the policy diffusion literature has been helpful. One can understand from this study two important refinements to the policy diffusion approach: 1) material practices can lead to an active creation and diffusion of ideas by private corporations. This is important because the policy diffusion literature has a tendency to start with governing organizations (GO) or more recently international governing organizations (IGO). When an idea has to be transferred or emulated, we rarely know how it came about, and accounts of private corporations being in the business of policy diffusion are sparse. Somehow GO's or IGO's are seen as diffusing ideas that seem to have 'fallen from the sky'. For example, IGO's have started diffusing the idea of PPPs only very recently (actively since the 2000's) while they were being undertaken in several countries two decades before. It may be that PPPs are not an exception and that private corporations have undertaken other important ideational diffusion efforts⁷³. 2) Private corporations can group themselves in business associations to represent their interests – this is well known – but what was less discussed is they can also create a specific diffusion hub for a particular idea. In the context of PPPs, organizations like NCPMP and CCPMP, sponsored by the industry, have been created to promote the specific product on the industry's behalf.

Those organizations, through their building process, aim at becoming more 'institutional' so as to gain increased legitimacy and to develop the seriousness of their diffusion material. Through the operation of those private hubs of diffusion, the industry

⁷³ Hodge (2006) discusses the consultocracy and the fact that "private consulting companies advocate for governments to go ahead and finance public infrastructure through schemes from which they themselves would profit," but the FES at large is not alluded to.

can diffuse the idea that the homogenization of the market would be better for all parties under the cover of the indirect actions of a more selfless type of organization (which seems to be mostly organizing conferences and giving prizes to champions). This homogenization proposal comes with the need for enabling legislation, as in the US, or PPP agencies that can select or force PPP projects on cautious or doubtful government departments. Both the efforts to create hubs of diffusion, and the impact of the diffusion done by those organizations, haven't been addressed in the literature and it is time to take them into account.

This study, due to its nature, was not able to fully flesh out the skeleton assembled, but future investigation certainly will. Similarly, the scope here was macro enough that many details remain elusive, but future studies can 'zoom in' and detail the specific processes that lead to each of those particular transfers. The aim in this thesis was to provide a new vision of the phenomenon, which would enable the launch of new research on new questions. This goal has been attained.

1.5 So what?

As economic thinking was being applied to the public policy field, either directly, or in the form of derived public choice and new public management to proclaim the 'efficiency judgement,' seasoned scholars were pointing out that we shouldn't forget classical public administration's prescription (C. Hood, 1991). As Williamson coined it in the transaction cost economics perspective: "To denounce public agencies because they have lower-powered incentives, more rules, and regulations, and greater job security than are associated with a counterpart private bureau *completely misses the point* if those features have been *deliberately crafted* into the public bureau, thereby *mitigating the contractual hazards*, albeit at a cost" (1999). If the efficiency assumptions are flawed, or if

the protections that classical public administration (intrinsic and extrinsic) has discussed and recommended over time are taken into account and if the *ex ante* and *ex post* moral hazard of transaction cost economics is studied, the PPP phenomenon can look riskier, less efficient and more expensive. At the same time, important equity and fairness issues do arise with PPPs; high user fees can prohibit some segments of the population the usage of the infrastructure, even in case where their government has guaranteed loans or a minimum volume of utilization. At equal cost with the traditional procurement and all else being equal, this equity issue might be sufficient to create a more favorable case for a more traditional procurement⁷⁴.

Public administration - and the public policies it helps create, enable, administer and deliver – has always been concerned with the public interest. Debates on the definition of the public interest abound and the goal here was not to resolve them here. Project finance - all else being constant - *always* costs more than traditional financing, be it traditional corporate loans or traditional public sector debt (Klein et al., 1996; Lewellen, 1971; Mills, 2010). If this is clear and undisputed in the private sector – that is, private corporations who use non-recourse project finance will pay more for the same project than if they use corporate loans because the risk for the lender is higher - when the same scheme is applied to the public sector it would therefore become less expensive. Obviously, this is unacceptable and public agencies, departments and politicians as well, shouldn't continue to act on this pretention and diffuse it. Moreover, this higher cost for project finance is a fact even without taking into account the important tangible transaction costs (i.e., consulting fees, legal fees, advisory fees, etc.) involved by the FES' participation. If this

⁷⁴ A short discussion can be also found in Loxley (2010, 77) and Padova (2010, 7).

was not enough, one also has to add the intangible transaction costs (*ex ante* and *ex post*), which plague any transaction, even highly redacted contractual arrangements. While in traditional procurement, the public service ethos was mitigating part of the intangible transaction costs (e.g., by reducing moral hazards and opportunism), in the PPP scheme this protection disappears. After winning a PPP project, the private consortia can request a ‘turn-key’ contract from their contractors so as to reduce those intangible costs, but the public sector is always prone to pay those costs in the management of the facility that the consortia usually keep for the duration of the contract⁷⁵. Evidence of this can be found in auditors’ reports where the level of services was not up to the contractual arrangement (e.g., Nova Scotia, as reported in this study), and by the refinancing of the project finance loan after the consortia has been awarded the project, hence, demonstrating that the information was far less than symmetric in the partnership. As clearly stated in the TCE perspective, monitoring aimed at assuring compliance is costly – many partners will not invest those extra costs but they will take the risk of paying an unknown price, consciously or not - and those shadow costs add up to the PPP costs⁷⁶; because it is costly to contract on the market, organizations internalize many operations they do regularly⁷⁷.

⁷⁵ “Case evidence suggests that PPP consortia are usually unwilling to accept revenue risk, which depends on use or demand and price (tolls). Not surprisingly, private sector participants will accept use risk and revenue risk if the PPP is taking over existing facilities, because these have relatively much lower revenue risk, e.g., US road concessions where traffic volumes (at least at current toll levels) are easily verifiable. However, Vining and Boardman (2008a) found that PPP projects with the highest use risk were less likely to have the use risk transferred to the private sector. They also observed that use risk was typically higher in larger projects, indicating that the private sector may be especially unwilling to take on use risk (or revenue risk) when projects are large” (Vining and Boardman 2012; 129).

⁷⁶ “While government contracting skills in some countries are improving ..., it is often poor. Where these skills are poor, governments are particularly vulnerable to opportunistic behaviour by private sector participants” (Vining and Boardman 2012; 129).

⁷⁷ This argument, originally from Coase’s *The Theory of the Firm* (1939), has been discussed by Williamson (1979).

The burden of proof should be against each and every PPP and their particular sponsors; *it is fair to think this way about a product the government is about to buy*. Using a particular discount rate and method, proposing unrealistic hypotheses or playing with the repartition of cash flow over time so as to place a PPP on the *pied d'estale* is not a valuable demonstration. One has to take into account all of the shadow costs to make the point worthwhile. What we have shown is that even without calculating the shadow cost, auditors can't find the proclaimed savings. In the private partnerships (PP) world it is well known by private corporations that PF costs more on a pure financing basis. This is a serious public policy problem we face. While it is fair enough to see industry sponsored organizations such as CCPPP or NCPNP proclaiming that PPPs are 'better' than traditional procurement, it is another thing to see public organizations such as PPP Canada or PartnershipBC proposing much the same.

By recognizing PPPs as a product, this study prescribes the following policy recommendations for developed countries such as Canada, the US and the UK studied here:

1. No policy should *facilitate* or *require* the consideration of PPPs. If present, policies should be terminated.
2. No official agencies, such as PPP Canada, should make the promotion of PPPs. If present, such agencies should be reorganized or terminated.
3. Independent public auditors should systematically approve the methodologies used for PSC analysis in all projects.
4. All projects analysed should then be debated in public in an appropriate forum⁷⁸.

⁷⁸ This is in line with the Manitoba legislation (Bill 34), but my recommendations #3 and #8 go much further.

5. Official documents should recognize that PPPs can cost more, but could be used for strategic missions that would be publicly discussed where this fact has been acknowledged.
6. Turn-key contracts, available to private consortia, should be requested by the public sector in areas where appropriate.
7. Discount rate should be 3.5 % for the PSC until new evidences is found.
8. All parties in a PPP must be subject to the same requirements for access of information as public organizations.

By putting forward these recommendations, governments will be in a better position to assess the usefulness of the “renting the money”⁷⁹ product that PPPs in fact are. If spending more now at a higher cost is desired – and it might be a fully legitimate political choice from time to time – and if this fact is well known, then the citizens who will pay more for this option will be the judge of the merits of the case for PPPs.

⁷⁹ The expression is from Vining and Boardman. “PPP advocates often treat the sale proceeds from concessions as a net benefit ... this government strategy [is] ‘renting the money’: government cash flow is higher upfront and lower in the future than for the PSA. Can ‘renting the money’ increase GS? No. From a political economy perspective, however, the obvious benefit is that government gets the money *now*. This money can be used for other purposes now, which may have political benefits” (2012).

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Appendices

APPENDIX 1 - PROJECT FINANCE PER PROJECT PER YEAR (1975-1992)

Year	Project Name	Size	Country
1975	Frigg gas field	300m	North Sea
1978	Kinsale North Sea	100m	Ireland
1979	Casablanca Oil		Spain
1981	Cogasco pipeline	85m	Argentina
1981	Northwest shelf/Woodside	1400m	Australia
1981	Kinsale refinery	200m	Ireland
1982	Blair Athol coal mine	450m	Australia
1982	OK Tedi mine 82	150m	Papua New Guinea
1983	Das Island gas liquidification	500m	Abu Dhabi
1983	Trans-Mediterranean pipeline T1	49m	Algeria, Italy
1983	Trans-Mediterranean pipeline T2	81m	Algeria, Italy
1983	Curraugh coal mine	110m	Australia
1983	Mount Isa coal mine	633m	Australia
1983	German Creek mine	50m	Australia
1983	AK1 diamond mine T1	150m	Australia
1983	AK1 diamond mine T2	25m	Australia
1983	Gulf Petrochemical Industries	160m	Bahrain
1983	Qunintette coal mine T1	760m	Canada
1983	Qunintette coal mine T2	760m	Canada
1983	Qunintette coal mine T3	760m	Canada
1983	Qunintette coal mine T4	760m	Canada
1983	Qunintette coal mine T5	760m	Canada
1983	Water treatment plan	20m	Nigeria
1983	Balmoral field	400m	North Sea
1983	Heimdal field	220m	North Sea
1983	National Guard housing	80m	Saudi Arabia
1983	Energy project	32m	United Arab Emirates
1984	Alwyn field	-	North Sea
1984	OK Tedi mine 84	200m	Papua New Guinea
1984	Brae field restructuring 1	650m	UK
1984	Brae field restructuring 2	650m	UK
1984	Saga Petroleum oil field	600m	UK
1985	Northwest shelf/Woodside	2360m	Australia
1985	Northwest shelf/Woodside	2360m	Australia
1986	AnTaiBoa coal mine	475m	China
1986	Huangeng power station	54m	China
1986	Shajiao power station	65m	China
1986	Le Meridien hotel, San Diego	41m	USUS
1987	CITIC pulp factory T1	26m	China
1987	CITIC pulp factory T2	9m	China
1987	CITIC pulp factory	11m	China
1987	Beijing hotel	64m	China

1987	Eurotunnel 1	6720m	UK, France
1987	Eurotunnel 2	1680m	UK, France
1988	Escondida coper mine	47m	Chile
1988	Rabi Koungé oil field	110m	Gabon
1988	Tunisian pipeline	60m	Tunisia
1988	Super Octanos	90m	Venezuela
1988	Super Octanos 1	25m	Venezuela
1988	Super Octanos 2	70m	Venezuela
1989	Garden Court hotel	18m	China
1989	Eurodisney	681m	France
1989	Tate's Cairn tunnel	199m	Hong Kong
1989	Kwai Chung container port	1080m	Hong Kong
1989	Titan Himont Phase 1 T1	50m	Malaysia
1989	Titan Himont Phase 1 T2	15m	Malaysia
1989	Mexcobre mining	210m	Mexico
1989	Bangkok expressway	100m	Thailand
1990	Alba smelter	650m	Bahrain
1990	Karnapuli T1	90m	Bangladesh
1990	Karnapuli T2	10m	Bangladesh
1990	Guangdong highway	800m	China
1990	PLUS second stage	172m	Malaysia
1990	Bangkok airport	32m	Thailand
1990	Ankara metro T1	200m	Turkey
1990	Ankara metro T1A	20m	Turkey
1990	Ankara metro T2	114m	Turkey
1990	Ankara metro T3	38m	Turkey
1990	Ankara metro T4	60m	Turkey
1990	Istanbul casino/hotel	45m	Turkey
1990	Bruce North Sea field	-	UK
1990	South Mary Abbot T1	125m	UK
1990	South Mary Abbot T2	54m	UK
1990	Corby electricity	407m	UK
1990	Petersborough power plant	464m	UK
1990	Teeside power	1300m	UK
1990	Lakeland electricity 1	191m	UK
1990	Lakeland electricity 2	225m	UK
1991	Alouette alluminium smelter	140m	Canada
1991	Stonecutter Island port Ph1	257m	Hong Kong
1991	Stonecutter Island port Ph2	361m	Hong Kong
1991	PT Adero coal mine	27m	Indonesia
1991	PTP furniture factory	37m	Indonesia
1991	Botang LNG expansion	750m	Indonesia
1991	PTP furniture factory T2	37m	Indonesia
1991	F Train pipeline T1	-	Indonesia
1991	F Train pipeline T2	-	Indonesia
1991	Toni + Tiff field	600m	Italy
1991	Polypropylene plant T1	72m	Malaysia
1991	Polypropylene plant T2	28m	Malaysia
1991	Qatar gas field	100m	Qatar
1991	Suntec City marina center	492m	Singapore

1991	Sahaviriya steel mill T1	250m	Thailand
1991	Sahaviriya steel mill T2	250m	Thailand
1991	Clydebank hospital	204m	UK
1991	Midland cogeneration plant	3000m	USUS
1991	Syracuse cogeneration	175m	USUS
1992	Trans-Mediterranean pipeline	12m	Algeria
1992	Goonyelle coal mine	240m	Australia
1992	Canberra casino	35m	Australia
1992	Fort Saskatchewan	650m	Canada
1992	Science road	-	Hong Kong
1992	Polyester yarn plant	50m	Indonesia
1992	Petrokimia	99m	Indonesia
1992	Javagas pipeline	400m	Indonesia
1992	Titan Himont Phase 2,3	166m	Malaysia
1992	Power grid company	100m	Poland
1992	Tech Semiconductor	178m	Singapore
1992	Bangkok gas field T1	95m	Thailand
1992	Bangkok gas field T2	15m	Thailand
1992	Bangkok gas field T3	35m	Thailand
1992	Mab Ta petrochemical 1	170m	Thailand
1992	Mab Ta petrochemical 2	480m	Thailand
1992	Bursa gas plant	36m	Turkey
1992	Keadby power	714m	UK
1992	Medway power	677m	UK
1992	Barking power T1	1164m	UK
1992	Barking power T2	95m	UK
1992	Chicago arena	140m	USUS

(My own adaptation, from Kleimeier, 1998)

Appendix 2 - Exhaustive multi-source project finance project per year (1975-1992)

Project Name	Location	PF Type	Date (of financing)
2 coal mines	Australia	LR	pre 1984
2nd Forth bridge in Edinburgh	UK	PF planned	1994
2nd Severn bridge	UK	BOT	1993
3 power projects	Pakistan	BOT	1988
A69 road	UK	BOT	1995
ACI International Group	Australia	LR	1983
Acominas Gerais SA steel works complex	Brazil	PF	1977
Adana power	Turkey	PF planned	since 1980s
Advanced Info Services	Thailand	BOT	approx 1990
AES Deepwater	N.A.	LR	1983
Aircombat Manoeuvre Instrumentation Range	UK	LR	1989
AK1 Argyle diamond mine	Australia	PF	1983
Akkuya nuclear power plant	Turkey	PF planned	since 1980s
Alabama river pulp comp	USUS	PF	1978
ALBA aluminium smelter	Bahrain	LR	1990
Alba North platform, Aran Energy	North Sea	PF	1992
Allegheny Lock + dam	N.A.	PF	1987
Allied Indonesia	Indonesia	LR	1983
Altback coal power station	Germany	LR	1983
Aluminium Austria alu smelter	Canada	LR	1991
Alwyn field, Elf & Total	North Sea	NR	1984
American Petrofina Exploration	USUS	PF	1979
ammonia-methanol plant, Gulf	Bahrain	LR	1983
ammonia-ura plant, Combustion Engineering	Chile	BOT	pre 1986
ammonia-urea plant	Tanzania	NR	1985
An Tai Boa coal mine	China	LR	1986
Ankara metro	Turkey	BOT	1990
Anschutz	N.A.	LR	1983
Arco cogeneration	USUS	LR	1983
Aroaima mining	Guyana	NR	approx 1990
Arun Bontang LPG	Indonesia	PF	1987
Arzew MTBE	Algeria	PF planned	1993
AS Pelican +CoKS (ULA)	N.A.	LR	1983
Asahau alu plant	Indonesia	PF	pre 1988
Asetco JV, polyethylene plants	Russia	LR	1989
Athens airport	Greece	BOT	1993
Atlas Intek industrial complex	Malaysia	PF	1994
Auckland cogeneration	New Zealand	NR	1995
Austintel Holdings Australia Pty	Australia	LR	pre 1984
Awar Awar power	Indonesia	PF planned	1995

Bada K-Nilam	Indonesia	LR	1983
Baghdad sewage	Iraq	LR	1993
Balmoral field, Sun Oil	North Sea	LR	1983
Baltimore recycling facility	USUS	NR	approx 1992
Bangkok 2nd stage expressway, Kumagai Gumi	Thailand	BOT	1989
Bangkok airport commercial park	Thailand	NR	1990
Bangkok elevated train + highway system, Hopewell	Thailand	PF planned	since 1990
Bangkok metro, Lavallin	Thailand	PF planned	since 1989
Bangkok Skytrain, Lavallin	Thailand	PF planned	since 1988
Bankgok World Trade Center	Thailand	PF planned	1988
Barking power	UK	LR	1992
Bear Island paper mill	N.A.	LR	1983
Beijing water	China	PF planned	1995
Belfast coal power, NIGen	UK	NR	1992
Bentoc Ltd	N.A.	LR	1983
Best World Plaza Johor Baru	Malaysia	PF	1991
BHP-Utah acquisition	USUS	LR	1983
Birecik power	Turkey	PF planned	in 1990s
Birmingham North relief road	UK	PF	1992
Black Point power station at Casle Peak	N.A.	PF	1992
Black Sea hotels	Russia	PF planned	1988
Blair Athol coal	Australia	LR	1982
Bongkot gas field - B structure	Thailand	PF	1992
Boot Hydro power	N.A.	LR	1983
Botang LNG expansion	Indonesia	PF	1991
Botang LNG facility	Indonesia	NR	1988
Bougainville copper mine	Papua New Guinea	PF	in 1960s
Bow Drill II	North Sea	LR	1983
Brigg power	UK	PF	approx 1991
Buchan field, Charterhouse Petroleum	North Sea	PF	1984
Budapest metro	Hungary	PF	approx 1993
Bullmoose coal mine	Canada	LR	1983
Cairton Holding Pty Ltd	N.A.	LR	1983
Calhoun energy conversion	USUS	LR	1983
California-Las Vegas rail link	USUS	PF	approx 1990
Canberra casino	Australia	NR	1992
Capitol cogeneration	N.A.	LR	1983
Carbon II coal power	Mexico	PF	1992
Carrickfergus power, Kilroot	UK	PF	1994
Casablanca oil field, Canada North West Oil	Spain	LR	1979
Casablance cement plant	Morocco	PF	1992
Cayeli copper + zinc mine	Turkey	LR	1992
Cedar Bay cogeneration	USUS	PF	1991
Celtpower Ltd	N.A.	LR	1993
Centragas pipeline	Colombia	BOT	1994

Central Manila power, Hopewell	Philippines	BOT	1994
Cerro Colorado copper mine	Chile	PF	1992
Channeltunnel	UK - France	BOT	1987
Channor iron ore development	Australia	PF	pre 1988
Chernogorskoye oil	Russia	LR	1993
Chicago stadium	USUS	PF	1992
China cement	Hong Kong	LR	1983
Chocawhatchee bridge	USUS	PF	pre 1992
Chudovo-RWS plywood factory	Russia	PF	1988
Cilacap paraxylene complex	Indonesia	PF	1987
CITIC pulp factory investment	China	LR	1987
Clark Airbase conversion	Philippines	PF planned	1995
Claymore field, Occidental	North Sea	PF other	1976
Claymore field, Thomson	North Sea	NR	1976
Clydebank hospital	UK	PF	1991
Coal Claugh wind farm at Burnley	UK	PF	1992
coal mine, British Columbia	Canada	LR	1983
Cobia oil + gas , Esso	Australia	PF	approx 1982
Cogasco gas pipeline	Argentina	BOT	1981
Cogentrix power	Philippines	PF other	1992
Collie power station	Australia	BOT	1992
Come-by-chance refinery	Canada	PF	pre 1986
COMINAK uranium development	Niger	PF	in 1970s
Comsigua iron	Venezuela	LR	approx 1995
Cooper Basin gas projects (5)	Australia	PF	1982 + 1983
Corby power	UK	PF	approx 1990
Cross Israel Highway (phase I)	Israel	PF planned	1995
Croydon tram system	UK	PF planned	1995
Croyton power	UK	PF	approx 1992
Curraugh coal	Australia	LR	1983
D5 toll road	Czech Republic	PF planned	1992
Dabhol power	India	PF	1992-1996
Dalian oil refinery	N.A.	PF	1981
Dansk Boreselskap	Denmark	PF	1979
Dartford crossing	UK	BOT	approx 1990
Das Island gas liquefacation	Abu Dhabi	LR	1983
Deer Park refining	USUS	NR	1993
Derwent cogeneration	UK	PF	1992
Dolet Hill Mining Venture	Australia	PF	1983
Don Muang tollway	Thailand	PF	1990
Drayton developments	Australia	PF	approx 1983
East Java gas pipeline	Indonesia	LR	1992
East Java refinery	Indonesia	PF planned	1988
Ekofisk complex	North Sea	LR	1983
Elcogas power plant	Spain	PF	1994
Elm energy + recycling	UK	PF	1992

EMC Kali	Canada	PF	pre 1988
Energy Investors Fund	N.A.	PF other	1994
Eraring power plant	Australia	PF	1978
Escondida copper mine	Chile	NR	1988
Esso Production Malaysia Inc	Malaysia	LR	1983
Eurodisney / Disneyland Paris	France	PF	1989
Excor refinery I, II, III	Indonesia	PF	1990+1993
Ezeiza-Canuela highway	Argentina	PF planned	1995
Fairfield energy venture	USUS	PF	1985
First Hydro Acquisition	N.A.	NR	1995
Florida high speed rail	USUS	PF planned	1995
Fort Drum cogeneration	USUS	PF	pre 1992
Fort Saskatchewan ethylene plant	Canada	PF	1992
Fort William sewage	UK	PF planned	1995
Fortescue oil + gas field	Australia	PF	approx 1982
Forties field, BP	North Sea	PF	1972
Frankfurt Messetower	Germany	BOT	pre 1990
Freeport Minerals copper project	Indonesia	NR	in 1960s
Freeport Mineral nickel mining	Australia	NR	in 1960s
Frigg natural gas project	North Sea	PF	in 1970s
gas field, Newmart International	Canada	PF	1983
German Creek coal, ACI	Australia	PF	1982 + 1983
Giannon project trust	N.A.	LR	1983
Gladstone power station	Australia	LR	1994
Golden Triangle land development	Indonesia	PF	1991
Goldworthy Area C - iron ore	Australia	PF	approx 1982
Gongola State water	Nigeria	PF	1983
Goonyella coal mine	Australia	PF	1992
Greenvale nickel-cobalt project	Australia	NR	in 1970s
Grundremmingen+Muelheim nuclear power (2)	Germany	LR	1983
Guangzhou-Shenzhen-Zhuhai superhighway	China	PF	1991
Gujarat port	India	PF planned	1996
Gujarat power stations (3)	India	PF planned	1995
Gullfrog gold mine	USUS	LR	1989
Guyana pharmaceutical	Guyana	NR	1986
Halla Construction Co	South Korea	LR	1983
Hampton gold mining areas	N.A.	LR	1983
Hartogen Energy Ltd	N.A.	LR	1983
Hartwell power	USUS	NR	approx 1992
Harvest platform	USUS	LR	1983
Heimdal field, Bow Valley & Elf	North Sea	LR	1983
Hibernia oil field	Canada	NR	approx 1992
Highland port	UK	PF	approx 1989
HK harbor tunnel (airport programme)	Hong Kong	PF	1995

Ho Chi Min city water	Vietnam	PF planned	1995
Hopewell cogeneration	USUS	PF	1989
Howard Smith Ltd	N.A.	LR	1983
Huaneng power station	China	BOT	1986
Hub River power	Pakistan	BOT	1992
Hunter Valley coal projects	Australia	PF	approx 1982
Hyatt Regency hotel	Cayman Islands	PF	1992
Hyatt Regency hotel	Czech Republic	NR	1992
Hydro energy projects	Australia	PF	1992
hydroelectric power plants	Laos	PF planned	1994
Independence cogeneration, Sithe Energy	USUS	PF	1993
Internprovincial pipeline	USUS-Canada	PF	1991
Ipoh water supply	Malaysia	BOT	1989
Iroquois pipeline	USUS-Canada	PF	1991
ISCOTT integrated steel	Trinidad & Tobago	PF	post 1978
Isle of Skye bridge	UK	BOT	early 1990s
Istanbul airport	Turkey	PF planned	since 1980s
Istanbul casino + hotel	Turkey	LR	1990
Istanbul-Bursa-Izmir highway	Turkey	PF planned	1995
Jakarta Shangri-La hotel	Indonesia	PF	1992
Java-Bali submarine pipeline	Indonesia	PF planned	1990
JFK airport arrivals building	USUS	PF planned	1995
Jihoceske Papirny paper machine	N.A.	PF	1991
K/S Nordana Drilling	N.A.	PF	1979
KAFCO Karnapuli Fertilizer Co.	Bangladesh	LR	1992
Kamaoa wind power	USUS	PF	1987
Kano State water supply	Nigeria	PF	1983
KAO Upper Vozey Silurian oil field	Russia	PF	1993
Karachi oil pipeline	Pakistan	PF planned	1995
Karachi power	Pakistan	BOT	1995
Keadby power	UK	NR	1992
Kelang bypass	Malaysia	BOT	pre 1993
Kepong interchange	Malaysia	BOT	pre 1993
Kern River cogeneration	USUS	LR	1983
Kingfish oil + gas field, Esso	Australia	PF	approx 1982
Kinsale field, Marathon	North Sea	NR	1978+1981
Kirby Buildings Systems	Kuwait	LR	1983
Kola smelter	Russia	PF planned	1991
Konkan railway	India	BOT	approx 1994
Koorangong coal loader	Australia	LR	1982
Krishnapatnam B power	India	PF planned	1995
Kuala Lumpur expressway	Malaysia	BOT	1994
Kuala Lumpur interchange	Malaysia	BOT	1987
Kuala Lumpur Sheraton	Malaysia	LR	1991
Kubaka gold mine, Omolon	Russia	LR	1996
Kuparu oil field	USUS	PF	1981

Kutubu oil	Papua New Guinea	PF	1991
Kuwait Silicon Products	Kuwait	LR	1983
La Loma-Cesar thermoelectric plant	Colombia	PF planned	1995
Labuan water supply project	Malaysia	BOT	approx 1987
Labuan-Beaufort interconnection	Malaysia	BOT	pre 1993
Lake Energy Corp	N.A.	LR	1983
Lakeland/Roosecote power	UK	PF	1990
Lakhra coal mine	Pakistan	PF planned	1990
Landbridge project	Thailand	PF planned	1990
Larut Matang water supply	Malaysia	BOT	1989
Lasmo / Scot	North Sea	PF	approx 1978
Le Flores Court cogeneration	USUS	PF	1987
Leipzig paper plant	Germany	PF planned	1992
Lenzing rayon fibre	USUS	LR	1992
LET Spitalfield development	UK	NR	approx 1988
Linden cogeneration	USUS	PF	approx 1992
LNG project	Nigeria	LR	1983
LOOP oil port	USUS	PF	1978
Loy Yang B power station	Australia	PF planned	1992
LRT III surface trolley system	Philippines	PF planned	1994
Lufthansa Beijing Center	China	PF	1988
M1/M15 toll road	Hungary	BOT	1993
M3/M30 road	Hungary	PF planned	1995
M5 highway	Hungary	BOT	1995
M7 road	Hungary	PF planned	1995
Mab Ta Phud fertilizer plant	Thailand	PF	1992
Mab Ta Phud petrochemical	Thailand	PF	1992
Macal-Mollejon power	Belize	BOT	approx 1992
Madison paper mill expansion	USUS	NR	approx 1979
Mae Moh mine	Thailand	PF	1992
Magalaseema thermal power	India	PF	1989+1990
Magma power	N.A.	PF planned	1988
Malayan Banking Berhad headquarters	Malaysia	LR	1983
Mangalore refinery	India	LR	approx 1992
Manila power station	Philippines	BOT	1988
Manila water distribution	Philippines	PF	1992
Mark Producing / Veba OI	N.A.	LR	1983
Marmara power	Turkey	PF planned	since 1980s
Maui gas project	New Zealand	PF	1974
Maureen field, Agip	North Sea	PF	1981+1983
Maureen field, Phillips	North Sea	LR	1983
Medway power	UK	LR	1992
Megal gas pipeline	Germany	LR	1983
Merak polyethylene plant	Indonesia	PF planned	1990
Merak polyethylene project	Indonesia	PF	1992
Mersin fertilizer	Turkey	PF planned	1989

Mesa	N.A.	LR	1983
Metro Manila Skyway	Philippines	PF planned	1995
Mexcobre copper mine	Mexico	PF	1989
Midal-Stegal gas pipeline	Germany	LR	1995
Midland cogeneration	USUS	PF	1988
Mid-State tollway	USUS	PF planned	1992
Miskar gas field	Tunesia	PF planned	1992
MLNG expansion	Malaysia	PF planned	1991
Mobil Rocky Mountain	USUS	LR	1983
Montville cogeneration, AES Thames	USUS	PF	1986
Moscow airport dutyfree shop, Aerofirst	Russia	LR	1989
Moscow Kempinski hotel	Russia	PF	1992
Moss Bluff gas storage	USUS	LR	1993
Mostagnem Alu smelter	Algeria	PF planned	1993
Mount Ather Nord	Australia	PF planned	1983
Mount Muria nuclear power	Indonesia	PF planned	1996
Mount Thorley	Australia	PF planned	1983
Multifuel cogeneration	USUS	PF	approx 1984
Muro gas pipeline	N.A.	LR	1983
MUSE toll road	France	PF planned	1992
National Guard staff housing	Saudi Arabia	LR	1983
National Industry Co.	Kuwait	LR	1983
National Wind Power, wind farms	UK	PF	1992
natural gas plant + pipeline	Vietnam	PF planned	1992
Navotas power	Philippines	PF planned	1992
New Hong Kong Tunnel (Kumagai Gumi)	Hong Kong	BOT	approx 1988
New York Meridien hotel	USUS	PF	pre 1988
Newlands-Collinsville-Abbot Point	Australia	PF	1984
Ninian field	North Sea	LR	1992
Norpipe AS	N.A.	LR	1983
North and South Luzon expressways	Philippines	PF planned	1995
North gas field	Qatar	PF planned	1992
North Madras thermal power I	India	PF	1986+1990
North Sea fields, Saga Petroleum	North Sea	LR	1984
North West Shelf gas, Woodside	Australia	PF	1981 + 1985
Northern Territory gas pipeline	Australia	PF	pre 1988
Nottingham light rail	UK	BOT	1995
Nova Scotia highway 104	Canada	PF planned	1995
nuclear power plant	Indonesia	PF planned	1988
NZ Refining Co	New Zealand	PF	1980+1983
NZ Synthetic Fuels Corp	New Zealand	LR	1982
Oaky Creek coal	Australia	NR	1981
oceanwave power, Kvaerner As	Tonga	BOT	1988
Ocelot methanol plant	Canada	PF	pre 1981
office complex	Nigeria	LR	1983
offshore oil + gas field	Nigeria	PF planned	1989

oil + gas fields, Total	Colombia	PF	1995
OK Tedi mine	Papua New Guinea	LR	1982
Oregon arena	USUS	PF	1993
Orion satellite	USUS	PF	1992
Orly-Paris rail link	France	PF	1988
Otis Hydro Point	N.A.	LR	1983
Oxymer VCM	USUS	NR	1989
Oyster Creek power	USUS	NR	approx 1992
Paddington-Heathrow rail link	UK	PF planned	since 1988
Pagbilao power	Philippines	BOT	1994
Paipa power	Colombia	PF planned	1995
Paiton power plant I	Indonesia	BOT	1995
Paiton power plant II	Indonesia	PF	1995
Pakistan International Airways, 3 aircrafts	Pakistan	LR	1991
Palace Hotel in Tallinn, Finest Hotel Group JV	Russia	LR	1989
palm oil mill	Liberia	PF	1984
Pasadena light rail, DBOM	USUS	PF planned	1995
Pearl River delta bridge	China	PF planned	1992
Pecten oil project	Cameroon	LR	1983
Pembroke Capital	UK	PF	1981
Pembroke power	UK	PF planned	1991
Pennzoil	N.A.	LR	1983
Pepsi Cola	USUS	LR	1983
Petersbourough power	UK	LR	approx 1990
Petialgas Chemicals - methanol plant	New Zealand	PF	1982
petrochemical plant upgrade	Russia	PF	1989
Petro-Lewis	N.A.	LR	1983
Picon Intl. B.V.	N.A.	LR	1983
Pilkington-Saint Gobain floatglass	Brazil	PF	pre 1988
pipe factory	Algeria	PF planned	1986
Piper field, Occidental	North Sea	PF other	1974
Piper field, Thomson	North Sea	NR	1974
Placid Oil Co.	N.A.	LR	1983
PLUS North-South highway	Malaysia	BOT	1988
Point at South resort hotel	USUS	PF	1988
Polypropylene Malaysia Bhd	Malaysia	PF	1990
Port of Aden	Yemen	PF planned	1995
Port Qassim power	Pakistan	PF planned	1990
Portland smelter	Australia	PF	pre 1988
Portsmouth wast-to-energy power	UK	BOT	1991
Power River coal transportation	USUS	PF	1981
		BOT	
Prague airport	Czech Republic	cancelled	1995
Premier Consolidated - Wytch Farm	North Sea	LR	1983
Pribramska Teplarenska akciova spolecnost	Czech Republic	PF	1995

Primester JV	N.A.	PF	1992
PT Adero coal mine	Indonesia	PF	1991
PT Babrie+Bros seamless steel tube mill	N.A.	LR	1983
PT International Nickel - mine	Indonesia	LR	1990
PT Kaltin Prime Coal	Indonesia	PF	1989
pulp and paper project	Pakistan	PF planned	1986
Qafac MTB project	Qatar	LR	approx 1992
Quintette coal	Canada	PF	1983
Ramu sugar	Papua New Guinea	LR	1983
Rangeland	N.A.	LR	1983
Ras Beirut commercial center	Lebanon	PF planned	1995
Ravensspur gas field	North Sea	PF	1992
Rayong power	Thailand	PF	approx 1995
Redpath-Labatt syrup facility	Canada	PF	pre 1981
Refuse Fuels Inc	N.A.	LR	1983
Regency Hotel acquisition, Sydney	Australia	PF	1987
Reslin polyethylene	Venezuela	PF	approx 1992
Rexby Downs uranium	Australia	PF	approx 1982
Rijn field, Pacific Lighting Exploration Comp.	North Sea	LR	1985
Rio Algon	Canada	LR	1993
Rio Negro tunnel	Colombia	BOT	pre 1985
River trade terminal	Hong Kong	PF planned	1995
Riverside coal	Australia	PF	in 1980s
Robinson hotel	Kenya	PF	1986
Rockfort power	Jamaica	BOT	1994
Sahaviriya steel mill	Thailand	PF	1991
Saltz-Deminson potash mine	Canada	PF	pre 1988
San Diego Meridien hotel	USUS	NR	1986
San Juan toll bridge	USUS	PF other	1993
San Roque hydro project (power and water)	Philippines	PF planned	1995
Sasol II, III	South Africa	PF	pre 1984
Saxony-Anhalt water treatment	Germany	LR	1992
Scapa field	North Sea	PF	pre 1986
Sears tower Chicago	USUS	PF	in 1980s
SELCHP waste recycling generator	UK	PF	1992
Selkirk cogeneration	N.A.	PF	1995
Shajiao B coal power station	China	BOT	1986 + 1987
Shajiao C power station	China	BOT	approx 1992
Shell Sarawak	Malaysia	PF	approx 1980
Shell-s olefin complex at Cilacap	Indonesia	PF	1991
Sherotel at Moscow airport	Russia	LR	1989
Shotton Paper Company	N.A.	PF	1988
Singapore Marina	Singapore	PF	1992
South Brae field, Marathon	North Sea	NR	1981+1984

Sovbutital JV petrochemicals	Russia	PF	1989
Springvale coal mine	Australia	PF	1991
Square Butt power	USUS	PF	approx 1979
SR 91 toll road	USUS	BOT	1993
St Mary Abbots property development	UK	LR	1990
St Petersburg airport	Russia	PF planned	1995
Statfjord field, Amoco	North Sea	LR	1983
Sual power	Philippines	BOT	1995
Subic power	Philippines	LR	1993
Suez Canal	Egypt	PF	1854/56
SunTec City development at Marina Center	Singapore	PF	1991
Super Octanos	Venezuela	BOT	1988
Suzhuo hotel	N.A.	PF	1987
Svenska Petroleum	North Sea	PF other	1981
Sycamore cogeneration	USUS	LR	1987
Sydney Harbor tunnel	Australia	BOT	1987
Sydney light rail	Australia	BOT	1995
Syracuse cogeneration	USUS	NR	1991
Tanayong light rail	Thailand	BOT	1996
Tanjung Jati power	Indonesia	BOT	1994
Tara mines	Ireland	PF	1976
Tarong coal, stage I and II	Australia	PF	1982 + 1985
Tate's Cairn tunnel	Hong Kong	LR	1989
TAV high speed train	Italy	PF	approx 1994
Tech Semiconductor chip plant	Singapore	LR	1992
Teeside power	UK	LR	1991
Tekirdak power	Turkey	PF planned	since 1985
Tele2 JV	N.A.	NR	1995
telecom project	Thailand	PF planned	1991
Terra Resources	USUS	LR	1983
Texas Instruments	USUS	LR	1983
Thai PTA plant	Thailand	LR	1990
Thames bridge	UK	BOT	pre 1994
Thames ower	UK	PF	approx 1991
Thistle field, Tricentrol	North Sea	PF other	1976
Tiffani + Toni fields, Agip	North Sea	PF	1992
Titan petrochemical complex, phases II + III	Malaysia	LR	1990
toll bridge	USUS	PF planned	1995
Tomago alu smelter	Canada	PF	approx 1981
Topgas II	N.A.	LR	1983
Transco	N.A.	LR	1983
Trans-Med gas pipeline (several phases)	Italy-Tunesia-Algeria		1980+1983+1992
Transmission line project	Finland	PF	1992
Trans-Tunesian pipeline	Tunesia	LR	1983

UAE energy, Dodsai	United Arab Emirates	LR	1983
Udocan copper mine	Russia	PF planned	1992
UK railways	UK	BOT	?
Ulan coal project	Australia	PF	approx 1982
Utah gas power	USUS	PF planned	pre 1990
Valhall field, NOCO	North Sea	NR	1981
Vargan Ltd	N.A.	LR	1983
Victoria tunnel	Australia	BOT	1992
Virginia-Washington DC toll road	USUS	PF	approx 1990
Wailea resort	USUS	LR	pre 1988
Walnow tunnel	Germany	BOT	1995
Water Authority of Malaysia	Malaysia	PF	1989
West Varyegan + Tagrinsk oil fields	Russia	PF	1991
Western Ural polyester fibre plant	Russia	PF	1986
White Nile Petroleum	Sudan	LR	1983
Williams Station	N.A.	LR	1983
Wyoming power, Black Hills	USUS	PF	1978
x- BOTs in pipeline (20+ projects)	Philippines	PF planned	1995
Yamula power	Turkey	PF planned	since 1980s
YTL power	Malaysia	PF	1994
Yu-Wei coal-slurry pipeline	China	PF planned	1994
Zarafshan gold mine	Uzbekistan	PF	approx 1993

(My own adaptation, from Kleimeier, 1998)

Appendix 3 – Sponsors of CCPPP as of 2012

Samsung C&T, E&C Americas, Inc.
3M Canada Company
407 ETR Concession Company Limited
A.H.B. 2000 Inc.
Acciona
Aconex
Acus Consulting
AECOM Canada
Aecon Group Inc.
Aedas Canada
Aéroports de Montréal
Agence métropolitaine de transport
Agree Incorporated
Ainsworth Inc.
Aird & Berlis LLP
Alberta Education
Alberta Electric System Operator
Alberta Infrastructure
Alberta Transportation
Alberta Treasury Board
Algonquin College
Allan Wielgoz
Altus Group Infrastructure
Ameresco Canada Inc.
American Water Canada Corp.
Amico Design Build Inc.
AON Reed Stenhouse Inc.
Aquatech, Water Management Services Inc. (Groupe Helios)
Aquila Infrastructure Management
Arup
Association of Power Producers of Ontario
Assured Guaranty Corporation
Autodesk Canada Co.
B+H Architects
BA Blacktop Ltd.
Baker & McKenzie LLP
Balfour Beatty Capital, Canada
Banco Bilbao Vizcaya Argentaria (BBVA)
Bank of Nova Scotia/Scotia Capital Inc.
Bank of Tokyo - Mitsubishi UFJ (Canada)
Barnard Construction Company Inc.
BC Auditor General
BC Hydro
BC Interior Health
BC Legislative Library

BC Ministry of Public Safety and Solicitor General
BC Provincial Treasury - Corporate & Project Finance Branch
BDO Canada LLP
Bennett Jones LLP
Bermuda Hospitals Board
Bilfinger Berger Project Investments Inc.
Bingham Business Solutions
Bird Construction Company
Black & McDonald Limited
Blake, Cassels & Graydon LLP
BMO Capital Markets
BNY Trust Company of Canada
Bondfield Construction Company Limited
Borden Ladner Gervais LLP
Borealis Infrastructure
Bot Construction Limited
Bouygues Building Canada
Brian Low & Associates
Broadhurst LLC
Brock University
Brookfield Financial Corp.
Bruce Power
Brun-Way Highways Operations Inc.
BTY Group
Bull, Housser & Tupper LLP
Business Development Bank of Canada
Caisse de dépôt et placement du Québec (CDP)
Calgary Board of Education
Calgary TELUS Convention Centre
CANA Management Ltd.
Canada Pension Plan Investment Board
Canada Post Corporation
Canada–Manitoba Infrastructure Secretariat
Canadian Construction Association
Canadian Urban Transit Association (CUTA)
Canadian Water and Wastewater Association
Cannon Design Architecture Inc.
Carillion Canada Inc.
Carmacks Enterprises Ltd.
Casgrain & Company Limited
Cassels, Brock & Blackwell LLP
CBC
CH2M HILL
Chubb Edwards - A UTC Fire & Security Company
CHUM (Centre Hospitalier de l'Université de Montréal)
CIBC
CIC Crédit Industriel et Commercial

CIMA Canada Inc.
CIT Financial Ltd.
Citi
Citibank Canada
City of Calgary
City of Chilliwack
City of Edmonton
City of Lethbridge
City of Mississauga
City of Ottawa
City of Regina
City of St. Catharines
City of Thunder Bay
City of Vaughan
Clark Builders
Clark Wilson LLP
CMHC
CNA Surety
Coco Paving Inc.
COFLEY Services Inc.
ColasCanada
Collings Johnston Inc.
Communities of Tomorrow
Compass Group Canada
Computershare Trust Company of Canada
Concert Infrastructure Ltd.
Conference Board of Canada
Construction F. Catania
Constructive Solutions for Business Inc.
Cordiant Capital Inc.
Corix Utilities
CPM
CRSP Cost Consultants
Cruickshank Construction Limited
CS&P Architects
Dalhousie University
Dalkia Canada Inc.
Davies Ward Phillips & Vineberg LLP
Davis LLP
DBRS Limited
De Grandpré Chait LLP
DekaBank Deutsche Girozentrale
Delcan Corporation
Deloitte
Denendeh Development Corporation
Desjardins Group Pension Plan
Desjardins Securities Inc.

Dessau Inc.
DIALOG
Diamond and Schmitt Architects Incorporated
DIF (Dutch Infrastructure Fund)
Dillon Consulting Limited
Don Gibson
DORA Construction Limited
Douglas G. Benson, Barrister & Solicitor
Dragados Canada Inc.
Dufferin Construction Company, A Division of Holcim (Canada) Inc.
Elite Construction Inc.
EllisDon Corporation
Embassy of Spain
ENCON Group Inc.
Entuitive
EPCOR
Equity Financial Trust
Ernst & Young Orenda Corporate Finance Inc.
ESC Automation
Export Development Canada
Fabian Papa & Partners Inc.
Farrans Construction Ltd.
Farris, Vaughan, Wills & Murphy LLP
Fasken Martineau DuMoulin LLP
FCC Construcccion S.A.
Federation of Canadian Municipalities
Fengate Capital Management Ltd.
Ferrovial Agroman
Fiera Axiom Infrastructure
Fiera Sceptre Inc.
First Canadian Title
Fitch Ratings
Flatiron Constructors Canada Limited
Fluor Corporation
Fort McMurray Chamber of Commerce
FORUM Equity Partners Inc.
Fraser Milner Casgrain LLP
Frederic Bettez
Gallagher Lambert Group (A Division of Arthur J. Gallagher)
GE Healthcare
GEC Architecture
Genivar Inc.
Geo. A. Kelson Company Limited
George Brown College
Glenna Carr
Globalvia Infraestructuras
Golder Associates

Goldman Antonetti & Cordova
Goodmans LLP
Gordon Campbell
Gouvernement du Québec, Ministère de la Santé et des Services sociaux
Gouvernement du Québec, Ministère des Transports
Gouvernement du Québec, Société immobilière du Québec
Government of Canada, Aboriginal Affairs and Northern Development
Government of Canada, Aboriginal Affairs and Northern Development
Government of Canada, Defence Construction Canada
Government of Canada, Department of Finance
Government of Canada, Department of Foreign Affairs and International

Trade

Government of Canada, Department of National Defence - CSEC
Government of Canada, Infrastructure Canada
Government of Canada, Natural Resources Canada (NRCan)
Government of Canada, Public Works & Government Services
Government of Canada, Transport Canada
Government of Canada, Treasury Board Secretariat
Government of Nunavut
Gowling Lafleur Henderson LLP
Graham Group
Grant Thornton Raymond Chabot Infrastructure
Greater Halifax Partnership
H. William Pearson
H.H. Angus & Associates Ltd.
Halsall
Hatch Mott MacDonald
Hawkins Delafield & Wood LLP
HCP Social Infrastructure (Canada) Ltd. (HCP)
HDR Corporation
HDR Inc.
Heenan Blaikie LLP
Helaba Landesbank Hessen-Thuringen
Hemisphere Engineering
Hidi Rae Consulting Engineers Inc.
HOCHTIEF PPP Solutions North America Inc.
HOK Canada Inc.
Hon. Donald S. Macdonald
Hon. Michael H. Wilson
Honeywell Limited
Horne LLP Chartered Accountants
Humber River Regional Hospital
Huntcor Infrastructure of Canada LLC
IBI Group
IBM
Idom Ingenieria y Sistemas, S.A.
InfraRed Capital Partners (US) LLC

Infrastructure Australia
Infrastructure Ontario
Infrastructure Québec
Innisfree Ltd.
INSPEC-SOL Inc.
INTECH Risk Management Inc.
InVenture Limited
Investec Capital Markets
IRIDIUM Concesiones de Infraestructuras, S.A.
J.P. Morgan Chase Canada
Jack W. Donahue, QC
James W. MacLaren
Jane Peatch
Jardine Lloyd Thompson
JCRA Financial LLC
John Laing
Johnson Controls L.P.
Jones Lang LaSalle
Kasian Architecture Interior Design & Planning Ltd.
Kelchner, Inc.
Kenaidan Contracting Limited
KfW IPEX-Bank GmbH, Representative Office North America
Kilmer Van Nostrand Co. Limited
KPMG LLP
Lafarge Canada
Laing O'Rourke Canada Limited
Lark Group
Larry Blain
Laurentian Bank of Canada
Lawson Lundell LLP
Ledcor Group of Companies
LeighFisher Canada Inc.
Leith Wheeler Investment Counsel Ltd.
Liberty International Underwriters
Lochner MMM Group LLC
Lower Mainland Facilities Management
LP Ciminelli
M. Sullivan & Son Ltd.
Mackenzie Aboriginal Corp.
MacKinnon Bennett & Co.
MacPherson, Leslie and Tyerman LLP
Macquarie Group of Companies
Mainroad Holdings Ltd.
Malone Given Parsons Ltd.
Manulife Financial
Maple Reinders Constructors
Maple Tree Advisory Inc.

Marsh Canada Limited
Matawa First Nations Management
Mazars LLP
McCarthy Tétrault LLP
McInnes Cooper
McMaster Innovation Park
McMillan LLP
McNally International
Meridiam Infrastructure
Meridian Systems
Metrolinx
Meyers Norris Penny LLP
MHPM Project Managers Inc.
Miller Thomson
MMM Group Limited
Montgomery Sisam Architects Inc.
Moody, Robert P.
Morrison Hershfield Limited
Mott MacDonald Canada Limited
Municipal Enterprises Ltd.
Munro Ltd.
NAC Constructors Ltd.
National Bank Financial
National Council for Public-Private Partnerships
National Executive Forum on Public Property
NCC Investment Group Inc.
NCC Investment Group Inc.
New Brunswick Department of Economic Development
New Brunswick Department of Supply and Services
New Brunswick Department of Transportation
New Brunswick Regional Development Corporation
Newfoundland & Labrador Department of Transportation and Works
Nexus Communications & Consulting
Niagara Health System
Niagara Region
North West Geomatics Ltd.
Norton Rose Canada LLP
Nossaman LLP
Nouvelle Autoroute 30, S.E.N.C.
NWT Department of Finance
OHL Canada
OMERS
Omicron Canada Inc.
ONPA Architects
Ontario Financing Authority
Ontario Ministry of Agriculture, Food and Rural Affairs
Ontario Ministry of Community Safety and Correctional Services

Ontario Ministry of Economic Development and Trade
Ontario Ministry of Transportation
Ontario Office of the Auditor General
Ontario Pension Board
Ontario Sewer & Watermain Construction Association
Ontario Teachers' Pension Plan
Operating Engineers' Pension Plan
Operis Group plc
Osler, Hoskin & Harcourt LLP
P1 Consulting Inc.
Parkin Architects Limited
Parkridge Properties Inc.
Parsons
Partnerships British Columbia
Pasquin St. Jean & Associates
PCL Constructors Inc.
PEI Department of Finance and Municipal Affairs
Perkins Eastman Black Architects
Perley-Robertson, Hill & McDougall LLP
Peter Kiewit Sons Co.
Peter V. Abrametz - Solicitor
Petrela, Winter & Associates
Phoenix Controls
Pierre Le François
Plant Group Inc.
Plenary Group
Pomerleau Inc.
PPP Canada
PricewaterhouseCoopers LLP
PRP International Inc.
Public Health Agency of Canada
Public Works Financing
RBC Capital Markets
RCMP
Read Jones Christoffersen Ltd.
Regina Public Library
Regional Municipality of Wood Buffalo
Regional Municipality of York
REMCOR Project Services Inc.
Residential & Civil Construction Alliance of Ontario
Reynolds, Mirth, Richards & Farmer LLP
Richard Armstrong Incorporated
Robertson Bright Inc.
Rod Love Consulting
Rosebank Inc.
Rougerie Consulting Inc.
Rowan Williams Davies & Irwin Inc. (RWDI)

Royal Ottawa Health Care Group
RSM Richter Chamberland LLP
RTKL
Saskatchewan Department of Justice and Attorney General
Saskatchewan Ministry of Highways & Infrastructure
SaskPower
Scott Northey
Serco Americas
Service Works Group
SGS Canada Inc.
Shepherd Engineering Services Limited
Siemens Building Technologies, Ltd.
Skanska Infrastructure Development
SNC-Lavalin Inc.
Sodexo
St. Michael's Hospital
Standard & Poors
Stantec Consulting
Stevenson and Hunt Insurance Brokers Limited
Stikeman Elliott LLP
Stonebridge Financial Corporation
Strategic Hospital Resources
Stuart Olson Construction
Sumitomo Mitsui Banking Corporation
Sun Life Assurance Company of Canada
Sureway Construction Group
Taylor McCaffrey LLP
TD Securities Inc.
Tetra Tech
The Canada Life Assurance Company
The Guarantee Company of North America
The JF Group
The Miller Group
The Write Touch Services
Toronto Port Authority
Torys LLP
Town of Goderich
Town of Innisfil
Town of Markham
Township of Uxbridge
TradeRisks
Trane/Ingersoll Rand
Transfield Services
Translink (South Coast BC Transportation Authority)
Travelers Canada
Tremco Inc.
Troy Life and Fire Safety Ltd.

Turner & Townsend cm2r Inc.
Turner Construction
UK Trade & Investment/British Consulate-General
Ullico Investment Advisors Inc.
United Water & S.C. North America
University of Alberta, Facilities & Operations
University of Toronto
Urban Systems Ltd.
Veolia Water Canada
Verreault Inc.
verTerra corp.
Vinci
Volker Steven Contracting Ltd.
VYM Consultants Inc.
Walsh Construction Company of Canada
Weidlinger Associates, Inc.
Weir Foulds LLP
WestLB AG
William Osler Health Centre
Wylie-Crump Limited
Yukon Department of Highways and Public Works
Ziedler Partnerships Architects
Zurich Insurance Company, Ltd.