FINANCING OF CONSTRUCTION PROJECTS

IN DEVELOPING COUNTRIES

by

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ABSTRACT

Third World countries, with their great need for industrial development projects, land reclamation, and infrastructure development represent a great opportunity for the construction industry, including consulting engineers, contractors, suppliers of construction materials and equipment, and financers.

This thesis is concerned with reviewing the available mechanisms for financing construction projects in the less developed world. The focus is on financing public projects entailing construction activity in LDC's and in those oil exporting countries which, although not fitting in the strict definition of less developed, play a great role in general demand for construction.

After the discussion of the types of credits and the organizations which extend these credits, the process of finding the financing and the constraints by the lenders are described. It is shown that economically viable projects do not encounter great obstacles in receiving the most straightforward forms of financing.

Room still remains for further discussion of the constraints by banks and other private financial institutions in lending to LDC's and what could be done to abate them. Further study could also be performed to point out the role of consultant engineers and contractors in the financing process.

Thesis Supervisor: Fred Moavenzadeh
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CHAPTER I

THE LESS DEVELOPED COUNTRIES AND THE CAPITAL FLOWS

1.1 The Less Developed Countries and Their Construction Market

The yardstick for the inclusion of a country in the category of the less developed is normally the value of GNP per capita.* (81)

The developing economies show a faster growth in terms of GNP in comparison with the developed ones; however, when the per capita growth, which is the basic indicator, is considered, the average for the period 1950-1975 is still lower for the formers, notwithstanding an inversion in the trend revealed in the period 1974-1976; both situations are shown in Tables 1-1 and 1-2.

Each institution dealing with this topic has its own list of LDC's; the most comprehensive of them is given by the World Bank in the "World Debt Tables", published yearly and revised quarterly. They indicate, for 1977, 96 less developed countries, divided into three income classes each with three sub-classes. They are also grouped by geographic location, pointing out which of them are oil exporting countries; such a qualification, as well as being exporter of any primary commodity or ore, is a very important aspect in the funds provided to a country. The external

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*Developing countries have been denoted in different ways, from "backward countries" to "developing countries", first used by the United Nations, to "Third World Countries", to the today's generally used expression of "less developed countries" (LDC's). All these will be used in the context of this thesis, with preference for the last one.

Table 1-1

GROSS NATIONAL PRODUCT (GNP) GROWTH RATES

Areas	Average Annual Growth Rates 1974	1975	1976	1974-76
Developing countries (including capital deficit oil exporting countries)	6.8	4.3	5.9	5.1
Developed countries (OECD countries, excluding Iceland, Greece, Portugal, Spain and Turkey)	-.1	-1.1	5.3	2.0

SOURCE: World Bank Annual Report, 1977.

Table 1-2

GROSS NATIONAL PRODUCT (GNP) PER CAPITA GROWTH RATES

1950 - 1975

	Average Annual Growth Rates 1950-60	1960-70	1970-75	1950-75
Developing countries*	2.8	3.2	3.0	3.1
Developed countries*	3.0	4.1	1.9	3.2

*Same countries as for Table 1-1.

SOURCE: World Bank Annual Report, 1977.

trade of a basic commodity is in fact the most powerful means that an economy has to generate the foreign currency needed to repay its debt, and this is probably the first thing lenders will examine when they receive an application for a loan by a developing country's government.

Although many claim that helping poor countries is a moral obligation, that their progress towards prosperity gives stability to the world economy and outlets to Western export activities, and helps to build a more secure environment, the reason to consider them in this thesis is the importance they have for the construction world. Developing countries account in fact for a substantial share of the work of the largest construction companies and engineering firms; any person active in the field is likely to confirm the importance of the foreign construction market. An idea of its size can be obtained from Table 1-3 which gives for each of the ENR 50 largest design-constractors firms the amount of foreign billing and its percentage of total. The "foreign billings" heading in the table mostly includes LDC's, the Arabian Pennisula oil exporting countries, and those countries that have a balance of payment surplus and do not fit in the theoretical definition of LDC's, as their incomes are higher than those specified. These latter groups are net importers of services (the product of the construction industry is generally considered a service) and plays an important role in the international construction market.

The Middle East countries have been highly visible in the international market for construction in the last decade. Many huge projects such as the spectacular $4.3 billion New Jeddah International Airport and the Hejar Railway, connecting Syria, Jordan, and Saudi Arabia

Table 1-3

CONSTRUCTION VALUE OF NEW 1978 CONTRACTS BASED ON DESIGN-AND-CONSTRUCT PLUS DESIGN-ONLY CONTRACTS VALUED AT ESTIMATED COST OF PROJECT FOR THE ENR 50 DESIGN-CONSTRUCTORS FIRMS

FIRMS	1978 Volume in US $ Million		
	Total	Foreign	
		Amount	% of Total
The Ralph M. Parsons, Co. Pasadena, California	4,750.0	885.0	18.6
C-E Lummus, Bloomfield, New Jersey	3,400.0	2,983.0	87.7
Stone & Webster Engineering Corp., Boston, Massachusetts	3,300.0	n.r.	-
Dravo Corp., Pittsburgn, Pa.	2,914.1	1,239.7	42.5
Bechtel Group of Companies, San Francisco, California	2,686.4	2,013.3	74.9
Stearns-Roger Engineering Corp. Denver, Colorado	2,495.7	79.6	3.2
United Engineers & Constructors, Inc., Philadelphia, Pa.	2,454.8	180.0	7.3
The Rust Engineering Co., Birmingham, Alabama	2,084.0	400.0	19.2
Ebasco Services, Inc., New York, New York	2,050.0	0	0
Pullman-Kellogg Division of Pullman, Inc. Houston, Texas	2,000.0	1,500.0	75.0
Burns and Roe, Inc., Oradell, N.J.	1,971.0	4.3	0.2
The Austin Col, Cleveland, Ohio	1,950.8	551.6	28.3
The Kuljian Corp., Philadelphia, Pa.	1,900.0	1,800.0	94.7
Arthur G. McKee & Co., Cleveland, Ohio	1,864.6	1,213.0	65.1
Fluor Corp., Irvine, California	1,855.7	1,347.3	72.6
Foster Wheeler Co., Livingston, N.J.	1,502.0	943.0	62.8
Brown & Root, Inc., Houston, Texas	1,482.5	187.0	12.5
Catalytic Inc., Philadelphia, Pa.	1,198.0	368.0	30.7

Table 1-3

FIRMS	1978 Volume in US $ Million		
	Total	Foreign	
		Amount	% of Total
C.F. Braun & Co., Alhambra, California	1,165.0	490.0	42.1
Jacobs Engineering Group, Inc. Pasadena, California	886.8	130.4	14.7
Raymond International, Inc. Houston, Texas	857.3	302.8	35.3
Morrison-Knudsen Co., Inc. Boise, Idaho	840.3	261.5	31.1
Ford, Bacon & Davis, New York, N.Y.	554.1	40.0	7.2
Heyward, Robinson, Inc. N.Y., N.Y.	463.0	270.0	58.3
Day & Zimmerman, Inc. Philadelphia, Pennsylvania	444.0	135.0	30.4
Davy Powergas, Inc., Lakeland, Fla.	345.1	34.6	70.0
Poole Construction, Ltd., Denver, Colorado	342.7	292.8	85.4
H.B.E., Corp., St. Louis, Mo.	299.7	0	0
Santa Fe International Corp. Orange, California	298.8	100.8	33.7
The Badger Co., Cambridge, Mass.	277.0	75.0	27.1
Crawford & Russell, Inc. Stamford, Connecticut	231.5	38.0	16.5
BE&K, Inc., Birmingham, Ala.	207.7	0	0
Barnard & Burk, Inc. Los Angeles, California	207.6	17.0	8.2
Koppers Co., Inc., Pittsburgh, Pa.	207.1	24.0	11.6
World Wide Constr. Inc. Wichita, Kansas	168.0	40.0	23.8
Eagleton Engineering Co., Houston, Texas	166.2	63.5	38.2

Table 1-3
continued

FIRMS	1978 Volume in US $ Million		
	Total	Foreign	
		Amount	% of Total
Dynalectric Co., McLean, Virginia	146.5	146.5	100.0
Cunningham-Limp Co., Birmingham, Michigan	144.7	18.7	12.9
Ramade-Development Co., Phoenix, Arizona	140.7	50.0	35.5
Sedco Constr. Division, Houston, Texas	140.0	140.0	100.0
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.	115.7	0	0
The A. Epstein Companies, Chicago, Illinois	111.0	89.8	80.9
Bank Bldg. & Equip. Corp. St. Louis, Missouri	104.9	0	0
L.K. Comstock & Co., Inc. Danbury, Connecticut	101.8	0	0
Treadwell Corp., New York, New York	96.0	0	0
Fish Eng. & Const. Inc. Houston, Texas	90.6	13.5	15.0
Charles Pankow, Inc., Altadena, California	89.0	0	0
The Ortloff Corp., Midland, Texas	83.9	15.1	18.0
Frigitemp Int. Corp/Frint Corp. New York, New York	80.0	80.0	100.0
The Carlson Group, Cochituate, Mass.	67.6	6.8	10.0

SOURCE: Top Design Billings Growth in 1978 Hits 13%
ENR, May 24, 1979, page 90.

for an expected cost of $1 billion, receive attention and are emphasized in the specailized press. Evidence exists, however, that in these countries construction will be growing at smaller rates in the future, while in other LDC's, most of the poorest among them, the rate of growth will be accelerated. For example, Brazil has development plans for its extractive industry that will make it spend $5.4 billion especially in construction, and for its railway system expected to cost $1.4 billion by 1982; a pipeline will be laid down in Bolivia for the cost $1 billion; the underground transportation system of Taipei is going to cost $4.2 billion within twenty years, while India itself will be spending in the next five years $875 million only in flood control works. The figures often talk about "one billion dollar projects" and other programs could be mentioned involving Malaysia, Philippines, Sri Lanka, Zambia.

The most interesting markets are, however, Egypt and China; the former is in the process of a major reconstruction effort, and the latter is going to begin soon a huge modernization program.

It has been established that by 1985 China will spend up to $600 billion in the attempt to achieve the goal of the Four Modernizations in agriculture, industry, defense and science and technology. A great share of the expenditures will be for construction and construction related items, divided among infrastructure projects (power generation and communication) and building of new plants and manufacturing facilities.

It will be challenging to arrange the financing for the plan. China's foreign reserves are in fact estimated to amount to $2 billion;

the country is not a World Bank's or any other development institution's member, thus it is not entitled to receive their funds. A default on a loan in 1946 makes it impossible for the Republic of China to be granted a loan by the Export-Import Bank of the United States unless a congressional resolution (likely due to the country's status of favored nation) allows it to overcome this obstacle.

These difficulties have caused a review of the modernization program and a resetting of priorities. Precedence is now given to communication and power generation schemes, as well as to the extractive industry. Immediately following is the development of industries expected to generate foreign exchange. The first one is the steel industry, expected to reach a production of 60 million t/year in 1985 from the present level of 31 million t/year; the second one is the light industry, with emphasis on construction products: a range of 300 materials will be produced, as well as modular elements for pre-fabricated buildings; the third source of foreign exchange is expected to be tourism. In this sector there is an agreement already signed for the construction of 5,000 hotel rooms and a forecast demand for at least 25,000 more in the future; the total cost would be around $3 billion. (32)

China is also attempting to rely as much as possible on in-house forces. The country owns both manpower and technical skills (construction with domestic forces of a 230-ft high gravity dam on the Yangtze River, begun in 1970 and scheduled to be completed in 1985 has been reported on the press). There is however lack of experience, managerial expertise to deal with large projects and entire systems,

experienced contractors, manufacturers of materials and equipment.

Despite the structure of this plan, a gap exists between the amount of foreign currency held or expected to be earned and that needed for the accomplishment of the modernization plan. Given the amount at stake, there is room for many institutions to provide the funds. With a change in its policy, China will accept for the first time in 30 years, government to government loans. For the remaining part, it seems to prefer dollar denominated loans: American, European, Arab banks are rushing to provide them, but the Japanese Export-Import Bank and other private banks have entered this market first and hold the best position. Whether or not the country will join the World Bank and other multilateral agencies and have access to their advisory skill, it will largely need the service of technical and financial consultants to coordinate this program.

Finally, China does not adverse forms of direct foreign investment. Facilities under construction by foreign firms show this trend. American oil companies are the most active, as the amounts they can risk and put in the venture are considerably low as compared to their assets.

1.2 History of Lending to LDC's

Several factors, from the industrial revolution to the commercialization of tropical agriculture and exploitation of mineral resources, led to a liberalization of trade and capital and labor movements at the end of the last century. The needed financing was provided by Great Britain and Europe in the form of long-term (up to 99 years and perpetual) bonds, and stock, which were floated by

private entities, about 70% of them being used for construction.

By the beginning of World War I, international lending had reached a level of $44 billion. Table 1-4 shows the breakdown of creditors and debtors and the position of LDC's.

TABLE 1-4
Creditors, Debtors and
Position of LDC's - 1913

Creditors	Gross $ Billion	Percentage
Great Britain	18.0	41
France	9.0	20
Germany	5.8	13
Belgium, Netherlands and Switzerland	5.5	13
United States	3.5	8
Others	2.2	5
TOTAL	44.0	100

Debtors	Gross $ Billion	Percentage
Europe	12.0	27
United States and Canada	10.5	24
Latin America	8.5	19
Asia	6.0	14
Africa	4.7	11
Oceania	2.3	5
TOTAL	44.0	100

SOURCE: Helen Hughes, "Debt and Development: The Role of Foreign Capital in Economic Growth, World Development, February, 1979, page 96.

The post World War I period saw the flow of reparation funds from Germany and the beginning of official aid and lending from governments. In the meantime, the flight of capitals to those countries, like Switzerland and the U.S., considered more prosperous and safe, caused New York to grow as the major capital market in the world in substitution of London. Finally, on the private sector side, there is the birth of the direct foreign investment (DFI) as a new form of private lending.

The impact of imported capital on borrowing countries varies from case to case; however, in the great majority it led to urbanization and increase in consumption and imports without a parallel increase in the production of export goods. This acted on those economies, already weak from the standpoint of the external debt, exacerbating the problem.

In the late 1940's, there was very small lending going on, and a few developing countries had achieved a balance of payment surplus during the war, due to their exports of raw materials and lack or supply of those manufactured goods they used to be importers of.

Soon after that, official aid began to be large again; but tied to procurement as well as other political conditions, often following military aid, raising questions about its effectiveness. It gradually lost its grant element in favor of its loan aspect in the 1960's, under the argument that a loan forces the borrower to a sound economic use of it to generate the repayment. This argument was considered weak and this trend eventually reversed again in the 1970's.

In the meantime, the International Bank for Reconstruction and Development had been created in 1946; its original purpose of channeling the funds for the reconstruction of nations hit by the war was actually accomplished by the newly launched Marshall Plan, and the Bank became then a vehicle of capital for development. It acted, and continues to act, as a financial intermediary, borrowing on its own and lending to LDC's, achieving, due to its good credit standing, results still not allowed to single governments.

After the reconstruction effort, DFI took a new shape in the 1960's, when Western corporations, especially U.S. based, found new interest in raw materials and low-cost labor supply of developing countries. The controversial issue of whether to consider this a form of aid or exploitation, given the undeniable transfer of know-how and the increase in employment and income, but also the use of labor intensive non-up-to-date technologies, the repatriation of the earned capital and the monopolistic and political power often reached by these firms, led to different attitudes by host countries. Today, many of these have reached a stronger negotiation position in this respect, while many multinational corporations are oriented towards policies of less equity control and management contracts and licensing agreements.

Private financial lending was begun in 1950 when governments of industrial countries wanted to guarantee their exports, through export credits. Borrowers and lenders seemed to like this solution, and governments of importing countries also guaranteed these credits. Although short-term and tied to the source, they are largely used.

Private capital was provided by commercial banks starting in the 1960's. They started to operate in LDC's to follow the interests of their MNC's clients, and reinforced their role after the increase of oil prices in 1973 when they became recipients of part of the surpluses of OPEC countries. Commercial loans replaced the decrease in DFI, did not carry macroeconomic conditions or ties, and borrowing became easier but more costly by LDC's. Capital markets have been largely tapped since then, though causing external debt figures to soar (see Table 1-5) and the position of banks to become riskier, as they are largely liable to OPEC countries.

The risk of default is implicit when, no matter what the source is, the terms of lending become harder. Argentina registered the first default in 1956, followed by eight other cases in the next twelve years. Debt rescheduling became necessary in these situations, and Zaire, Sierra Leone, and Turkey provide the latest examples. From 1970 through 1977, $9.3 billion of debt repayments have been rescheduled, while debt relief or loan forgiveness are also sought and sometimes granted. A few of them consist of large amounts. (105)

As a statistical summary, the growth of debt per year in real terms for LDC's has been 14% in the 1950's, 12% in the 1960's and 9% in the 1970's. External debt has doubled in the period 1970-75 and is expected to double again by 1980. With respect to exports, external debt has grown 200% in the lowest income countries, 50% in OPEC countries, and 80-100% in others. (57)

Lastly, OPEC countries have been participating in aid and lending to LDC's since 1973 through different means that will be examined later on.

TABLE 1-5

External Public Debt of 96 Developing Countries and Increases Over Previous Year. Status as of December 31 of Debt Outstanding-Disbursed Only.

(Amounts in US $ Millions)

Type of Country	1970	1971	1972	1973	1974	1975	1976
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
87 NODC's	46,966.1	54,215.0 (15.4% Increase over 1970)	62,012.0 (14.4% Increase Over 1971)	73,426.7 (18.4% Increase Over 1972)	90,669.2 (23.5% Increase Over 1973)	109,984.1 (21.3% Increase Over 1974)	134,693.4 (22.5% Increase Over 1975)
9 Oil Exporting Countries	7,383.2	9,885.4 (33.9% Increase Over 1970)	12,181.4 (23.3% Increase Over 1971)	16,378.6 (34.5% Increase Over 1972)	17,777.1 (8.5% Increase Over 1973	20,312.1 (14.3% Increase Over 1974	25,832.2 (27.2% Increase Over 1975)
96 LDC's	54,349.3	64,100.4 (17.9% Increase Over 1970	74,193.4 (15.7% Increase Over 1971	89,805.3 (21.0% Increase Over 1972)	108,446.3 (20.8% Increase Over 1973)	130,296.2 (20.1% Increase Over 1974)	160,525.6 (23.2% Increase Over 1975)

SOURCE: World Bank:World Debt Tables EC-167/78.

CHAPTER 2
MECHANISMS OF FINANCING A PROJECT

It has been estimated that the public share of construction in developing countries is about 70% of the total (61). To finance these activities, governments have to borrow either on the local capital markets in their own currencies or outside in hard currencies. When they borrow is foreign currency, they create or increase an external debt. Public external debt is defined as debt owed to non-residents, repayable in foreign currency, goods or services, which has an original or extended maturity of over one year and which is an obligation of a public debtor (the national government or a political subdivision or an agency of either, any autonomous public body) or of a private debtor publicly guaranteed (105).

2.1 Characteristics of Project Financing

The reasons why countries borrow can be grouped under five headings (95):

1. Budget, when the loan is used to meet current expenditures;
2. Reserve management, when the purpose of borrowing is to hold foreign currency reserves at the desired level;
3. Debt restructuring, when the funds are used to solve debt crisis arisen for the maturity of previous borrowing;
4. Guarantees for others' performance, however seldom taken by a government but often shifted to a statal

agency or development institution;

5. Projects, when the loan is granted for the purpose of a financially sound money earning activity.

2.1.1 Debt Servicing Problems

What it is important to point out is the difference between the so-called sovereign risk loan, whose repayment is expected to come from the same balance of payments of the country it has been granted to give help to, and the project loan, which is made to an investment directly related to an outlet estimable in amount and time.

LDC's are asked to show their capability to service the external debt, as it is evident that they will continue to tap all the possible sources of funds at fast pace. Attention is given by lenders to the debt management skill shown by the borrower country, as well as to the overall economic management, intended as correct exploitation of natural resources, as use of economic tools and policies adopted with regard to capital and skilled labor outflows. When a country applies for a loan, three aspects must be considered in its overall economic condition: (1) the trade position and the various currencies involved in the trade activity; (2) what are its reserves denominated in; (3) and what currency it is borrowing in. A country's ability to meet its obligations derives from its external trade, from the utilization it makes of the currency it borrows, and the further borrowing it may have access to. Many loans to LDC's never mature, rather they are continuously refinanced. Moreover, the repaying of a debt is affected by the terms of the debt and by the environment during the repayment period, with special regard to the value of

unexpected inflation, which works in the way of easing the cost of borrowing.* (17).

To try to quantify the problem some financial parameters are calculated; the most important is the "debt service ratio", defined as the ratio of the sum of amortization payments on long-term debt and interest payments expressed as percentage of goods and services for exports. More precisely, there are two of these ratios, the first one excluding from exports manufactured goods, the second one including them. Other ratios or values considered are: the amount of foreign reserves,whose usefulness is however only temporary and in the short run, as they can be originated by other loans rather than economic activities; the number of different primary commodities and manufactured goods included in the exports the economy relies on, to see how much the sources of hard currencies are diversified; and the import coverage, giving the number of months foreign reserves would allow the country to import for (11). Table 2-1 lists these factors advised to be used in determining the creditworthiness of a country (11). As for all financial ratios, their meaning and importance lie in considering them all together; individually taken they could be either misleading or meaningless.

*For an analytical exposition of the effect of inflation on borrowing by LDC's see: "Some Aspects of the Impact of Inflation on the Debt Burden of the Developing Countries", The UNCTAD Secretariat, World Development, February 1979, p. 135-143

Table 2-1

FACTORS AFFECTING CREDITWORTHINESS

1. Current account surplus/deficit as % of GNP

2. National savings as % of GNP, average of 5 last years

3. Number of primary commodities accounting for 40% of exports

4. Number of primary commodities accounting for 60% of exports

5. Manufactured goods exports as % of total

6. Debt service ratio on total debt

7. Total end of year debt as % of GNP

8. Debt service one end of year public debt as % of debt falling due in two years

9. Debt service on end of year public debt as % of debt falling due in five years

10. Import coverage of official international reserves

2.1.2 Project Financing and Currency Used

Project financing refers instead to lending money to those activities, construction in our case, expected to generate a cash inflow within a certain number of years. There is theoretically no need in this case for the lender to examine the overall trend of the economy and its parameters. One sector of it is isolated and the loan is granted to it alone. The expected return of the project is the means the financing will be repayed with, no matter what the behavior of other economic sectors is. Sometimes, however, lending to a project can have the same meaning as of lending to a country, when the economy is tied to that project or to the sector that project pertains to.

The only task of a project is to earn a revenue, this is why to find financing for it may be sometimes easier than for a current account deficit problem. Yet, any project entails risks, which can be broadly classified into five categories; namely, cost overruns, completion, post completion outages, customer default, and intervention of superior forces (governments' intervention, "force majeure"). The analysis to be undertaken in this case is however more familiar to most of the lenders as this is what their job is all about; they are not asked to make a complete study of a foreign eoonomy, and it can be said that more prospective lenders are more attracted by the project financing than by the sovereign risk loan.

It may happen that huge projects are made up of several identical parts and are undertaken by steps; in this case, they do not need a very big initial outlay and begin soon to earn revenues, thus

attracting the financing for their continuation. However in many cases the big projects need a long construction time before realizing any return. The financing needs of these projects are, therefore, very large and of long term nature; this normally imposes major obstacles to financing those type of projects.

It is necessary to point out that it is difficult to draw a distinction between construction and other kinds of projects, as any of the latter often entails some degree of engineering work. Although the classic way is to include under "construction" only the infrastructure projects, also health, tourism, manufacturing and others have building activity in them; we consider only those whose result is the creation of a concrete asset which can be pledged by the lender in case of default, thus constituting an incentive for him to grant the financing.

Of the five kinds of risks mentioned above, the post completion outages or recurrent costs have recently been matter of concern. The problem arises because, while the initial outlays for the projects are considered in providing the funds for the development investment, and computed in the financing needs, yearly expenditures, incurred for its maintenance have wrongly been considered as consumption items. They are not covered under the financing, and the funds to meet them are expected to be generated within the economy. As this does not always happen, new projects are undertaken, further exacerbating the problem of recurrent costs, while previous ones fail to produce the expected profits for lack of maintenance or implementation. It has been advised to include these costs in the cash flow of the project, after determining the

Table 2-2

Illustrative Summary of Recurrent Expenditure Implications of Projects as a Proportion of Investment Expenditure

SECTOR	"r"
Buildings	0.01
Education	
Agricultural colleges and polytechnic schools	0.17
Primary schools	0.06 - 7.0
Secondary schools	0.08 - 0.72
Universities	0.02 - 0.22
Health	
District hospitals	0.11 - 0.30
General hospitals	0.183
Medical auxiliary training schools	0.14
Nurses colleges	0.20
Nutrition rehabilitation units	0.34
Rural health centers	0.27 - 0.71
Urban health centers	0.17
Housing	0.03
Manufacturing commerce and construction	0.01
Roads	
Feeder roads	0.06 - 0.14
Paved roads	0.03 - 0.07
Tourism	0.05

Source: Peter Heller, The underfinancing of recurrent development costs, Finance and Development, (March 1979), p. 39.

sensitivity of the project return to the maintenance level and a maintenance program, such that they can be included in the financing package (54). To this purpose, the World Bank has recently studied the matter and has determined the amount of the yearly recurrent expenditures for different kinds of projects; some indicative result is given in Table 2-2 under the form of a percentage coefficient "r"; the coefficient must be properly used, as for some sectors, like "health" and "education", it is not strictly limited to the construction but also includes expenditures for personnel and supplies.

When calling international tenders of a project, a government has the choice of the currency to use to pay for the service. The choice of one currency rather than another is determined by three kinds of considerations.

The first one is if, and how much, that currency is marketable, that is how much attractive it is for prospective, qualified contractors.

The second is the currency the project earns its returns in. Certain projects in a country are sometimes directly related to some form of external activity (e.g. electric power production and export) and may earn foreign currency; or they are indirectly related to an improvement in the foreign reserve position of the country (tourism, health, infrasturcture), thus allowing it to use the earned currency to repay the debt incurred for the payment of the contractor.

The third thing to be considered is who will finance the project and what currency will be made available for the payments, always bearing in mind that the financing must exactly match the project needs. The existence of a substantial level of domestic savings enables the country to finance its development without resorting to external sources, or at

least limiting its dependence upon them to only a share of the total cost of the project.

However, for their own definition, developing countries suffer from a lack of savings due to the higher standard of living sought by the people causing expenditures to grow faster than income; savings are also low because of the population growth which makes per capita income decrease despite the increase in GNP. Moreover, and especially in the least developed countries, the economy is of the exchange type; that is, it is characterized by the existence of money as the only form of financial asset, and saving can be made up of only either money or tangible assets. The level of savings is then low, as the accumulation of wealth in these ways does not yield interest; financing of ventures by owners of technical know-how or construction opportunities is almost impossible (48).

The impasse is broken when financial instruments are introduced: they enable borrowers to raise captials, in the meantime stimulating thrift in a wider range of savers by yielding interests to their holders; the process is made viable by the existence of financial intermediaries which, exploiting economies of scale, meet the different needs of borrowers and lenders, provide a linkage between the two groups and an incentive for the exitence of a secondary market. This process calls the governments and central banks to a stabilizing role: the first stages of the formation of a capital market, and of a stock exchange in particular, are in fact characterized by non-frequent issues, limited customers, wide instability and price fluctuation, and it takes a long time to meet the conditions of an efficient market. LDC's have tried to

develop capital markets in both their own forms of stock exchange and interbank market; a few have succeeded (Brazil, Indonesia, Kenya, Qatar, Jordan, Malaysia, Philippines, for example) and governments have exploited them for their financing, while others have experience regressions (Burma and Vietnam for instance); still others even lack presuppositions for their implementation (95).

The private industrial sector is also weak in LDC's: it is then not in the position of accumulating wealth and generate internal capital, thus corporates' savings account for only a small amount. The situation is not better on the public side: governments use tax surpluses for current spending rather then for investment. Moreover, governments should make use of the proper macroeconomic tools to reach a full employment thrift-stimulating situation; also when these tools are understood, the lack of complementary factors in the economy makes it impossible to achieve the appointed goal (48).

2.2 EXTERNAL FORMS OF FINANCING A PROJECT.

When the situation of a sufficient level of savings does not exist in an economy, it becomes necessary to fill the saving-investment-gap recurring to import of capital. Tables 2-3 and 2-4 give a summary of the external public debt of LDC's in recent years.*

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* In the glossary of international lending, "commitments" represent the total of loan for which the contracts are agreed upon in the specified year; "disbursements" are the amounts actually drawn by the borrowers and are recorded in the year they take place; "amount outstanding" represents the part of the loans commited but not yet drawn (undisbursed). (105).

Table 2-3

EXTERNAL PUBLIC DEBT OF 96 DEVELOPING COUNTRIES*
(U.S. $ BILLIONS)

	1974	1975	1976	1977
Debt Outstanding (Disbursed)	90.7	110	134.7	164.5
Commitments	34.2	35	42.3	47.6
Net Flow	15.1	21.7	24.4	27.2

Table 2-4

EXTERNAL PUBLIC DEBT OUTSTANDING (DISBURSED) BY REGION,
87 DEVELOPING COUNTRIES*(U.S. $ MILLIONS)

	1973	1974	1975	1976
Subsaharian Africa	7,007	9,429	11,391	13,927
East Asia and Pacific	7,407	8,665	11,265	14,547
Latin America & Caribbean	24,520	32,287	39,849	50,841
North Africa & Middle East	4,786	5,781	8,629	10,785
South Asia	16,469	18,773	20,679	23,177
Mediterranean more advanced countries	13,156	15,735	18,171	21,417
87 LDC's	73,427	90,670	109,984	134,693

SOURCE: (both tables) World Bank, World Debt Tables, EC 167-/78

*The list of LDC's included in the computation is given in World Debt Tables EC 167/78.

External sources of capital supply fall under three broadly classifiable forms:

economic aid,

direct foreign investment (DFI), and

lending at market terms.

Advantages and drawbacks of each of these solutions, and their effects on the recipient country have been discussed by many authors (63). Generally speaking, it can be said that the first two forms bring political restraints but are advantageous under a pure economic standpoint (although this is strongly denied by many for DFI (63)), while the latter is economically costly but basically free from the above mentioned conditions.

Not all the flow to LDC's is being used for development projects; a large share of the funds borrowed goes to repayment of previously incurred debt. The amount going to refinancing is estimated to be about 27% of the total today, and is likely to reach 66% of the total flow by 1985 (52).

2.2.1 Economic Aid

Economic aid can be defined as additional resources, in the form of either foreign currency or goods that a developing country receives over the capacity it can develop by itself with exports and accumulated reserves; the aid is aimed to promote a faster growth without reducing consumption and to improve the performance of the recipient economy and eventually changing its structure (63).

Economic aid is often tied to the source: this means that, in order to receive it, the developing countries have to meet a few conditions,

the most common of them being to make further purchases with the loan proceeds in the donor country. This occasionally causes the aid to be less efficient than other forms of financing: in giving compulsory alternatives in the way the money has to be spent, in the selection of consultants, contractors, equipment suppliers and in the procurement procedures, the advantages of competition and bidding or exchange rate opportunities are missed.

On the other side, it cannot be neglected the usefulness of having a homogeneous team for the accomplishment of a project since its early stages, which is often originated under the provision of a government to government loan. Recent examples can be cited in this regard: the Wonogiri dam at Java, Indonesia, where the Japanese government participated in its financing through the Japanese export credit agency: all the services are provided by Japan based firms. Similarly, Sri Lanka has gained funds from the British Ministry for Overseas Development, for the dam and hydroelectric scheme at the Victoria Rapids on the Mahaweli Gangu River.

The largest outstanding program of economic aid is between the U.S. and Egypt: it has accounted for $3.7 billion from 1975 to June, 1979, spent in all economic sectors, excluding military expenses (12). It has all the characteristics described for economic aid: a large portion is still undisbursed, given the "gap between commitments and expenditures" in specific development projects, it is undertaken for precise political reasons, allows opportunities for U.S. exporters and contractors, and will eventually operate a modernization in the structure of that economy.

The principal forms of economic aid include:

a) Grant, which is a free gift and no future repayment is required. It is thus the best form of "economic aid", though presenting the above mentioned drawbacks, especially when it is awarded for a specific project. Under the classification of grant also fall the debt relief and loan forgiveness sometimes granted by governments under the recurrent development aid plans, to those countries facing debt servicing problems.

b) Credit. The kind of credit relevant to this section is that available at terms more favorable then current commercial ones, generally referred to as "soft loans" and awarded for specific projects.
The factors to be examined in order to define a loan as a soft one are:

- the existence of a "period of grace", that is an initial period of time during which beginning of repayment is delayed and thus there is no flow back of money from the developing country;
- the interest rate, considerably lower than that applied in current commercial agreements;
- The maturity, longer than any other available, with the further qualification that loans having high interest rates but long maturity are sometimes classified as grants and sometimes as commercial loans.

It is possible to quantify the amount of grant included in a loan through the "grant equivalent"; the grant equivalent is the face value of the commitment (total loan) minus the discounted present value of future repayments computed using a correct economic value for the discount rate (10% used by World Bank and OECD in 1977). The "grant element" is instead defined as the grant equivalent expressed as percentage of the

face value of the commitment (74).

Another advantage of a soft loan is that not always is it to be repayed in foreign hard currency, but can also be serviced in local currency or goods. The repayment in hard currency implies further needs of loans or grants if the external trade activity is not increased by the time of repayment; the use of local bills entails the awful risk of printing more money and the more subtle one that the repayments are used by the donor to finance ordinary purchases of the developing country's goods or services, otherwise paid for by hard currency; the use of goods, especially if in addition to the normal trade activity levels has the most stimulating effect on the economy: it results in being the cheapest of the three above mentioned (63).

c) Technical Assistance. It is often used to complete the aid "package" in the case of soft loans for specific projects; it is then well relevant to project financing. Its value is given by the opportunity cost of the services provided, had they to be bought by the recipient country.

2.2.2 Direct Foreign Investment.

The two most common arguments in favor of DFI are that it is essentially a long term investment, which is one of the conditions to be met by foreign aid, and that it is basically sound, as it has to pass the test of the market (63).

It is however counter argued that, in the long run, the amount of repatriated funds largely exceeds the cost of repaying a loan, thus DFI is not cheap at all, and that the same know-how, certainly brought in and disclosed by the new firm, could be more conveniently purchased in some other way. DFI is still continued and especially exercised by U.S. based

firms (21), with the developing countries accounting for about 26% of the total investment in 1976: despite a decrease in the gap shown in 1976, LDC's still represent the areas allowing the highest rate of return (See Tables 2-5 and 2-6).

Whether it is to be considered cheap or expensive, DFI is a form of financing construction projects. Incentive measures are studied by the Development Assistance Committee (DAC) of the OECD. The most important facilities provided to promote DFI in LDC's are (75):

- investment guarantee schemes, aimed at offering a coverage to political risks that cannot otherwise be insured;
- fiscal measures, whose goal is to avoid an excessive burden of income tax on repatriated funds when taxes are already heavily levied in the subsidiary's country;
- investment information and promotion activities, organization of economic centers, missions for the examination of investment opportunities, and financing of feasibility studies and pre-investment surveys;
- cooperation between government aid agencies and private investors, consisting of financial and technical assistance;
- government sponsored investment corporations, of the type of IFC.

One of the countries favoring DFI is the Republic of China. It offers to foreign investors free land for the construction of plants and manufacturing facilities relevant to the modernization plan the country has established; the counterpart it negotiates for is a share in the profits of the firms (32).

Table 2-5

UNITED STATES DFI BY AREA
(YEAR END BOOK VALUE 1976 IN U.S. $ MILLIONS)

	Amount	Percent
Developed Countries	101,149	73.7
Latin America & Other Western Hemisphere	23,536	17.1
Other	12,559	9.2

SOURCE: Eiteman and Stonehill, Multinational Business Finance, p. 12.

Table 2-6

RATE OF RETURN IN PERCENT ON U.S. DFI

	1975	1976
DEVELOPED COUNTRIES	10.9	11.9
Petroleum	8.5	8.5
Manufacturing	10.6	12.5
Other	13.5	13.4
DEVELOPING COUNTRIES	29.1	25.2
Petroleum	288.5	109.9
Manufacturing	13.9	11.3
Other	18.7	19.7

SOURCE: Eiteman and Stonehill, Multinational Business Finance, p. 13. (21)

2.2.3 Borrowing at Market Terms.

Buying capital at market terms is a solution that enables the borrower to use the funds received without the control and the conditions carried by grants and other forms of aid; the negotiation is kept on a pure commercial and financial basis. This is probably why many LDC's have largely used this form of financing, trying to build the necessary creditworthiness to obtain further credit. Exceptions are a few countries which have not exploited commercial opportunities, in order to remain eligible for grants and concessional loans by governments and multilateral agencies (95).

a) Eurocredits. Loans made by commercial banks have by 1975 become the major source of funds for LDC's (47). The share of the total Euromarket credit going to LDC's is shown in Table 2-7: it must be considered that also the part attributed to "Offshore centers" ends up going in considerable amounts to the developing countries; Table 2-8 gives the geographical distribution of Eurocredits for the period 1971-1975. Since then, figures concerning Eurocurrency loans to LDC's have continued to soar; the trend is due to the slow down of the demand for credit in the developed countries, to the increase in the demand by Third World's countries for development projects, and to the effect of inflation.

American, Japanese, European and offshore center banks engage in foreign lending to LDC's; the "Euro" form is the most common, and the U.S. based banks are the most active, participating in it through their foreign subsidiaries. The Eurocurrency market, originated in response to high dollar demand, is generally a short term, highly liquid, and "wholesale" market, in the sense that the amounts involved are very

Table 2-7

ESTIMATED USE OF EUROCURRENCY
(U.S. $ BILLIONS)

	1973	1975
Reporting European Area	49 (37%)	63 (31%)
Developed countries	40.9 (31%)	62.5 (30%)
Eastern Europe	7.4 (6%)	15.6 (7%)
Offshore Banking centers	18.7 (14%)	35.6 (17%)
Oil exporting countries	14.3 (11%)	5.3 (3%)
LDC's		19.5 (10%)
Unallocated	1.7 (1%)	3.5 (2%)

SOURCE: BIS Annual Reports

Table 2-8
GEOGRAPHICAL DISTRIBUTION OF PUBLISHED EUROCREDITS
TO LDC'S, JANUARY 1971 - JUNE 1975
(U.S. $ MILLIONS)

	Amount	Percent
Africa	4,274	15
Asia	8,394	29
Latin America	15,898	56
TOTAL	28,566	100

SOURCE: BIS Annual Reports

large ($500,000 and more) (21).

The loans may assume many forms, according to the participants and the terms agreed (95). When there is a single lender it may be:

- straight bank loan (one off loan) generally for small amounts and short term; or
- line of credit, advanced by a bank to the borrower: often the latter is a bank in the developing country, in turn lending to its own clients.

When there is a group of banks on the lender's side the possible loans are:

- syndicated bank loan, having a floating rate, that is a fixed spread over the floating value of LIBOR (London Interbank Offered Rate). In a few cases, the spread itself can increase over time. It is negotiated with the client by two or three leading banks also acting as underwriters of that part of the loan they cannot syndicate to other participant banks, whose number may vary up to 60-70. One bank acts as agent after the syndication, to administer the transfer of funds. The syndicated loan basically comes from the need of banks to diversify their loan portfolio and spread out the risk among the different loans.
- syndicated bank loan, but with fixed interest rate, less common than the previous one;
- revolving credit, similar to a syndicated loan but where the borrower may draw the portion of the loan he likes and pay interest on this part only, during the life of the loan;

- standby facility, when the borrower has no time limit to use the funds, though paying a fee for the elapse of time he does not draw them; interest begins to be computed starting from the drawing of funds;
- private note placement is a negotiable syndicated eurocredit; it is in the bearer's form, although it does not have a developed secondary market;
- medium term certificate of deposit (CD), defined as "a negotiable instrument issued by a bank, evidencing a deposit for a stated amount of money for a stated maturity of more than one year and at a stated rate of interest"*; CDs are issued in the "top" or in the "tranche" form, and are estimated to constitute 85-90% of the total Eurodollar deposits.

The maturity of eurocredits have varied over time, never being more than twelve years; there seems to be no bias in favor of developed countries vis-a-vis LDC's in the maturity distribution (see Table 2-9). However, what LDC's look for are very long maturities, what they can get are terms shorter than 10 years; at least in that range, average maturities are clearly lengthening.

Another feature of the maturity is its transformation. The market is essentially an interbank one, that is there are banks borrowing at short terms and normally at LIBOR, then lending at medium term and adding

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*Park, The Eurobond Market, 120 (1974).

Table 2-9

MATURITY STRUCTURE OF EUROCREDITS
1975 - 1978 (PERCENTS)

MATURITY (IN YEARS)	YEARS							
	1975		1976		1977		1978	
	LDCS	ALL	LDCS	ALL	LDCS	ALL	LDCS	ALL
1 - 5	68.6	63.7	55.8	49.2	23.4	18.6	9.5	10.0
5.01 - 10	27.4	31.5	35.4	42.9	72.6	76.8	84.1	83.7
Over 10	1.7	1.0	--	--	--	--	3.0	3.0
Unknown	2.2	3.8	8.9	7.9	4.0	4.6	3.4	3.3

SOURCE: World Bank, Borrowing in International Capital Markets. EC-181/783.

their spread; the loan is periodically rescheduled (rolled over) to adjust for the changes in the interest rate. The roll-over, a normal operation, must be distinguished from debt restructuring, which is changing the loan's terms because of difficulties encountered by the borrower in servicing it, and from debt refinancing: the latter is a possibility exploited in occasion of periods of market liquidity and consisting of the retirement of short term debt for new ones with longer terms and higher spreads.

The interest rate on eurocredits is calculated in spread over LIBOR, but the U.S. prime rate is sometimes relevant too. The interest rate is subject to changes at any roll-over date, to adapt it at the variations of LIBOR; the floating interest rate has the effect of shifting the risk to the part of the borrower and attracts a bigger number of banks in the market. A few LDC's, having good negotiating position, have many options for the roll-over period (1,2,3,4,6,12 months) that they can exploit when LIBOR is falling. The actual spread ranges bewteen 1 and 2%, which means nominal interest rates of 13-14%. There is no unique LIBOR: there is one value associated with each maturity, from overnight to one year; the spread charged on a loan is sometimes calculated from all the LIBOR's with a proper formula.

The actual cost of a loan must however be computed adding the percentage for fees banks usually charge on them (95). The borrower may be requested to pay two kinds of fees; the first kind is associated with the obtainment of the loan: there may be management (depending on the size of the operation), participation (to those banks supplying the largest portions), drawdown and negotiation fees all charged in percent of the loan. The second type is related to the performance: it includes

an agent's provision, often in yearly fixed sum rather than in percent, and late and prepayment fees. The borrower is also charged by the lender for negotiating expenses.

Given the nature of the market, eurocredits have sometimes the peculiarity of the change of currency of denomination by the borrower at any roll-over date, as well as a currency availability clause exists for the lender in case of difficulties of raising the funds in that currency. The great bulk of Euromarket transactions is in dollars and German mark is the second largest traded (98). The percentages of Eurocredits in different currencies is given in Table 2-10. The agreements also include very peculiar provisions to accelerate repayment when structural difficulties arise affecting the Euromarket as a whole (95).

Eurocredits have been available for any country. A little bias has been shown in a few occasions by banks. They have granted loans to developed countries experiencing financial management difficulties at better terms than to LDC's not having the same difficulties; the pattern seems to be occasional rather than a rule (40). As far as LDC's are considered, there is a concentration of credit to a restricted group of high income developing countries. The trend is shown in Tables 2-11 and 2-12.

The next two tables (2-13 and 2-14) show the distribution of eurocredits among different industries and the allocation between the public and private sector.

b) International bonds. The second way to tap private capital markets after the euroloan is the issue of international bonds, in the two forms of: foreign bonds, floated by a foreign borrower in a single country, denominated in its currency and syndicated by institutions of

Table 2-10

EUROCURRENCY CREDIT BY CURRENCY OF DENOMINATION (PERCENT)

Currencies	YEARS 1975	1976	1977	1978
U.S. Dollar	96.6	93.5	95.8	95.2
German Mark	2.3	3.4	2.7	1.8
British Pound	0.7	1.9	0.4	0.9
Saudi Arabian Riyal	0.1	0.9	0.2	0.2
Japanese Yen	--	--	0.3	0.7
Others	0.3	0.3	0.6	1.2

SOURCE: World Bank, Borrowing the International Capital Markets, EC-181/783 .

Table 2-11

TEN MAJOR LDC'S CREDITORS TO THE EUROCURRENCY MARKET
(1978 FIRST 3 QUARTERS) (U.S. $ MILLIONS)

	Amount	Percent	Percent Progressive
Mexico	3,871.5	14.9	14.9
Brazil	3,151.9	12.1	27.0
Venezuela	1,871.6	7.2	34.2
Philippines	1,608.9	6.2	40.4
Spain	1,548.2	6.0	46.4
Iran	1,118.1	4.3	50.7
Indonesia	1,089.8	4.2	54.9
Nigeria	1,000.0	3.9	58.7
Algeria	964.0	3.7	62.4
Malaysia	876.8	3.4	65.8
All LDCs	25,971	100.0	100.0

SOURCE: World Bank, Borrowing in International Capital Markets, EC-181/783.

Table 2-12

15 MAJOR LDC'S CREDITORS TO THE EUROCURRENCY MARKET AT THE END OF 1975 (U.S. $ MILLIONS)

Country	Amount	Percent	Percent Progressive
Mexico	5,839	19.7	19.7
Brazil	5,295	17.9	37.6
Indonesia	2,533	8.6	46.2
Algeria	2,230	7.5	53.7
Iran	1,681	5.7	59.4
Peru	1,680	5.7	65.1
Philippines	1,376	4.7	69.7
Argentina	974	3.3	73.0
South Korea	802	2.7	75.5
Hong Kong	758	2.6	78.3
Venezuela	658	2.2	80.5
Malaysia	641	2.2	80.5
Zaire	530	1.8	84.5
Panama	523	1.8	86.2
North Korea	458	1.5	87.7
All LDC's	29,590	100.0	100.0

SOURCE: Miguel S. Wiouczek, The LDC external Debt and the Euro-markets: The Impressive Record and the Uncertain Future (98).

Table 2-13

SECTORAL DISTRIBUTION OF EUROCREDITS TO LDCS
1975 - 1978 (PERCENT)

Sector	YEARS 1975	1976	1977	1978*
Bank and Finance	24.5	25.9	21.6	24.5
Transport	10.0	5.1	6.6	7.2
Utilities	7.6	12.8	12.5	15.1
Petroleum and natural resources	17.0	10.8	9.5	15.2
Industry	10.0	15.8	17.6	10.8
General	30.9	29.6	32.2	27.2

*First Three Quarters

SOURCE: World Bank, Borrowing in International Capital Markets, EC-181/783.

Table 2-14

EUROCREDITS TO LDCS - TYPE OF BORROWERS 1978
(PERCENT)

Borrowers	Percent
Governmental	28.5
Other Public Non-financial	35.2
Banks and Financial Sector	24.5
Private Non-Financial	11.8

SOURCE: World Bank, Borrowing in International Capital Markets, EC 181/783.

that country; eurobonds, whose syndicators are of different nationalities and in whose countries they are traded. These issues, once managed by investment banks, are today also managed by merchant and commercial banks.

Bonds are long term obligations with fixed interest rates (parelleling those of the country of their currency of denomination); in this sense they completely match the project financing needs of LDC's. Despite a sharp rise in issues after 1977, these instruments have been much less used than eurocredits by developing countries. Their market has to be high quality and low risk, because of the many private unsophisticated buyers trading in it; on the contrary, either information or trust and creditibility about LDC's often lack, and a rating service does not exist, apart from something provided upon request by Standard and Poor's. Thus, also investors holding an internationally diversified portfolio of securities do not hold LDC's bonds and prefer to choose other forms of assets. Table 2-15 through 2-17 summarize the situation of bond issues and total borrowing on private capital markets.

c) Export credits. Export credits have grown to be an important item in the project financing; they are estimated to reach even the level of 30% of total value of the project, and are especially available in those countries, and currencies, where there are strong and efficient organizations to support exports.

Very short term, but effective, financing can be obtained, when the owner of the projects provides construction materials and/or equipment to the contractor, by simple trade credit: this is the deferred payment normally granted in commercial operations by the suppliers to good customers (public agencies easily fall into this class). Its usefulness is

increased by the fact that, by managing acquisition and delivery by itself, the owner avoids the fees the contractor would charge on these items.

Table 2-15

PERCENTAGE OF BOND ISSUES BY LDCS - 1974 - 1978*
*(FIRST THREE QUARTERS)

Issuers	1974	1975	1976	1977	1978
LDCs	7.6	4.4	6.6	13.1	14.3
Industrialized	47.2	70.4	67.7	63.1	62.7
Oil Exporters	--	--	--	0.1	0.2
Others	45.2	25.2	25.7	23.7	22.8

SOURCE: World Bank, Borrowing International Capital Markets, EC-181/783.

Table 2-16

LDC's INTERNATIONAL BOND ISSUES BY INCOME CLASSES
1978 FIRST THREE QUARTERS (U.S. $ MILLIONS)

Income Class	Amount	Percent
High and Upper Middle	$2,333.6	56.1
Intermediate and Lower Middle	1,690.4	40.6
Low	75.0	1.8
Oil Exporting	61.6	1.5
LDC's	$4,160.6	100.0

SOURCE: World Bank, Borrowing in International Capital Markets, EC-181/783.

Table 2-17

TOTAL BORROWING BY LDCS ON PRIVATE CAPITAL MARKETS
1974 - 1978 (U.S. $ BILLIONS)

Years and Kind of Credit	COUNTRIES					
	Oil Exporting		Other Developing		All LDCs	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
1974	0.15	100.0	9.72	91.2	9.87	91.4
Eurocredits	0.15	100.0	9.72	91.2	9.87	91.4
Bonds	--	--	0.93	8.7	0.93	8.6
(Foreign)	--	--	(0.81)	(7.6)	(0.81)	(7.5)
(International)	--	--	(0.11)	(1.0)	(0.11)	(1.1)
Total Borrowing	0.15	100.0	10.66	100.0	10.8	100.0
1975						
Eurocredits	0.01	100.0	12.46	92.5	12.47	92.6
Bonds	--	--	1.01	7.5	1.01	7.4
(Foreign)	--	--	(0.55)	(4.1)	(0.55)	(4.1)
(International)	--	--	(0.46)	(3.4)	(0.46)	(3.3)
Total Borrowing	0.01	100.0	13.47	100.0	13.48	100.0
1976						
Eurocredits	0.24	100.0	17.26	88.5	17.50	88.6
Bonds	--	--	2.25	11.5	2.25	11.4
(Foreign)	--	--	(0.96)	(4.9)	(0.96)	(4.9)
(International)	--	--	(1.29)	(6.6)	(1.29)	(6.5)
Total Borrowing	0.24	100.0	19.51	100.0	19.25	100.0
1977						
Eurocredits	1.56	96.9	20.24	81.1	21.8	82.1
Bonds	0.05	3.1	4.72	18.9	4.75	17.9
(Foreign)	--	--	(1.95)	(7.8)	(1.95)	(7.3)
(International)	(0.05)	(3.1)	2.77	(11.1)	(2.82)	(10.6)
Total	1.61	100.0	24.96	100.0	26.55	100.0

- Table Continued on Following Page -

Table 2-17: Continued

Years and Kind of Credit	COUNTRIES					
	Oil Exporting		Other Developing		All LDCs	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
1978						
Eurocredits	1.32	95.7	37.94	87.4	39.26	87.7
Bonds	0.06	4.3	5.47	12.6	5.53	12.3
(Foreign)	--	--	(2.29)	(5.3)	(2.29)	(5.1)
(International)	(0.06)	(4.3)	(3.18)	(7.3)	(3.24)	(7.2)
Total	1.38	100.0	43.41	100.0	44.79	100.0

SOURCE: World Bank, Borrowing in International Capital Markets, various issues.

2.2.4 Other Forms of Financing

A few more opportunities must be mentioned, in order to complete the picture.

Cofinancing is engaged by the World Bank and the other development institutions, to increase and ease the financial flow to LDC's; the development bank leads the operation and looks for partners among the other multilateral agencies, governmental bodies, and private sources. Each lender lends at its own terms: private sources at shorter maturities, the World Bank at longer ones, such that the burden of repayment is neither too heavy (lower overall interest rate than if the loan were only by private banks) not too much concentrated in time: the borrower can then more easily afford the repayment (55).

The country is assisted by the World Bank, which also takes the responsibility of the supervision on project's implementation and on proper use of funds. The amount of cofinancing with the World Bank and the composition of the colenders is shown in Table 2-18.

Parallel financing is distinguished from cofinancing; the World Bank agrees in taking a share of the toal, but leaves to the borrower the task of completing the package; nobody other than the borrower acts as the leader of the operation.

Other examples can be provided. Jordan is currently looking for a loan of $13 million, to finance a construction activity, at no interest, to avoid the limiting impositions on lending and borrowing by the Islamic religion; rather it offers the lender to share the project return (65). The Kenya Gitaru scheme, on the Tana river, encountered financial diffi-

Table 2-18

BREAKDOWN OF CO-FINANCING WITH WORLD BANK - 1973 - 1976

Fiscal Year	Total		Official Sources		Export Credits		Private Financing	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
1973	34	450.5	32	357.6	4	90.7	1	2.2
1974	41	1,380.4	36	674.5	12	621.2	2	84.7
1975	56	1,887.2	54	950.0	7	878.7	2	58.5
1976	66	2,246.6	58	1,247.2	12	753.4	5	246.0

SOURCE: Roger A. Hornstein, Cofinancing of Bank and IDA projects, Finance and Development, March 1979, p. 42.

culties while the work was in progress: it was completed due to new provisions negotiated with the contractors. At this regard, it must be said that contractors are not financial institutions, although some of them are listed as such on American stock exchanges; they are not high liquid and cannot raise funds to lend at competitive rates. However, they can be called when the project is at the stage of the financing study; they provide some advisory service, exploiting the business relationships they have with financial institutions.

A last thing to be mentioned is the guarantee deduction, almost always included in construction agreements. It is a short-term financing, similar to the supplier credit normally used in commercial operations, and whose value ranges from 2-3% up to 10% of the total cost of the work.

CHAPTER 3

BILATERAL AND MULTILATERAL AGENCIES

The process of financing projects in LDC's through the methods examined in the previous chapter is accomplished by many different organizations, acting either on a multilateral or bilateral basis. From another standpoint, lenders can be grouped into two classes (105):

- official lenders: including governments and governmental agencies, as well as central banks, and other public bodies; international organizations, such as the development banks, multilateral institutions and intergovernmental agencies;
- private lenders: all those suppliers, exporters and manufacturers extending credits to their clients and all the private banks and other financial institutions engaged in lending to LDC's.

The breakdown of the external debt of the non-oil exporting developing countries (NODCs) into categories of lenders is given in Table 3-1.

3.1 OFFICIAL LENDERS

Official lenders supply funds to LDC's in the form of grants, soft (concessional) loans, and export credits through the means of export-import agencies (63). The following discussion tries to point out the major aspects and differences among the sources of funds.

Table 3.1

EXTERNAL PUBLIC DEBT OF 87 NODCs BY CATEGORIES OF LENDERS (U.S. $ BILLIONS)

	1974	1975	1976	1977(1)
a) COMMITMENTS				
Multilateral Organizations	6.0	7.4	7.7	10.9
Governments	11.5	11.8	13.0	10.6
Financial Markets	13.7	12.9	18.2	20.8
Suppliers and Other Private	2.9	2.9	3.3	5.2
Total	34.2	35.0	42.5	47.6
b) NET FLOWS				
Multilateral Organizations	2.5	3.4	3.6	5.3
Governments	4.4	7.6	6.5	6.9
Financial Markets	7.7	9.9	13.3	13.3
Suppliers and Other Private	0.5	0.8	1.0	1.7
Total	15.1	21.7	24.4	27.2
c) DEBT OUTSTANDING (DISBURSED ONLY)				
Multilateral Organizations	14.6	17.9	21.6	27.0
Governments	41.0	47.1	54.0	62.0
Financial Markets	25.4	34.9	47.9	60.8
Suppliers and Other Private	9.7	10.1	11.2	14.7
Total	90.7	110.0	134.7	164.5

(1) Partially Estimated
SOURCE: World Debt Tables, EC 167/78

3.1.1 Development Banks

Development financial institutions are specifically created for and oriented to the channeling of funds and technical skill to the Third World; more exactly they are defined as institutions which are comprised of large international governmental membership, and which dispense financial aid and technical skill and do not impose political sanctions or other requirements on aid recipients (90). In order to be considered as such, a development bank must accomplish both the banking function (that is, the supply of medium and long-term capital) and the development function (that is, dealing with social and education programs, training of skill at various levels, fostering of local capital markets, implementing economic plans, supervising projects, and encouraging the development of indigenous industries). The performance of these banks can be assessed through the amount of money they are able to supply, the maintenance of an adequate and efficient staff of employees, the viability of the projects they chose to finance, and the sectors of the economy they address their funds to (22).

What most characterizes development banks is that they only lend for specific projects; they never award funds for general balance of payments expenditures. Thus an important part of their job is the appraisal of the final destination of the loan.

a) The World Bank Group. The Group is made up of three institutions, each of them lending for a particular kind of project.

The World Bank, formally International Bank for Reconstruction and Development, was established with the participation of 38 countries and

a subscribed capital of U.S. $7,670,000 (21); on June 30, 1977 it consisted of 129 members who owned the 255,890 shares outstanding (22.55% held by the United States) for an amount paid in of $3,086,925,000 (100).

Once the post-war reconstruction was terminated, the Bank turned to the financing of development as its main task. It makes loans to projects clearly identifiable and which have high priority in the economic patterns of the recipient countries, under the guarantee of governments or comparable agencies. As a matter of fact, the guarantee has always been sought by governments, as distinct from central banks (104).

In order to be awarded a loan, a prospective borrower must demonstrate that he cannot obtain the funds from any other source; loans cannot be tied in any way and political considerations do not influence the lending policy. Rather, projects are investigated under six aspects: economic, technical, organizational, managerial, operational and financial. Table 3-2 lists the major innovations introduced in project evaluation.

The Bank has been very active in financing infrastructure and other construction works (see Table 3-5); it has recently shifted its focus to those projects which, in addition to implementing development, also assure an even distribution of the returns within the recipient country.

Loans are at convenient terms (21); this means that interest rates must be profitable for the Bank, with respect to the way it raises funds, and for the borrower, compared to other possible alternatives on the market. Funds for loans are raised by increases in capital subscriptions by member countries, by sale of obligations, and by use of income from previous operations (104). In lending, the Bank understates the

Table 3-2. SELECTED NEW ASPECTS OF PROJECT WORK

Innovation Year of Introduction	Explanation
Agricultural research (late 1960s)	In fiscal 1974, 18 out of 51 agriculture projects has research components; in fiscal 1976, 33 out of 64.
Sensitivity and risk analysis (late 1960s)	The sensitivity of the rate of return to different assumptions about uncertain costs and benefits is regularly examined.
Project-related training (1970)	Between fiscal 1972 and fical 1976, the number of projects with a training component more than doubled; the amount of Bank financing for this purpose more than quadrupled.
Environment (1970)	Every project is now routinely examined for its environmental implications (including health), and any protective measures, identified as necessay, are incorporated into its design and execution.
Income distribution (early 1970s)	Distribution of benefits and the impact of the project on different income groups are examined and taken into account wherever possible.
Cost recovery (early 1970s)	Increasing attention is given to cost recovery arrangements, which balance the needs for efficient use of services provided against financial, fiscal, and income distribution considerations.
Development of local contractors, consultants, and other local capabilities (early 1970s)	Increased efforts in this area have been under way for some years, in particular, to provide technical and limited financial assistance to develop local contracting industries through projects.
Technology transfers and appropriate technology (early 1970s)	The range of options, the standards, the low-cost solutions appropriate to developing countries, and especially to the poverty target groups, are being more critically examined and given more attention in project design.

- Table Continues on Following Page -

Table 3-2. SELECTED NEW ASPECTS OF PROJECT WORK (Continued)

Innovation Year of Introduction	Explanation
Employment generation (early 1970s)	Increasing attention is being given to designing project to have a positive impact on employment, for example, through labor-intensive construction methods and the encouragement of small-scale enterprises.
Sector context (early 1970s)	Project selection and design have been increasingly based on a broad analysis of sector problems and priorities.
Monitoring and Evaluation (since 1972)	Built-in monitoring and evaluation of their progress and impact have gradually become a regular feature of most projects.
Use of remote sensing (1973)	These techniques were applied to project and sector work in 11 countries in fiscal 1977.
Utility tariff structure and policy (water - 1972, power - 1974)	The Bank has always been concerned with the financial adequacy of utility tariffs, but has only recently focused on tariff structure and its impact on income distribution. Review of the equity and economic aspects of tariff structure and policy is now an element of virtually every power and water project.
Sociological and anthropological aspects (since 1973)	This element is critical in many newer-style projects and is beginning to be introduced as a regular part of project work.
Health (1975)	In the first 18 months after introduction of health components, staff provided advice on 122 projects and provided direct operational support to 33 of these.
Nutrition and population components (1976)	In addition to projects in these sectors, increasing attention is being given to including nutrition and population components in projects in other sectors, particularly rural and urban development.

- Table Continues on Following Page -

Table 3-2. SELECTED NEW ASPECTS OF PROJECT WORK (Continued)

Innovation Year of Introduction	Explanation
Social rate of return (1976)	Return calculations taking into account the distributional impact of project are still in the experimental stage.
Role of women in development (1976)	A new advisory position was created and filled in 1977. Involvement of women is now being explicitly considered in projects, especially in education and rural development.
Small-scale enterprises (1976)	Lending to development finance companies and industrial estates is increasingly oriented toward small-scale neterprises which generate employment.
Urban poverty orientation in non-sites and services projects (1976)	Traditional water and power projects in urban areas are being redesigned to incorporate distribution elements to service poorest segments of the community.

SOURCE: World Bank Annual Report, 1977.

so called "one-to-one" limitation: that is, outstanding loans cannot exceed subscribed capital, surplus and reserves (80); when borrowing in the market place, the Bank seeks for the currency needed by the recipient country (see Table 3-3); it actually does not disburse the money to the country; rather it prefers to pay the contractor directly in order to avoid the use of the money for purposes differing from the original. The borrowing on the private market is guaranteed by the uncalled part of the subscribed capital.

The International Development Association (IDA) was created in 1960 as the third member of the Group (104); it was owned by 117 member countries as of June 30, 1977 (100). IDA is a separate entity from the World Bank, but its characteristics are similar to those of the parent organization. The reason for its existence is the need to provide capital at very favorable terms to the poorest countries: IDA loans have very long maturities and grace periods, at no interest but with a 3/4 of 1% charge for administrative expenses, and only the 34 "low income" countries having a per capita income less than $280 in 1976 are eligible to receive them.*(21)(100)(104)

Tables 3-4 through 3-6 summarize the operations and sector distributions of funds of World Bank and IDA.

The World Bank is precluded, by Articles of Agreement, from lending to non-governmental guaranteed projects and from investing in equity capital (8); these reasons are at the origin of the International Finance

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*The list of the countries is given in World Debt Tables, EC 167/78, p. 22.

Table 3-3

WORLD BANK BORROWING, JUNE 30, 1977
(EXPRESSED IN U.S. $ MILLIONS)

	Outstanding Principal	Percent
U.S. Dollars	9,173	49.6
German Marks	4,494	24.3
Swiss Francs	1,655	9.0
Japanese Yens	1,653	8.9
13 Other Currencies	1,503	8.2
TOTAL	18,478	100.0

SOURCE: Eiteman & Stonehill, Multinational Business Finance, p. 337.

Table 3-4

RECORD OF WORLD BANK AND IDA ACTIVITIES 1968-1977 (U.S. $ BILLION)

	FISCAL YEAR									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
WORLD BANK										
Operations Approved	44	82	69	78	72	73	105	122	141	161
Loan Amounts	847	1,399	1,580	1,921	1,966	2,051	3,218	4,320	4,977	5,759
Countries	31	44	39	42	40	42	49	51	51	54
Disbursements(1)	772	762	754	915	1,182	1,180	1,533	1,995	2,470	2,636
Total Income	356	410	504	578	646	758	929	1,157	1,330	1,617
Net Income	169	171	213	212	183	186	216	275	220	209
Total Reserves	1,160	1,254	1,329	1,444	1,597	1,750	1,772	1,902	1,916	2,026
Borrowings: Total	735	1,224	735	1,368	1,744	1,723	1,853	3,510	3,811	4,721
Borrowings: Net	222	698	299	819	1,136	955	990	2,483	2,530	3,258
Subscribed Capital	22,942	23,036	23,159	23,871	26,607	30,397	30,431	30,821	30,861	30,869
Member Countries	107	110	113	116	117	122	124	125	127	129
Professional Staff	767	961	1,170	1,348	1,516	1,654	1,752	1,883	2,066	2,203
IDA										
Operations Approved	16	29	50	51	68	75	69	68	73	67
Credit Amounts	107	385	606	584	1,000	1,357	1,095	1,576	1,655	1,308
Countries	14	28	33	34	38	43	41	39	39	36
Disbursements	319	256	143	235	261	493	711	1,026	1,252	1,298
Usable Resources, cumulative	1,807	2,176	3,182	3,343	4,204	7,019	7,433	11,608	11,514	11,789
Member Countries	98	102	105	107	108	112	113	114	116	117

(1) Excludes loans and disbursements to IFC.

SOURCE: Reprinted from World Bank Annual Report, 1977, p. 4.

Table 3-5

WORLD BANK AND IDA LENDING BY SECTOR,
YEAR ENDED JUNE 30, 1977 (U.S. $ MILLIONS)

SECTOR	WORLD BANK AMOUNT	WORLD BANK PERCENT	IDA AMOUNT	IDA PERCENT
Agriculture	1,637.8	28.4	670.0	51.2
Transportation	875.6	15.2	172.0	13.3
Electric Power	784.5	13.6	167.0	12.8
Finance	730.7	12.7	25.5	2.0
Industry	720.7	12.5	16.0	1.2
Water Supply & Sewerage	262.5	4.6	38.2	2.9
Education	210.1	3.6	78.5	6.0
Telecommunications	140.0	2.4	--	--
Urbanization	128.2	2.2	30.0	2.3
Non-Project	126.2	2.2	90.0	6.9
Tourism	98.6	1.7	--	--
Population & Nutrition	42.5	0.7	4.8	0.4
Technical Assistance	1.5	0.0	15.4	1.0
TOTAL	5,759.3	100.0	1,307.5	100.0

SOURCE: World Bank Annual Report 1977, p. 17.

Table 3-6

WORLD BANK AND IDA LENDING BY REGION,
YEAR ENDED JUNE 30, 1977 (U.S. $ MILLIONS)

REGION	AMOUNT	PERCENT
Eastern Africa	572.2	8.1
Western Africa	392.1	5.5
East Asia and Pacific	1,475.0	20.9
South Asia	1,164.2	16.5
Europe, Middle East and North Africa	1,570.1	22.2
Latin America and the Caribbean	1,893.2	26.8
TOTAL	7,066.8	100.0

SOURCE: World Bank Annual Report, 1977, p. 18-19

Corporation (IFC), whose task is predominantly to assist the private sector (104). When subscribing equity shares of a venture, IFC neither seeks official guarantors (21) nor is too much involved in construction, at least in the classic sense defined in Chapter 2; however, out of the 42 commitments of 1978, at least 21 entail building activity (plants, silos, etc.), thus generating activity for this sector (60).

b) Regional development banks

Regional organizations are on the other hand those whose membership or scale of operations are limited to some geogrpahical area. The demand for regional development banks arises from the financial issue of channeling more funds from governments and capital markets to a particular area, and from the political issue of strengthening the identity of a region; this latter motive distinguishes them from other financial development institutions. They still operate as banks and perform the two functions earlier specified, but they do it at a different level (96).

Regional development banks such as the Inter-American Development Bank, the African Development Bank (AFDB), and the Asian Development Bank (ADB), are considered to be of the right size to serve two purposes: they are large enough to attract developed countries to use them as a vehicle of capital to LDC's (the global level allows them to exert an active participation and a political influence); at the same time, regional banks are small enough for LDC's to control the allocation of funds among the countries of the region and to set priorities for the projects.

The Inter-American Development Bank is the first born of the type, modeled after the World Bank, and is founded on a strong financial

structure due to the participation of U.S. and later of Canada. The qualified ownership also gives the Bank a good borrowing capacity, exploited with large bond issues, especially in Europe (96). The stress of the lending policy is on low-income sectors. The Articles of Agreement are a little biased in favor of the private sector, and construction has accounted so far for a large share. The Bank is oriented to several loans of small amounts, typically covering about one-fourth of the total project cost (15). The largest granted in 1978 was $210 million for a hydroelectric development whose total estimated cost is $4.5 billion; other typical loans average $60-$65 million. In the first 15 years of activity the Bank had loaned to 24 countries (Table 3-7), distributed by sectors as follows: 39% to economic infrastructures (electric power facilities and communications), 37% to productive sectors (more than 14% to construction of new plants), 20% to education and social (housing 5.6%, sanitation 10.1%) and 4% to other activities (58)(59).

Again modeled after the World Bank, the AfDB is certainly the most respondent to the wishes of the countries in the region for whom it was originated, having its membership confined to them. This caused, at least at the beginning, a skeptical reaction by developed nations and a limited disposability of funds for operations. Some delay in paying the subscriptions by member countries further limited the scale of activity and the credibility of the institution (96).

Any agency, institution or program related to the development of Africa is entitled to receive funds from the AfDB, but its principal goal are those projects concerning several members or designed to make the economies of the member countries more and more complementary. Terms

Table 3-7

IDB CUMULATIVE LENDING (1961-74), BY COUNTRY

(U.S. $)

COUNTRY	LOANS	TOTAL COST OF PROJECTS
Argentina	$ 770,100,000	$ 2,619,000,000
Barbados	12,900,000	18,000,000
Bolivia	242,200,000	433,000,000
Brazil	1,715,300,000	10,585,700,000
Chile	406,100,000	1,319,700,000
Colombia	620,300,000	1,448,300,000
Costa Rica	143,200,000	284,200,000
Dominican Republic	171,100,000	299,300,000
Ecuador	284,000,000	685,500,000
El Salvador	137,300,000	268,800,000
Guatemala	133,400,000	246,600,000
Haiti	45,600,000	61,900,000
Honduras	122,500,000	207,500,000
Jamaica	50,800,000	105,200,000
Mexico	1,041,200,000	3,036,800,000
Nicaragua	126,900,000	231,200,000
Panama	113,100,000	289,100,000
Paraguay	191,400,000	306,800,000
Peru	335,000,000	712,700,000
Trinidad and Tobago	35,600,000	76,500,000
Uruguay	132,000,000	279,200,000
Venezuela	326,600,000	952,400,000
Regional	259,600,000	811,100,000
TOTAL	$ 7,416,200,000	$ 25,482,500,000

SOURCE: IDB Annual Report, 1976, p. 10.

Table 3-8

SECTORAL AND REGIONAL DISTRIBUTION OF ADB LOANS 1967-1977
(in UA millions)

Sectors	REGIONS North Africa	West Africa	Central Africa	East Africa	Multi-national	Total
Agriculture	5.76 (4)	13.91 (6)	7.25 (2)	26.07 (7)	--	52.99 (19)
Transport	26.70 (8)	36.75 (10)	30.02 (8)	34.50 (13)	11.97 (4)	139.94 (43)
Telecommunication	1.65 (1)	11.40 (3)	9.80 (3)	13.60 (4)	--	36.45 (11)
Electricity	43.55 (10)	22.54 (7)	3.25 (2)	14.31 (4)	--	83.65 (23)
Water Supply and Sewerage	--	34.35 (9)	16.21 (4)	12.24 (4)	--	62.80 (17)
Industry and Banks	17.91 (5)	31.49 (17)	4.00 (1)	20.16 (9)	15.20 (3)	88.76 (36)
Total	95.57 (28)	150.44 (52)	70.53 (20)	120.88 (41)	27.17 (7)	464.59 (148)

Note: The figures in parenthesis () show the number of projects by sector/region.

SOURCE: AfDB Annual Report, 1977, p. 23.

of lending must be determined according to the nature of the project and to the way funds for the same lending were raised (2). The sectoral and regional distribution of loans in the first ten years of activity are given in Table 3-8.

The ADB was, on the contrary, established by relying on capital also subscribed by developed nations outside the region. Although the voting power is a little biased in favor of poor countries, 2/3 of it go to developed ones, and influence of Japan and the U.S. is very strong. The capital subscribed by nations in the region was in fact only 60% of the total, divided among them according to their GNP, population, exports and tax revenues (96).

The ADB repeats perfectly the model of the World Bank. It makes regular and concessional loans to both the public and the private sector, but without governmental guarantee. A typical concessional loan in 1978 is that for the execution of a power-transmission project in Thailand (7): the amount of the loan is $36.5 millions; the maturity is 20 years with 4 years of grace, at an interest rate of 7.7% per annum. During 1978 the Bank has increased its level of activity by 30% over 1977 and has operated a cut in the interest rate of 7.4% (6). Table 3-9 gives the record for the decade 1968-78. In the first quarter of 1979 there have been two loans for an amount of $12.45 million, and 12 technical assistance programs (basically for feasibility studies) with amounts ranging from $60,000 to $649,000. Future programs provide priority for rural development, social projects, energy, mineral resources and man-power development (6).

The European Investment Bank (EIB) was established by EEC countries

Table 3-9
LOAN APPROVALS BY SECTOR TO END OF 1978
(Amounts in $ million)

SECTOR	1978				1968-1978			
	OCR	SF	TOTAL	%	OCR	SF	TOTAL	%
Agriculture & Agro-Industry	108.59	202.15	310.74	26.8	588.25	771.66	1,359.91	25.2
Agriculture	108.59	128.75	237.34	20.5	486.85	549.49	1,036.34	19.2
Agro-Industry	--	73.40	73.40	6.3	101.40	222.17	323.57	6.0
Industry	73.10	51.50	124.60	10.8	256.47	93.62	350.09	6.5
Development Banks	120.00	37.50	157.50	13.6	732.10	110.00	842.10	15.6
Power	214.20	35.00	249.20	21.5	983.27	260.34	1,243.61	23.0
Transport & Communications	127.10	11.00	138.10	11.9	791.89	149.87	941.76	17.4
Water Supply	80.74	13.36	94.10	8.1	394.95	117.51	512.46	9.5
Urban Development	16.00	--	16.00	1.4	37.65	--	37.65	0.7
Education	--	30.00	30.00	2.6	33.80	44.00	77.80	1.4
Health	38.50	--	38.50	3.3	38.50	--	38.50	0.7
TOTAL	778.23	380.51	1,158.74	100.0	3,856.88	1,547.00	5,403.88	100.0

SOURCE: ADB Annual Report, 1978.

to act within them; but afterwards, under various arrangements, its scale of operations was broadened to other European, African, Latin American and Caribbean countries. Although born from developed countries, EIB has a particular skill in dealing with "young" developing countries, as the EEC itself is (19).

The institution has a good credit standing, due to the soundness of projects considered and the forms of guarantee requested to client countries, allowing it to borrow easily on private markets, and then to lend to governments not yet able to show the same good credit position (18).

3.1.2 Export Import Bank of the United States.

Eximbank, as it is commonly known, as well as other similar organizations around the world, has as its main task the improvement of the balance of payments of the nation; this task is accomplished through facilities granted export activities. Eximbank currently holds four types of programs: direct loans, discount loans, guarantees, and export credit financing. They are carried on in cooperation, rather than competition with, private sources of capital, with the Bank taking the longest maturities (85).

The characteristics, qualifications for eligibility, and conditions of application for loans are largely described in the literature. What is worth pointing out here is that 14.5% of the total $10.69 billion of exports supported in 1978 went to construction (detail in Table 3-10), and that many items under other headings are construction related too (43).

Table 3-10

EXPORT SUPPORTED BY EXPORT IMPORT BANK 1978
(U.S. $ Billion)

SECTOR	AMOUNT	PERCENT
Mining and Refining	2.50	23.3
Transportation	1.90	17.8
Electric Power	1.60	15.0
Construction	1.55	14.5
Manufacturing	0.63	5.9
Agriculture	0.61	5.7
Communications	0.30	2.8
Others	1.60	15.0
TOTAL	10.69	100.0

SOURCE: Data from the Export Import Bank Annual Report, 1978.

Three programs among the others are particularly interesting for LDC's and construction (85). The first one, called "local cost financing", is a guarantee offered to those institutions willing to finance local operations of American contractors, consultants or others abroad. The second one is the "guarantee" on the financing of engineering, planning, and feasibility studies carried out by American firms, done under the assumption that the suppliers of the service generally are of the same nationality as the consultant (64). "Credit information" is provided by Eximbank for commercial banks lending to LDC's; this program is particularly important for those middle-sized banks planning to begin an international lending activity and lacking references, information, and experience in the field.

3.1.3 The OPEC Role

There are five ways OPEC countries spend their surpluses (51). They are:

- purchase of capital good and services for infrastructural and development projects;
- aid to other LDC's;
- purchase of arms;
- purchase of luxury goods; and
- increase of reserves and foreign assets.

Although the first steps of OPEC aid were in 1953 (Kuwait) and in 1967 (Libya and Saudi Arabia), and actual disbursement reached $1,740 million in 1973, it was after this year the increase in oil prices that

it became noteworthy (87).

The OPEC aid has been granted beginning with simple direct country-to-country disbursements; later it has been channeled through existing multilateral organizations and then through especially created new ones, enlarging during the process both the number of recipient countries and the goals. The record of net disbursements, as estimated by OECD, is given in Table 3-11.

The ongoing trade between OPEC countries and industrialized nations is an example of oil for goods, services, and financial assets. This exchange is referred to as "paying for oil" when it is for purchase of goods and services; it is referred to as "financing oil" when it is for acquisition of financial assets (also called primary and secondary recycling) (3). The distribution of OPEC's financial surpluses in types of assets is given in Table 3-12: it is shown that a great share of OPEC's revenues goes to the Euromarket, making possible its great liquidity and the huge lending to LDC's. What has been a matter of concern is the high liability acquired by banks vis-a-vis OPEC, and the fear that the surplus could be deposited on a short-term basis, thus causing banks to prudentially reduce maturities of loans and to raise interest rates.

The financial flow from OPEC has two characteristics: it is from developing countries to other developing countries and it relies on a depletable natural resource. This aid constitutes a great share of donor countries' GNPs -- namely, an average of 2.01 - 2.7% in the period 1974-1976, versus 0.34% of DAC countries (74). There are high differences within the group, comprehensible if we think that, for instance, Algeria and Nigeria are poorer than the countries they send their aid

Table 3-11

TOTAL OFFICIAL FLOWS FROM OPEC MEMBERS TO DEVELOPING COUNTRIES: NET DISBURSEMENTS

(U.S. $ Million)

Donor Country	AMOUNT					% OF GNP				
	1973	1974	1975	1976	1977	1973	1974	1975	1976	1977
Algeria	29.8	51.4	42.2	66.6	75.5	0.36	0.43	0.31	0.43	0.39
Iran	4.9	739.4	936.1	807.3	266.4	0.02	1.59	1.74	1.22	0.32
Iraq	11.1	440.2	254.4	254.7	116.5	0.21	4.16	1.91	1.60	0.61
Kuwait	555.7	1186.1	1711.2	1874.7	1917.5	9.26	10.88	11.44	13.24	13.54
Libya	403.8	263.2	362.8	363.2	270.7	6.25	2.21	2.96	2.38	1.55
Nigeria	5.7	134.8	347.5	176.8	34.9	0.04	0.60	1.37	0.57	0.11
Qatar	93.7	217.9	366.7	240.3	196.1	15.62	10.90	16.90	9.82	7.85
Saudia Arabia	334.9	1622.1	2466.7	2817.3	2742.7	4.12	7.19	7.42	6.85	5.57
UAE	288.6	749.4	1206.6	1144.5	1437.0	12.03	9.78	13.59	11.81	12.50
Venezuela	17.7	483.4	473.8	385.3	530.5	0.11	1.93	1.80	1.24	1.45
TOTAL	1745.9	5887.9	8186.0	8130.7	7587.8	1.89	3.43	4.01	3.33	2.65

SOURCE: Ibrahim F. T. Shihata and Robert, The OPEC aid record. World Development, Feb. 1979, p. 172.

Table 3-12

GEOGRAPHIC DISTRIBUTION OF OPEC'S FINANCIAL SURPLUSES
(U.S. $ BILLION)

	1974	1975	1976	1977	1978[1]
United States					
Bank Deposits	10.83	6.27	8.12	7.00	-0.53
Other	1.70	3.20	4.20	2.30	0.50
Euromarket	22.50	8.00	11.00	12.00	1.25
Developed Countries	13.50	8.00	7.00	8.75	2.25
LDCs and Non-Market Countries	6.50	9.25	8.75	10.00	2.50
International Financial Institutions	3.75	4.25	1.75	0.50	--

[1] First six months.

SOURCE: Sharif Gallib, Some of the oil Dollars become oil Deutsche Marks, Euromoney, April 1979, p. 85 (49).

to (87).

The flow from OPEC to LDC's is not tied in any way. Disbursements are likely to be for general balance-of-payments problems rather than for projects, for two reasons: first, in order to attempt to channel more funds to the poorest countries, which also lack development plans and projects; second, project financing entails technical assistance know-how which is still non-existing in OPEC countries. Actual disbursements by OPEC almost immediately follow the commitment, because the aid is not for a specific purpose; on the contrary, project financing is payed over a period of time, thus losing value in real terms by the time it is received. Also, if OPEC aid has harder terms than DAC's (according to the given definition of grant element, see Table 3-13) it is more advantageous for other reasons (87).

There is no room here for an examination of ethical, economic, and political considerations underlying this aid; it is only worthwhile to point out that, while it has reached a big level (Saudi Arabia is the second largest donor after U.S.), it is likely to continue, as all its motives are still valid and the only possible constraint to it are the home expenditures of donor countries (45).

3.1.4 Other Organizations

The goal of general economic stability and full employment is sought by the Organization for Economic Development through the sustaining of effective growth in LDC's (77). Its 24 developed country members sponsor programs of financial aid, industrial, technological

Table 3-13

GRANT ELEMENT OF OPEC AND DAC AID

	1974	1975	1976
OPEC	79.0%	72.3%	79.3%
DAC	86.0%	88.6%	88.9%

SOURCE: OECD, Development cooperation, 1978 review (74) and Ibrahim F.T. Shihata and Robert Mabro, The OPEC Aid Record. World Development, February 1979, p. 172.

and scientific cooperation; the they provide useful statistics on the Third World (74)(75).

It is worth mentioning that the IMF is not a source of project financing (14); its credits (trust fund, subsidy account, compensatory financing, buffer stock, oil and standby facilities) are short-term and for balance-of-payments difficulties, though terms of lending have recently been lengthened. Since the adoption of floating exchange rates, most drawings from the Fund have been by NODC 's (Table 3-14). An important role is invoked by the banks for the IMF in the field of international lending -- namely, the collection and disclosure of the financial and economic information it has access to (53). It has been estimated that this would ease and increase the total flow to LDC's, despite the risk of less complete and candid information provided by the countries once they know it is not kept confidential anymore (41).

3.2 COMMERCIAL BANKS

At least 800 institutions (52) (commercial and investment banks, branches, consortia and joint-venture banks) dealing in the Euromarket have done business with LDC's. They are domiciled in all the countries, including developing ones, and in the so-called banking heavens (Luxembourg, Singapore, Panama, the Bahamas and other Caribbean Islands). These heavens, by the way, account for 60% of the total LDC's banks having a Eurocurrency activity (95). Almost 20% of these institutions are U.S. based; the reasons of this predominancy are the size of U.S. banks and the widespread network of subsidiaries and branches they have all over the world, the

Table 3-14

IMF DRAWINGS - 1947 - 1979 (FIRST QUARTER)
(SDR BILLION)

Countries	Cumulative During the period				Outstanding	
	1947 to Feb. 28, 1973		1947 to March 31, 1979		March 31, 1979	
	Amount	Percent	Amount	Percent	Amount	Percent
Industrial Countries	17.4	68	28.69	59	3.31	75
Oil Exporters	0.72	3	0.69	1	--	--
Other LDCs	7.55	29	19.16	39	1.12	25
Total Drawings	25.67	100	48.54	100	4.43	100

SOURCE: IMF, International Financial Statistics, various issues.

great use of the dollar in international lending, the aggressivity shown in business by American bankers, and the lack of demand for credit lately experienced in the industrial world and especially in the United States.

This last-mentioned aspect has been a matter of concern, as it is feared that, as soon as credit demand at home beings to be brisk again, banks will slow their lending to LDC's. It has happened in 1978, with U.S. banks lending less than in previous 1976-1977 (1). The trend is unlikely to cause a real stop in the flow; however, as a country decreases its lending, others are likely to increase theirs, offsetting the previous effect. Also in time of high credit demand in the industrial nations as a whole, as in the first half of 1978, LDC's are still likely to have access to the market bacause of the higher rates of return they allow (21). Moreover, a dramatic shortage of credit to LDC's given the high percentage of it going to repayment of previously incurred debt could originate some defaults and eventually bank failures: banks are then interested in avoiding the possible dangerous repercussions in the inter-bank system (20). The distribution of Eurocredits for the period 1974 through 1978 is given in Table 3-15.

Bank lending has shown to be concentrated in few relatively less poor LDC's, leaving the majority of them without this source of capital. This trend is changing, because banks need to diversify their loan portfolios, and a broadening of the number of client countries serves this purpose. At least major banks have experts for any country and can judge whether or not to extend credit to each of them; they are willing to do it and, if they do not, it is because the country in question has not yet passed the test it has been submitted to. So far, very few LDC's are

Table 3-15

GEOGRAPHICAL DISTRIBUTION OF EUROCREDITS 1976 - 1978
(U.S. $ Billions)

	1976		1977		1978	
	Amount	Percent	Amount	Percent	Amount	Percent
Industrialized Countries	8.31	28.9	11.06	32.3	30.35	42.4
Developing Countries	17.26	60.1	20.27	59.3	37.94	53.0
Centrally Planned Economies	2.37	8.3	2.57	7.5	3.02	4.1
International Organizations	0.38	1.3	0.20	0.6	0.18	0.3
Others	0.39	1.4	0.10	0.3	0.16	0.2
Total	28.71	100.0	34.20	100.0	71.65	100.0

SOURCE: World Bank, Borrowing in international capital markets. EC-181/784, p. 156.

still considered in this position. The syndicated loan examined in Chapter 2 is another response to this need: by sharing the risk among many lenders, it lessens the possibility of catastrophic losses (21), at the same time allowing the banks to participate in many loans, for the accomplishment of the diversification policy.

From this perspective another slow change can be observed. Commercial banks still do not attach policy or income-distribution conditions to their loans, but are showing a tendency toward project loans, as opposed to the general balance-of-payments loans they were used to. This actually means that they are looking for double security in the debt-servicing capacity: they still test the financial parameters of the overall economy, but also make sure that there is a project earning income for the repayments of the loan. Again, rather than a tightening, this opens more possibilities to project financing.

In the commercial bank sector, two initiatives are worth mentioning. The first is the formation of "Multi-national Business Consortia", begun in Europe in 1964 but developed especially after 1968 (21). Consortia are joint ventures of two or more banks, separately incorporated from, but entirely owned by, the parent banks. Consortia banks typically pool skill in a particular kind of financing or knowledge of some particular region. Second is the "Islamic banking" now taking shape which consists of banks that accept deposits without guaranteeing a stated annual interest payment (12). The banks also make loans without charging an interest rate. What they receive back is the repayment of the principal and a share of the profit, or losses, of the enterprises they have loaned to. In the same way, in distributing to the depositors a portion

of the bank's profit or losses of the year, private depositors (without being shareholders of either the bank or the other companies involved), are tied to their fortunes and end up by receiving something very similar to a dividend. The system has the purpose of making possible financial activity in countries with strict rules on usury and interest payment. There have also been some issues of Islamic bonds with the same characteristics.

Finally, a word on the terms. Typically, the relationship between a country and a bank begins with hard terms and very short maturities. However, international lending has grown to be such an important and competitive field that the terms become easier, and the average maturity on Euroloans was 9 years at the end of 1978, while it was 6 1/2 in 1977.

CHAPTER 4

THE PROCESS OF FINANCING CONSTRUCTION PROJECTS

The process of financing a project is not a standard one, as there are many possible alternatives and factors influencing it. From the standpoint of the LDC there are, however, a few devices leading to the obtainment of good borrowing terms.

4.1 ECONOMIC ANALYSIS

Overall economic planning is normally performed in each country with in-house resources by the country's economic planning board. This planning in general leads to the identification of potential projects which could meet the fulfillment of goals established for each sector of the economy. Subsequent feasibility study, planning and evaluation, and the final approval could also be handled by the country itself.

The viability of a project can be examined through a cost-benefit analysis, consisting of assessing the value of all the costs and benefits accrued by a project. Costs and benefits of a project in general depend on particular socio-economic as well as technological situations of the country: they must be evaluated within its context according to what the national objectives are. When the goal of a project is only to maximize the income (79) (the traditional approach), the problem does not show overwhelming difficulties; but, as we are talking about public projects in underdeveloped areas, there are also social objectives to be included, such as the distribution of the income, the alleviation of extreme poverty,

the level of employment and other socio-economic issues. Among the cost of a project it is also necessary to include the opportunity costs of the resources employed: that is, the foregone benefits that the same resources could have earned, had they been used in some other way (88).

When all this has been determined, the net value of the whole project is calculated by one of three methods: net present value, internal rate of return, and payback method (84). Great preference is given to the net present value method, which takes into account the time value of money.

After the determination of the discount rate, the application of the method is straightforward and leads to the correct value of the project in present terms.* This method makes it possible to compare two or more alternatives, indicating which one is the most advantageous: projects are always compared with another possibility, which may of course also include the do-nothing alternative. Another option is to consider the "opportunity cost of capital", that is the return on the investment as compared with the return on the investment at the margin in the economy: the project is then undertaken when it has a higher rate than the margin, so that there is a productive and profitable use of resources (79).

What has been mentioned up to now is the normal methodology to

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*Textbooks of Accounting and Managerial Finance give the details of the computation of the NPV of a project and the way to keep account of opportunity costs. See among others: James C. Van Horne, Financial Management and Policy, Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1977; Lawrence D. Schall and Charles W. Haley, Introduction to Financial Management, McGraw Hill Book Co., New York, N.Y., 1977; Robert N. Anthony and James S. Reece, Management Accounting, Richard D. Irwin, Inc., Homewood, Illinois, 1975.

evaluate and eventually undertake new projects. However, for developing countries, a broad economic planning, aimed at the identification of needed projects and then at the study of their feasibility, is seldom performed; projects are not tested and evaluated under pure economic criteria to prove their soundness. What rather often happens is that projects are proposed, examined and eventually evaluated under the push of some influential local group. Very often in the past they have been too big and lumpy, thus difficult to fit the local economy. In many occasions they have not matched the needs of the country and have not appropriate returns. Sometimes they are conceived just to add fame to the country or personal prestige to the sponsor. Improved project evaluation techniques and insistance of international financial institutions for a sound socio-economic evaluation have, in recent past, avoided financing of such large scale grand projects.

4.2 SETTING UP OF THE FINANCING PACKAGE: THE STANDARD PROCESS

Once the project is approved by the organization in charge, it is necessary to arrange the financing: the first prospective lender an LDC looks at is a development bank. The choice of the development institution to apply first for a loan, when the project is ready is again up to the country and its financial advisor.

4.2.1 Application to The World Bank

The general pattern for LDC's is to begin with an application to the World Bank, or one of its two subsidiaries (IDA, IFC), according to the

characteristics of the project to be proposed and to the income of the country applying. There are at least three reasons why many developing countries consider the World Bank as the first source of funding.

The first is that, by submitting a proposal to the World Bank, a country has access to the Bank's skill; this may be very valuable for those LDC's lacking good technical and managerial skill. The staff of the Bank is widely considered as well prepared and up to date in this evaluation and analysis of the conditions leading to the development of a sound project. Furthermore, if the loan is granted, Bank employees continue to monitor the project during the construction phase and provide the managerial and technical assistance as well as supervision for the disbursement of funds, which are valuable for the correct implementation of project.

The second reason is that the World Bank is a fully recognized and highly respected world-wide financial institution. It is considered as a highly professional group well informed in dealing with developing countries and possessing the largest amount of information about them. Even a partial financing by the Bank is considered a sound starting point for a country and is likely to attract other lenders, in particular commercial banks. Private lenders are also willing to be associated with good World Bank projects, because in such an arrangement they are entitled to receive the first repayments, thus having a very short time of exposure (47).

The third reason is that good terms are available -- still the most advantageous (IDA lending maturity can be up to 50 years, with several years of grace) available to the borrower LDC.

4.2.2 The World Bank Project Cycle

Given its role in the financing process, it is useful to describe the World Bank's project cycle. This cycle is composed of six stages: identification, preparation, appraisal, negotiation, implementation and supervision, and evaluation (9).

The first stage, identification, is designed to avoid the drawbacks earlier described about project selection to the countries' economies. The Bank has always encouraged its developing countries members to perform a thorough economic analysis by themselves, to draft complete development plans, and try to individualize projects that fit into these plans and are profitable and attractive enough to find proper financing. The task is, however, not easy: for the least developed countries, not owning the appropriate skill and not able to afford the services of external advisors, the Bank is involved since this early stage. The involvement consists of keeping in touch with technical and planning ministries and officers of the country (104). The Bank organizes periodic missions to study the level of the development reached by the single countries, the implementation of development plans and to individualize future priorities. This work specifically serves two purposes. The first one is to avoid, especially in countries which are not creditworthy enough to be able to hope for loans other than from the World Bank, high expenses for costly feasibility studies just to discover at the end that the project they are proposing, or the way it has been organized, are not of the type matching the Bank's standard and then the study has to be re-executed. The second is that, by knowing in advance

the number and the size of the projects for which there is going to be an application for funds, the Bank can plan the future needs and assure the availability of the resources. Once projects are identified, they enter the channel of the lending program, which will take time to be completed.

The second step of the cycle, the preparation, is referred to as peculiar to the country: by participating in it the Bank could influence its future appraisal. However, it ends up by being deeply involved in this phase too, for a number of reasons. There is the need for the proposal to be in line with the institution's standards for approval, the desire to channel loans, for the preparatory studies or for importing technical skill and assistance, generally on a grant basis, either alone or in conjunction with some other institution. There is also the need to help the country in finding external consultants; to make sure that the country is developing the collateral factors and structures necessary for the achievement of the project's profits and objectives; and to take care that the appropriate technology is being conceived for the execution of the project, given the characteristics of the country's economy; and finally to attempt to time the applications for loans.

The third step is the appraisal, which is only the Bank's concern, but which can be performed with the help of technical consultants from outside. It is evident that a project must be sound from a technical, economic, organizational and operational standpoint, and it must be assured an appropriate management. These aspects will not be examined. It is instead interesting to stress the financial viability also required for a project to be approved, because the Bank needs to continue to show

profits in order to be able to borrow on the private markets and to keep on lending at good terms to LDC's. It is the soundness of the projects considered that makes the reputation of the Bank and allows it to work as an intermediary between the capital markets and the LDC's still not having access to them. The same is valid for the other development institutions; the good standing of projects considered also attracts other lenders in either co-financing or parallel financing operations.

The following step is the negotiation, to be concluded with the drawing up of a final contract. Two aspects appear in this phase: the collateral requirements of the Bank to grant the funds, such as increases in prices, manpower uses, tax structure changes; and second, the decision of whether to form a new project unit to supervise the project, how to compose it and the definition of its tasks, duties and limitiations. As in any negotiation, this, as well as the two previous steps of preparation and appraisal, requires time to be completed. Then, quite a long time elapses from the moment a project is designed and the moment the last formal step is accomplished and work may actually be begun. The time lapse has raised criticism of the World Bank for the bureaucratic procedures it undergoes and the slow-down it gives to projects.

While at this point any other lender's task would be finished and he would have only to administer the loan for his own purpose, the World Bank is still committed to implementation and supervision; the characteristics of this involvement are fully described in the contract provisions. The Bank's staff organize an information system, based on reports to be submitted by the borrowers and examined at the headquarters, and on missions and trips to the field, as well as meetings and other

direct contacts with the personnel in charge of the work, both on the borrower's and on the contractor's side. The duties are to solve the problems normally arising during the construction and entailing cost overruns, to make sure that the borrowing country continues to be commited to and concentrated on this "old" project and not distracted by new ones it may have at study at this moment, and to check the proper maintenance of what has been bought with the loan's funds. Finally, actual payments must be made; the Bank lends in the currency needed for the expenditures, because the money actually does not pass through the hands of the borrower; rather, when the contractor of the supplier bills the owner, the latter approves the bill and then sends it to the Bank. After further approval, the Bank makes the payments directly to the formers.

The task of the World Bank continues after the actual construction period is over, with an internal evaluation of the results.

4.2.3 Incentives to Other Possible Lenders

The World Bank can also refuse its contribution, either when the project does not meet the standards or when a country has already borrowed large amounts; in this case it is expected to raise new funds elsewhere, especially if it is in a satisfactory financial position to be able to find other sources.

If the financing is not granted by the World Bank there are other alternatives. A direct government-to-government loan can be sought with all its advantages and drawbacks already known. The most probable and feasible solution at this point is to look for a credit from either an

export agency or a private bank.

The willingness of a bank to finance a project may depend on a certain number of factors: a few are extrinsic to the developing country, such as liquidity in the international market and home country regulations; other are related to it. In this last category the desire to do business in that country is important. Sometimes the opening of a branch may be facilitated by the concession of a loan or may be followed by it to maintain the favor of the country's authorities. If a local branch is doing profitable business, it should not be jeopardized by refusing a credit to the government; the need for the bank to respond to the home country government about choices in lending may prevent or encourage some banks in making a loan, but this argument is weak for western banks. The stature of the leading bank if the loan is ndicated is important in attracting other lender (95).

To attract a prospective lender, a borrower developing country may offer incentives in the structure of the loan and in the way the funds are used when received. As far as the structure is concerned, it has already been mentioned how a Eurocredit can take the form of a marketable note, which can be traded and does not tie the holder until maturity. A few banks may prefer this form, despite the fact that the ongoing trade is never too large and is only inter-bank. Although few banks are biased in this sense, the promise of spending part of the funds with certain suppliers or contractors of the bank's home country may lead to good relationships and might be helpful in the award of the loan; more important, if the funds are not to be spent immediately, but it is the borrower's intention to redeposit the funds in the same bank, then the bank's reluctancy to loan the funds may be lessened.

It is, however, worth mentioning the chance that some countries, heavily borrowing but having good credit standing, have to borrow at very convenient interest rates (that is less than 1%); they can then redeposit the funds in the same Euromarket, making a profit in the arbitrage operation. It has already happened at least once for Brazil (95).

An option, though costly, still open to the borrower is to offer to take an interest rate floor on a floating rate loan. It may also be useful for the country to build a good self-image in the circle of international bankers, through the use of publications explaining programs and borrowing reasons, as well as disclosure, up to a certain limit of the debt situation and perspectives. The method has been used successfully, for instance, by Brazil, the Ivory Coast and the Philippines.

It is worth mentioning here the value of confinancing for all parties involved. The World Bank engages in confinancing, putting at disposition its qualified skill in the matter of development. It may then participate in a larger number of projects than would be allowed by its financial resources. Commercial banks like to be associated in these projects, as will be pointed out later. Finally, LDCs feel safer if, when they have to negotiate a loan, they face not only private lenders but also the World Bank. We can imagine a triangular negotiation table, with the World Bank doing its own business but also granting, with its presence, a certain degree of assistance to the borrower.

4.3 SETTING UP THE FINANCING PACKAGE: THE LIKELY PROCESS

The process of securing financing for a project can take another shape, according to how, and by whom, the first step is accomplished.

4.3.1 The Aggressiveness of Export-Import Banks

If a country is not tied from the preliminary stage to any development institution, all it has to do instead of tapping individually the prospective lenders is to put itself in the condition of being sought after. When a project is advertised in the proper international press, export-import agencies are very likely to make the initial move. Export-import agencies are most organized in the cooperation between the state and the private sector of their own country and can exploit the advantages of both for the same nature of their work; moreover, they are very aggressive in making their business.

Then, as soon as a project is made known, an export-import agency steps in by its own initiative; it studies the project and proposes to take a part of the financing, offering its conditions. It is particularly interesting for the borrower that not only are these terms indeed very convenient, but also that the organization the agency sets up and carries offers a complete "package" or services for the accomplishment of the project: private bsnks, consultants, contractors, manufacturers and other suppliers of goods are called in to study the details of the project. In a short time they are able to submit a complete plan, ready to be executed.

The fact that this "train of organizations" arrives first on a market gives it the advantages of taking more business and securing

the best terms; for the owner of the project the possibility of having a complete plan organized by others and completely coordinated offsets the disadvantages of not using international competitive bidding.

The countries famous for having the most "aggressive" export-import organizations are Japan, Germany, Canada, and Spain. Japan is by far in first place in this rank; it can count, with Germany, on a sound financial situation; all the banks and suppliers it can lead into the venture have a good reputation and are a guarantee for the owner of the project. The other countries, although aggressive in doing business, do not have the same powerful financial and technical backing. The Export Import Bank of the United States, already described, despite a recent reduction of .25% in the interest rate (43), is considered not as effective as others and neither grants good conditions to the foreign borrower nor facilitates the exporter's work.

4.3.2 The Participation of the World Bank and the Choice of Private Lenders

Especially for the now common multibillion dollar projects financing by the Export Import Agency is not going to cover the total cost; but, at this point, the borrower is certainly in a better position than before. He can tap development banks much more confidently, showing the good terms he has already been able to obtain; more than that, the World Bank sometimes happens to come in without being called; it proposes a financing, just because, given its role of leading institution in the field of development, it cannot affort to keep out

of major projects. It is quite evident who has the advantage in the following negotiation.

If there is still need for some more funds to cover expenses to finish the project, commercial banks are asked to do it. They are very likely to participate, because at this stage they face a project already largely examined by more than one expert, with a small share of risk still to be taken. Given these premises, the borrower developing country has the choice either of the leading bank, if the loan is to be syndicated, or of the lending bank, if it is to be a single lender loan.

Different variables can be estimated before making the decision (95). The first one is the size of the bank, as well as its stature and reputation: if the loan must be syndicated, a large and well-esteemed leading bank is more likely to find partners than a small one, or to provide along the funds it cannot syndicate out. In any case, the larger the bank, the better the terms obtainable. In some cases, the borrowers have checked through the World Bank the reputation of the prospective lender, whether it is a bank not very well established or any other ambiguous institution they may happen to encounter. When they want to ensure a high degree of competence they can use the services of banks that are the World Bank's advisors, as Colombia has done on some occasions.

The nationality of the bank is another aspect borrowers take into account. They can choose a bank of a country whose capital market they are planning to enter with a future bonds floatation, or whose currency of deposit base is important, in case of difficulties in the Euromarket at the moment of raising the funds. On the contrary, some nationality

can be disliked in particular circumstances: an example is the decrease in the use of Singapore banks by the Philippines since the latter have attempted to become a financial center.

The in-country branch of a bank may give an advantage to that bank. The local government may in fact feel tied to it for different motives: the financing granted in the past to trade or other activities of the country, the holding of the deposits of the country's central bank, its knowledge of the country's situation, or even the fact that government members had formally been working for that same bank. It must be remarked, however, that a foreign branch of a major bank not always has the skill or liquidity to arrange a eurocredit: when asked for a loan, it acts only as a link between the country and the parent office.

Another reason why one bank may be preferred to another is its presence in the region; again, due to a better knowledge of the borrowing country, it can evaluate the situation and then determine the most proper lending terms.

Another aspect countries may consider is the willingness banks have to compete in open tenders. It is rather more normal procedure to ask each bank for a private bid; also, not all the banks commit themselves in the syndication. A few prefer only to act as the leader of the loan, and just work to try to form the syndicate and obtain the funds at the best conditions.

4.4 THE ROLE OF THE CONSULTANT

Financial advisory service is performed for LDC's by professional firms of consultants, specialists from investment banks, and now also from commercial banks which complement in this way their business relationship with the Third World. The job of these individuals is to study the alternatives available to raise the funds and then get together the borrowers and the prospective lenders.

The financial advisor has a general business relationship with the government of the country he is involved with; he is hired at the beginning especially for a broad financial problem, such as a general situation of external debt. What the newly employed advisor initially finds is a situation of enormous debt to be either repayed or rescheduled, and many new projects for which new financing is needed. His first task is to make an inventory listing all debt service data, time of maturities and amount of repayments, and to schedule future new needs. When this preliminary work is completed, the task becomes a more specific problem: the rescheduling of previous debt and the organization of the financing of new projects.

The work of the financial advisor does not influence the engineering aspects of the project: he begins his job when these have already been determined. He can, however, be involved early in the study, and help structure the project in such a way that it is liked, and then likely financed, by one of the relevant organizations. Any one of them has its standards to be met, as well as preferences for kinds of projects and countries; it may be important to know these details to apply for

funds to the most probable lender. For this same reason commercial banks have begun to supply the advisory service, as nobody knows better than a banker what the policy of other bankers is.

The service of a financial advisor may also be requested by those host countries not biased against DFI. As there is the need of a certain environment for DFI to be attracted, the task of the advisor in this case is to individualize the devices a country should adopt and the conditions it should create in order to favor private investment from abroad.

It is believed that it is generally helpful for an LDC to have a financial advisor, who ease the search for financing due to his capability in structuring the project. He is a guarantee for the least developed country entering for the first time the international lending scene, and an aid for others trying to tap a new capital market. He works close to the financial ministries in making sure that there is a coordination in the borrowing when complicated financing packages are arranged and there is a need to deal with many institutions at the same time. Finally, he guarantees to commercial and development banks that a piece of professional work is going to be submitted, so that the LDC does not risk not being considered at all.

Great competition seems to exist between commercial and investment banks. Some commercial banks do not like to see the investment banks in the picture al all; the former attribute to the latter the possibility and willingness to raise funds for lending, instead of only providing professional service; thus they consider them as competitors. Investment banks, on the contrary, see their role as

advisors threatened by the others. While the best division of the tasks seems to be that commercial banks deal with short-term and leave long-term problems to investment banks, the existence of the competition lowers the price of the service. Fees are considered by many not adequate to the level of the performance, to the amount of money involved and to the degree of commitment necessary.

Lastly, it is worth mentioning that engineering firms attempt to provide owners with complete studies of their projects. So, while they carry on the technical engineering and architectural part of the work, they take the initiative to get in touch with the expert for the financing plan. The owner receives, in this case, a proposal that, if accepted, allows him to shorten the total project duration, bypassing one step.

CHAPTER 5

CONSTRAINTS IN LENDING TO DEVELOPING COUNTRIES

The discussion of constraints in the flow of funds to LDC's is organized according to the type of lender.

5.1 OFFICIAL LENDERS

It is not easy to find real constraints in lending to LDC's by the World Bank Group or by any other development bank. It is more correct in this case to talk about lending policies and criteria, rather than clauses and restrictions imposed on the borrower or hindrances for the lenders in raising the funds for the loan.

No apparent political consideration biases the World Bank's decisions of what projects to lend for. Some LDC's feel it is a big, strong and powerful institution, and they fear having to confront it; however, in the end they like it to be present in the negotiation. What can be said is that the Bank has reached such a large size and has developed such complicated internal procedures that it takes on the aspects and ways of operating peculiar to a bureaucratic body. This slows down its activity and makes it suffer from lack of efficiency.

Project standards are strict; consequently a great amount of funds ends up being channeled to those few countries which have reached a good stage of development, which have reliable planning skills and which can actually develop good plans and project proposals. As far as the standards and characteristics of projects are concerned, it can be noticed that they are changing with the times. The typical project

financed by the World Bank in the past was an energy power generator, in a middle-income developing country, executed by foreign contractors, viable and leading to a satisfactory return. Today's more likely project financed, confinanced or assisted by the World Bank is in a low-income LDC, produces a package of goods and services to the country, and sees as much as possible the participation of local industries and manpower at all levels.(9)

It is possible to point out in today's policy the characteristics which entitle a borrower to precedence. First of all there are the projects such as those in nutrition, education, population planning and rural development which strictly entail social progress significance. As they do not have a great amount of construction activity, this can be interpreted as a constraint in lending to construction. There is in fact a decrease of available funds addressed to this sector. Precedence is now also given to projects whose generated return is evenly distributed through different income groups in the country; projects are preferred if they lead to an increase in further investment rather than consumption - especially in those countries where the existing level of investment does not guarantee satisfactory growth.

The previous statement about the strictness of the Bank's standards must be qualified at this point. World Bank and especially IDA lending is for least developed countries, and is awarded also for projects not economically perfectly viable. A distinction is made in their appraisal between financial profit (the amount of money accruing to the operating entity) and social profit (the effect of the project on the whole economy). The same is not valid for IFC lending; the corporation is more

profit oriented in its operations, the ventures it takes part in are private enterprises, and these ventures would simply be nonsense if non-profitable. Showing losses would also preclude the possibility of IFC's making further loans.

Another concern of the development institutions is protection from the deterioration of natural resources, and evaluation of side effects of project development. The environment is, and must be considered and treated as, an economic entity. It is characterized by its scarcity, and priorities must be determined for its use. Human intervention causes alterations in the environment that must be evaluated before project execution. To this purpose, the World Bank publishes guidelines and checklists of possible consequences for each kind of projects work. (103)

The procurement process is not a constraint in loans granted by the World Bank. International competitive bidding, considered to be the most efficient in the interest of the owner of the project, is used. If restrictions were placed on procurement, a higher cost would result for the project. Slight preference is given only to suppliers and contractors from LDC's, as one new major point of the Bank's policy is to foster indigenous industries. Arguments in favor of the so-called "fair-share" (consisting in prescribing that the country recipient of the loan spend in each country an amount proportional to its quota of participants in the Bank's capital) have often been raised on large projects. This is certainly a threat to the freedom of loans from any condition, but has never been considered too much. (66).

The same of course cannot be said for other official lenders. Export-import agencies are strongly biased in favor of exporters of their own country, but this is their own duty. Governments, too, use to tie their disbursement spending conditions. They actually finance, through foreign aid to credit, some sector of their economy which lacks home demand or which is not well established in the international market.

5.2 RISK CONSTRAINTS FOR PRIVATE LENDERS

Both multinational corporations and commercial banks face a peculiar kind of risk, the country risk, when they deal with international operations. They need to keep an expert and trained staff to evaluate each country's situation; nevertheless, difficulties arise because of the many uncertainties in the problem.

5.2.1 Multinational Corporations

Multinational coporations are different from domestic ones because they face, in addition to economic and financial risk, the foreign exchange exposure arising from the necessity to operate in more than one currency, as well as the political risk. Under this latter definition fall all those limitations, controls, and discriminatory or indiscriminatory interferences (up to the extreme case of expropriation), that originate from social, cultural and political differences between the host country and the subsidiary.(21)

These non-economic constraints on the establishment of foreign corporations include incompatibility with the socialist forms of government or any political expediency the firm may be subject to; the cultural and religious differences between the corporation's personnel and the host country's population which may lead to non-acceptance of the foreign investment, or which may force local authorities to shut down the firm as a precautionary measure for safe-guarding the national heritage; finally, arguments of economic imperialism and national security threatened by the massive presence of MNC's are recurrently brought up.

Different studies and surveys have determined that political interference with MNC's operations come from countries showing certain common characteristics.(21) These countries have been ranked on several occasions, and techniques for forecasting these differences and evaluating the degree of riskiness of a prospective venture in those countries have been proposed by the various authors who have studied the subject.*(68),(73),(89)

5.2.2 Commercial Banks

The major concern of banks when they are asked to extend credit to a foreign country is the determination of its credit worthiness. It has already been seen that many factors can be included in an analysis of a country's economic situation; however, the probability that a debt will be repayed depends not only on these strictly economic factors, but also on other factors more generally indicating its level of political stability and the chances that take-over or other major events would not happen.

Many banks have attempted to set up techniques to quantify country

*See among others: R.J. Rummel and David A. Heenan. "How multinationals analyze political risk". Harvard Business Review, Jan-Feb., 1978.

risk; the final goal is to rank the countries according to their level of riskiness: that is, the probability of full repayment of their debt and interests. For the purpose of banks, risk is defined in probabilistic terms as the size of the potential loss times the probability of its occurrence; the loss is instead the difference between the discounted present value of the expected net income and the actual net income, expressed as a percentage of the discounted present value of the expected cash flow. Defined in this way, the concept of loss is different from the accounting definition of it; it also includes the possibility of only not collecting the entire amount of interest. (73)

The evaluation of country risk may be performed in the local foreign branch, if any, of the country applying for the loan, when the bank is a large one and is accustomed to decentralization; more often, it is performed in the bank's headquarters by staff economists or line personnel. The results of the evaluation are updated according to the level of exposure with that country, otherwise once a years.(50)

Four categories of methods can be listed among the techniques used by banks to assess a country's creditworthiness:(50) (78)

- fully qualitative methods, consisting in reports on a country's situation, in which structure and major points vary according to the country;
- structured qualitative systems, based on reports where format is fixed for a well-determined aspect to be pointed out, and which include some statistical observations;
- checklist systems, containing list of variables, each of which is given a score; variables can also have different weights;

- other quantitative methods, which use more complicated mathematical techniques.

The output of the study may be used to make the decision on whether to extend credit or not, or to fix loan ceilings for each country's exposure, These tests are not used to determine the interest rate on the loan. On the other hand, all the methods have some weak points. Qualitative reports allow a more complete description of the country, but not a rank of them in risk classes; quantitative methods assume, in assigning values to the variables, that they are all independent of each other. This is not true as the occurrence of one event may influence the occurence of others. Some improvement could be obtained by introducing a decision tree for each of them, although this may make the system too complicated to be managed.(73)

5.3 SUPPLY CONSTRAINTS FOR COMMERCIAL BANKS

Not all restrictions in lending to LDC's by commercial banks derive from the non-willingness to bear country risk. The middle-income class of developing countries, which accounts for the great bulk of commercial bank loans, shows that for the next ten years it will be able to maintain a GNP growth of about 3% per year, and that debt-servicing problems as a whole will not be a threat to the commercial bank system.(57)

A possible cause of commercial loan limitation consists in the lack of availability of adequate capital, and reasons for restrictions are indicated in the capital adequacy of banks, portfolio considerations, investors' attitudes, and regulatory environment - at least in the United States. (52)

It has been noticed that the capital base of the largest U.S. banks

has been eroded and that the process will continue in the near future, as earnings are not likely to be good. If the profits are low, the internal generation of capital, despite low dividend payouts, is insufficient for banks to meet future needs. Capital, on the other hand, cannot easily be raised through the issuance of new equity securities because they are not too much favored by investors, at least at present. Finally, the issuance of bonds by banks is subject to regulation: the limit of borrowing is now fixed at 50% of equity plus reserves, and the largest banks, those involved in international lending, are already close to that limit. (52)

The concentration of borrowers is a second possible constraint in the flow of funds; it is certain that banks will have to find new expedients and forms, if they want to continue to lend to such countries as Brazil, Mexico, Korea, the Philippines, and Venezuela, where banks obtain great part of their earnings. They will have to either resist to other types of borrowers in these countries and diversify their portfolios through the increase in the number and kind of borrowers, or they will have to lend to specific projects. Each borrower constitutes a different situation and thus the diversification requirements are satisfied. In this sense, the portfolio argument is not a constraint any more; rather, it makes more funds go to project opportunities in the sense already specified. Moreover, from the general viewpoint of the flow of funds to all LDC's, the banks' diversification need broadens the number of prospective borrowers and gives a chance to more of them.

The decrease in earnings, the knowledge that the banks are highly leveraged, and the awareness of the existence of country risk in international lending (especially true for LDC's) causes concern of investors,

which could be reflected in changes of banks' lending policy. In addition to that, banks usually do not disclose data on their lending abroad, and investors may as a result think that they are understating the risk of foreign operations; or they know these risks are high and thus prefer not to show the level international lending has reached. Investors also fear that the evaluation of the country risk and of the opportunity to extend credit is performed by middle-level personnel in the foreign local branch rather than by top economists in the main office. Finally, American investors trust the U.S. economy more and feel that good business can be done at home, rather than looking for it in foreign countries about whom they know nothing. All these attitudes by investors can have an impact on the bank's lending, as the amount of capital the public supplies through deposits or security purchases is affected by these considerations.

Other limitations in lending to foreign governments are due to regulations, which have been imposed because of worry that the increased number of loans has caused in the American Congress. A limit in the amount borrowed by each borrower, either domestic or foreign, of 10% of the capital of the bank is now being enforced. In addition to that, it has been established that each borrower must pass a "means" test and a "purpose" test. These tests have to indicate the capability of the borrower to repay the loan and the reason why credit is looked for. Banks are then required to collect more information on their clients and their activity. If the borrower fail to pass both the tests, credit is considered as extended to the national government, and in this way the above-mentioned limit of 10% of capital is easily reached. (52) Another concern of Congress is that foreign lending is an instrument of foreign

policy and is closely related to governmental measures of foreign aid. It should, then, in its view, be subject to some form of approval and control.

All has been said thus far is especially related to the United States; the consequence of these arguments is that U.S. bank activity with LDC's is not expected to grow in the near future at the same fast pace experienced in the recent past. But high liquidity is forecast for Western European banks, which also face at the same time lack of credit demand at home. They are expected to play the role U.S. banks used to play and to supply the capital which LDC's need.

CHAPTER 6

CONCLUSION

The review of the financing instruments and the institutions involved have shown the possibilities a country has to pay for the construction services when it has a favorable project ready to start, but falls short of its own financing means. The two possibilities have been shown of raising the funds on the internal capital market (a method that only few LCD's can implement so far) and of obtaining them from international lenders, all of them having their own forms, conditions and characteristics. It has been seen that the borrowing developing country not always has to bear heavy conditions in order to obtain the needed funds, but that it can also exploit some situation peculiar to the market, when it arises, and thus make the cost of borrowing less heavy.

It has emerged from the study that good projects in least developed and low-income countries are very likely to be financed by official institutions: loans carry low interest rates and have long maturities, if not also a grace period, very favorable for the borrower. This puts the owner of the project in position to be able to service the debt because, by the time it matures, enough return has already been generated. It has emerged also that a few countries, those considered creditworthy, are likely to be financed by private banks; their number is widening, due to the development of good eonomic management within them and to the need banks have to enlarge the number of their customers. This credit is, however, short or medium term, and at higher interest

rate, and also bears fees and other provisions that make its cost still higher.

It is also evident that the credit available is less than what is demanded; the borrower more likely to face a lack of funds is that where a project generates returns late in time, then needs long-term financing, in a country other than one of the poorest, and which thus hardly has access to the World Bank and IDA funds. If such a project finds a commercial bank willing to lend, there is an implicit need for rescheduling.

A few suggestions are given to meet future credit demand by LDCs. To incease the availability of funds inside the country there are three possibilities. The first two are to develop external trade, a concern of any nation, and to increase savings to be spent for investments, through the implementation of a capital market and the financial intermediaries necessary to foster it.(52) As a matter of fact, all the development institutions are addressing a great part of their funds and efforts to the implementation of this sector. The growth of international financial centers in the developing areas (Amman, Baharain, Manila, Sao Paolo) is expected to play an important role in facilitating borrowing by LDC's. (95) The third method is that of organizing an indigeneous construction industry. This reduces the dependence on foreign contractors to execute the work and the need of currency to pay for their service, and is a source of foreign currency itself when the industry is developed enough to win some international tender - Korea is the best example of this regard.

For an easy availability of credit from LDC's from abroad, the first proposal is always that of an increase in the World Bank's capital through the member countries' subscriptions. Other proposals include forms of cooperation between commercial banks and international organizations, such as the IMF and IBRD: the former should provide the capital and the latter the information needed to establish the most proper terms for this supply.(53) (72)

The betterment of existing financial investments is seen as another good possibility. As the issue of bonds by LDC's is not exploited enough for lack of marketability, it has been suggested to denominate them in currency cocktails, to make the instruments less volatile, or to introduce the use of floating interest rates;(52) neither of these two devices would decrease the risk of default by the issuing country, but they both make the bonds more attractive, and thus enlarge their market.

As far as the lending organizations are concerned, there is the chance to involve in this activity private non-bank financial institutions. Pension funds, insurance companies and the like are provided with high liquidity, and could appreciate new occasions of broading the range of their investment.

The new supply of capital originated from a larger number of participants on the lender's side would probably not produce a decrease in the cost of money; the increase in the supply is necessary to offset the continuing increase in the demand, at least in the short tun. On the contrary, the diversification of lenders and the forms of credits might reduce the cost of borrowing for LDC's in the the long run, as well as serve another purpose - namely, development institutions would not

be left the perogative of channeling funds to LDC's. The activity is then kept on a commercial basis and only viable ventures are considered, rather than letting it become only a charitable assistance, without profit for either the lender or the borrower.

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