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Sources of Funds and Risk Management for International Energy Projects

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Sources of Funds and Risk Management for International Energy Projects

By
David Blumental*

This paper examines how energy companies can take advantage of new opportunities to develop projects in emerging economies using the project finance mechanism. In particular, this paper looks at the various sources of funding available to multinational corporations for international projects as well as ways to control the risks inherent in such projects in order to fashion the best possible financing package.

TABLE OF CONTENTS

I. Overview—Opportunity, Financing & Special Challenges In Emerging Economies.....	269
A. Marketization, Opportunity & New Financing Forms.....	269
B. The Relationship between Risk and Funding.....	271
C. Special Challenges and Risks in Emerging Economies....	271
D. General Prerequisites for Obtaining Funding.....	272
II. Sources Of Funding.....	273
A. Generally.....	273
B. Funding in Various Energy Industries.....	273
C. Traditional Financing Models.....	274
D. Combining and Sourcing Equity and Debt.....	275
E. International Multilateral Institutions.....	276
1. International Monetary Fund.....	276
2. World Bank.....	276
a. International Development Association.....	277
b. International Finance Corporation.....	277
(1) IFC's Involvement in the Energy Sector.....	278
(2) IFC Financing Standards and Requirements...	278
c. Multilateral Investment Guarantee Agency (MIGA).....	279

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d.	How the World Bank Processes a Loan	279
e.	The World Bank Guarantee	279
F.	Borrowing from Regional Development Banks	280
G.	Bilateral Source—National Governmental Institutions	280
1.	Export Financing & Credit	281
a.	U.S. Export-Import Bank	281
b.	Export Finance in the Energy Sector and Project Finance	282
c.	How to apply for U.S. Export-Import Bank Assistance in Project Finance	282
2.	Development Assistance	283
a.	U.S. Trade & Development Agency	283
b.	Overseas Private Investment Corporation	284
(1)	Project Finance Eligibility	284
(2)	Clients, Project Evaluation, and Application Procedures	284
(3)	Form of Financing	285
H.	Private Commercial Funding	285
1.	Domestic Capital Markets	285
2.	International Commercial Banks	285
3.	International Equity Markets	286
4.	International Bond Markets	286
5.	Specialized Energy Funds	287
6.	Credit Rating Agencies	287
III.	Types Of Risk And Risk Management	287
A.	Risks Inherent at Various Phases of Project Construction	287
1.	Development Stage	287
2.	Construction Risk	287
3.	Operation & Maintenance Phase	288
B.	Local Business Environment	288
C.	Ways to Manage Risk Ex Ante	289
1.	Structuring the Project	289
2.	Allocation of Risk Through Contract Terms and Provisions	290
a.	Price Protection	290
b.	Currency Fluctuation Risk	290
c.	Achieving Certainty in Dispute Resolution	290
3.	Investment Insurance	291
a.	National Governmental Agencies	291
(1)	OPIC	291
(2)	U.S. Exim Credit Insurance	292
b.	Multilateral International Institutions	292
(1)	Multilateral Investment Guarantee Agency	292
(a)	Term and Coverage	292

(b) Applying for MIGA Political Risk Insurance	292
c. Private Insurance	293
IV. How To Put Together A Financeable Project	293
A. Evaluation of Project and Business Environment	294
B. Financial Viability	294
C. Technical Viability	295
D. Potential Environmental Liabilities	295
E. "Financial Engineering"	295
1. Ownership Structure	295
2. Sourcing Financing	295
3. Security Arrangements	295
V. Conclusion	296

I.

OVERVIEW—OPPORTUNITY, FINANCING & SPECIAL CHALLENGES IN EMERGING ECONOMIES

A. *Marketization, Opportunity & New Financing Forms*

During the past decade, the globalization of business and investment, combined with rapid economic growth in many developing countries, has spurred the soaring demand for energy in emerging economies in Latin America and East Asia. China, for example, has surpassed most of the industrialized countries to become the world's second-largest energy consumer after the United States.¹

To meet the huge increase in demand for energy, emerging economies have rushed to increase oil production, gas transmission, and electric power generation capacity.² The tremendous scale of the investment required to finance the development of oil production, gas transmission, and electric power generation facilities has hastened the shift toward free market reform and privatization of the energy sector in many emerging economies.³ To avoid incurring prohibitively large debt and to attract the necessary technology and know-how, governments have dismantled their traditional public monopolies, loosened regulation and encouraged private international investment in the energy sector.⁴ Gas transmission and electric power generation, in particular, are areas in which government-owned or controlled utilities now cooperate with energy companies. The governments in developing countries commonly offer these concessions to investors under "build, operate, and transfer" ("BOT") or "build, own, operate,

1. See Handel Lee et al., *Preparing Itself for the Next Century*, 65 PETROLEUM ECONOMIST 19 (1998) (discussing reform of China's petroleum industry).

2. See generally, THE PETROLEUM ECONOMIST, LTD., THE GUIDE TO WORLD ENERGY PRIVATISATION (1995).

3. See *Energy Privatisation: World Review*, *id.*, at 123-68.

4. See generally, THE GUIDE TO WORLD ENERGY PRIVATISATION, *supra* note 2; HOSSEIN RAZAVI, FINANCING ENERGY PROJECTS IN EMERGING ECONOMIES (1996).

and transfer" ("BOOT") arrangements.⁵ Under these models, government utilities generally sign a "take or pay" off-take agreement with the independent power producer ("IPP") or gas pipeline operator which provides the project with a guaranteed income stream for a set term. At the end of the term, the debt has been repaid, the equity investors have received their return, and the project assets are transferred to the host government.⁶

This shift has created a wealth of new opportunities for energy companies and private and institutional investors. Access to flush U.S. and international capital markets, combined with American engineering skill and state-of-the-art technology, has given U.S. companies an advantage in competing for a share of the international energy development market. Since the early 1990s, many U.S.-based energy companies have ventured into Latin America and Asia.

The need for increased capital to exploit opportunities in global emerging markets has driven the development of new approaches to obtaining financing. The most highly-touted of these is project finance. Project finance is an approach that integrates a mixture of equity and debt financing from different sources, all of which derive their return on equity or debt service strictly from the revenue stream of the underlying project over a ten to twenty-five year period.⁷

The principal difference between the project finance approach and traditional corporate financing, and the biggest advantage to the developer, is that project finance is limited recourse or nonrecourse "off-balance sheet" financing.⁸ In traditional corporate financing, the lenders have recourse to all of the project sponsor's assets and revenues. The structure of a project finance transaction limits the lender's security to the assets and cash flow of the project itself, under the rubric of a project company formed specifically to construct, own and operate the project facility.

Because no single project encumbers the sponsor's balance sheet, energy companies effectively gain access to far more capital than under the traditional corporate finance approach, while maintaining their general creditworthiness. In a typical project finance transaction, the project sponsor contributes twenty to forty percent of the total project investment as equity, with the remainder of the required capital infused as project debt.⁹ The sponsor may also raise equity on international or local equity markets, or through various multilateral and governmental institutions. Debt financing may include commercial loans, suppliers' credit, international bond offerings, and loans from multilateral or governmental

5. See PAUL E. COMEAUX & N. STEPHEN KINSELLA, *PROTECTING FOREIGN INVESTMENT UNDER INTERNATIONAL LAW: LEGAL ASPECTS OF POLITICAL RISK* 129 (1997), for additional general background on BOT, BOOT, and other concessionary forms.

6. See *id.*, *supra* note 5, at 129; Nina N. Hoque & J. Michael Robinson, *An Examination of the Build, Operate and Transfer Model for International Projects in Emerging Markets in INTERNATIONAL INFRASTRUCTURE PROJECTS X-1* (1995); and J. Michael Robinson, *The Build, Own, and Transfer Model for International Projects in Emerging Markets*, 8 INT'L Q. 126 (1996).

7. On project finance generally, see PETER K. NEVITT, *PROJECT FINANCING* (6th ed. 1997). See also RAZAVI, *supra* note 4, at 3-11.

8. See RAZAVI, *supra* note 4, at 3-11. See generally NEVITT, *supra* note 7.

9. See NEVITT, *supra* note 7.

institutions. With the right development approach, a project sponsor can create a financeable project package tailored to each project, obtain financing, and maximize its return for a number of projects without detriment to its own balance sheet.

B. The Relationship between Risk and Funding

While the project finance model offers many advantages over traditional corporate financing approaches, significant risks remain at each phase of the project's development. Lenders are risk-averse by nature. Their fear is heightened where the debt is nonrecourse or limited recourse, and the borrower's risk is limited to its own equity investment. In order to obtain financing, and to give the lenders sufficient comfort, the project structure itself must take risk factors into account. Identifying, analyzing, and mitigating risk are one of the most critical aspects in structuring and funding a successful international energy project. Risks, including political risk and currency fluctuation risk, exist at all phases of the project. Project sponsors and their counsel must work prospectively to structure the investment in a way that reduces and mitigates risk to the greatest possible extent. Accordingly, the relationships between the project's parties and the instruments required are quite complex. The true skill in developing project finance deals lies in the "financial engineering" that will comfort lenders while raising the most capital possible.¹⁰

C. Special Challenges and Risks in Emerging Economies

Before taking advantage of the tremendous opportunities created by soaring demand for energy resources and facilities, energy companies must recognize and address the special risks and challenges that arise when developing projects in emerging economies. These risks stem primarily from the local business environment and can create problems and increase total project costs at every stage of a project's existence. To a large extent, the local business environment is defined by the limits of the host country's resources. The level of infrastructure development and the availability of capital, raw materials, skilled labor, local managerial talent all determine the type and levels of risk that investors will face. The risks faced by any project can be divided into two categories: commercial risk and political risk. In practice, however, the distinction may be difficult to draw, particularly when the contract counter-party is a government agency or other government-controlled entity.

To recognize and deal with these risks, a project sponsor needs developers who possess knowledge of the local political environment and business culture and who can communicate effectively with their local counterparts. It is critical for project sponsors to have developers fluent in the local language or to retain reliable translators with experience in project development. Not only must project sponsors educate themselves on the host country's situation, they also must be prepared to spend considerable time and effort educating their local

10. See generally RAZAVI, *supra* note 4, at 11.

counterparts and partners about the mechanics of financing and the reasons for lenders' demands. Local parties are usually unfamiliar with the complexities of project financing for energy projects through international organizations and international capital markets. The ability to understand local concerns and communicate between local parties and financiers is of paramount importance.

Commercial risks are those risks inherent in any business, distinct from the prevailing political climate. Such risks include the risks of drops in consumer demand, unpredictable and changing costs for inputs, insolvency of purchasers, and cost overruns. In developing countries, however, these risks are exacerbated by limited infrastructure and telecommunication facilities.¹¹

Political risk, on the other hand, comprises a wide range of governmental action which adds to the overall risk of the project in two ways.¹² First, reform of industry management and administrative structures often do not keep pace with the government's pro-investment, market-oriented policies. Overlapping, inflexible, or vague lines of authority tend to delay the obtaining of approvals and permits, thereby raising costs. Second, the lack of transparent laws and regulatory regimes can produce uncertainty for investors when it comes time to price electric power or oil and gas. This regulatory ambiguity also makes it more difficult to comply with environmental regulations and local tax codes.

Together, political risk and economic instability can drive up costs, reduce revenues, and in extreme cases, result in the total loss of capital.¹³ Consequently, investors will demand a higher return where the risk is greater. At the same time, investors must devise an investment structure which allows them to spread the risk inherent in any project with their counter-parties, insurers, and partners.

D. General Prerequisites for Obtaining Funding

In order to ensure successful financing for a project, energy developers should engage in a two-step inquiry. The first step is to determine the underlying economics of a project based on available information. If the project appears to be viable, the project sponsor should conduct research and exercise due diligence to identify what risks arise from the local business and political environment. These should be, in turn, factored back into the project economics. If, after factoring in the risks of a given project, the project remains viable, one must determine the financial structure of the project. In this second step of the inquiry, one must make such determinations as the project's ownership structure. Further, one must identify sources of funds to be used and find investors and lenders. Also, one must determine the project's ideal debt-to-equity ratio. Finally, one must ascertain the basic package of project documents to be negotiated, including the security documents necessary to collateralize the project's assets in the host country.

11. See COMEAUX & KINSELLA, *supra* note 5, at xxvii n. 46.

12. See RAZAVI, *supra* note 4, at 15.

13. See *id.*

II. SOURCES OF FUNDING

A. *Generally*

In recent years, changing market conditions and rising costs have changed the way funds are sourced for international energy projects. As a basic industry, energy projects, whether oil production, natural gas transmission, or electric power generation, have access to equity and debt funding from diverse sources. These sources including multilateral institutions, regional development banks, export-import banks, commercial banks, institutional investors, equity and bond markets, equipment suppliers' credit, and other ad hoc sources.¹⁴ Because commercial banks are now careful to limit their exposure to the risk inherent in lending to projects in developing countries, most projects ultimately obtain funding from a mix of public and private sources

Institutionally, multilateral organizations and regional development banks have shifted their traditional focus and now provide numerous services and facilities designed to support private investment in the energy sector. Although the actual amounts that multilateral institutions commit to energy projects are usually relatively small, they serve to give private investors comfort and confidence and thus pave the way for commercially-sourced funding.¹⁵

Bilateral agencies and the export-import banks of developed countries, including the U.S. and Japan, now provide funding to private entities in the form of suppliers' credit, buyers' credit, and guarantees.¹⁶ Because these agencies exist to promote their own nations' exports, this support is generally limited to use for the purchase of that country's equipment and products.¹⁷

Commercial financing refers to funds from commercial banks and other institutional investors as well as capital raised through equity and bond offerings. Beyond risk aversion, commercial banks are also subject to certain structural and regulatory constraints which necessitate a financing package that includes other sources. Principally, energy projects require large investment and debt service over a relatively long term. Commercial banks, however, are limited in the amount of long-term loans they can fund due to country risk limits, sector limits, and reserve requirements.

B. *Funding in Various Energy Industries*

Changing market conditions in the 1990s have caused oil companies to reduce their own investment in projects. Oil companies are no longer willing to fund new projects solely from their own balance sheets. Accordingly, oil companies have adopted new financing instruments and strategic partnership

14. *See id.* at 29.

15. This process is known as mobilization.

16. *See* U.S. Exim website (visited June 15, 1998) <www.exim.gov>; *see also* JExim website (visited June 15, 1998) <www.japanexim.go.jp>.

17. U.S. Exim website (visited June 15, 1998) <www.exim.gov>; *see also* JExim website (visited June 15, 1998) <www.japanexim.go.jp>; RAZAVI, *supra* note 4, at 67-79.

arrangements with local interests to fund exploration, develop new production facilities, and limit exposure in any given country.

In the electric power industry, private project finance investment has focused on greenfield projects¹⁸ and renovation/expansion of existing generation facilities. There has been a general trend towards separating generation from transmission and distribution networks. Transmission and distribution (“T&D”) is still viewed as a natural monopoly best managed by government utilities. Also, because new investment in T&D is focused on renovating or expanding existing facilities, not on creating discrete, new projects, the project finance mechanism is perhaps not the best vehicle for funding T&D. The project finance mechanism is far better suited to the development of new generation facilities, because it can be structured as a discrete project with a predetermined income stream based on a fixed term, fixed price “take or pay” power purchase arrangement with the local utility.

Financing in the natural gas industry combines elements of oil and of power development. Upstream exploration and production is driven by private investment, while downstream T&D has generally retained its natural monopoly characteristics. This is changing, however, and certain U.S.-based energy companies have been involved in the privatization of gas pipeline construction and operation.

C. *Traditional Financing Models*

Nonrecourse or limited recourse project finance is now widely accepted as an alternative to traditional recourse corporate financing. Traditional financing approaches gave lenders recourse to all of the borrower’s assets and cash flow. Project finance, on the other hand, is “off balance sheet” financing that limits recourse to the assets and cash flow of the underlying project. The result is that companies do not have to carry project debt on their balance sheets and are able to pursue several projects simultaneously. Nonetheless, as a practical matter, project finance is very often structured on a hybrid, limited recourse basis.

During the riskiest phases of the project — construction and start-up — the project sponsor is committed to providing contingent financial support beyond its equity investment,¹⁹ typically in the form of a payment guaranty. At the completion date, once the facility has passed all completion tests, the sponsor’s payment guaranty is released, and the lenders’ rights convert to nonrecourse status. Most often, however, sponsors will continue to provide limited support in the form of performance guarantees regarding the fulfillment of obligations of their subsidiaries and affiliates.

18. Greenfield refers to projects constructed from the ground up, where the site was only a “green field” prior to construction.

19. See generally RAZAVI, *supra* note 4, at 5.

D. Combining and Sourcing Equity and Debt

Determining the proper ratio and the sources of equity and debt financing are key steps in designing the structure of project finance energy projects. Generally, total project investment is 20-40% equity and 60-80% debt financed.²⁰ This mixture relates back to the question of how project risk is to be distributed among the parties. Between project sponsors and lenders there is a natural tension surrounding this issue. Lenders naturally prefer project sponsors to commit more equity to a project. The more equity a project sponsor invests, the greater the proportion of the project risk it undertakes. The project sponsor, however, wants to reduce its exposure and save as much of its capital as possible to invest in other projects. The tension between the interests of the lenders and those of the project sponsors plays out during the negotiation of the loan documents and project structure. Several factors influence the determination of the debt to equity ratio: the creditworthiness of the sponsors, the location and economics of the project, and the risks inherent in that project.

In this area, just as in the development of project finance itself, necessity drives innovation. The huge investments and long-term nature of energy project investment have forced project sponsors to broaden the search for financing. Equity financing now often includes funds raised not just from the sponsor, but also from investment funds, multilateral institutions like the International Finance Corporation ("IFC"), regional development banks, and international and local equity markets.²¹ Projects structured as joint ventures between project sponsors and local public utilities add a new dimension because the local partner's funding may come from the host government or from the public lending arms of the World Bank or regional development banks.²²

Similar creativity and innovation go into structuring the debt financing. Because commercial banks remain cautious about making large infrastructure investments in developing countries, and because of the structural problems commercial banks face in making such large, long-term loans, traditional commercial financing alone cannot provide sufficient debt financing for large energy projects. Syndicated bank loans increase the funds available, but they cannot resolve the timing constraints on commercial banks. Energy projects still generally require financing for longer periods than the standard five to ten year commercial loan maturity. Other common sources of debt financing include institutional investors (pension funds, insurance companies, and mutual funds), government-sponsored energy funds, the IFC, private investment departments of regional development banks, international and local bond markets, and suppliers' credit.²³ However, these sources of financing also come with challenges in timing.

20. See *id.* at 3-11. See generally NEVITT, *supra* note 7.

21. See RAZAVI, *supra* note 4, at 7.

22. See *id.* at 8.

23. See *id.* at 9.

E. *International Multilateral Institutions*

The International Monetary Fund ("IMF") and its sister organization, the World Bank, are the two foremost multilateral institutions involved in project finance. In particular, the IMF and the World Bank continue to have a strong impact on the macroeconomic and monetary policies that form the backdrop to the successful financing of energy projects.

1. *International Monetary Fund*

The IMF is a nonprofit institution that belongs to the governments of the 179 countries which make up its membership. The IMF has no direct role in financing international energy projects.²⁴ Yet its influence on developing countries' economic and monetary policies is profound, both as a source of stability and as an impetus for market reforms.

By helping economies maintain the value of their currencies, the IMF helps create the stability that is critical to the successful development, financing, and operation of large international energy projects. With such projects, payment for energy will usually be made in local currency and must be converted to dollars in order to service the project debt and provide investors with their returns. While project sponsors and lenders have developed mechanisms to reduce the risk of currency fluctuations, it is unlikely that a contractual solution between the parties would address fully the problems created by a total collapse of the local currency. In such instances, support from multilateral institutions such as the IMF is crucial to salvaging international energy projects.

2. *World Bank*

Commonly referred to as the World Bank, the International Bank for Reconstruction and Development and its three affiliates, the International Development Association ("IDA"), the International Finance Corporation ("IFC"), and the Multilateral Investment Guarantee Agency ("MIGA") play a central role in international energy project financing.

Although the World Bank cannot lend directly to private sector enterprises, it emphasizes building free market systems, and through member state governments it supports development in oil, gas, electric power and other rapidly privatizing sectors.²⁵ It may finance the equity or debt share of the public sector in joint venture public/private projects and can provide political risk and foreign exchange convertibility guarantees. Further, the World Bank's prestige can facilitate relations with the host government as well as give lenders and outside investors greater comfort.

The World Bank lends \$17-20 billion annually. Of this amount, approximately \$2-3 billion goes to electric power and \$1 billion to oil and gas projects. In recent years, the World Bank has shown renewed interest in oil and gas projects, especially natural gas.

24. See IMF website (visited June 15, 1998) <www.imf.org>.

25. See *id.*

a. *International Development Association*

Established in 1960, the IDA is the World Bank's concessional lending arm, providing interest-free long-term loans to the poorest developing countries in order to alleviate poverty and create a base for sustainable growth. The IDA lends only to countries whose 1996 per capita income was less than \$925 and which are unable to borrow from the World Bank on market terms.²⁶ The IDA credits have maturities of 35-40 years with a 10-year grace period on repayment of principal.²⁷ Credits are subject to a service charge of 0.75 percent on undisbursed balances, but are interest-free. The IDA has lent over \$100 billion since 1960 and currently lends an average of \$5-6 billion per year. The eighty countries currently eligible to borrow from the IDA represent 3.3 billion people, or 69% of the world's population.²⁸

Because its loans are long-term and interest-free, the IDA relies principally on contributions from donor governments to finance its poverty reduction program. The IDA lends to governments or entities with government affiliations. In recent years, the IDA has taken an interest in projects combining public and private investment, but a project in an eligible country must reduce poverty and encourage development to qualify for IDA lending. Finally, the IDA serves an important function in coordinating information and aid from other multilateral organizations.

b. *International Finance Corporation*

The IFC is the World Bank's private enterprise development arm, and is perhaps the most important World Bank affiliate with which potential project sponsors should be familiar. The IFC was established in 1956, and its approach differs significantly from that of the World Bank, proper. The IFC will lend directly to private companies and cannot accept repayment guarantees from host country governments.

The IFC may fund equity investments in private businesses, and it also may provide debt financing for projects. Through mobilization, the IFC also plays a key role in attracting other investors and lenders to a project. IFC syndication gives commercial banks the comfort they require to extend commercial loans in developing countries.²⁹ As the lender of record in the syndication, the IFC's special privileges as a multilateral institution will extend to the commercial banks in the syndication. They will be exempt from payment of local taxes, insulated against political risk and may have greater access to local political leadership. The IFC is responsible for exercising due diligence on a project and for coordinating legal documentation. The IFC also administers the loans and

26. See IDA website (visited June 15, 1998) <www.worldbank.org/html/extdr/ida.html>. See generally RAZAVI, *supra* note 4, at 43-44.

27. See IDA website (visited June 15, 1998) <www.worldbank.org/html/extdr/ida.html>. See generally RAZAVI, *supra* note 4, at 43-44.

28. IDA website (visited June 15, 1998) <www.worldbank.org/html/extdr/ida.html>.

29. See IFC website (visited June 15, 1998) <www.ifc.org>; see also RAZAVI, *supra* note 4, at 46-47.

collection of payments from the borrower, distributing these payments pro rata among itself and the other banks. This means, in effect, that a default on any portion of the loan is a default to the IFC. All of this gives commercial lenders a greater degree of comfort.³⁰

(1) *IFC's Involvement in the Energy Sector*

The IFC has helped to develop debt and equity financing instruments that are applicable to energy industry investments.³¹ The IFC has encouraged other investors and lenders to join it in international BOT and "build, own, operate" ("BOO") projects and has facilitated solutions for legal, financial, contractual, and technical problems between project sponsors and host governments. It has helped develop specialized energy sector investment funds with institutional investors and mutual funds. The IFC's Global Power Fund brings private international funds to private power projects in developing countries. The IFC has also assisted private companies in obtaining financing from international equity and bond markets.

(2) *IFC Financing Standards and Requirements*

The IFC is dependent upon the commercial success of the projects it helps finance, and the IFC's procedures for evaluating and approving projects reflect this. Because the IFC cannot accept governmental guarantees of repayment, it focuses narrowly on the economic return and commercial practice of a project rather than on broader issues of regional economic policy and development. The IFC's approach aims to improve the overall business environment one project at a time.³² The IFC achieves this through a strong credit review prior to involving international lending institutions.

The IFC lends to projects for terms of seven to ten years at commercially determined interest rates and fee structures. The IFC will finance only up to a maximum of 25% of a greenfield project, and a bit more for expansions of existing facilities. The project sponsor must reimburse all the costs the IFC incurs in exercising due diligence and evaluating the project. The typical IFC equity holding is 5-10% with an exit horizon four to five years after the project's "close of development."³³

As an equity investor, the IFC will not take a controlling or majority position, nor will it actively involve itself in the day to day operations and management of the project. A long-term investor, the IFC's shares are treated as domestic or neutral in determining national ownership.³⁴

30. See RAZAVI, *supra* note 4, at 46-47.

31. See *id.* at 47-49.

32. See *id.* at 48; see also IFC Website (visited June 15, 1998) <www.ifc.org>.

33. A project's "close of development," or "C.O.D.," refers to the time when the principal project contracts are executed, and the project shifts to the construction and financing phases.

34. See RAZAVI, *supra* note 4, at 49.

c. *Multilateral Investment Guarantee Agency (MIGA)*

MIGA was established in 1988. MIGA seeks to encourage foreign investment in developing countries by providing political risk investment guarantees. MIGA provides investors and lenders insurance against the risks of breach of contract by host governments, currency transfer difficulties, expropriation, and other governmental *force majeure*. Over 150 countries are members of MIGA, which is backed by \$1 billion in authorized capital. Specific types of project risks covered and procedures for obtaining MIGA guarantees will be covered later in this paper.

d. *How the World Bank Processes a Loan*

The World Bank's lending criteria are strict. Financing from the World Bank requires a sovereign guarantee, which means that the Bank does not provide private financing. The Bank has a formal loan application process whereby it identifies and evaluates a project, negotiates the loan, and then brings the project to the Bank's Board of Executive Directors.³⁵ Although the World Bank negotiates and lends only to governments, private project sponsors can play a role in identifying potential projects to the Bank. Once a project is identified, a government may, either on its own or with the aid of a consultant, define its objectives for the project, the amount of borrowing, and its eventual allocation. A government then packages these into an overall project presentation.³⁶

The World Bank then conducts an independent evaluation of the economic, financial, technical, and environmental aspects of the project. The Appraisal Report produced forms the basis on which the Bank can negotiate with a government and produce the legal documentation necessary to extend the loan. Negotiated agreements with governments may also include commitments to carry out regulatory and market reform of the energy sector and to encourage broader development.³⁷ All negotiated agreements are subject to final approval by the Bank's Board of Executive Directors in Washington, D.C. Factors in the Board's vote to approve a loan include the feasibility of the project and the broader political agenda of individual members. The structure of the World Bank evaluation process, however, ensures that most projects that reach an Executive Board vote are feasible and will be approved.³⁸

e. *The World Bank Guarantee*

Since the mid 1990s, the World Bank has placed greater emphasis on its guarantee function to give commercial lenders the comfort they need to extend loans to projects. The World Bank now offers partial guarantees to private lenders. Partial guarantees cover: (i) compliance with negotiated pricing and

35. See *id.* at 38-39; see also World Bank website (visited June 15, 1998) <www.worldbank.org>.

36. See *id.*

37. See *id.* at 40.

38. See *id.* at 41.

payment for outputs by government-controlled utilities or purchasers; (ii) the importation of fuel, equipment, and other goods; (iii) compensation for the adverse impact on projects caused by governmental actions; and (iv) foreign exchange convertibility problems.³⁹ Because World Bank guarantees are designed to help developing countries attract capital, they cover up to 100% of a private lender's principal and interest. They do not, however, protect an investor's equity, nor do they cover loans issued by other multilateral or bilateral organizations.⁴⁰

These guarantees protect private lenders from breach of government contractual obligations and *force majeure* events. Lenders, however, continue to bear the risk of other adverse events. In this way, the World Bank lends its prestige to private lenders in that area of risk in which private lenders need the most help — dealing with sovereigns, an important aspect of most energy deals.

F. *Borrowing from Regional Development Banks*

Regional development banks are owned by the governments of their member states.⁴¹ They were first established in the 1950s and 1960s and were patterned after the World Bank. Their project implementation procedures generally mirror those of the World Bank. Like the World Bank, regional development banks have as their mission the alleviation of poverty and the promotion of economic growth and social development in their respective regions. However, in response to the surge in private infrastructure investment, regional development banks have come to figure into the financing mix of international energy projects. Two regional development banks in particular, the Inter-American Development Bank and the Asian Development Bank, have established private sector investment arms to support energy projects in their regions.

G. *Bilateral Source—National Governmental Institutions*

Industrialized countries have set up bilateral agencies both to support investment and technical assistance in developing countries, and to promote the export of domestic products and technology abroad. Given the high degree of technical complexity of modern energy projects, the assistance of bilateral sources in providing equipment financing is of significant importance.

39. See World Bank website (visited June 15, 1998) <www.worldbank.org>; see also RAZAVI, *supra* note 4, at 42.

40. See World Bank website (visited June 15, 1998) <www.worldbank.org>; see also RAZAVI, *supra* note 4, at 42.

41. The regional development banks are: the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the European Investment Bank, the European Bank for Reconstruction and Development, the Nordic Investment Bank, the Nordic Development Fund, the OPEC Fund for International Development, the Islamic Development Bank, the Arab Fund for Economic and Social Development, and the Arab Bank for Economic Development in Africa.

1. *Export Financing & Credit*

Member states of the Organization for Economic Cooperation and Development ("OECD") have all established export credit agencies and programs. These provide concessional financing for the export of goods and services by their own companies in the form of a loan to the purchaser of the equipment or as a credit to the supplier/manufacturer. An agreement reached by OECD members limits the potential price-distorting effects of such credits.⁴²

a. *U.S. Export-Import Bank*

The U.S. Export-Import Bank ("U.S. Exim") is a government-held corporation first established in 1934 to stimulate the American economy during the Depression. It was reestablished in 1945 to help American companies participate in the post-War reconstruction of Europe and Asia. In over sixty years, U.S. Exim has supported more than \$300 billion in U.S. exports.⁴³

U.S. Exim works to promote American business by supplementing private capital. Part of its statutory mandate is to provide export financing support when the private market is unwilling to take the lead because of the size or risk of the transaction.

Among the services provided by U.S. Exim are working capital guarantees, which cover 90% of the principal and interest on commercial loans given to small and medium sized U.S. exporters. A project sponsor can use a U.S. Exim working capital guarantee to help improve its financing terms in negotiations with project lenders.

In addition, U.S. Exim guarantees 100% repayment of commercial loans to creditworthy foreign buyers of American goods and services. U.S. Exim may also guarantee payment on cross-border leases. The guarantees provided by U.S. Exim help to protect project participants against political and commercial risks.

Further, U.S. Exim provides direct loans to foreign purchasers of American goods and services. Such loans are competitive and fixed-rate, in line with OECD guidelines.

Finally, U.S. Exim provides export credit insurance to protect against payment default by foreign buyers. Short term policies cover 90-95% of the commercial risk and 100% of the political risk associated with default by a foreign sovereign entity, foreign exchange inconvertibility, cancellation of export-import licenses, delay in transfer of payments, and war or civil disturbance. Capital goods may be insured up to five years under a medium-term policy which covers 100% of principal and interest on the financed portion.

42. The OECD Consensus or "Arrangement on Guidelines for Officially-Sponsored Credits" was reached in 1978. See RAZAVI, *supra* note 4, at 69.

43. See US Exim website (visited June 15, 1998) <www.exim.gov/history.html>.

b. Export Finance in the Energy Sector and Project Finance

Both U.S. Exim and its Japanese counterpart, the Export-Import Bank of Japan ("JExim"), serve important functions in funding project finance-type electric power and gas projects. U.S. Exim established a Project Finance division in 1994 to help U.S. companies compete in energy and infrastructure projects. Since its creation, the division has approved nine project finance transactions representing \$2.6 billion in U.S. exports.⁴⁴

Bilateral agencies such as U.S. Exim provide financing to an importing entity, usually the project company, through direct lending, on-lending,⁴⁵ or interest rate equalization.⁴⁶ Direct loans are normally tied to the purchase of equipment from manufacturers in the country of the export credit agency. U.S. Exim provides these services pursuant to OECD conditions. JExim also provides untied loans whose terms do not have to follow OECD conditions.

c. How to Apply for U.S. Export-Import Bank Assistance in Project Finance

U.S. Exim processes applications on an expedited basis. The application process for project finance transactions differs somewhat from the traditional financing application process.⁴⁷ U.S. Exim will consider project finance transactions in countries which are closed to traditional support due to economic conditions. However, the project sponsor needs to show structures in place to mitigate certain risks. For example, one such structure is the use, with host government's approval, of offshore escrow accounts to retain the project's hard currency revenues and ensure debt service.⁴⁸ U.S. Exim's application procedures also require that project sponsors have significant experience in project finance and have an equity investment in the project. Finally, U.S. Exim requires that when the primary off-take purchaser is a government-owned utility, the availability of coverage is subject to U.S. Exim's country limitation schedule.

Interested project sponsors should address themselves to U.S. Exim's Business Development Division. After an initial meeting, the application procedure will move forward in several stages. On the project sponsor's application, including an executive summary of the project, U.S. Exim may issue a Project Finance Letter of Interest. These letters of interest give projects sponsors a certain degree of leverage when they go to negotiate with other sources of projects funding.

The next step is to determine whether U.S. Exim will go forward with a full evaluation of the project. The project sponsor must submit a standard

44. See US Exim website (visited June 15, 1998) <www.exim.gov/mpfprogs.html>.

45. On-lending refers to a financial transaction whereby one bank lends money to another bank so that the second bank can lend the funds to a third party, in this case, the project sponsor.

46. Interest rate equalization occurs when a bilateral agency compensates commercial banks who extend fixed low interest loans to importers for the difference between the fixed rate and market interest rate.

47. Traditional financing application procedures are listed at the U.S. Exim website, <www.exim.gov/95howto.html>.

48. U.S. Exim website (visited June 15, 1998) <www.exim.gov/mpfprogs.html>.

Commitment Application Form as well as attach detailed materials concerning all aspects of the project.⁴⁹

U.S. Exim will review the above material within five to ten days to decide if it wants to proceed. If U.S. Exim decides to go ahead with full evaluation of the project, it will retain an outside financial advisor to exercise two-phase due diligence. At this time, the project sponsor will be required to sign a contract with U.S. Exim and pay an evaluation fee, as well as sign an indemnity agreement with the financial advisor. The evaluation will be completed within forty-five days, and U.S. Exim, if satisfied with the results of the evaluation, will issue a Preliminary Project Letter. The Preliminary Project Letter indicates that U.S. Exim is prepared to extend a financing offer and begin negotiating general terms and conditions. At this point, U.S. Exim will work with the project sponsor towards a final commitment to finance.

2. *Development Assistance*

Member states of the OECD all have development assistance programs. Of these, the United States and Japan contribute the largest in overall funds. Programs are publicly funded and assistance is granted to developing countries based on standards that vary among donor countries. U.S. assistance aims to protect international stability by encouraging environmental protection and institutional development. Funds are usually applied to specific needs or projects, including balance of payments, specific project investments, and technical assistance.

a. *U.S. Trade & Development Agency*

The U.S. Trade & Development Agency (“TDA”) provides grant funding for large project feasibility studies in developing countries. A grant must be requested by a government entity in the developing country for work to be undertaken by a U.S. company. The TDA will consider whether the study is likely to identify large-scale export opportunities for U.S. companies. Grants for studies related to oil, gas, and electric power normally range between \$500,000 and \$1 million. Once a grant request is approved, the TDA selects an American company on a competitive bidding basis and will pay grant fees to that company directly.

49. Project sponsors must demonstrate to U.S. Exim that the project’s economics and financial structure are feasible and that all necessary agreements are in place, or substantially so. Further, project sponsors must demonstrate that all the project’s participants are capable of performing their respective obligations. Also, project sponsors must prove that the host country’s legal and regulatory regimes are amenable to the project and are sufficiently stable to support long-term debt exposure. Finally, the technology employed in the project must be proven and reliable. These requirements are listed in great detail on US Exim’s Project Finance website, <www.exim.gov/mpfprogs.html>.

b. Overseas Private Investment Corporation

A body of the U.S. government established in 1969, the Overseas Private Investment Corporation ("OPIC") provides project financing through loans, equity, insurance, and loan guarantees. It also provides political risk insurance and advisory services in support of U.S. investment and exports. OPIC may provide up to \$400 million of total support to a project, up to \$200 million of which may be for financing or insurance. Out of OPIC's total portfolio, 11% is committed to the oil and gas sector and 30% to the power sector.

(1) *Project Finance Eligibility*

OPIC, per its statutory mandate, offers medium to long-term financing for new projects or expansion and renovation of existing facilities. Eligible projects must have a positive effect on U.S. employment, be financially sound, and bring significant economic and social benefit to the host country. OPIC can provide up to \$200 million in financing in the form of loans and loan guarantees to any one project, and it does not require that a foreign project be wholly American-owned. However, OPIC will not provide financing to projects where a foreign government holds controlling shares, nor will it finance projects that can access sufficient commercial funds. OPIC publishes a list of eligible countries in which it will finance projects.⁵⁰

(2) *Clients, Project Evaluation, and Application Procedures*

OPIC's clients are exclusively American companies. OPIC does not provide inter-government aid or grants. OPIC currently has about 400 active clients, including small, medium and large U.S. businesses, and demand is growing with increased U.S. interest in large-scale infrastructure projects in Latin America, Asia, and elsewhere in the developing world.⁵¹

In evaluating projects, OPIC considers certain broader policy issues. OPIC looks to whether the project will contribute to the development of the fundamentals of a market economy in the host country by increasing the availability of higher quality goods and services, improving labor skills, transferring technology and managerial skills, and generating foreign exchange earnings or savings.⁵²

Application procedures are relatively straightforward and require three to six months to complete, depending on the complexity of the project. Project sponsors should start by submitting an application Form 115, attaching a business plan outlining project costs, proposed financing, *pro forma* financial statements, and underlying assumptions. OPIC's website contains a detailed ex-

50. The OPIC Country List can be found on OPIC's website, <www.opic.gov/subdocs/info/crylist.htm>.

51. A list of OPIC clients and their projects can be found on OPIC's website, (visited on June 15, 1998) <www.opic.gov/subdocs/info>. General information on OPIC Project Financing is available in the revised *OPIC Program Handbook*, which can be obtained from OPIC by mail or on the worldwide web at: <www.opic.gov/subdocs/what/ph-fin.htm>.

52. See OPIC website (visited on June 15, 1998) <www.opic.gov/subdocs/what/ph-intro.htm>.

planation of what the business plan should include, and Form 115 may also be directly downloaded from the website.

(3) *Form of Financing*

OPIC financing is limited recourse. As such, OPIC relies not on foreign sovereign guarantees but on the cash flow of the project. It therefore closely assesses the economic, financial, and technical feasibility of each project. The amount of financing provided is determined depending on the host country's level of development, the project's requirements, and the extent to which the financial risks and benefits are shared among the investors and other lenders.

OPIC financing takes the form of direct loans and loan guarantees. Loan guarantees are issued to U.S. financial institutions that are more than 50% beneficially owned by U.S. citizens, corporations, or partnerships. Where a loan guarantee is provided, OPIC may also assist a project company in locating the underlying commercial loans. OPIC-guaranteed loans are backed by the full faith and credit of the United States and are classified as eligible U.S. government securities. Interest rates vary depending on OPIC's assessment of the project's risks, and also reflect long-term U.S. capital market rates. OPIC generally requires senior creditor treatment, *pari passu* with other senior debt holders.

H. *Private Commercial Funding*

A variety of instruments allow project sponsors to access private commercial funding for international energy projects. While multilateral or bilateral agencies provide prestige which gives lenders comfort, private financing is usually necessary in order to obtain sufficient funding. The optimum financing package should include some or all of these commercial sources in tandem with multilateral or bilateral sources of financing.

1. *Domestic Capital Markets*

Domestic capital markets in developing countries have grown rapidly in the 1990s and can offer access to a host country's domestic savings either through public equity or bond offerings, or by attracting domestic investors or debt financing. The principal difficulty of reliance upon domestic capital markets is their instability, particularly in the wake of the current Asian financial crisis.

2. *International Commercial Banks*

International commercial banks are now more cautious about the projects in which they are willing to get involved. In addition to a project's economics and a basic contractual structure that ensures a sufficient cash flow, banks will also insist on a stringent security package and on mechanisms to shift or share risk with other lenders. Accordingly, syndicated loans have become a popular way to achieve the level of comfort necessary for commercial banks to extend long-term loans. A number of banks will loan to a project under identical terms and conditions. One bank, sometimes the IFC, will act as an administrative agent for

the banks. Interest rates are negotiated as a fixed spread above some benchmark, usually LIBOR. Certain contractual provisions can mitigate the risk of debt service caused by a floating interest rate, including longer repayment periods and multicurrency repayment options. The primary advantage of syndicated debt is that it gives project sponsors access to the large loans they need to fund an energy project without the costs incident to a bond offering.

3. *International Equity Markets*

As with multilateral and bilateral agencies, international capital markets are much more receptive to recognized and experienced project sponsors. In the United States, Security and Exchange Commission ("SEC") Rule 144A permits certain qualified institutional investors to purchase securities not registered with the SEC. However, these securities may not be freely traded for three years after they are purchased. Generally, under Rule 144A, foreign companies issue equity in the United States by means of American Depositary Receipts ("ADR")⁵³ issued by a U.S. bank. ADRs can be traded on national exchanges, but are privately placed. The underlying shares are held by a custodian bank in the home country.

4. *International Bond Markets*

International bond markets in the United States, the United Kingdom, Japan, and Europe are all available to raise capital for international energy development projects. Each has distinct advantages. Bonds for international projects may be considered domestic or foreign, depending on which entity issues them. Bonds may be publicly-issued or privately-placed, and many project sponsors opt for privately-placed bonds because they are subject to less government regulation.

In the United States, publicly-offered bonds must be registered with the SEC, and the borrower must be rated by a credit rating agency, such as Moody's or Standard and Poor's ("S&P"). However, SEC Rule 144A offers privately placed foreign bonds a way around otherwise restrictive SEC regulations. Project sponsors can offer bonds to qualified institutional investors, raising capital quickly without adverse regulatory or tax consequences.⁵⁴

Eurobonds can be issued in any convertible currency and sold to institutional investors. Eurobonds also offers project sponsors freedom from SEC disclosure requirements and other regulations. Also, Eurobonds may offer tax treatment more favorable than that of bonds issued publicly in the United States by a foreign corporation.

53. ADRs are receipts for the shares of a foreign-based corporation held by a U.S. bank entitling the share holder to all dividends and capital gains. ADRs are a convenient alternative to buying shares directly in overseas markets. ADRs represent ownership interest in foreign issuers and are negotiable. For an excellent overview of ADRs, see Securities and Exchange Commission, *American Depositary Receipts* 56 Fed. Reg. 24420 (1991), reprinted in HAL S. SCOTT & PHILIP A. WELLS, *INTERNATIONAL FINANCE: TRANSACTIONS, POLICY, AND REGULATION* 110-18 (5th ed., 1998).

54. For an overview of Rule 144A, see RICHARD W. JENNINGS, et al., *SECURITIES REGULATION* (8th ed. 1997).

Both national energy companies in developing countries as well as international energy companies have tended toward privately placed bonds under Rule 144A. As with other commercial sources of financing, bond issues are greatly aided by the participation in the project of a multilateral organization.

5. *Specialized Energy Funds*

Both domestic government-sponsored and private funds attempt to attract private investment and financing to the energy sector. Many private funds are focused on energy sector investments in a specific region. For example, the IFC's Global Power Fund invests equity and provides subordinated debt and completion guarantees for construction of power projects.

6. *Credit Rating Agencies*

In conjunction with bond offerings to raise capital for specific projects, Moody's, Standard & Poor's, and other credit rating agencies have begun rating project-specific financing to determine whether the project structure will support timely payments of principal and interest to bondholders. The rating agencies will analyze the local legal and regulatory environment and scrutinize the principal project documents: off-take agreements, fuel contracts, and operation and maintenance agreements. Further, these credit agencies will give overall assessments as to how well the parties have managed the project and mitigated important project risks.

III.

TYPES OF RISK AND RISK MANAGEMENT

A. *Risks Inherent at Various Phases of Project Construction*

1. *Development Stage*

At the development stage the sponsor faces the risk of rejection of the project by either the host government or by its potential lenders. Commonly cited grounds are that the project is commercially weak or not viable. Host governments may also reject the project if the terms excessively favor the foreign party, or if it decides the project will not achieve desired social or economic goals. Lenders may reject the project based on the project sponsor's failure to obtain necessary approvals, licenses, permissions, or due to other risks inherent in the local political or economic system.

The risk of rejection and failure at this stage is high and borne solely by the project sponsor. But up-front costs may not be that high, depending on how far along the development process has gone.

2. *Construction Risk*

The risk that construction will not be completed on schedule, within budget, and according to specifications is great; and the costs associated with that risk are high. Normally, a project has already obtained financing by the

construction stage, so the risk of failure to complete construction is shared both by the project sponsors and by the lenders. This is the most critical risk stage for the lenders because in nonrecourse financing, they have recourse only to the project assets. As such, the lenders take on proportionally greater risk, depending on the debt to equity ratio. At this stage their security interests are of little value. Hence, to mitigate their risk, lenders often ask for recourse at this stage or otherwise require sponsors to cover construction contingencies.

Project sponsors, in turn, limit their exposure through completion bonds and liquidated damages, provided for in their contract with the general contractor. These contracts, often termed, Engineering, Procurement and Construction Contracts ("EPC"), are generally "turnkey" contracts. At the completion date, the EPC contractor provides the sponsor with a complete facility that is tested and ready for the sponsor to begin production. Project sponsors may also purchase insurance to cover construction risk.

3. *Operation & Maintenance Phase*

At this stage, risk remains but is less than that present at earlier stages of the project.⁵⁵ Remaining risks include political risk, and the risk that the project may experience a technical failure during operation. Further, necessary raw materials and inputs may suddenly become scarce. Also, market demand and prices for energy may fluctuate, thereby affecting the project's revenues. In addition, there may be an intervening change in tax rates or subsidies. Finally, as noted above, a project's revenues are usually denominated in local currency whereas its debt payments may be denominated in a foreign currency, thus creating foreign exchange risk.

The project company can hedge against these risks through various contractual and guarantee arrangements. First, the risk of a sudden dearth of raw materials may be mitigated by supplier guarantees with price escalations passed on to the ultimate off-take purchaser. To guard against the risk of equipment failure, a project company can obtain guarantees from its equipment suppliers for equipment performance. Also, a project company may obtain multilateral or bilateral agency political risk guarantees from the organizations discussed above. Off-shore accounts to hold foreign currency can protect against foreign exchange risk. Finally, take-or-pay contracts with local utilities for fixed terms at fixed prices (usually with a built-in escalation for floating operation costs) help a power project guarantee demand.

B. *Local Business Environment*

The differences in local business environments between industrialized and developing countries cause the most concern and uncertainty for lenders and project sponsors alike. The assumptions underlying a project's economics usually include continued political stability and economic growth in the host country. At best, such projections can take into account only a limited degree of

55. See generally RAZAVI, *supra* note 4, at 11.

uncertainty. However, in developing countries, political and legal institutions as well as legal processes and remedies are often incomplete and inchoate. Rapid economic growth creates wealth, but it also has the potential to generate social displacement and disenfranchisement that can topple a seemingly stable regime.

The most fundamental risk is instability of the political system. Political risk insurance and contractual arrangements can be of some help in dealing with the unexpected. The best approach for sponsors, however, is to examine the local situation closely before investing in a project and to avoid investing in countries with unstable regimes or economic systems. Indonesia is an example of a country where the political system seemed more than stable enough to support the country's booming economy. Yet when the government failed to deal with the severe financial crisis beginning last summer, the economy fell apart, and the Suharto regime followed.

Expropriation is the risk that the host government will seize and nationalize the project's property rights. Even where it is compensated, the amount of compensation will likely not satisfy all of the project's debts and equity. Creeping expropriation is often a greater fear than outright seizure. This occurs gradually through increased taxes, fees, and other regulation.

The host government may also breach various commitments it has made to the project to waive fees and taxes or to provide surrounding infrastructure necessary for the project. Project sponsors have little recourse in this situation. The potential damage to the host government's international reputation may deter this type of breach to some degree, but as was the case in India, nationalistic politics can often prevail over diplomacy, comity and respecting commitments.⁵⁶ A host country may prohibit the repatriation of profits abroad and insist that profits be invested in other local projects. Lenders, of course, depend on expatriation of profits for debt service and will not lend where it is not possible. A change in policy after the project is in construction or operation would likely constitute governmental *force majeure*.

C. Ways to Manage Risk Ex Ante

1. Structuring the Project

Critical to the success of a project finance deal is the "financial engineering," which structures the transaction in a way that recognizes and minimizes risks. Any risk that could adversely affect the project's net cash flow must be addressed and allocated to creditworthy, qualified parties. Parties who can best bear a certain risk should undertake that risk contractually, but they must have sufficient incentive to do so. The EPC contractor, for instance, should take on the bulk of completion risk at the construction phase.

According to some experts, project sponsors should, as a general rule, minimize exposure to political risk by minimizing the assets present in the project's

56. Gregg Jones, *The Remaking of India: Economy Perks Up after Government Rolls Back Socialist Policies*, DALLAS MORNING NEWS, Aug. 10, 1997, at 1H.

host country.⁵⁷ In addition, opening the project to local participation further reduces political risk by tying the financial interests of the local population to the success of the project.⁵⁸ Finally, borrowing and purchasing political risk insurance from international multilateral and national governmental agencies can discourage undue political interference by the host government, thereby reducing political risk.⁵⁹

2. *Allocation of Risk Through Contract Terms and Provisions*

The complex contractual structure of any project finance transaction is driven by the need to allocate risks to the parties who can best bear them.

a. *Price Protection*

An off-take agreement, for example, will likely provide price protection for the project company in the form of price escalators, either keyed to inflation (or consumer price benchmark) or set by a predetermined formula. For power projects, fuel price risk is also borne by the off-take purchaser. If fuel prices rise, the project company simply passes through the increased cost to the purchaser by increasing the energy payment component of the power tariff accordingly.

b. *Currency Fluctuation Risk*

The off-take agreement may also provide for currency fluctuation adjustments. Even where a tariff is denominated in local currency, the price may be referenced to dollars, calculated at the exchange rate as of a certain benchmark date. The critical point to negotiate is which party, the purchaser or the seller, will absorb the difference should the local currency fall against the dollar. Many times, as a local utility, the purchaser may be unwilling or unable to pay more for its off-take, often because its own revenues come from transmission and distribution and from sales to consumers. The project company, on the other hand, must maintain its net cash flow at all costs to ensure debt service. The result is an often contentious point of discussion during negotiations.

c. *Achieving Certainty in Dispute Resolution*

One of the most important ways to limit risk is to ensure prospectively that there will be certainty in the event the parties cannot resolve disputes between them amicably. This applies most forcefully to the project company and the off-take purchaser, who will each perform under the main contract for many years. Parties should be careful to provide in their contracts for international arbitra-

57. See, e.g., Philip R. Stansbury, *Planning Against Expropriation*, 24 INT'L LAW. 678 (1990); see also COMEAUX & KINSELLA, *supra* note 5, at 130-31.

58. See Richard M. Mosk, *Expropriation: What to Do About It?*, 5 CAL. INT'L PRAC. Fall-Winter 1993-94, at 11, 14.

59. See Joseph P. Hadley, *Use of Political Risk Insurance in Connection with Project Financings*, in INTERNATIONAL INFRASTRUCTURE PROJECTS VIII-3 (1995); see also COMEAUX & KINSELLA, *supra* note 5, at 130-31.

tion under the United Nations Commission for International Trade Law (“UNCITRAL”) or International Chamber of Commerce (“ICC”) rules in a neutral third country. Preferably, the parties should choose a country whose business and arbitration laws are firmly established. Above all, that country chosen should be a signatory to the New York Convention on Recognition and Enforcement of Arbitral Awards (“New York Convention”).

U.S. companies and their counsel are often wary of arbitration because they see it as merely an international analog to domestic alternative dispute resolution (“ADR”). They are concerned that arbitrators will decide matters by splitting the difference rather than adjudicating on the merits. It is absolutely crucial, however, to recognize that important differences exist between international commercial arbitration and domestic ADR. First and foremost, the New York Convention provides an international framework which ensures that an arbitral award made in one country can be enforced in another so long as each country is a signatory to the Convention. The New York Convention itself, first signed in 1958, now comprises well over one hundred nations worldwide. In fact, the New York Convention is the only comprehensive, mutually reciprocal system for ensuring enforcement of awards arising out of international commercial disputes. The New York Convention offers the optimal solution to the difficulties of either suing a local party, especially a local government entity, in local courts, or bringing suit against that party in a American court, and then trying to enforce the judgment.

Project sponsors should confirm that the local law of the host company permits international arbitration in such disputes. Sometimes, if the project company is registered as a local company, it may be considered a purely domestic entity under local law, despite 100% foreign ownership. Therefore disputes between it and another local entity may not be subject to international arbitration. Project sponsors and their counsel should also be sure that they understand the different consequences of the choices of arbitral rules, applicable substantive law, and place of arbitration — *lex arbitri* — on the arbitration process and eventual enforcement of an award.

3. *Investment Insurance*

a. *National Governmental Agencies*

(1) *OPIC*

OPIC, under its statutory mandate, can offer up to \$200 million in political risk insurance to any one project. OPIC insurance covers political risks, including currency inconvertibility, nationalization, expropriation and “creeping” expropriation, and political unrest. OPIC also offers specialized insurance coverage for certain industries including oil and gas exploration, development, and production. Exploration coverage is broader than expropriation coverage, and covers arbitrary changes or breaches of key project agreements by the host government. OPIC can also cover against seizure of bank accounts and/or equip-

ment imported to perform a service or off-take agreement signed with a government-controlled entity.⁶⁰

(2) *U.S. Exim Credit Insurance*

In addition to OPIC, a project sponsor may also purchase investment insurance from U.S. Exim to cover both commercial and political risk.

b. *Multilateral International Institutions*

(1) *Multilateral Investment Guarantee Agency*

Project sponsors also have access to investment insurance through MIGA. MIGA guarantees investors and lenders insurance against the risks posed by deleterious action taken by the project's host country. The risks include breach of contract, expropriation, currency inconvertibility, and other *force majeure*.

(a) *Term and Coverage*

MIGA's standard term for insurance is fifteen years, noncancellable by MIGA. MIGA insurance covers both equity and debt financing. For the equity portions, MIGA insurance covers up to 90% of investment plus an additional 180% for the earning stream of the investment. For debt, MIGA insurance covers up to 90% of the principal plus the interest accruable over the term of the loan. Premium rates and fees vary depending on the project and type of coverage purchased. MIGA coverage is limited to \$50 million per project, and \$150 million per country. MIGA insurance may be sought in conjunction with private and other multilateral or national political risk insurance coverage.

(b) *Applying for MIGA Political Risk Insurance*

The procedure to process a MIGA application is relatively simple and straightforward, and can be initiated by submitting a Preliminary Application for Guarantee before any investment is irrevocably committed.⁶¹ Based on this information, MIGA will make a provisional determination regarding the eligibility of the investor and the project. If MIGA is satisfied at this initial stage of the project, it will send a Notice of Registration along with a Definitive Application for Guarantee to the project sponsor.

Once investment and financing plans take shape, the project sponsor should complete and return the Definitive Application, attaching relevant project documents, including contracts and studies on feasibility and environmental impact. There is an application fee payable to MIGA at this juncture, the amount of which ranges from \$5,000-25,000, depending on the amount of the guarantee sought.

60. See OPIC website (visited on June 15, 1998) <www.opic.gov> and *OPIC Handbook* at 25. See also COMEAUX & KINSELLA, *supra* note 5, at 158-59.

61. The Preliminary Application Form is also available on MIGA's website at: <www.miga.org/miggu/prelim.htm>.

Upon receipt of the Definitive Application, and before it makes a guarantee, MIGA, as a World Bank affiliate, is required to obtain the approval of the host country.

c. Private Insurance

Private political risk insurance is a growing market, and there are more insurance choices emerging to meet that market demand. Private insurance may cover a project's assets or its contracts. Contract insurance generally covers loss due to contract cancellation caused by political violence or uprising, repudiation of the contract, and currency inconvertibility. Asset coverage includes protection against nationalization or other expropriation of assets, as well as other local political risks like strikes, arbitrary cancellation of permits and approvals, and labor uprisings.⁶²

In some ways, private insurance coverage is superior to government or multilateral political risk insurance. First, it does not require approval of the host country's government. Second, it is more flexible and provides coverage to a broader range of insured parties. However, it is considerably more expensive and too short-term for some projects.⁶³

4. Project Parties' Support

In addition to contractual solutions to the problem of risk, parties may insure themselves. For example, a guarantee from the project sponsor's parent corporation, an escrow account, letter of credit, or set-off rights can mitigate project risk.

The project sponsor may, in addition to its equity investment, make certain limited guarantees to eliminate risk. Such guarantees may include a completion guarantee (i.e., a contingent commitment to put in more equity), cost overrun funding, performance bonds, and clawback of equity distributions.⁶⁴

Finally, a certain amount of risk may eventually be borne by the project's lenders. Though lenders are naturally risk-averse, market factors and their interest in a project and confidence in the project's participants may make them willing to take on a certain amount of risk. As the banks will profit from a successful project, it is reasonable that they should undertake some risk for that profit.

IV.

HOW TO PUT TOGETHER A FINANCEABLE PROJECT

Because projects, host countries, project sponsors, and other conditions vary so greatly, it is difficult, if not impossible, to come up with a uniform, "one

62. See COMEAUX & KINSELLA, *supra* note 5, at 182.

63. See Peter F. Fitzgerald, *Overview of Risks in International Financing*, 707 PLI/COMM 7, 16 (1995) (stating that private insurance may be too short-term for some projects).

64. In a clawback of equity agreement, the project sponsor agrees to disgorge any dividends which the project company has paid out to it in the event of certain circumstances. The effect of a clawback agreement is to give lenders an additional level of comfort.

size fits all” approach to developing and financing international energy projects. Nevertheless, there are some general points worth noting.

Project sponsors and their counsel should keep in mind that in working in foreign countries, particularly developing countries with newly emerging economies, significant differences in language, business culture, and legal traditions create different project development dynamics. The legal systems in emerging economies are often themselves emerging and generally do not offer the certainty that American statutory and case law does. Negotiation and approval processes generally proceed at a slower pace than in the United States. Recognizing and working with these differences may be crucial to the success of a particular project.

In conjunction with these factors, the project finance approach has its own imperatives. Of paramount importance to project sponsors are the needs to protect the net revenue stream, create a complex web of contractual arrangements, and mitigate the various political and commercial risks inherent in projects. These goals will very often directly conflict with the need to forge long-term partnerships with local counter-parties and host government entities. The project sponsor has to recognize each of these diverse interests and balance them so that each group is satisfied.

Below are a few thoughts on how to approach these challenges.

A. Evaluation of Project and Business Environment

Project sponsors should bring an understanding of international business and markets and familiarize themselves as quickly as possible with the local situation. Project sponsors should assess the host country’s actual interest and support for a specific project. Identifying local officials and business leaders who will facilitate relations with government agencies is crucial to the success of a project. The project sponsor must be able to bridge different worlds. Without spending sufficient time and resources to understand the local political, economic, and business situation, a project sponsor is liable to incur greater costs down the road when more resources have been committed to the project.

B. Financial Viability

Beyond knowledge of the host country, international energy project sponsors must realistically assess the likely returns of their projects. Project sponsors in upstream oil and gas projects should determine whether the projected prices for crude oil and natural gas over the term of the main project contract will be sufficiently stable to guarantee the net revenue stream necessary to service the debt. Downstream gas transmission and distribution or oil refining projects must determine the stability of both the supply of natural gas or crude oil and the market for gas and finished oil products. For power generation projects, similar considerations apply. In all of these instances, project sponsors must weigh all costs, including opportunity costs and development costs, against the potential

returns. The greater the extent to which the risks discussed above can be allocated through contract, the more likely a project is to be financially viable.

C. *Technically Viability*

On completion of construction, the facility must be able to operate according to stipulated performance standards. If, due to technical defect or equipment failure, it cannot, the project could suffer fatal setbacks from lost revenues and potentially breach any off-take agreement. This risk is magnified by the limited availability of repair service and replacement parts in developing countries. For this reason, lenders will insist on proven and reliable technology.

D. *Potential Environmental Liabilities*

Project sponsors should take special care to ensure they meet all environmental standards and are aware of any imminent changes in local environmental laws and regulations that could adversely affect the project.

E. *"Financial Engineering"*

1. *Ownership Structure*

The ownership structure will vary depending on the type of project, its size and location. The project company, usually an entity formed in the host country, may include local interests as shareholders, or may be a joint venture with government utilities or agencies. The structure on the international level will vary according to such concerns as tax treatment, liability, and accounting standards.

2. *Sourcing Financing*

Project sponsors should seek financing from as many different sources as possible. Multilateral institutions, regional development banks, and bilateral agencies can provide important support, which gives private commercial lenders and investors the confidence they require to participate in the project.

3. *Security Arrangements*

When financing in developing countries, banks seek a complete security arrangement to protect them from the broad range of commercial and political risks outlined above. During their exercise of due diligence, lenders will be particularly concerned with their actual ability to enforce their secured interest and foreclose in the event of a default.

Project sponsors need to mobilize all the available multilateral support, bilateral export credit, and risk insurance that can be obtained in order to convince lenders that revenue projections can be met and that the project's assets can be repatriated. The contractual arrangements should ensure that lenders will not bear the burden of the cost overrun or revenue shortfall, and that the lenders will be kept whole. The project sponsor must be willing to pledge its equity to the lenders. The project must securitize the project assets to the lenders' benefit.

And the project parties must often consent for the project sponsors to assign all of their contract rights to the lenders. The lenders' objective is to ensure that if there is an event of default, and they foreclose, they will be able to take over and continue to operate the ongoing concern, rather than liquidating the project company.

V.

CONCLUSION

During the past decade, the trend towards privatization of infrastructure and basic utilities has spread from Europe and the United States to many emerging economies, particularly in Latin America and Asia. As these developing countries undergo unprecedented, rapid economic growth, private investment in these traditionally publicly-owned and operated sectors has emerged as the most viable means for national and local governments to meet soaring demand for energy and basic utilities. Governments have, in turn, dismantled public monopolies, loosened regulation, and encouraged foreign direct investment in the development of modern energy, water, communication, and other facilities.

This trend presents a wealth of opportunities for multinational energy companies, financial institutions, associated companies, and other international organizations. At the same time, the unique and often significant risks — political and economic — in emerging economies require actors to devise investment structures that mitigate and allocate such risk in a cost-effective and prudent manner. For a project whose total investment may range from several hundred million to several billion dollars, fund sourcing is inextricably linked with the effective management of market-specific and country-specific risks. To this end, familiarity with both the political and economic environment of the host country and with international capital markets is crucial. No less important is understanding the roles that various international organizations and national governmental institutions can play in financing international projects — whether through direct debt or equity financing, risk management devices, or export credit support. “Financial engineering” is the art of combining all of these elements into a viable project structure.

This paper provides an overview of the function of the project finance mechanism in bringing advanced technology and modern facilities to emerging economies. I have specifically avoided any value judgment as to whether this approach represents the best development model for emerging economies. I note, however, that public welfare is not mutually exclusive with multinationals' corporate profits. Moreover, governments in emerging economies do retain important industry-specific, environmental, and regulatory checks which allow them to safeguard public interests. Indeed, the advent of international investment often motivates important regulatory reform.

Useful Worldwide Web Addresses

Asian Development Bank	www.asiandevbank.org
International Finance Corporation;	www.ifc.org
Multilateral Investment Guarantee Agency	www.miga.org
Preliminary Application for Guarantee	www.miga.org/miggu/prelim.htm
United States Export-Import Bank	www.exim.gov
Japan Export-Import Bank	www.japanexim.go.jp
Overseas Private Investment Corporation (Adobe Reader necessary to download Application for Financing and Request for Registration of Political Risk Insurance)	www.opic.gov
International Monetary Fund	www.imf.org
The World Bank (International Bank for Reconstruction and Development)	www.worldbank.org
Inter-American Development Bank	www.iadb.org
International Development Association	www.worldbank.org/html/extdr/ida.html
The European Bank for Reconstruction and Development.	www.ebrd.org
The European Investment Bank	www.eib.org
The Nordic Development Fund	www.um.dk/english/undenrigspolitik/ udviklingspolitik/multilateralism/strategies/ banks/banks.2.5.html
The OPEC Fund for International Development	www.opec.org/opecfund.htm

