

Failure of downstream to buy feedstock gas: if the downstream does not take the feedstock gas, condensate cannot be produced and the upstream debt cannot be serviced.

Intercreditor arrangements: are necessary, given two separate loan packages and have to be designed to avoid putting the upstream in default and in an extreme case, if the upstream actually becomes insolvent, provide pre-emption rights to the downstream to assume the debt.

Sponsor Guarantees: Sponsors often need to provide guarantees for completion requirements e.g if the upstream or downstream is complete but the other is not and vice versa; the cashflow deficiency mentioned above etc.

Case 2: Integrated Financing

Only one project company is established. It owns and operates all the assets of the project (drilling platforms, pipelines, storage facilities, the LNG plant etc).

In combining the upstream and downstream into an integrated financing, some features of separated financings are avoided completely e.g two separate project companies do not have to be established; two separate arranging groups are not required etc.

Other aspects become simpler e.g the cashflow is already pooled, so no sharing is required; as two separate loan packages do not exist, no intercreditor arrangements are required; procurement/ export credit coverage obtention are unified without two sets of applications being submitted to each ECA; Sponsor guarantees/ commitments to the two sets of lenders are significantly reduced etc.

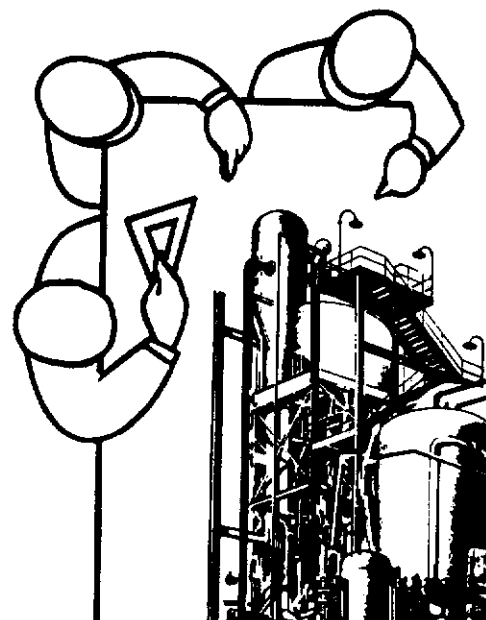
The project economics become

more robust, which is reflected in the higher debt service coverage ratio. The lenders also have access to a larger security package, admittedly for a significantly larger amount.

Crucially, there is an avoidance of conflict and long drawn-out negotiations between two arranging groups which results in a faster financing.

CONCLUSIONS

- A number of challenges face the financing of gas projects in the Middle East, some which can be mitigated by the choice of the means of transportation, others by the intervention of various bilateral and multilateral agencies. Offtake risk is a major consideration and the long-term sustainability of an offtake contract depends heavily on the soundness of the project economics and the (export) revenue generating capacity of the offtaker.
- The host sponsor can raise equity financing for gas projects based on existing, appropriate oil sales arrangements without increasing its sovereign indebtedness.
- LNG project financings versus cross-border pipelines have tended to be predominant in the Middle East. Different debt financing approaches can be adopted for LNG. The circumstances could lead to a separated approach but experience has shown that an integrated financing is easier and quicker. The degree of control that the Sponsors wish to exercise over the financing and the appropriate resources required to ensure and coordinate that control primarily dictates the choice between the Contractor and the Sponsor approach.



An Asian Gas Center:

Legal & Operational Alternatives

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1.1 Introduction:

As early as September 1994, at the Pan ASIA GAS FORUM (22-23

1- This is a personal contribution and should not be taken as the official position of the United Nations or the ESCAP Secretariat.

Separate Financings are a function of circumstance rather than design. They start of as separate financings on account of differences in the:

- Shareholding of the upstream and downstream (oil companies get involved in the upstream during exploration and find gas while the downstream sponsorship can be heavily influenced by the offtaker).
- Stage of advancement of the respective parts (one may proceed faster than the other).
- Potential sources of financing, given the difference between Upstream and Downstream Sponsors.

The financings cannot remain separated for two major reasons:

- * The economics of the upstream are too weak to be viable independently for even though it produces condensates that could enable autofinancing, condensate production is determined by the quantity of feedstock gas

required. The resultant quantities of condensate produced, especially during the buildup periods, can be insufficient to finance upstream dedicated debt. This is usually compensated by excess gas production but the local gas grid needs to be able to absorb it as flaring of such large quantities is not a feasible option.

- * Consequently, if the upstream is declared to be in default and production is stopped, then no feedstock gas is available for the downstream.

If the realization of this problem occurs prior to the financing proceeding, but the Host Sponsor does not want to share the ownership of the upstream with the foreign sponsors and yet requires the upstream to be financed and operated by them, then the solution is to negotiate the financing of the upstream by the foreign sponsors. The foreign sponsors, in view of their long term business

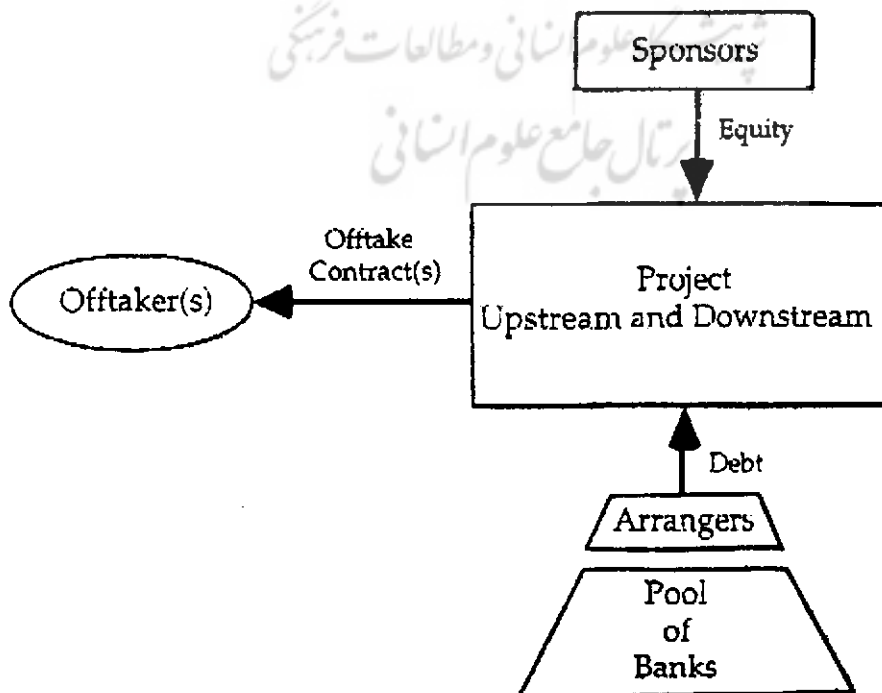
interests and probable involvement in the LNG Plant, are more likely to provide the funding without the usual requirements insisted on by the lenders e.g fixed/ floating charges on assets.

On the other hand, if the financing has already proceeded on a separated basis, it is necessary in such a case to recreate links between the upstream and downstream. These links relate to cashflow sharing, intercreditor arrangements, failure to provide/ receive feedstock, Sponsor support etc.

Cashflow deficiency: As it is usually the upstream that finds itself in difficulties, the downstream undertakes to make its surplus cash (e.g dividends) available on a subordinated basis to avoid a repayment default situation.

Failure of upstream to provide feedstock gas: given that the downstream cannot produce LNG and therefore incurs penalties under its take or pay contracts with offtakers, a claims/ payment system may have to be put in place.

Case 2: Integrated Financing



* The ECAs do not respond to the competition between the Contractors. In fact, the provision of a common set of terms and conditions by the Sponsors practically eliminates the competition between the ECAs to provide better terms. Each ECA consequently provides a uniform coverage/ premium to all the consortiums, thereby eliminating any advantage. Furthermore, the ECAs do not appreciate being approached several times by different consortiums for the same project.

* As each Arranging group has to provide a complete underwriting, the transaction is underwritten several times over, which may prove a problem for less robust projects or a tighter loan syndication market.

* The Sponsors may find comparing

integrated proposals versus working on technical bids and financing proposals separately, more difficult to evaluate.

In the case of the Sponsor Approach, the Sponsors wants to control the financing process, have the internal or external resources to do so and are confident in the internal coordination between the technical and financial teams to ensure that the procurement will ensure sufficient eligibility for export credit cover. The price to be paid is the need to invite a fairly large number of banks (10-20) to make financing bids and evaluate them separately.

That process does provide the Sponsors with a significant number of different proposals that enable them to negotiate with the final Arrangers (with a good idea of what the banking

market is and is not prepared to do) and pick the most appropriate banks for the specific roles involved.

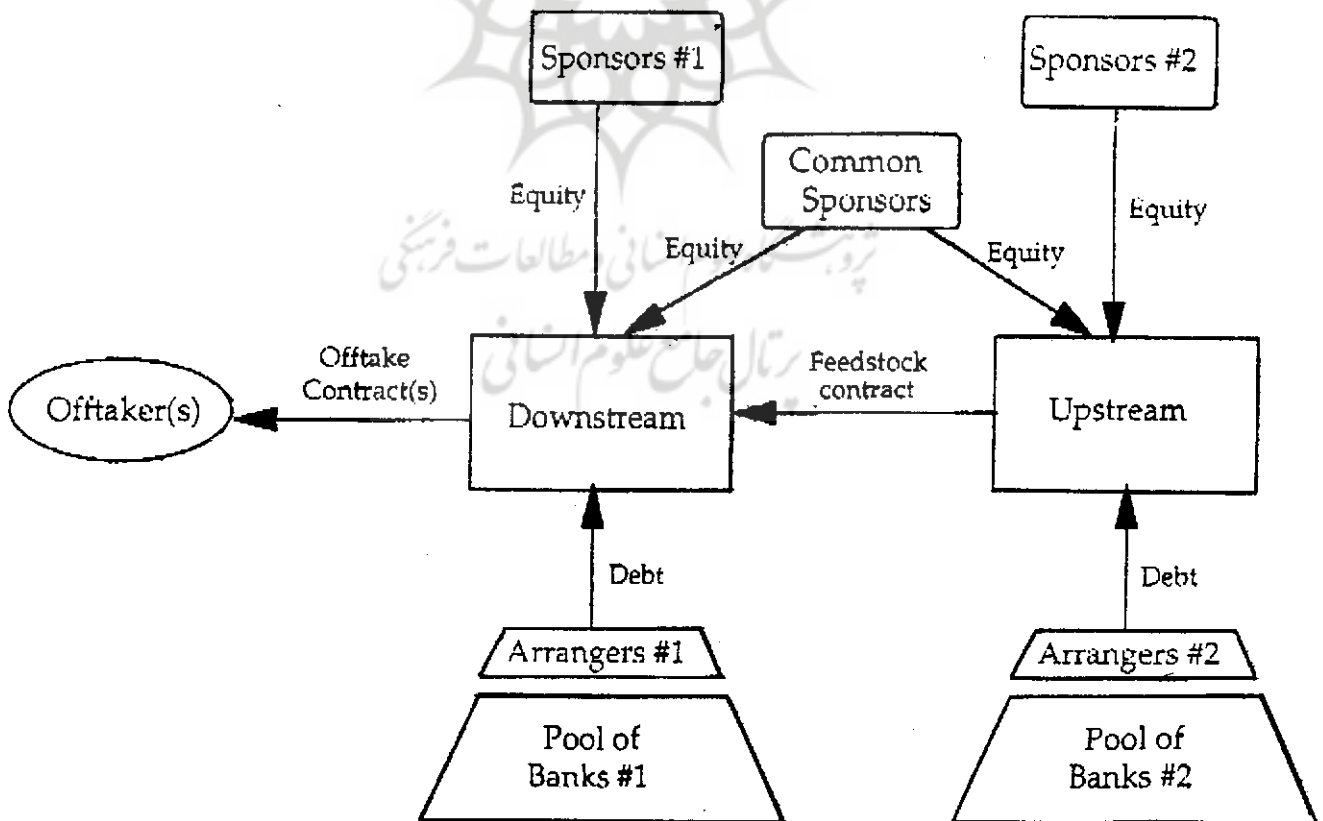
Given below are examples of each of the two financing approaches that can be adopted for LNG:

- (i). Case 1: integrated Financing
- (ii). Case 2: Separated Financing

Case 1: Separated Financing

Two separate upstream and downstream project companies have to be established, with different shareholder structures, different operators and distinct financings provided by two different arranging groups.

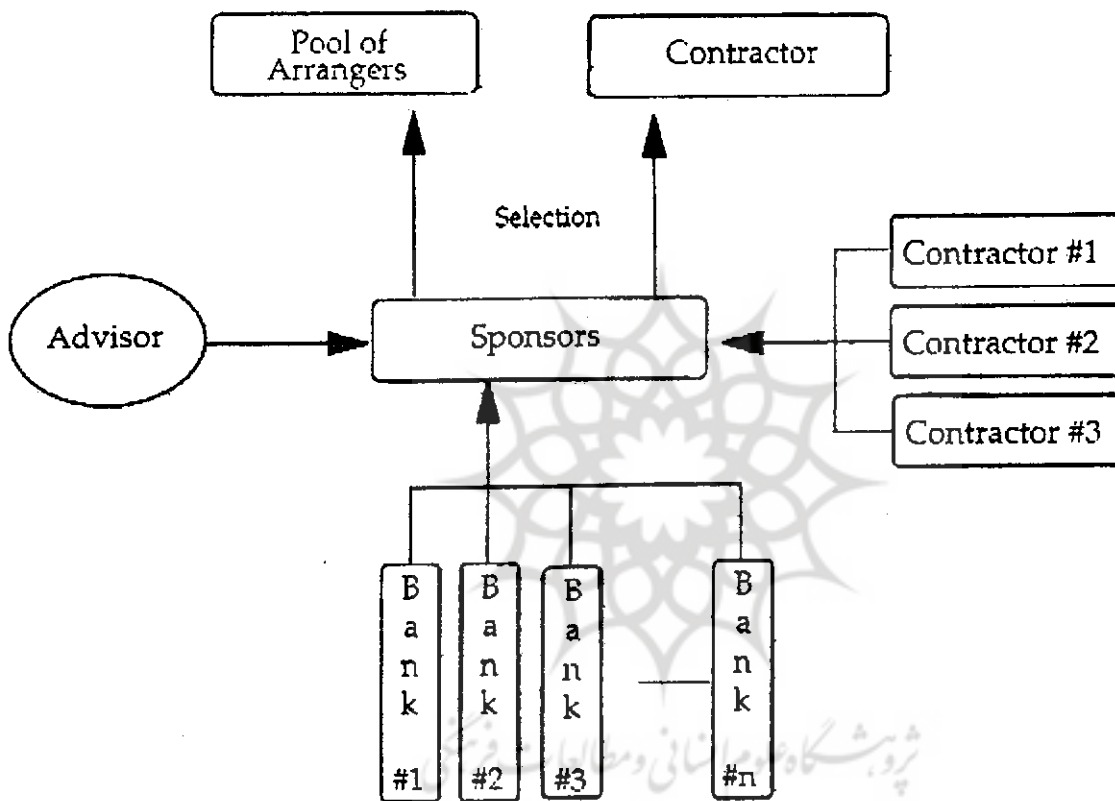
Case 1: Separated Financing



contractors make technical, priced bids only; they are not asked to provide the debt financing as part of their bids. The Sponsors approach the banks separately and ask them to bid for the debt financing of the project, either

individually or in groups. Sponsors award the construction contract⁽¹⁾ and also select an Arranging Group of Banks (the "Arranging Group") but separately.

Sponsor Approach



There are inherent advantages and disadvantages of the Contractor Approach i.e

Advantages

* It ensures the intergration of the technical and financial aspects between the contractors and the arrangers, especially on ensuring the eligibility of the procurement to export credit cover.

* All the bidders have to try and provide the best terms for the financing, from their respective Arranging Group.

* It provides the Sponsors with the all-in cost of the project.

* The competitive bidding process ensures that the Contractors apply pressure on their banks and the Export Credit Agencies but the Sponsors have to ensure that they are involved and do not allow over-enthusiasm to set in. Sponsors are also not forced to favour certain banks relative to others in the selection process as the contractor consortium that wins the bid will have its arranging group as the arrangers or the transaction.

Disadvantages

* The Contractor Approach allows for less control over the financing

process by the Sponsors, especially in terms of arranger selection, export credits etc.

* The Arranging Group may not have all the best specialists for the roles to be performed. Worse, even though the overall package may be the most competitive, the financing package may not necessarily be the best but the Sponsors are obliged to adopt it nevertheless.

* The ECAs do not respond to the competition between the Contractors. In fact, the provision of a common set of terms and conditions by the Sponsors practically eliminates the

different sources of financing, although international banks are active in both markets.

The bulk of the project financing remains debt, given its highly leveraged nature, so let us proceed to the debt

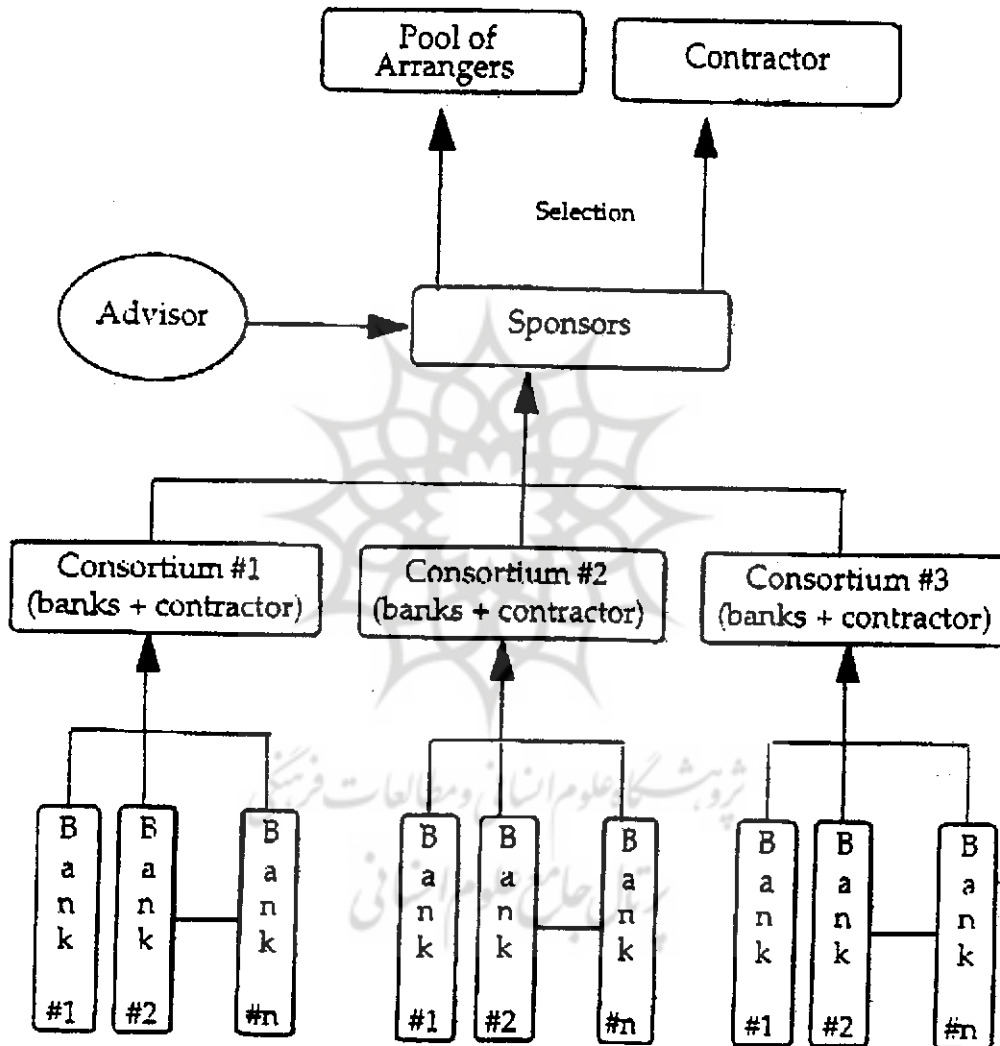
financing techniques.

Debt Financing

This section will deal with some of

the fundamental choices facing Sponsors on to how to proceed with their projects and the experience of Crédit Lyonnais relative to the outcome of those choices, which includes two cases.

Contractor Approach



The Sponsors can either ask each of the Contractor consortiums to provide financed bids or arrange the financing themselves.

In the Contractor Approach contractors are asked to provide not only a technical bid with an attached price tag but the debt financing as well.

They usually approach both their own core banks and other banks that have relevant experience/ capabilities.

A Group (5-7) of Arranging banks (the "Arranging Group") is selected by each competing contractor consortium. Each group prepares a bid for the debt financing of the Project, based on the

price/ procurement, technology etc proposed by their contractor consortium ("Contractor"). Specialized roles are usually decided upon and allocated within the Arranging Group e.g technical bank, export credit coordinator etc.

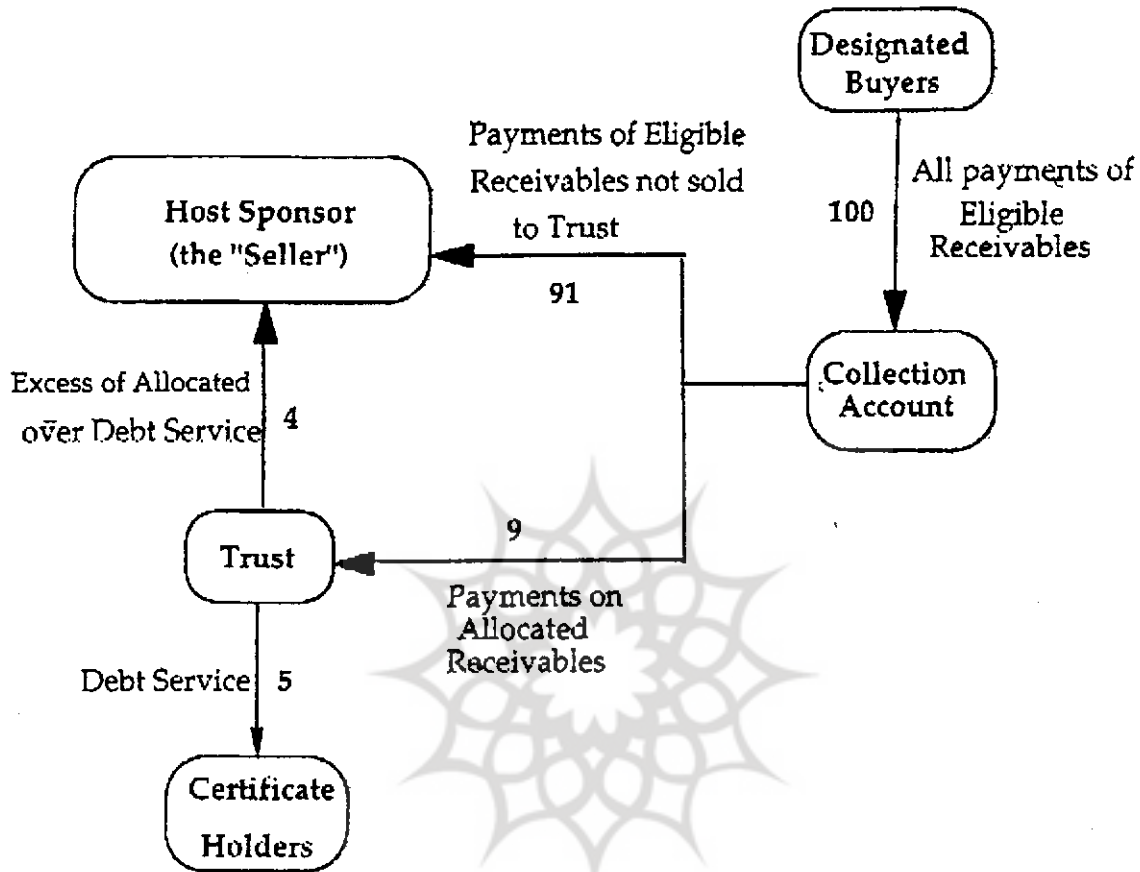
In the Sponsor approach the

and international banks (the "Certificates Holders"). (3) & (4)

the proceeds of the issue will be transferred via the Trust back to

the Seller.

Securitization: Ongoing Flows



□ During the life of the transaction, payments on all receivables provided by the Designated Buyers (the "Eligible Receivables") (100 in the illustrative diagram given below) will be received in a Trust collection account based offshore (the "Collection Account"). Payments of these receivables will be segregated between (i) payments of the Allocated receivables which will be transferred to the Trust (9) and (ii) the remaining proceeds which will be released to the Seller (91). The Trust, in turn, will retain the amount of interest, principal, fees or expenses due on next scheduled payment date of the certificates (5) and transfer the excess of the

Allocated Receivables (4) to the Seller. The Allocated Receivables represents a multiple of the debt service amount and can range from 1.5 to 3 times debt service. It is also called the overcollateralization amount.

□ In the event the Host Sponsor uses a Sales Agent, the Trust would continue to use it as its undisclosed Sales Agent, responsible for selling the physical volumes ascribed under these future oil obligations in accordance with its existing commercial practices. It is important to note that the Trust would not take actual delivery of oil or have any responsibility for it. In this way the Trust does not

interfere with the host sponsor's normal energy business, nor its existing customer relationships other than having the proceeds deposited by the customer directly into a Collection Account.

The securitization structure has several advantages:

- It is unlikely to be counted as sovereign debt, since the Trust will act as Issuer.
- It can achieve ratings higher than the sovereign rating;
- It can provide long term, fixed or floating rate financing;
- It opens up new sources of financing, notably capital markets.

Both the prepayment and the securitization structures are similar except to the extent that they tap two

the Trust. The portions of the total designated quantity would require to be sold to creditworthy buyers, preferably but not necessarily under offtake contracts.

The Trust would service its debt obligations (after payment/ receipt of hedging obligations) to CL, who redistributes the payments to the bank syndicated.

The Trust would use the entity currently selling the crude as its undisclosed Sales Agent, who would be responsible for selling the physical

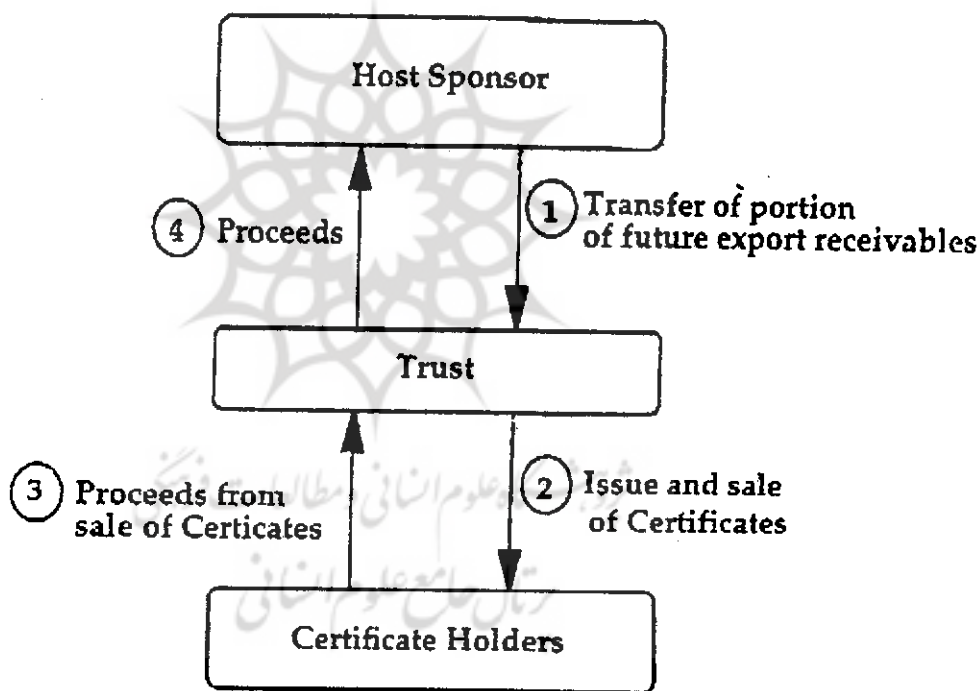
volumes ascribed under these future oil obligations, in accordance with their existing commercial practices. The host sponsor's customers would not be involved in any aspect of the financing arrangement other than making payments to a specified offshore, escrow account and as the Trust would not take actual delivery of oil, or have any responsibility for it, current sale arrangements require little modification.

The financing structure proposed, by virtue of its commercial nature (in

terms of reimbursement of the Facility being in oil) and the Trust structure could be potentially considered as deconsolidated and consequently avoid being treated as a sovereign loan. The hedging mechanism extends the maturity of what is normally a short-term trade finance instrument into a long term instrument and can be structured to provide a degree of upside in the event of rising oil prices. Depending on the tax regime, certain tax advantages may also be possible given the deferred

Securitization

Securitization: Initial Flows



nature of the revenue stream.

Securitization is a financing technique that uses stable, predictable cashflows as the basis of issuing (and repaying) a bond issue on the capital markets subscribed to by investors. It is a technique frequently applied to allow oil producers to raise term financing repaid from the cashflow generated from future crude oil exports. In the case of the Host Sponsor (the "Seller"), it involves:

- Establishing a special purpose trust (the "Trust") controlled by the Host Sponsor (the "Seller") which (1) will purchase a pre-determined portion of the Seller current and future oil export receivables⁽¹⁾ to be generated under firm offtake contracts with certain identified investment grade customers (the "Designated Buyers"). In some cases, the creation of a

SPC(Special Purpose Company) may be required. The SPC will purchase the receivables and transferrd them to the Trust.

- The Trust will (2) issue U.S Dollar denominated Certificates (the "Certificates") which shall be placed with institutional investors

¹- based on proven, dedicated oil reserves and production

□ it avoids the debt going directly onto the balance sheets of the Sponsors and limits the recourse to them;

□ it allows for a certain degree of latitude in terms of the proportion of debt to equity of export to commercial credits.

One of the most important elements of a project financing is the equity contribution in the form of new

money, which each Sponsor provides. The foreign, private sector Sponsors ("Foreign Sponsors") have various means of raising their equity

contributions ranging from internally generated cashflow to straight corporate debt or rights/ equity issues. The focus of this paper, in terms of equity financing, however, is the financing of the host country's/

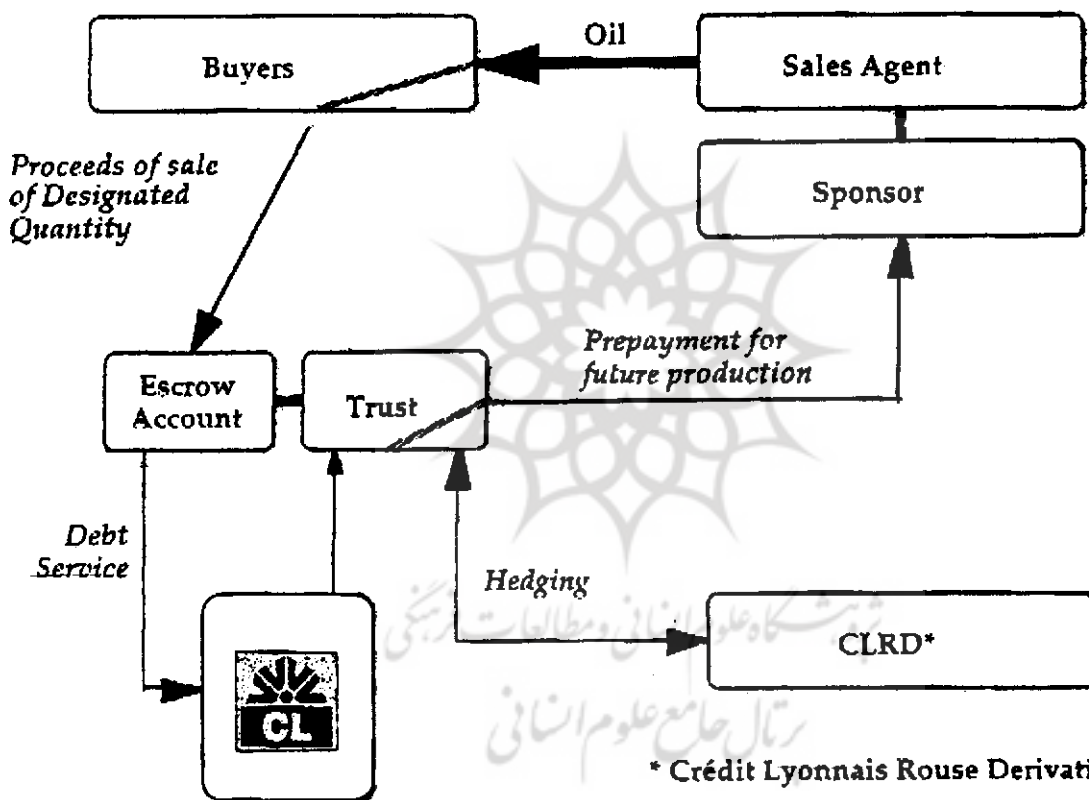
public sector petroleum company's contribution.

Equity Financing

The host country/public sector petroleum company ("Host Sponsor") is faced with essentially two choices i.e

□ to negotiate a package where

Prepayment Financing



* Crédit Lyonnais Rouse Derivatives

the bulk or even the entire foreign investment is made by the foreign partners who repay themselves upon completion from the cashflows generated and splitting the remainder of the cashflow with the host sponsor (PSAs, buybacks etc)or

□ provide their share of the equity financing.

In the event the host sponsor decides on the latter, given below are a few ways in which the host sponsor can

raise financing on the basis of a resource directly under its control: oil.

Crédit Lyonnais ("CL") would establish a special purpose trust (the "Trust") to pre-purchase a total designated quantity of future crude oil production from the Host Sponsor. The price paid by the Trust to the Host Sponsor would be the net present value of projected revenues from the periodic sale of portions of the total designated quantity, spread over a period of time that corresponds to the

maturity of the Facility required by the Host Sponsor. The projected revenues would be based on the Trust's hedging arrangements' guaranteed minimum price.

The appointed sales Agent (whichever entity is currently selling the crude) would continue to sell the crude as before, except to the extent that for the payments of the portions of the total designated quantity in question, the proceeds would be credited directly into the offshore, escrow account of

(iii). Incentive to renege on the contract on account of lower alternative fuel prices &/or alternative sources as in the case of ENEL, "for technical, economic and environmental reasons".

When offtake risk is broken down in this fashion, it falls into one of the above categories e.g (i). is analysed in Completion Risk (ii). under macro-economic risk (in the case of the public sector backed by the Federal Government) while (iii). is assessed in the due diligence process of the project economics. Additionally, in the case of (ii)., several public sector companies can get together in a joint venture⁽¹⁾ for the purchase and marketing of the gas, thereby reducing the concentration risk of one buyer (e.g the Government alone).

In all cases, volume flexibility, contract/ price renegotiation and other such clauses have to be carefully examined and evaluated both from the supplier's and the buyers perspective to ensure that neither suffers inordinately in the event of say, an adverse price movement.

However, the ultimate economic viability determines the level of risks that adverse price changes will cause reasons for abdication of the contract.

Price Risk

Take or pay contracts in the case of pipelines' pay tariffs often consist of two elements i.e a Capacity Charge that at least covers debt service & an equity return and a Variable Charge that covers operating & other variable costs.

Take or pay contracts in the case of LNG have occasionally obtained minimum floor price provisions that have provided cashflows sufficient to cover debt service independent of the linkage of the gas price to a formula that is essentially a function of the oil

price or a basket of crude oil prices.

However, buyers are applying increasing pressure to eliminate floor prices, which in the event of sustained low oil prices could create serious repayment difficulties for highly leveraged gas projects that have gas prices linked (by means of a formula) to oil prices.

If gas prices eventually do float but either buyer &/or seller prefer fixing the price, then the linkage to oil prices could potentially be used to lock in the price of the gas, based on an oil price hedge i.e for a given quantity of gas, the proportional quantity of oil as per the oil price formula can be hedged by means of a swap, floor etc.

Alternatively, buyer and seller negotiate floor and ceiling prices to avoid the zero-sum nature of oil price changes relative to their price formulas.

Project Economics

The long term viability of the gas project depends on the competitiveness of the all-in cost of gas relative to other fuel alternatives. For instance, the cost of the entire LNG chain i.e upstream field development, plant, shipping, regasification and transportation, which can become a multi-billion dollar investment, has to be competitive with coal, diesel, etc.

Given the dual burning capacity of some power plants, switching fuels is relatively straightforward. All gas projects have to be cost-competitive on a long-term basis (in terms of the final usage for the gas, e.g electricity) or else the incentive to renegotiate or even renege increases. Where direct switching capability exists, they must be close to competitive even on a short-term basis.

A useful back of the envelope calculation is to compare the cost of electricity in the buyer country if the LNG or gas supplied were to be used as the feedstock against the current

price of electricity (adjusting for any subsidies or other distortions) generated by alternative fuels. If the two figures are already comparable, it does not bode well for the long term competitiveness of gas.

Having provided an understanding of how financier's analyse risks and potential ways of mitigating them, Part II looks at the financing techniques that can be applied to fund or approach the financings of these projects.

Developing a gas project (LNG or natural gas pipeline) involves upstream facilities, which extract the gas (and, in many cases, condensates) and deliver them to the downstream facilities, which (i). transform the feedstock gas into LNG and transport it by ship or (ii). transport the gas via pipeline to the end user(s).

Part 2

Financing Techniques

Some gas projects still enjoy the luxury of being financed purely with equity. Most gas projects, given the huge capital investment required, need to adopt a project financing approach, that involves a combination of debt and equity financing.

A project financing approach serves several purposes:

- It is a means of ensuring the distribution of the risks outlined in Part I to the parties most suited to assume them;
- Its flexibility allows for a diversity of financing sources to be used, especially by the host Government/ national petroleum company;

1- As the Gas Authority of India Ltd (GAIL), Indian Oil Corporation and Oil & Natural Gas Corporation are planning.

the nature and degree of technical risk varies between an onshore and an offshore pipeline, depending of course on the route taken. If one takes the proposed route for the Oman-India pipeline for instance, its subsea length would be approximately a 1000 km and it would reach depths of over 3000m. A lot of the pipelines currently being considered in the Middle East would be laid on the continental shelf, which would still have maximum depths of 1000m, thereby making repairs possible by means of Remote Operated Vehicles (ROVs) alone. An onshore option would, from purely a technical point of view, be cheaper to build and easier to maintain.

The type and extent of the completion guarantees (that cover cost overruns, delays, abandonment etc.) required by the financiers will reflect the technical risk involved.

LNG plants, on the other hand, are a well established technology, for which incremental improvements have led to increases in production capacity while lowering plant costs. The completion risk is likely to be perceived as lower than that of a deep water pipeline.

However, LNG projects need to ensure that the entire LNG chain functions in tandem i.e from wellhead to the final consumer, which includes the shipping, regasification terminals, power plants etc. Consequently, completion tests usually cover these aspects (with varying degrees, given the time lag for ensuring these elements).

Sub sea pipelines are not subject to the geopolitical risks of their land based or continental shelf cousins: however, the higher the degree of complexity involved in terms of length, depth, terrain, currents etc the greater will be the need for independent feasibility verification and ironclad completion tests and guarantees provided by creditworthy parties. LNG plants in themselves are complex but well understood: the issue is more to

ensure that the entire chain will be constructed and functioning in time for the completion of the plant. Detailed milestones for these elements have to be integrated into the project planning/documentation.

Gas Supply Risk

The supply of the gas to either the pipeline or the LNG plant along with the production of condensates requires independent confirmation of proven reserves and verification of the entire process of extracting gas from the wells to the LNG plant fence or pipeline.

The independent engineers, in cooperation with the banks' engineers will look at issues such as the concentration of supply (i.e the percentage of supply depending any one source or bottleneck). The number of wells, reservoirs and platforms etc must be adequate to ensure that there is a sufficient quantity of reserves available for and dedicated to the project during its life and at startup.

Operating Risk

Apart from the depth of sub sea pipelines and the associated repair difficulties, operating pipelines is a fairly straightforward process.

Operating a LNG plant optimally and safely is a more complex process in addition to the logistics of coordinating the shipping, regasification and onward transportation arrangements.

Again, the independent consultant and the banks' engineers perform their due diligence on (i). the ability, experience and resources of the operator to run the plant/pipeline efficiently (ii). capability to minimize scheduled and unscheduled downtime; respect stringent safety/ environmental standards and ensure proper logistical/ infrastructure support etc.

Offtake Risk

Long term take or pay contracts

are usually established for the sale of gas, be it LNG or piped gas. These contracts need the long tenor to achieve the economies of scale required for such large capital investments to generate free cashflow sufficient to repay the debt and generate an adequate return.

The first important distinction is between public sector buyers backed by their Government and private sector buyers.

The creditworthiness of public sector buyers backed by their Government is essentially determined by the sovereign rating and the appetite of banks for that country's long-term sovereign risk whereas private buyers' long-term capacity to pay will have to be estimated, including the viability of the final product the gas is being used to produce.

In this respect, LNG is perceived as being significantly more flexible than pipelines in terms of being able to supply alternate buyers or even the spot market. The buyers must, however, possess the necessary regasification facilities and have level of creditworthiness commensurate with their undertaking.

A major issue is that most of the highly rated Far Eastern potential buyers have already sourced their gas for the year 2000, which leaves the option of selling to lower rated buyers or delaying the implementation of LNG projects till 2003-2004.

Buyer or seller must also arrange for LNG cargo ships, which often have to be built at a cost of between USD 250-300 Mn, that add significantly to the MMBtu cost of the gas.

Mitigation of long term offtake risk will be one of the major challenges for large gas projects. Offtake risk can be broken up into sub categories:

- (i) Degree of investment/benefits involved for absorbing the gas;
- (ii) Ability to pay for the gas, in foreign currency.

alternative fuels/feedstock.

- The presence or absence of exploitable quantities of condensates.
- Gas is often sold on the basis of long term, take or pay offtake contracts⁽¹⁾ which, in the event of cheaper alternative fuels becoming available, may create an incentive for the purchaser to renegotiate or even cancel the contract.
- Gas pricing is determined on an ad-hoc basis (which can be fob or cif) and can be (i). linked to crude oil or (ii). the final output for which it is acting as a feedstock or (iii). a capacity/ variable charge structure (in the case of pipelines).
- The choice of the means of transportation is primarily a function of the distance to and the geographic dispersion of its end user(s) i.e LNG, pipeline or even gas to liquid conversions.

Financing gas projects involves not only the upstream field development but also the means of transforming and/ or transporting the gas to its final user(s). Accordingly, the current choice between LNG and a pipeline has to be made.

The object of this paper is not to go into the relative economic and technical merits of pipelines or LNG. Part I provide a financier's viewpoint of how each option is viewed in terms of risk, especially in the context of the Middle East and the potential means to mitigate those risks while Part II describes the application of various financing techniques for the provision of the debt and the equity required by these projects.

Part 1

A Financier's Analysis

Geo-Political Risks

A gas pipeline that has to transit across the territorial land or waters of

a third country is likely to be considered riskier than the use of LNG ships, which are loaded onto ocean going vessels and therefore subject to limited risk from third parties. The estimation of political risk significantly increases with the passage of a pipeline through a third country as the third country has an incentive to raise the transit costs up to the level that alternate routes or alternate supplies would cost. The flip side is that LNG cargoes may not be able to have safe transit if the supplier or buyer country is in the midst of a conflict.

The risk equation for a pipeline depends on whether the third country is gas rich and also has export ambitions (i.e higher risk) or not. In either case, the countries involved should become investors in the venture in order to have a mutual interest stake. Being parties to the United Nations Conventions on the Law of the Sea and the existence of a pipeline treaty creates an appropriate international legal infrastructure. Multilateral Agency involvement (The World Bank/IFC/EBRD/ADB) as direct or indirect lenders or equity holders (e.g the Agency could finance the equity stake of the third country through which the pipeline transits or become a shareholder itself) can alleviate the perception of risk. The involvement of Export Credit Agencies providing suitable political risk cover combines with the other two measures to reduce the risk profile.

Political/Macro-Economic Risk

In signing long term gas supply contracts, sellers are exposing themselves to a long term risk on the stability of the purchasing country, the economic capacity to have sufficient foreign exchange reserves to pay for the gas and the distribution/ payment collection capability.

Private sector (foreign and local) sponsors investing in the LNG plant/ pipeline from the supplier country are also assuming that the supplier country's Government will not introduce/ change tariff taxes; expropriate or nationalize the pipeline; will respect the terms of the concession agreement and will not cause any hindrances to foreign exchange transfers (debt service and dividends). A pipeline does not require a regasification terminal but otherwise the risks in the case of LNG or a pipeline are similar.

Again, The Government(s) involved must set the appropriate legal stage by providing a legally binding Concession or Implementation Agreement to ensure that the construction and operation of the pipeline is authorized. In addition, it must furnish the necessary licences, consents, permits etc; allow for the opening of offshore bank accounts and ensure that no material adverse change arises on account of changes in taxation, foreign currency repatriation or in extreme cases, expropriation/ nationalization. The involvement of Multilateral/ Export Credit Agencies can then backstop these commitments with insurance/ guarantee cover or in the case of the former, by virtue of their presence as a lender or equity investor.

In terms of macro-economic risk, projecting the purchasing country's payment capacity over the long term is not an exact science. Both rating agencies and banks' in-house economists endeavour to estimate that capacity, including by making projections of a country's export to debt service ratio.

Technical/Completion Risk

1- that sometimes include floor price provisions

Financing International Gas Projects

شركه سگاه علوم انسانی و مطالعات فرهنگی
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Financing gas projects follows a well established approach that is being exposed to a new set of challenges and uncertainties. This paper endeavours to address, with the benefit of hindsight and new financing structures, how to mitigate or resolve those factors for the

next generation of gas projects to come on stream.

The transportation, marketing and price of gas has distinct features that impact the financing i.e.

- A single or limited number of end users buying the entire production,

whose long term creditworthiness is essential,

- The economic viability of a gas project depends on the cost competitiveness of the final product that is produced (e.g. electricity) versus the use of