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EVALUATION OF COUNTRY RISKS IN THE LOAN GRANTING DECISION MAKING PROCESS.

PROBLEMS OF BANKING REQUIREMENTS FOR GRANTING LOANS FOR

INDUSTRIAL PROJECTS IN DEVELOPING COUNTRIES\*

Ъy

Dariusz K. Rosati\*\*

<sup>\*</sup> The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the secretarist of UNIDO. This document has been reproduced without formal editing.

<sup>\*\*</sup> Associate Professor, Main School of Planning and Statistics, Warsaw, Consultant Economist, Citibank, N.A., New York.

SUMMARY

The role of private capital sources in financing the needs of less developed countries has been increasing during last decade. International commercial banks have become mojor suppliers of credits for industrial purposes. However, these credits differ considerably from traditionally provided official capital funds, stemming from governments of industrialized countries and international economic organizations.

Private banks, as any other commercial companies, tend to maximize their profits from financial activities. They apply this rule in international lending, therefore private capital is in most cases more expensive and more cautious in covering the needs of LDCs. While thoroughly preparing any loan decision, the bank has to assess the risk connected with the transaction. This analysis is usually carried out in two steps. First, the particular country's creditworthiness is evaluated in order to determine the extent of political and economic risk. Second, the particular industrial project is examined and its expected profitability is assessed. Country-project risk analysis aims to establish the optimal level of country exposure and to avoid an excessive risk in foreign lending. All commercial banks are well advanced in elaboration of a compehansive system of country risk evaluation, using a variety of economic, social and political information, although, as by far, substantial differences among banks still remain in this respect.

However, despite firm requirements, private banks show increasingly more willingness to finance viable industrial projects in developping world.

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### Introduction.

Modern developing countries are committed to accelerating economic growth and structural transformation. In particular they aim to increase considerably their industrial production to meet a large spectrum of growing social and economic needs. Since the resources of domestic savings fall usually short of these needs, the implementation of ambitious industrial development projects requires huge amounts of external capital. The international lending by private commercial banks are now to be seen as a major source of additional financial funds for less developed countries (LDCs) (1).

The traditional official sources of external capital for the developing world - both the donor countries "Official Development Assistance" and the financial flows stemming from the multi-lateral financial institutions such as the International Monetary Fund, World Bank (IBRD) and regional development banks - have long been inadequate to meet the external capital requirements of the Third World. Private sources of financing had filled this gap for many years, with private banks becoming an increasingly important constituent source. The share of private lendings in total external public or publicly guaranteed debt of the 84 LDCs increased from about 30% in 1969 to over 41% in 1975.

However, although the role of commercial banks grows dramatically, the opinion prevails among the developing countries, that increasing access to private capital remains still a rather difficult problem, and many countries continue to rely almost completely upon official sources of external capital. One can find reasonable explanation of this phenomenon in a large variety of different requirements applied in the private loan granting decision-making process. The exposition of these requirements is one of the purposes of this paper.

In section I the main features of contemporary environment of the international lending-borrowing processes are presented. The emerging role of private banks is stressed and basic principles of their international activities are derived. The general outline of routine country/project risk analysis is showed, serving as a point of issue for more detailed discussion. In section II the macro-level country risk analysis is demonstrated with the emphasis on a given country credit-worthiness and economic performances as viewed by private banks.

In section III the micro-level project risk analysis follows with the emphasis on profitability measures and guarantees against excessive risks. The conclusions are given in section IV.

I. The Role of Commercial Banks in financing the industrial development of LDCs.

The huge amounts of financial funds acquired by LDCs can be classified by type of lender as well as by type of loan. Such a classification can provide a useful background for private banks' role examination.

One can distinguish the following categories of lenders (sources of external financing).

- 1. Official lenders:
  - 1.1. Governments and their agencies, including central banks.
- 1.2. Centrally planned economies
- 1.3. International organizations, like World Bank, IMF, etc.
- 2. Private lenders.
  - Suppliers of goods and services manufacturers, exporters and others.
- 2.2. Commercial banks and other private financial institutions (e.g. insurance companies, loan and savings associations).
- 2.3. Publicly-issued and privately-placed bonds and securities.
- 2.4. Other private lenders (e.g. debt on accounts of nationalized properties, etc.)

Credits provided by different lenders vary widely as far as interests, terms and conditions of payment are concerned.

One can distinguish therefore the following principal categories of loans, acquired by LDC (2):

- 1. "Concessionary" financing, almost exclusively public, including loans with interest of 3-5 percent or even less, with maturity rather long over 5 years, and grants.
- 2. "Conventional" loans, with interest above 5 percent, but

typically between 6 and 9 percent or higher, and maturities over 5 years, frequently over 10 years, including privately-placed bonds, IBRD and other loans.

- 3. Export or commercial credits provided to finance export of industrial countries with a variety of terms, centering about 8-9 percent interest and different maturities usually less than 5-7 years.
- 4. Centrally planned economies' credits, characterised by low interest and maturity shorter than 10 years.

We can summarise the above classification in the following table, where the principal relations among lenders and different types of loans are marked with X-sign.

Table 1. Principal categories of loans and their main sources.

Loans Lenders	l Concession -ary	2 Conven- tional	3 Exp/ Commercial	4 CPEs
1.1. Governments	x			
1.2. CPEs				x
1.3. Intern.Organ.		x		^
2.1. Suppliers			x	
2.2. Private banks		x	x	
2.3. Financ.markets		x		
2.4. Other private		x	x	

The table shows the most typical connection. It is easy to see, that flows from private sources are concentrated in loans with high interests and their maturities do not exceed 10 years (with the exception of bonds) (3). Due to these reasons, credits from official sources are obviously more interesting for LDCs, but latest statistical data indicate that the role of official lenders diminishes with respect to private sources. This evolution is demonstrated in table 2.

Table 2. Creditor composition of external public debt outstanding (disbursed only) for 84 LDCs 1969-1975. (World Debt Tables 1977, US \$ billions)

No.	Lender (Creditor)	1969	1971	1973	1974	1975
1.1	Governments		· · · · · · · · · · · · · · · · · · ·			44.7
1.2	C.P.Economies	24.6	31.8	40.5		7.1
1.3	Intern.Organis.	7.1	9.2	12.9	15.8	19.4
2.1	Suppliers	6.7	8.5	10.0	11.4	12.1
2.2	Banks and Fin- ancial Markets	5.8	9.4	18.4	25.6	36.5
2.3	Others	0.8	1.1	0.8	1.2	1.1
	TOTAL:	45.0	60.0	82.6	100.1	120.9
Tota	al official in %	70.4	68.3	64.6	61.8	58.9
Tota	al private in %	29.6	31.7	35.4	38.2	41.1

The share of private sources in the global amount of financial flows to LDCs increased substantially during last several years. In particular, the credits supplied by Financial markets, i.e. private bank loans and bonds' sales experienced the highest growth rate. Moreover if we take into account the fact that commercial banks participate to the considerable extend in the overall purchase of bonds, and that they refinance almost in full credits by suppliers, we will obtain more comprehensive and precise idea of what the commercial bank's role really is in the LDCs external financing.

What were the reasons for such a substantial growth of bank lending to LDCs during the last decade? A number of factors have contributed to this process.

First of all, the so-called "concessionary" aid, regarded as very cheap, poured from official sources, falls short of the rapidly growing needs of the Third World. The increasing gap has emerged,

provoking private financial institutions to fill it up, since the bigger this gap, the lesser reluctance of LDCs to pay higher interests and give more encouraging conditions and guarantees.

Secondly, many countries have undertaken the extensive development programs in industry, mining and agriculture. This created numerous investment opportunities and attracted private foreign capital to these branches which guaranteed the prompt and relatively quick repayments and profits.

The fourfold rise of oil prices had also a great additional impact on the international borrowing-lending processes, causing simultaneously huge financial surpluses in the oil-exporting countries and deep deficits in the balances of payments of other LDCs. It is assumed that some 75 \$ billions of additional debt was contracted to compensate for current-account deficits that soared beyond previous levels (4).

The emergence and blossoming of bank lending activities has made possible the maintaining of fragile growth equilibrium in many of LDCs. However, loans provided by commercial banks and by other private sources are of different character than formerly prevailing concessionary financing. First of all the private lending has all features of financial market transaction and cannot be regarded as a grant or altruistic aid. It results from the obvious fact, that private banks are profit-seeking commercial institutions and therefore their profits should cover their costs and allow to expand their activity; otherwise they would vanish from competitive world market. This feature determines the bank's attitude towards international lending.

Secondly, the private banks have always certain opportunities for profitable investment on their domestic markets as well as in other industrial countries. They diversify their portfolios, allocating funds in countries and projects, where they can optimize their expected profits and diminish risks. Thus, the lending decision is evaluated from the lender's view-point and not the borrower's; in other words, the credit comes where

profits are expected to be high and not where the need for funds is most acute. This is probably the most important difference between official and private financing. This also explains the apparent concentration of private loans in a relatively small number of countries (Table 3).

Table 3. External public debt outstanding to financial markets in selected countries in 1975.

Country	Public debt to financial markets (millions of \$)	the total of the given	As a % of the total of the financial market loans to LDCs
1. Mexico	8455	75.1	23.2
2. Brazil	6374	55.6	17.5
3. Spain	2162	64.9	5.9
4. Algeria	2108	46.6	5.8
5. Greece	1896	74.6	5.2
6. Indonesia	1745	21.5	4.8
7. Peru	1403	52.5	3.8
8. Korea	1101	21.1	3.0
9. India	21	0.2	0.06
10.Bangladesh	11	0.7	0.03
ll.Pakistan	100	1.9	0.27
12.Egypt	250	6.9	0.69
13.Ghana	0.0	0.0	0.0
l4.Syria	20	3.0	0.06
15.Mali	1	0.3	0.0
l6.Sri Lanka	1	0.2	0.0

Source: World Debt Tables, 1977.

Over 40% of total private debt is cocentrated in two countries only - Mexico and Brazil. First eight countries count for almost 70% of total debt to financial markets. Profit-oriented character of commercial banking require the banks have to follow two principal guidelines in their activity:

- o to allocate their loans in most creditworthy countries,
- o to finance projects which are regarded as profitable and not too risky.

Thus, every credit decision is made by private banks after a thorough and comprehensive analysis of risks connected with the evaluated transaction. This conclusion applies to virtually all types of loans and among them to those for industrial project financing. The evaluation of credit decision is proceeded by private banks generally in two steps. First, the given country creditworthiness is assessed on the basis of fairly sophisticated analysis. This is to be done whether or not the loan is provided for a particular project or for general purposes. Second, the economic and financial evaluation of an eventual project is made in order to determine the expected profitability, terms of repayments and the level of associated risk.

The first step of the whole analysis is of major importance, since even the particular project does not seem to yield a reasonable profit, as it is the case of numerous infrastructure investments, like railway and highway systems, airports, hospitals, schools, etc., the loan can be granted under guarantees obtained from a given government or its Central Bank, but provided the country has gained the sufficient level of creditworthiness. Therefore, the assessment of the country creditworthiness becomes crucial element of any loan-granting decision making process.

Creditworthiness, as viewed by bank-lender, is a feature of a given country, determining its ability to service its debt and, therefore, determining a risk connected with a given credit transaction. It should be noted, that private banks do not yet dispose a completed system of creditworthiness analysis, but they are already well on their way to construct a general framework for this purpose. (5). The banks still vary in the process

used to judge the country risk and in the criteria to evaluate it. This process will be affected by the magnitude of risk assets in foreign currencies, the existence of branches and other similar entities in the borrowing countries, the length and breadth of experience in international lending, the decision-making organization at headquarters, and so forth (6). Nevertheless, some general guidelines, common for all major commercial banks, can be formulated.

- II. Macro-level of lender's analysis.
- 2.1. The purpose of country risk analysis (CRA).

Country risk analysis, as viewed by private banks, is carried out in order to determine the creditworthiness of a given country. This has twofold objective. First, this is to assess the extent of risk as far as all assets located in the country are concerned, which are referred to as country exposure. Second this must provide all necessary information for forthcoming credit decisions - whether the lending for the country can still be extended and what conditions should be fulfilled.

As a result one obtains a general idea on the level of admissable exposure - the so called ceiling which indicates the upper limit of the lending. However, this part of CRA is not elaborated on the basis of some very sophisticated methods; it relies rather upon general experience of banking officers, intuition and some general rules. For this reason, the "ceiling" is always a fairly flexible limit.

It should be noted that risk in lending cannot be eliminated. However, it can be properly assessed and, consequently, thoroughly managed in such a way as to strengthen the financial position of private bank. Yet, country risk evaluation has been made also in the past, but it becomes of much greater importance in the era of a growing private lending expansion to LDCs.

How CRA is brought about? What kind of information is used in that process? How the risk can be managed and diminished? What should be the best policy for lenders as well as for borrowers to avoid too risky decisions?

Of course, no simple answers exist to those questions. We will try thus to describe briefly some theoretical and practical achievements, applied already in routine procedure of country risk analysis in most of international commercial banks.

2.2. Type of risks involved in the lending to LDCs.

Factors affecting financial position of the private bank, both directly and indirectly, can be classified in two major groups. The risks external in origin to the country embody such events like wars, embargos, adverse effects of other countries' policies, like price and tariffs increases, impacts of inflation or business cycles, etc. This kind of risk has to be regarded as a function of foreign policy of a given country, of its relations with neighbours, its vulnerability to hostile acts of other countries. The risks internal in origin to the country can in turn be subdivided onto so-called sovereign risk and risk beyond sovereign control. The latter refers to such events like revolution, extended civil unrest or civil war, adverse economic conditions like poor harvests, earthquakes, floods, etc. This should be assessed through a deep analysis of social situation within the country, existing political parties and movements, their programs and attitudes towards external capital, management skills of governments and main commercial companies' executives and so forth.

The sovereign risk refers to the events deemed to be under the government's control such as confiscation, nationalisation, foreign-exchange controls, interest rates policy, taxation, price-wage controls, trade impediments and many others. In a world of increasing government intervention in economic activities, sovereign risk may take many diverse and novel forms. Of key importance is the attitude of government towards repatriation of capital, remittance of earnings and the servicing of external debt. The extended classification of country risk is presented in Appendix I (Chart 1).

Against this background, it is clear that country risk - seen as highly complicated combination of the risks involved in

living internationally, the risks arising from a world of inevitable uncertainty, and the risks of intervention by governments in private markets - are widespread and significant. All these events can affect favorably or adversely private bank's assets - both equity and debt. The lender's aim is to anticipate changes before they occur.

2.3. Elements used to assess country risk.

The CRA involves a variety of economic, social and political information, both published or unpublished. The key element is the systematic evaluation and monitoring of certain quantitative and qualitative indicators. Private lenders rely on various economic and statistical indicators, both domestic and international, but none of them can be taken in isolation. It must be emphasised that only joint examination of the whole set of indicators can be useful for comprehensive analysis, since particular indicators have different significance in different countries. Among domestic quantitative indicators the most frequently used are per capita income and growth rate, growth in industrial and agricultural sectors of economy, consumptioninvestment ratio, domestic savings, investment structure, fiscal and monetary indicators, overall levels of demand and supply on domestic market and so forth. Among external quantitative indicators one focuses attention on the balance of payments elements and trends, on external debt structure and growth, and debt service ratios of different kinds. The following ratios are of major importance:

- o debt service payments/exports of goods and services ratio,
- o interest payments/exports and amortization/exports
  ratios,
- o debt service/GDP or GNP and its major components ratios,
- o debt service/international reserves ratio,
- o external debt outstanding/GNP or export ratios

A country's exports are also subject of thorough analysis, taking into account their rate of growth, degree of diversification and variability. Structure and compressibility of imports are also

evaluated. All these quantitative data, although very instructive, cannot produce a satisfying outlook of a given country condition, and, therefore they must be accompanied by qualitative judgement elements. These are to handle impacts on domestic performance stemming from social and political conditions, general environment, psychological and cultural attitudes of society, etc. Various qualitative and quantitative elements used to assess country risk are shown in Appendix I (Chart 2).

The decision-making process is naturally based on all this information, but it follows them in a somewhat heuristic manner. There is no, at least until now, unified, comprehensive model for transforming data into lending decisions, using more sophisticated econometric methods, although several trials have been already made (7). Through these tentative models, one tries to obtain a sort of country rating according to attributed risks, but the results of these studies are still not very impressive.

A recent Export-Import Bank study of bank country evaluation points to a paradox: that the majority of banks use a numerical computerised system to evaluate country risk, but that such ratings do not in fact enter into decision-making process relating to foreign loans. Furthermore, some banks investigate very large quantum of indicators and the others, like FDIC and Federal Reserve in USA, use only a few (five) (8).

The main problem of ranking system or ratio analysis is that the indicators themselves can be misleading, unless they are placed in an overall context. Moreover, the quantification of political and social risks still remains an elusive area, and it is hard to imagine how any bank could evaluate country risk leaving political questions aside. The latest studies by Kindleberger and Kobrin, although fully competent and educative, don't explain the interactions between the level of lending and political instability (9). The same difficulty arises during the Delphi method application, as practised by Chase Manhattan Bank. As noted by many authors, for Delphi assessments to be meaningful, they require an accurate listing of major determinants of political risk, well-reasoned,

timely and independent opinions of knowledgeable professionals and an appropriate mechanism of statistical treatment of opinions (10). However, at least one of these factors is missing from the Delphi technique. The so-called Cross-Impact Method is likely more promising on this highly uncertain area of forecasting.

The major effort is now undertaken by many banks and academic centers to apply more sophisticated statistical models for CRA. But it is unlikely, that in the forseeable future it will yield a fully satisfying method of analysis.

### 2.4. Conclusions.

The CRA with connection to existing investment opportunities determines the creditworthiness of a given country. When risk is high, the private bank will be reluctant to extend its financial resources to the country even though the project to be financed seems to be profitable. The overall exposure in that country will be maintained on a low level and any further loans cannot be obtained but on very hard terms, or even it may be impossible.

- III. Micro-level of lender's analysis.
- 3.1. Purpose of micro-level analysis.

Having accomplished the country risk analysis, the private lender passes to in-depth evaluation of the project to be financed. In this phase two major types of situation can be distinguished. First, the bank can provide the capital to an existing company or enterprise, publicly or privately owned, for financing the maintenance or expansion of its activity. There are a number of comparative indicators and measures to help appraise the financial conditions, efficiency, profitability and prospects of a business enterprise. The banks used to apply the conventional tools like cash flow analysis, balance-sheet analysis or ratio analysis of financial statements. The second situation, more interesting for us, is when a private bank makes a loan for a new project; in

other words, when it finances the so-called start-up venture. With a new wave of industrialization this type of financing occurs more often, creating opportunity for rapid expansion of bank's lending.

Private banks usually are able to supply the financial funds for both fixed capital expenditures and working capital expenditures. However, they concentrate, at least at present situation, on conventional short term loans, generally for working capital purposes, to finance inventories or receivables. In the case of inventories it is generally for shipment of finished goods against firm orders, rather than work-in-process or speculative stocks. Alternatively, short term bank borrowings can be used by the company as "bridge" financing for construction or acquisition purposes against a firm's long term take-out from some other source (e.g. official credit). Depending on the strength of the borrower, short term financing may or may nit be received by the current asset or long term take-out the loan is financing; however, if unsecured, it should be supported by some covenant restrictions on the operations of the company and a negative pledge of assets.

The fixed capital investments (along with repair and cultivation expenditures) are basically financed by suppliers of equipment. Nevertheless, the bank usually extends the credit for supplier, although the degree of direct bank involvement to the project analysis may vary depending on the financial position of the supplying company. When the latter has satisfying economic performances, the bank can simply refinance the deliveries, granting a credit against the company's other assets. But, in most cases, the bank is willing to investigate all the economic aspects of the project itself. Bank loans may be used directly for the development of major projects, financing construction and equipment expenditures. In these cases, the long term loan vehicle is employed, generally supported by mortgage security, third party guarantees, occasionally performance guarantees and the conventional longterm loans covenants. Among them, the so-called equity-kickers

are now often part of bank loan package and are sought in the case of new development projects.

Finally, lease financing is occasionally provided by private banks, as a substitute for long term debt or for other reasons.

Private banks traditionally show more willingness to extend credits for short term working capital purposes, which reflects lender's aversion towards risk. This attitude however, must not necessarily prevail in the future, since the risk level can be diminished and to some extent compensated by higher interest rates and diversified guarantees.

### 3.2. Financial evaluation of the project.

Assuming the country is creditworthy enough, the bank evaluates the project in several steps.

First an introductory overview of the venture is done in order to decide whether the opportunity is viable enough to warrant purposefulness of further study. In this phase the type of investment is recognized (profitable vs non-profitable, productive vs non-productive, industrial, agricultural, mining, transportation or other, etc.), as well as its expected costs and viability. The private bank will not engage itself into a doubtful venture, which does not ensure the repayment of the debt. Thus, it is not of bank's primary concern to assess whether the project covers real needs of the country or whether even it will be profitable at all. Banks can supply the capital even for non-profitable or nonproductive projects, provided that the country's creditworthiness is high and sufficient guarantees exist for debt repayment. But this is the case of a limited number of LDCs; most of them in the present situation can acquire additional loans only on a basis of detailed demonstration of purposefulness of the project.

In the case of preparation of industrial projects the bank should be consulted during the pre-feasibility study, since if it has to be financed through lending, the bank's tentative acceptance of a general project idea is one of prerequisites for further feasibility study. The bank can
express its interest conditionally, provided that some
changes or improvements in the original project are to
be made. In particular, with regard to industrial projects,
the private bank want to see the venture sufficiently
export-oriented; loans for purely domestic production are
seen as much more risky as far as the repayments in foreign
currency are concerned.

Once the project is tentatively accepted the bank follows up a <u>full detailed financial analysis</u> of the project, including its profitability. One starts with cash-flow tables, investment costs assessments, time-scheduling, balance sheet projections, using conventional quantitative and qualitative tools and measures. Among the most frequently used are the following:

### A. Cash-flow forecasting.

- 1. The profit and loss statement. It is obtained through comparing three main figures amount of sales, costs of production, and other incomes and expenses (selling and administrative costs etc.) Bank always tends to estimate all costs and prices in a reasonable conservative way, independently on estimations made in feasibility study. This indicates that feasibility study cannot be based upon too optimistic forecasts of sales and costs, interest rates, exchange rates, taxes and so forth, since it can fail to be endorsed by the bank or any other private financial institution.
- 2. Operating funds generation. The items composing operating funds, minimum required cash balance included, are all obtained from the profit and loss account.
- 3. Non-operating funds generation and needs.

These funds embody new equity, debt of all kinds, sale of assets on the generation side, and capital expenditures, dividends, and other investments on the needs side.

Cash flow forecast should show sufficient profitability of the examined project. This kind of evaluation is accompanied always by ratios analysis.

- B. Ratios Measuring an Existing Company Liquidity and Indebtedness (all following numbers are to be regarded as rough approximations only, since required ratio values differ widely in dependence on the country, type and position of company, lender's attitude and so forth).
- 1. The long term debt/equity ratio the lower the better from the lender's view-point commonly required value is 1 or less.
- 2. The total debt/equity ratio the lower the better should not exceed 1.5.
- 3. The long term debt/capitalization ratio (ratio of long term debt to total amount of equity and debt) the lower the better most frequently required value is 0.5 or less.
- 4. The current ratio (the ratio of current assets to current liabilities) the higher the better usually required value is 1.5 or more.
- 5. The liquidity ratio (the ratio of cash, marketable securities and receivables to current liabilities) the higher the better commonly required value is about 1 or more.
- C. Ratios appraising funds management and "turnover" relationships.
- 1. Average daily sales.
- 2. The ratio of receivables to sales for the given period.
- 3. Average daily payments.
- 4. The ratio of payments to purchases for the given period.
- 5. The turnover ratio (the ratio of costs of goods sold to average inventory). All ratio values differ widely from company to company.
- D. Ratios referring to profitability of the project.
- 1. Net Present Value (NPV discounted value of net future profits) the higher the better.

- 2. Internal rate of return the discount rate at which the present value of cash inflows is equal to the present value of cash outflows should considerably exceed the interest rate.
- 3. Average profit ratio (the ratio of earnings before interest and taxes to total assets) should exceed considerably the interest rate.
- 4. Average net profit ratio (the ratio of earnings after interest and taxes to total assets should be significantly above zero.
- 5. Average cost ratio (the ratio of costs of goods sold to the amount of sales) should be considerably below unity.
- 6. Net profit margin (the ratio of net profit to the amount of sales) should be above zero; most preferably above 5 percent.
- 7. Pay-back period a number of years for which the NPV discounted at a fixed pre-determined interest rate is equal to total investment costs the shorter this period the higher willingness of private bank to lend.
- E. <u>Sensitivity and probability analysis</u>. This kind of analysis, if properly elaborated, allows for proper risk assessment. 1) When the extended financial evaluation (points A, B, C, D, E) of the project shows the opportunity is attractive enough, the private bank evaluates the financial ability to bring the project to completion.

<sup>1)</sup> Sophisticated sensitivity/probability analysis assumes some probability distribution for principal projected elements of cash-flow table and balance sheet items. Given high risk aversion of private lenders, the confidence intervals for mean and variance should not cover non profitable values of parameters.

All sources of financing are thoroughly analyzed in order to answer the following questions:

- a) How many independent sources of financing have declared the willingness to participate in the project? (the more the better).
- b) Do they all have the ability to meet additional expenses, having in mind the rule-of-thumb, that overruns of up to 50% are normally experienced?
- c) Can they formally be committed in this respect?

The ability of borrower to servicing the debt burdens is of major importance for the private lender. Since the repayments require often the increased foreign currency earnings, the bank insists to enlarge the share of exports in the future global sales. When the export-oriented activity is likely to play a considerable role in the future production and marketing sales promotion, the bank is more willing to provide the project with more abundant capital funds. But, again, the analysis of export possibilities is made by the bank independently although the feasibility study should extensively cover this problem.

### 3.3. Guarantees.

Private bank are profit-seekers but they are also loss-avoiders. Borrowers must expect private banks to be the most cautious of all sources of external financing (10). Thus, all kinds of guarantees are welcomes by banks and they always strengthen the creditworthiness of the country as well as increase bank's willingness to finance the project. It is not possible in this paper to discuss all types of guarantees and to determine the circumstances in which one is preferable to another. This will almost always vary with the particular facts surrounding each case. The private bank generally prefers to obtain unqualified guarantees, which are referred to as a direct commitment by the guarantor to reimburse or protect the bank at the latter's call. The gualified guarantee is a partial covering of a percentage of the obligation, or a fixed amount up to a stipulated maximum figure, like for example: "put" agreement, working capital

guarantee, asset purchase guarantee, "take-or-pay" contracts and others. The private bank usually does not accept the so-called moral guarantees, which is a third party's declaration to "stand behind" a borrower. The guarantee's value, as viewed by the bank, depends obviously on the quarantor himself. Lending transaction, which is guaranteed fully by Export-Import Bank or U.S. Government's agencies, like e.g. Department of Defense, is usually regarded as a most safe loan. Thus, the quarantee by governmental entities in the lender's own country can effectively eliminate the risk of the transaction. The quarantee by governmental entities in the borrower's country can reduce the risk and encourage to extend the sufficient amount of loans, but provided the country creditworthiness is appraised. Central Bank guarantees are especially useful in this category, in particular, where there is a tradition of the central bank's giving the highest priority to safeguarding his own creditworthiness with foreign lenders. The quarantees provided by export-credit quarantee agencies in principal industrialized countries are also willingly accepted by private banks (11). Since part of foreign lending by private banks is to overseas branches or affiliates of multinational firms it is also possible to request the headquarters company to quarantee the debt incurred by its branch or subsidiary. This kind of "second-wayout" is often a feasible way to satisfy conditions of creditworthiness of the country. However, these private quarantees are not likely to play a significant role in the industrial project financing, since they are always limited to relatively medium and small lending transactions.

Finally, country risk can be reduced by provision of <u>collateral</u> (e.g. gold, foreign currency deposits, other securities). This is more likely to occur when a country is beginning to establish its creditworthiness with private banks.

### IV. Conclusions.

The general private lending approach to lending to LDCs with special consideration of industrial projects financing was presented in this paper. As we can see, one can formulate

but very general rules of banking activity in this area. The number of factors affecting lending decisions is enormous; in addition, many of them are grasped and analyzed in a heuristic, even intuitive way, which does not allow for more systematic approach. Furthermore, it should be noted, that lending decisions are influenced not only by borrower's economic and political conditions, but also by particular bank's policy, experience and financial position. This paper deals mainly with the former, the latter being assumed to become a subject of eventual separate study.

Although loan-granting decision making process is determined by so many variables, that no precise rules can be established by far, the paper covers general principles and guidelines of this process, as seen from the private bank's viewpoint. One can summarize the analysis in the following table of private lending priorities.

Table IV. Private-lending priorities.

		Project		
Country	Loan	Profitable	Non-profitable or highly uncertain	
Creditworthy	Guaranteed	A	В	
	Non-guaranteed	В	С	
Risky	Guaranteed	В	D	
	Non-guaranteed	С	-	

In the table the different areas of private banks' priorities are shown, where A, B, C, D stand for first, second, third and last priority for lending. The right down element of the table indicates that there is no loans available from private source, when both the project risk and country risk are too high. However, it should not be the case of industrial projects, which all are usually regarded as generally profitable

(or at least they should be). Thus, for these projects only first column of the table applies, indicating that private capital can almost always be supplied for them. Turning to somewhat prospective aspect of the problem, one can ask what will be the future of private lending for industrial projects in LDCs, and whether one can expect private banks to increase their involvement in financing of these projects. It seems that rather optimistic view in this respect prevails among banking executives. further evolution of international economic orders should act in favor of increased creditworthiness of many LDCs, encouraging private capital sources to expand their lending. The industrial projects, if properly evaluated, feasible and viable, warrant usually sufficient rate of profit to be considered as favorable investment opportunities for private banks.

### APPENDIX I

### CHART 1

### CATALOGUE OF COUNTRY RISKS

### FACTORS AFFECTING BANK BOTH DIRECTLY AND INDIRECTLY VIA CUSTOMER BASE

## Risks External in Origin to the Country

- Hostile or Discriminatory Acts, Short of War
- Special Vulnerabilities of Bank And/Or Customer Base to Other Types of External Events Including Effects of Business Cycles, Oil Price Increases, Inflation, Food Shortages

# Risks Internal in Origin to the Country

- Revolution
- Extended Civil Unrest
- Adverse Economic Conditions and Outlook Affecting Bank And/or Customer Base
- Confiscation
- Nationalization
- Indigenization: Ownership and Personnel
- Exchange Controls and Practices in Respect of
  - Repatriation of Investments
  - Transfer of Earnings
  - Minimum Tenor Limitations on Foreign Currency Borrowings
  - Other Restrictions on Foreign Currency Borrowings
  - Multiple Currency Practices Applied to Capital Flows
  - Servicing of Foreign Currency Loans
  - Exchange Declaration
  - Exchange Surrender
  - Exchange Rationing, etc.
  - Advance Deposit Requests
  - Swaps
  - Hedging
  - Future Exchange Transactions
  - Impact of Bilateral Agreements

### CHART (cont'd)

- Trade Controls and Practices, e.g.
  - Tariffs on Imports
  - Quotas on Imports
  - Other Forms of Import Restrictions
  - Export Taxes/Rebates, etc.
- Other Government Action, e.g.
  - Fiscal, e.g. Increases in
    - Direct Taxes
    - Indirect Taxes, etc.
    - Changes in Subsidization Policy
  - Monetary, e.g. Changes in
    - Reserve Requirements
    - Government Credit Policies: Debt/Equity Constraints, etc.
    - Rate Ceilings
    - Open Market Operations
    - Policies Relating to Credit Allocation, etc.
  - Exchange Rates
    - Fixed
    - Floating
    - Multiple Rates
    - Devaluation Policy, etc.
  - International Reserves and Intervention Policies
  - Public Investment
  - Wages
  - Prices
  - Regulatory
  - Change in Policy Toward U.S. and
  - Changes in Policy Toward U.S. and Foreign Multinational Firms

SOURCE: Office of the SAIO, Citibank, N.A.

### CHART 2

# MAJOR QUALITATIVE AND QUANTITATIVE ELEMENTS USED TO ASSESS COUNTRY CONDITIONS

### 1. Qualitative

Impacts on domestic economic performance stemming from:

- A. Global Interdependencies
- B. Trade Vulnerabilities
- C. Proposals and Agreements Taken in International Forums
- D. Social Conditions
- E. Political Outlook
- F. Government Domestic Economic Management
- G. Government Balance of Payments Management
- H. Flow of Funds and Financial Intermediation -- Actual and Potential
- I. Principal Economic Sectors -- Trends and Prospects

### II. Quantitative

- A. Debt Structure, Profile and Debt Servicing Ratios, e.g.
  - Debt Service Payments
  - Interest Payments
  - Interest in Relation to Debt Service
  - Debt Service in Relation to Gross Capital Inflow
  - Debt Service in Relation to GDP and Its Major Components
    - o Domestic Savings
    - o Consumption
    - o Total Investment
    - o Public Investment
  - Debt Service to Total Exports of Goods and Services
  - Debt Service in Relation to Imports
    - o Total Imports
    - o Consumption Imports
    - o Capital Imports Total and Major Components
  - Debt Service to Total Government Expenditures

Note: To the extent possible, under A. a distinction should be drawn between debt guaranteed by government and non-guaranteed debt; where significant and feasible, a further disaggregation should be attempted.

### CHART 2 (cont'd)

- Debt Service to Total Government Revenues (Excluding Borrowings from Central Bank
- Debt Service on Government and Government Guaranteed (Debtor Government) Debt in Relation to Debt Service on Total Debt
- External Debt Outstanding in Relation to GDP
- Debt Service on Debt to Lenders Guaranteed by Government
- Debt Service on Debt to Lenders Not Guaranteed by Government
- B. Exports
  - Rates of Growth of Exports -- Real and Nominal
  - Diversification in Products and Markets
  - Percentage Shares of Main Categories of Exports
  - Variability of Export Earnings During Past Ten Years
  - In Relation to GDP
- C. External Debt Outstanding in Relation to Exports
- D. Exports to Imports
- E. Imports
  - Rates of Growth of Imports -- Real and Nominal
  - Diversification in Products and Markets
  - Percentage Shares of Main Categories of Imports
  - Variability of Import Payments During Past Ten Years
  - In Relation to GDP
- F. Compressibility of Imports
- G. Changes in Level of Reserves
- H. International Reserves in Relation to
  - External Debt
  - External Debt Servicing
  - Categories of Imports and Other Payments
  - Available Credit with International Agencies
    - e.g. IMF, World Bank, IDB, etc.
- I. Per Capita Income -- Growth Rate
- J. Fiscal Indicators
- K. Monetary Indicators
- L. Investment and Savings Ratios
  - Total Investment to GDP
  - Domestic Savings to Total Investment
  - Foreign Capital to Total Investment
  - Foreign Debt Capital to Total Investment
- M. Service Items and Balance of Payments (Excluding Debt Servicing)

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- N. Capital Flows, Disaggregated as Feasible
  - Outflows
  - Inflows
  - Net Flows
- O. Indicators Especially Constructed for Individual Countries, e.g. Capital Flight, Proportion of External Debt to GDP

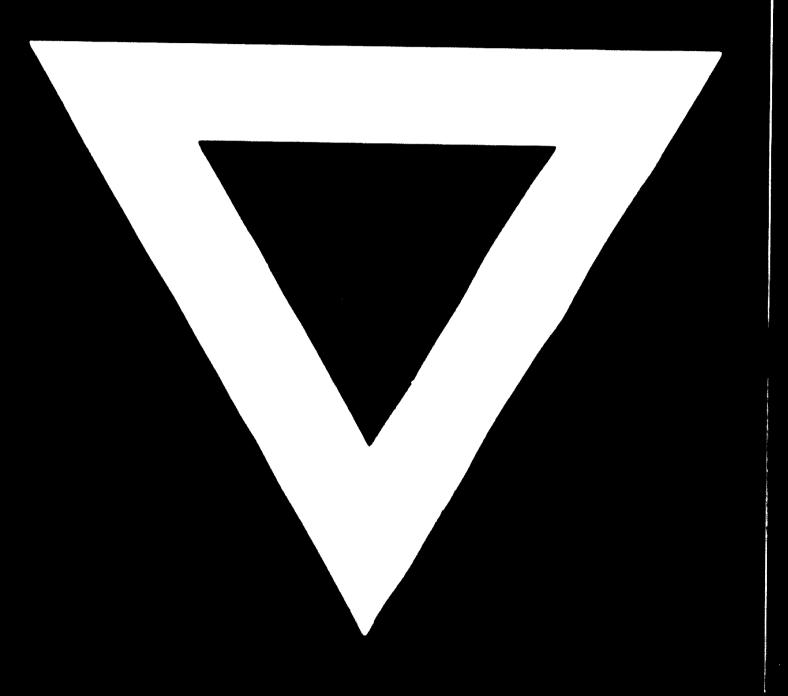
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- 3. In most cases the share of loans with maturities over 5 years does not exceed 20% of the total portfolio located in LDCs.
- 4. See e.g. A. Fishlow "Debt Remains a Problem", Foreign Policy, No. 30, Spring 1978, p. 135.
- 5. This view was expressed during Alpbach Economic Seminar of the Austrian College, August, 1978 (Journal of Commerce, 8/30/78). This opinion prevails also in the recent Exim-Bank study ("Financing and Risk in Developing Countries", August, 1977 unpublished).
- 6. I.S.Friedman, ibid., p.48.
- 7. See, e.g.: Ch.R.Frank and W.R.Cline "Measurement of Debt Servicing Capacity: An Application of Discriminant Analysis", Journal of International Economics, Vol.1, No.3, 1971, G.Feder and R.Just "A Study of Debt Servicing Capacity Applying Logit Analysis", Journal of Development Economics, Vol.4, No.1, 1977, N.Sargen "Use of Economic Indicators and Country Risk Appraisal", Economic Review, Federal Reserve Bank of San Francisco, Fall, 1977; P.Dhonte "Quantitative Indicators and External Debt Problems", IMF Paper, February, 27,1974; K.Saini and Ph.Bates "Statistical Techniques for Determining Debt-Servicing Capacity of Developing Countries", Federal Reserve Bank of New York, September, 8, 1978. These and many other studies deal primarily with debt rescheduling or defaults forecasting, using various statistical approaches.
- 8. See Exim-Bank study, ibid.
- 9. S.J.Kobrin "The Conditions under which Political Disruption Results in Increased Political Risk", MIT, Alfred S.Sloane School of Management, January, 1977.

- 10. I.S.Friedman, ibid. p.76.
- 11. It is the case of Export-Import Bank in USA. Equivalent agencies in other major countries are "Hermes" in West Germany, ECGD in United Kingdom and COFACE in France.



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