Chapter 2 - <u>Characteristic Features of</u> <u>Project Finance</u>

2.1 - Definition of project finance

From the data collected this study, it is observed that there is no strict definition of "project finance". The term is used to refer to financing structures to finance mainly large capital projects. The sponsor or sponsors of the project provide the equity required (in the form of ordinary shares or loan stock) while the rest of the project cost or capital is supplied by lenders in the form of a senior debt. An important aspect noted in project financing is that lenders do not have full recourse to the sponsors of the project. And more often than not, it involves complex loan and security documentation and high lenders' fees and margins reflecting lenders' exposure to the project. The progress of the project is also monitored closely by the lenders.

Perhaps the most important and distinctive feature of project finance observed is that the lenders providing the senior debt rely substantially on the performance of the project itself. In other words, financing is not based

primarily on the credit support of the project sponsors or the value of the project's physical assets. Rather, lenders are more concern with the viability or feasibility of the project and its inherent risks, that is, its vulnerability to potential adverse factors. Feasibility of the project denotes two aspects namely:

- Technical feasibility; and
- Financial feasibility.

Project feasibility is discussed in detail in Chapter 3.

However, some of the bankers cautioned that one must not be misconceived that project finance means off-balance sheet financing entirely, that is to say the project is stand-alone and self-supporting without any additional credit support from a financially responsible third party. A successful project finance entails structuring a financing of a project with as little recourse as possible to the sponsor while at the same time providing sufficient credit support through guarantees or undertakings of the sponsor or a third party.

In summary, the term "project finance" refers to a financing that has the following characteristic features:

 it involves specialised and detailed evaluation of the project and its inherent risks to establish technical and financial feasibility;

- reliance on the project assets particularly cash flows;
- lenders do not have full recourse to the sponsors but there is sufficient credit support in the form of guarantees or undertakings;
- higher margins and fees;
- it is complex and documentation tends to be complicated;
- thorough on-going monitoring of the project by lenders;

Despite the definition of project finance outlined above, there is a consensus of opinion that project finance is really a financial technique that can be flexibly adapted and applied to new and unfamiliar circumstances. The crux of project finance is that it is concern with *risk allocation*. A successful project financing is really a result of a satisfactory allocation of the risks in the project among the parties involved.

2.2 - Types of project that are "project-financed"

Project finance can be and has been applied, especially in industrialised countries, to projects such as development or construction of roads, railways, airports, power plants, hydroelectric dams, LNG plants, refineries, hard minerals, petrochemicals, oil and gas pipelines and various other projects.

For a country like Malaysia which is moving towards industrialisation, the types of projects that are 'project-financed" are typically large-scale infrastructure projects such as roads and highways, rail transit system, telecommunications, energy and power plants (i.e. the independent power producer or "IPP" projects) and commercial developments. Table 2.2A below provide a list of projects where the financing have been arranged or in progress. Potential projects, for example, those still at the drawing board or under negotiations with the Economic Planning Unit are also included.

Table 2.2A

Project name or description	Project cost	Sponsor(s)* or Project	Financing details
	(RM'million)	Company [^]	
Paka / Pasir Gudang	3,468	YTL Power Generation	Arranger: BBMB
1212MW combined-cycle		Sdn Bhd^	Amount: RM2.66
power plant			billion
Polyethylene/ethylene project		Petronas, Idemitsu,	Maybank, BBMB,
in Terengganu		British Petroleum*	Sumitomo, Tokai
			US\$193m to
			Petronas
Melawa, Sabah 48MW	180	ARL Associates*	DCB Bank
medium-fuel power plant		ARL Tenaga [^]	

Project name or description	Project cost (RM'million)	Sponsor(s)* or Project Company^	Financing details
cycle power plant		Holdings*	RM3 billion
		Segari Energy Venture [*]	
Telok Gong 440MW open-	615	Powertek Berhad [^]	BBMB
cycle power plant			RM525 million
STAR LRT System 1 Phase 1	1,275	STAR^, KLTG (AEG	BBMB, Hongkong
STAR LRT System 1 Phase 2	1,200	and TWI),EPF,AIA,	Bank
		Tab. Haji	
Time fibre optic cable project	2,000	Time Telecomm [^]	Maybank, BBMB
Malaysia-Singapore Second	1,400	Linkedua [^]	Adviser:Morg.
crossing (bridge project)		UEM*	Grenfell, Arranger:
			CIMB
Second crossing (township	950	Prolink Development [^]	Arab Malaysian
project)		Renong*	Bank
Putra LRT System 2	4,500	Putra^, Renong*	CIMB, BBMB
North South Expressway	1,185	ELITE^	CIMB, BBMB
Central Link		UEM*	RM800 million
Karak-Kuantan-KT East Coast	NA	UEM, MTD, MMC*	
Highway		(proposed only)	
Ampang Elevated Highway		Prolintas^, Percon*	RM300 million
Serdang Highway	NA	Road Builders, HMS	Adviser: CIMB
		Resources*	
Bakun 2400MW hydroelectric	15,000	Ekran, SESCO, TNB,	HSBC Capital
power project		EPF, Hicom*	
Sapura PCN - Personal	1,000	Sapura Digital Sdn	Maybank
Communication Network		Bhd^	
Mutiara PCN	NA	Berjaya*, Mutiara	ВВМВ
		Communication [^]	
KL Sentral - New KL railway	NA	MRCB, KTMB*	
station with mix development		KL Sentral Sdn Bhd^	
Express Rail Link (ERL)-to	2,000	Tabung Haji, UEM,	
link KL to Putrajaya and KLIA		Abrar Group Int.*	
Elevated Federal Highway	>1,000	AMDB, UEM (proposal	
		stage)	
Cogeneration plant at KLIA	NA	Petronas/Tokyo Gas/	
(cooling system)		Mitsui (proposed)	

Most of the infrastructure projects are privatised by the government, pursuant to a concession or franchise, to a private company or a consortium, usually by way of the "Build-Operate-Transfer" (BOT) structure or scheme. In such a scheme, the project company will build, own and operate the project for a stipulated concession period before transferring it to the government. An example of a BOT scheme is the RM 1.2 billion North South Expressway Central Link project granted to ELITE Sdn Bhd, a subsidiary company of United Engineers Malaysia Berhad, for a concession period ending on the year 2018. Another structure with similar acronym i.e. BOO ('Build-Own-Operate'') refers to a similar scheme except that at the end of the concession, the project is not transferred to the government. Table 2.2B below provide a list of possible project structures or schemes and their respective acronyms or abbreviations, each of which are self-explanatory.

Table 2.2B

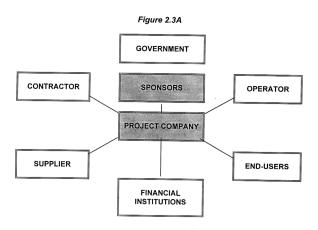
BOT Build Operate Transfer BOO Build Own Operate BOL Build Operate Lease DBOM Design Build Operate Maintain DBOT Design Build Operate Transfer DBFOT Design Build Finance Operate Transfer DBOO Design Build Won Operate ROO Refurbish Own Operate ROT Refurbish Own Transfer OUT Own Upgrade Transfer	Called to the same of the same	
BOL Build Operate Lease DBOM Design Build Operate Maintain DBOT Design Build Operate Transfer DBFOT Design Build Finance Operate Transfer DBOO Design Build Own Operate ROO Refurbish Own Operate ROT Refurbish Own Transfer	ВОТ	Build Operate Transfer
DBOM Design Build Operate Maintain DBOT Design Build Operate Transfer DBFOT Design Build Finance Operate Transfer DBOO Design Build Own Operate ROO Refurbish Own Operate ROT Refurbish Own Transfer	ВОО	Build Own Operate
DBOT Design Build Operate Transfer DBFOT Design Build Finance Operate Transfer DBOO Design Build Own Operate ROO Refurbish Own Operate ROT Refurbish Own Transfer	BOL	Build Operate Lease
DBFOT Design Build Finance Operate Transfer DBOO Design Build Own Operate ROO Refurbish Own Operate ROT Refurbish Own Transfer	DBOM	Design Build Operate Maintain
DBOO Design Build Own Operate ROO Refurbish Own Operate ROT Refurbish Own Transfer	DBOT	Design Build Operate Transfer
ROO Refurbish Own Operate ROT Refurbish Own Transfer	DBFOT	Design Build Finance Operate Transfer
ROT Refurbish Own Transfer	DBOO	Design Build Own Operate
Transfer own transfer	ROO	Refurbish Own Operate
OUT Own Upgrade Transfer	ROT	Refurbish Own Transfer
	OUT	Own Upgrade Transfer

The above analysis might lead one to a misconception that project finance only applies to large projects. This is not true. It is stressed here that project finance is also used to finance smaller and ordinary ventures or projects such as construction of a hotel or a processing plant. To determine whether it is project finance, the key aspect one ought to bear in mind is the technique, not the size of the project.

2.3 - Contractual structure and parties involved

Basic structure

From the actual cases of project financings analysed in this study, it is found that the contractual structure or organisation of almost all projects are based on or derived from a basic structure as presented in Figure 2.3A below. The structure comprises eight parties: The government, the sponsors, the project company, the contractor, the operator, the supplier, the purchaser or end-users, and finally the lenders.



Contractual relationship

As between the government and the sponsors or, more correctly, the project company, the legal relationship is evidenced usually by a Concession Agreement or Franchise Agreement. And if for some reasons the concession or franchise is transferred to another company, there may be a Novation Agreement.

If the project company is not fully owned by a particular sponsor, there will be a Shareholders Agreement or Joint-Venture Agreement to regulate the relationship between the sponsors of the project.

To build or construct the project, for example a power plant or an expressway, the project company enters into a construction contract with a contractor. The project company will also enter into a contract with an Operator of the project, albeit, an O&M Agreement for the operation and maintenance of the project. For supply of raw material or fuel, a supply contract may be entered, for example, a Fuel Supply Agreement in an IPP project.

End-users for a highway project for example, will be vehicle owners who pay toll for usage of the highway. No formal agreement is involved here. For an IPP project however, there is a formal Power Purchase Agreement signed with the purchaser, namely Tenaga Nasional Berhad in case the project is in Peninsular Malaysia, or the Sabah Electricity Board in the State of Sabah, East Malaysia.

Finally, between the project company and the lenders, the legal relationship is that of a borrower and lender, involving some quite complicated loan and security documents.

For illustration, figure 2.3B below present the contractual structure of Segari Energy Ventures Sdn Bhd's RM 4.05 billion 1,303 Megawatt Combined-Cycle IPP project in Lumut, Perak (information valid as at May 1994). For further illustrations of contractual structures of other projects please refer to Appendix C attached.

Figure 2.3B

Contractor Sponsors Operator ABB Group Malakoff Berhad and Teknik Janakuasa Asea Brown Boveri Sdn Bhd Holdings Sdn Bhd (TJSB) Operation and **EPC Contract** Maintenance Agreement Segari Energy Ventures Sdn Bhd (SEV) Gas Supply Power Purchase Agreement Agreement Supplier Purchaser Petronas Tenaga Nasional Berhad Financial Lenders Facility/Bond/ Advisor EPF Paying Agent Fieldstone PCG Bank Bumiputra Aseambankers Ltd Maybank Public Bank Security Agent Financial ABN-AMRO Bank Bumiputra Arranger Aetna Universal Merchant Bank Bumiputra DCB Bank Bankers Maybank and 12 others **Bond Trustee** Project Agent Mayban Trustee

Bank Bumiputra

Project parties

The government: The government is involved as the grantor of the concessions or franchise and by making available some incentives such as support loan or acting as a guarantor or providing tax benefits. The government may also take equity interest, directly or through its agencies such as the EPF Board, Keretapi Tanah Melayu Berhad etc.

The sponsors: The sponsor may be a company or a consortium of parties who could also be the contractor, supplier, operator, or purchaser of the project's product or facilities. The sponsors own the project company.

The project company: A special purpose company established by the sponsors to develop the project. All the project companies analysed in this study are private limited companies though it is not denied that a partnership or joint-venture structure could also be used. Some of the private companies could eventually be publicly listed, for example, Powertek Berhad.

Contractor / Operator / Supplier/ Purchasers : These parties have been discussed above.

Financial advisor: In most cases, a financial advisor will be appointed, usually a commercial bank, merchant bank or a private firm. The financial advisor role includes, inter alia, advising on the financial structure of the project, dealing with the financial arranger and soliciting financing from lenders.

The advisor will prepare an information memorandum outlining the details of the project, it's sponsors, project feasibility, contractual documents and other relevant information. The advisor charges a fee or commission, usually calculated by a certain percentage point over the project cost or the financing to be raised.

Financial arranger: The bank which arranges the financing from a syndicate of the lenders which usually includes itself. The arranger takes the leading role in negotiating the terms and conditions of the loan and the security documentation. The arranger will underwrite the financing for the project, on fully-underwritten basis or best-effort basis. For it's role, the arranger gets a fee, calculated by a certain percentage point over the amount of financing arranged.

Lead managers and managers: They are usually banks named in the loan documentation. Their status merely reflects a certain level of participation in the overall financing of the project compared to other lenders as they do not have any particular responsibilities to the borrower or other lenders.

Agent bank: The bank appointed is responsible for co-ordinating drawdowns, supervising and effecting communication between the lenders and the borrower on matters pertaining to the loan documents, serving notices and information. The bank could also be made to be responsible for monitoring the progress and performance of the project and communicating with the project

engineers and independent experts, if a specific bank for such role is not appointed.

Security agent or trustee: A position usually held also by the agent bank, a security trustee is responsible for the holding and safekeeping of the securities for the financing, for example, title deeds, share certificates, guarantees and indemnities, letters of undertaking and others.

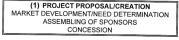
Independent experts: Appointments of technical experts such as engineers are usually required by the banks to vet the feasibility study of the project. They will also monitor the technical progress of the project also act as the arbiter in the event of disputes between the lenders and borrower over the compliance of performance conditions and test stipulated in the loan documents. Other independent experts includes auditors and insurers. The requirement and responsibilities of the experts will be stipulated in the loan documents.

Lawyers: Lawyers are responsible for legal matters including drafting the project documents. They are appointed by parties wishing to safeguard their respective interests. A specific legal firm will be appointed to undertake the documentation for the financing. In addition, the lenders will appoint a lenders' counsel to represent them in the documentation exercise and also to advise them on the project documents, compliance with regulations, the project assets and securities and other related matters.

2.4 - Stages of project finance

From the banks' perspective, the stages of project finance can be briefly summarised in figure 2.4A below. A commercial bank usually gets involved from stage (2) onwards, unless it acts as the financial advisor to the sponsor or the project company.

Figure 2.4A



(2) EVALUATION FINANCIAL FEASIBILITY TECHNICAL FEASIBILITY

(3) STRUCTURING A FINANCING OFFER BY FINANCIAL ARRANGER TERMS AND CONDITIONS OF LOAN

(4) ARRANGING A FINANCING
INFORMATION MEMORANDUM
LOAN SYNDICATION EXERCISE
DOCUMENTATION

(5) IMPLEMENTING THE FINANCING
PROJECT AGENT/SECURITY AGENT
COMPLIANCE/DRAWDOWN

(6) MONITORING THE PERFORMANCE

Basically a project can be financed by two components namely, equity and debt. Equity can be the initial equity investment or through various method of shares issues, for example initial public offering (IPO), private placement etc. IPOs are usually undertaken by merchant or investment bankers. This study only analyses the debt component of the financing structure.

Having evaluated and determined the project's feasibility, the bank will offer to arrange or underwrite the financing for the project for a fee and upon negotiated terms and conditions. The types of debt financing to be arranged could range from the conventional term loan, overdraft or trade finance facility, to the issuance of promissory notes, bonds and other private debt securities.

The information memorandum is a comprehensive document containing information regarding, inter alia, details of the project, it's feasibility, it's sponsors, the financing structure, terms and conditions of loan and a summary of important contractual documents. Usually it is prepared by the financial arranger (or the financial advisor) for the purpose of soliciting participation by lenders in the financing of the project. Lenders may comprise, for example, other banks or financial institutions, discount houses, insurance companies or the Employee Provident Fund.

After the loan has been successfully syndicated and documented, the implementation of the financing including drawdowns and the monitoring of the progress and performance of the project will then be undertaken by the project agent or agent bank appointed.