PRINCIPLES OF DEVELOPMENT BANKING

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CONCEPT OF DEVELOPMENT BANKING

Development banking is a form of financial intermediation designed to help the country reach a higher and sustainable level of development. On the broader context, the desired level of development includes the whole spectrum of socio-economic progress. Development banking is also defined as a form of financial intermediary providing financing to high priority investment projects in a developing economy. Both definitions imply that the purpose of development banking is to bring the country to a higher level of development.

The above definitions recognize a development bank as a "bank" in the business of "development". As a financial intermediary, it facilitates the transfer of economic resources from the surplus sector to the deficit sector. In other words, from the saving sector to the investment sector. In this function, it is operating just like any other bank.

However, development banks are supposed to invest in "development projects" earning it a name development bank. It is classified as a development finance institution (DFI) together with other non-bank development organizations whose business is to help a country in its development efforts. This brings us to the first dilemma confronting development banks: it has two sets of relatives with different operating strategies and investment objectives. It is a product of the marriage between a development financing insti-

tution and a commercial bank. Its godfather is the government. Unless it is able to define its role and determine its playing field, it will always bump into problems of institutional identification and unwarranted competition from its relatives.

This paper will discuss both the theoretical and practical aspects of development banking. The academic discussion of its principles will be tempered with the "real world" of banking operations.

Development banks have been evaluated by using disjointed performance parameters: judging it as a financial institution and ignoring its development role or vice versa. The biggest challenge facing development banks is how to reconcile these two seemingly conflicting views. We may develop different indices for rating the performance of development banks, but the best indicator so far is the fact that many of them survived.

OBJECTIVES OF DEVELOPMENT BANKS

The objectives of development banks can be summarized into two: 1) to increase the savings rate, and 2) to increase the investment rate.

The first objective could be achieved by raising capital from capital markets abroad, inviting foreign direct investment, developing domestic financial markets, and mobilizing the non-traditional sources of capital. Besides the initial capitalization provided by the government, development banks should not rely on the continued injection of government money but instead raise capital from somewhere else. Getting some government subsidy is different from relying entirely on government budget. If it relies entirely on government budget, it is not increasing the savings rate since government money also comes from public savings.

The second objective could be achieved by investing in projects that commercial banks would be unwilling to enter. These are the "development" projects that require large volume of capital, risky, needs long term financing, and are low in the bankability scale. Commercial banks will invest in these projects when they become "commercialized" or have been proven to be financially profitable. In theory, development banks would not contribute to increasing the investment rate if it competes with commercial banks.

The two objectives are mutually exclusive. The success of one does not depend on the other, although in the long run more savings would lead to more investment and more investment could result to more savings. If these objectives sound like government objectives, the truth of the matter is: they are. Development banks and other non-bank development financing institutions are government tools and partners to achieve these objectives.

Individual development bank pursues both or either one of these objectives depending on their operating charter. One bank would concentrate in channeling capital from traditional sources (government and domestic capital market) to stimulate the manufacturing sector as in the case of industrial development banks. Other banks would engage in attracting capital from non-traditional sources and at the same time invest in non-traditional investment activities such as in rural development banking and micro-enterprise development banking. Some banks serve as saving and loan centers and raise capital through public debt (bonding) to finance housing projects. Some development banks help importers and exporters have access to foreign exchange such as import-export banks. These development banks, in one way of another, are trying to increase the savings and investment rates.

RECENT EVOLUTION OF DEVELOPMENT BANKS

Development banking can be said to have started during the time of industrial expansion in countries now considered to be more developed. The 1930's and the years following the Second World War saw the establishment of financial intermediaries engaged in development financing in many developing countries. During this period, the focus of development financing appeared to be industrial development. Industrial development banks can be considered the pioneers in development financing. This is consistent with the theory that the direction of development appeared to be from agriculture to industrial development. Industrial development has been emphasized in the development plans of many developing countries and governments established industrial development banks to achieve this purpose. As a matter of fact, their establishment was a part of the development plan itself. At the initial stage of industrialization, investments in manufacturing and processing are considered risky and untried. These types of investments also require large volume of capital and long-term finance. Industrial development banks

were established to fill this investment void where commercial banks are reluctant to enter.

Soon, the developing countries realized that industrialization could not be sustained without the concurrent development in agriculture and other sectors. This phenomenon put into motion the establishment of other development banks and non-bank financing institutions. In less developed countries (some authors referred to this countries as pre-takeoff countries), multipurpose development banks were formed. These development banks serve the needs of various sectors of the economy needing a push. As the country gains more development momentum, more specialized development banks were established such as agricultural development banks, microenterprise development banks, cooperative development banks, import-export banks, rural banks, housing development banks, and other sectoral development banks. Specialized industrial banks were established to serve specific industrial clients such as in manufacturing, technology, mining, steel, and energy supply.

According to the records of the Association of Development Financing Institutions in Asia-Pacific (ADFIAP), there were 550 development banks worldwide or an average of 2.8 development banks per country. There are 121 development banks in Asia and the Pacific region. In addition, there are 32 international, regional, and sub-regional development banks. Africa has 147 development banks and 47 development banks can be found in the Middle East. The rest are located in the Western Hemisphere and Europe.

Most development banks are government-owned, some are privatelyowned. This is specially true in developing countries. The government owned development banks were established to support the development strategy of a particular developing country.

During the 1960's when industrial development is thought to be the main road to development, many countries established industrial development banks to stimulate investment in manufacturing and commerce. When the need to link agriculture to industrial activities emerged as a better strategy, agricultural development banks were established to increase agricultural production. Land banks were established to finance land reform. Cooperative banks were founded to stimulate investments in marketing and consumer cooperatives. Agro-Business banks were established to stimulate small to medium investments in food processing, transforming agricultural produce

to commercial products, livestock feed processing, and commercial grain and livestock processing. Rural banks were established to integrate the rural population to mainstream economic activity and to mobilize non-traditional source of capital. Many developing countries established specialized development banks to support sectoral development as in tourism, import-export, marine production, micro-enterprises, rural development, and other development areas.

In countries that have attained a higher level of economic development, commercial banks have taken a significant role of providing private capital to development projects as these projects become bankable. In these countries, investments in industrial activities, transportation, communication, and energy generation were taken over by commercial banks. The role of development banks in these investment areas was changed from the initiator to a participant in a loan package. Participation of a development bank in loan packaging is important in order to demonstrate to commercial banks the viability of the investment. It also reduces the exposure of commercial banks to a more tolerable limit.

A number of industrial banks that started as publicly owned institutions were privatized. In addition, many commercial banks started to invest in development projects in consortium with development banks. It implies that the "business of development" is becoming profitable. As a matter of fact, the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC), members of the World Bank Group are profitable banks. Their surplus is being channeled to the International Development Association (IDA), another member of the Group. IDA loans are targeted to less-developed countries. These loans have low interest rates and longer repayment period compared to IBRD and IFC loans.

ROLES OF DEVELOPMENT BANKS

The primary role of development banks is to supply the "missing ingredients" needed to sustain the current level of economic development and to bring the country into a higher level. For many developing countries, the missing ingredients include capital, technology, foreign exchange, and entrepreneurship.

The production function for the economy is Y=f(L,Lb,K,E,T). It means that the national output (Y) is a function of land (L), labor (Lb), capital (K), enterpreneurship (E), and technology (T). The entrepreneurs combine the other "factors" to reach a desired level of production. The entrepreneurs (E) are the investors who have the knowledge and skills for sound investment decisions and are able and willing to manage the risks. Depending on the size of the investment, investors might need the support of managers who have the expertise to manage the business. Together, they determine the right mix of the other factors of production such as capital, land, labor, and technology.

In general, developing countries have favorable factor endowments or comparative advantage in land and labor. It has a comparative disadvantage in the supply of capital, entrepreneurship, and technology. These are the "missing ingredients" for the developing countries. Comparative advantage means that a country can supply the factor of production at a lesser cost compared to another country. The more developed countries have comparative advantage on the supply of capital, entrepreneurship, and technology. Developing countries could wait until they increase capital formation, develop local entrepreneural skills, and develop the needed technology on their own. Chances are they do not have adequate economic base to do these on their own. In addition, many developing countries like to increase the rate of development in the shortest time possible. This situation puts developing countries in a position whereby the missing ingredients are to be supplied from more developed countries.

The process of supplying the missing ingredients is a continuous process. As the country gains more development momentum, demand for these missing ingredients will increase. Logically, it can be assumed that as the country develops, its capacity to absorb the missing ingredients will also increase. The continuous supply of these ingredients will lead to the increase in savings rate and investment rate, the two main objectives of development banks.

In the process of supplying the missing ingredients, development banks should be performing the following roles:

INITIATOR

Development banks are playing a "supply leading" role in providing the missing ingredients. Supply-leading is when the institutions, such as development banks, are created in advance or in anticipation for the demand for these ingredients. "Demand-following" is when the institutions, such as commercial banks are created in response to the demand. In the supply-leading role, the development banks should seek every opportunity to "stimulate" the demand for the missing ingredients and to create the capacity of the economy to absorb it. An example is in technology transfer. If the private sector is not taking advantage of new and improved technologies, the development banks should encourage its transfer through its lending activities. Another example is in the development of entrepreneurial skills. The development bank could put as a condition of a loan that the owner and managers of the small-scale food processing plant attend business management seminars.

INSTITUTION BUILDER

Development banks should develop new methodologies, techniques, and system in raising capital and increasing investments in non-traditional areas. One example is when a development bank develops a system of attracting capital from non-traditional sources such as farmers and small businessmen. Once the system proved to be effective, formal guidelines could be develop for other banks to follow. When that happens, the system of raising capital from these sources is said to have been "institutionalized". Another example is when development bank developed a new financing structure for a large industrial project. Once proven to be successful, such model can be used by the private sector in financing similar projects. Still another example is in the area of microenterprise financing. This type of financing has been "institutionalized" in many countries, both in developing countries and in more developed countries, due to the pioneering activities of development banks.

AS A CATALYST

Commercial banks are reluctant to invest in projects for varied reasons including: level of risk (because the project is a new venture), large financing requirements, long term repayments, untried creditworthiness of prospective borrowers (as in microenterprise and agricultural financing), and other reasons. If these projects are vital in the process of economic development, development banks should develop a financial package involving private investors and commercial banks. It should build the confidence of the private sector in the financial viability of the project. The mere fact that the development bank is a participant in the package would demonstrate that it is okay to invest. The development banks could either absorb a large portion of the required investment or offer some guarantees on the repayment of their loans. For example, the Multilateral Investment Guarantee Agency (MIGA), a member of the World Bank Group, gives guarantee to foreign investors againts political risk. This guarantee reduces the risk exposures of foreign investors who will be participating in a financial structure prepared by the International Finance Corporation, another member of the World Bank giving loans to the private sector investors in developing countries.

The development bank should reduce its exposure as private investors and commercial banks gain more confidence in specific type of investment. In this role, the development bank is serving as a "priming device" to draw the commercial banks into the project.

DEVELOPMENT ADVOCATE

The lending strategy of development banks should always consider development contributions as an integral part of the scheme. After all, it is in the business of "development". Development benefits include employment generation, utilization of domestic resources, increasing income of farmers and industrial workers, saving and earning of foreign exchange, transfer of new technology, and improving entrepreneurial skills of non-traditional investors, and other benefit. If the lending ac-

tivities of development banks do not result to development benefits and is geared solely to recouping its loans, one can say that it is operating just like any other commercial bank. In addition to development benefits, development banks should also be "beneficiary-oriented" since development project are targeted to specfic beneficiaries. As a development advocate, the development bank should make sure that the intended beneficiaries receive the benefits. The following example will clarify this point. If the agribusiness loan granted to a corporation was intended to increase the income of the tomato farmers with the influence area of the processing plant, the development bank should see to it that the intended beneficiaries (tomato farmers) actually benefited.

BANK OF LAST RESORT

Development banks are expected to invest in areas where commercial banks have not gone before or are reluctant to get involved. This role is closely related to the other roles discussed above. In this role, the development bank will be providing financing to projects proposed by private investors but because of its nature could not be financed by commercial banks. This role is different from being an initiator since the project idea comes from the potential private investor. As an initiator, the investment idea comes from the development bank. The development bank should help the private investor design the project carefully and device techniques to minimize the risks. This is especially true in projects with barely enough financial return to the private investors but promising tremendous development benefits. Most likely in this case, the private investors would be seeking to reduce their exposure, asking for a subsidized lending rate, or seeking the technical assistance of the bank in designing the investment.

DEVELOPMENT BANKING AND STAGES OF ECONOMIC DEVELOPMENT

There are three stages of economic development. The first stage is called pre-takeoff, the second stage is takeoff, the third stage is called mass consumption. The World Bank called the pre-takeoff countries as low in-

come countries, the takeoff countries as medium income countries, and mass consumption countries as high income countries. The classification is based on Gross National Product (GNP) per capita.

Development banks should be monitoring the progress of economic development. It implies that development banks should maintain a very close link with the national economic planning agencies.

The pre-takeoff countries are those that are still trying to build their momentum for economic development. In short, they have not "taken off" yet. Their development batteries were weak and need to be "recharged" with the missing ingredients mentioned above. These countries are mainly agricultural where a large portion of labor force (about 69%) are engaged in agricultural production. Consumption pattern is basic. Their export is mostly minerals and agricultural products. Its import is mostly processed consumption goods, capital goods, and technology. Energy consumption (a determinant of industrial activities) is small. Its physical infrastructure (as in transportation and communication) and socio-economic infrastructure (as in education and health) are still underdeveloped. The level of technology is mostly land and labor intensive.

The takeoff stage is further subdivided into early takeoff and advanced takeoff.

The early takeoff countries are still in agricultural production but with a growing small to medium industries. A decreasing portion of labor force (31%) still in agriculture also characterizes it. It implies that a significant number of laborers are able to find employment in the growing industrial sector. Capital intensity is increasing in agricultural production technology. Consumption pattern is semi-processed products. Their export is still basic mineral and agricultural products but the export of semi-processed products is increasing. Energy consumption is increasing due to the demands from the growing small medium scale industries. The physical infrastructure (as in roads and communications) and socio-economic infrastructure (as in education and health) is (or should be) increasing. At this stage, the technological mix is land and labor intensive but with increasing level of capital intensity. The mix depends on how much comparative advantage the country still enjoys on labor.

The portion of labor force still in agriculture continues to decrease as the country reaches the advanced takeoff (only 21% is still in agriculture).

The decreasing portion of labor force in agriculture does not mean that agriculture is being abandoned. It simply means that more and more capital and technology are being employed in agriculture in lieu of sheer manual labor. The industrial sector continues to grow with increasing investments in medium scale industries. Some countries at this stage are even adopting a large scale and more automated manufacturing. The significant increase in energy consumption is a result of increasing industrialization. The physical infrastructure and socio-economic infrastructure should also be improving.

Mass consumption countries have attained full industrialization and in agricultural production. With the application of more and more capital, technology, and entrepreneurship, the percentage of labor force still in agriculture have significantly decreased (only 5% on the average is still in agriculture). The farmer who is both laborer and entrepreneur applies more and more capital and technology to produce more in a given piece of land. In many instances farming and livestock production is completely a corporate industrial operation.

The above discussion points to the fact that the direction of economic development is from agriculture to industrial development. This is evidenced by decreasing percentage of labor force in agriculture and increasing consumption of energy. The shifting from agriculture to industry is also characterized by increasing capital intensity in technology.

If development banks are cognizant of the process of economic development, it would be able to incorporate the supply of the "missing ingredients" in its financing strategy.

THE CONCEPT OF BALANCE (OR RATHER UNBALANCED) GROWTH

This concept tells us that in a certain level of economic development, the amount of direct productive activities (DPA) and the supply of social overhead capital (SOC) are in equilibrium. This simply means that before agriculture and industry (DPA) could attain optimum level of production, there must be adequate supply of transportation, communication, education, health and other infrastructure (SOC).

This concept assumes that the direct productive activities come from the private sector and the responsibilities of the public sector is to supply the social overhead capital. In some countries however, the government is still engaged in direct productive activities in the form of government-owned corporations.

The investment initiative could come either from the public sector or from the private sector. Normally, the initiative comes from the public sector. In this case, the government would build adequate transportation, communication, and energy supply facilities to attract private investment in either agriculture or manufacturing. This is particularly true in designated development areas such as industrial estates.

The provision of additional SOC would serve as a magnet for DPA to follow until another equilibrium is reached. At this point, the economy is "balanced". To spark a new round of development activities, either the private sector or the public sector should initiate more investment. This will "unbalance" the economy. As the private sector and the public sector responds to the initiative of the other, the economy is being propelled to higher and higher levels of economic development.

In the earlier stage of economic development, the supply of missing ingredient such as capital, foreign exchange and technology are mostly geared towards social overhead capital. This is expected to attract private investment. If the private investment is not forthcoming, it is still incumbent on the public sector (including development banks) to show the way.

Development banks are expected to participate in both DPA and the provision of SOC. Their financing activities should support the provision of physical and socio-economic infrastructures (SOC) and lead the way for private investors and commercial banks to invest in DPA. An example, in the supply of SOC is when a development bank participates in financing of transportation and communication projects. An example in DPA is when the development bank initiates the financing of industrial projects.

THE CONCEPT OF OPPORTUNITY COST AND ITS APPLICATION TO DEVELOPMENT BANK'S OPERATION

Opportunity cost is important in the process of allocating scarce economic resources. Since the purpose of analyzing investment is to determine its overall merits in comparison to other opportunities, it is important to know what is being foregone when resources are devoted to a particular investment. The following illustration will clarify this point.

The opportunity of investment is equivalent to the benefits of the "second-best" alternative that is foregone. Assume that there are two investment alternatives open to us, namely: B1 and B2. Assume further that each alternative requires an investment amounting to M1 (which happens to be our maximum ability). Since M1 is not enough to implement both alternatives, we are constrained to select between them. If we decide to invest M1 in B1, we will lose the opportunity to implement B2. Obviously, such decisions based on the analysis that B1 has a higher return than B2. If the return on B1 is 12% and the return on B2 is 10%, the opportunity cost of our decision is the "foregone" opportunity to earn 10%. In this case, our economic benefit is 12% and our opportunity cost 10%, giving us an economic surplus of 2%.

Another simple example could further illustrate this concept. Suppose we decided to borrow in order to invest in a project. If the lending rate is 14%, the project should give an internal rate of return (IRR) equal or more than 14% because it is the opportunity cost of our investment. If instead we withdraw our money which is earning 10% from the bank, we will not invest in an investment project unless it gives an IRR equal or more than 10%. Since we used our own money (equity), the opportunity cost is equivalent to saving interest rate. Obviously, by withdrawing the money, we lost the "opportunity" for that money to earch the saving interest rate.

There are two types of opportunity cost depending on who "owns" the money and "whose" interest is being served by the investment. These are the private opportunity cost and the public opportunity cost. The private opportunity cost is when private investors used their own resources (or borrow) to satisfy their private interest (micro). The public opportunity cost is when the public investor (government) used its own resources (or borrow) to satisfy the broader interest of the country (macro). Development banks have dual personalities: one as a financial institution (micro) and the other as a development institution (macro). As a financial institution, a development bank is serving its own private interest and as a development institution it is considered a development advocate serving a public interest.

For corporations using borrowed capital, their opportunity is equivalent to the cost of borrowing. If they use their own equity, the opportunity cost is equal to the average return on investment (ROI). The opportunity cost of public money (government) is equivalent to the national discount rate or the interest rates of short-term treasury bills. The national discount is the lending rate charged by the central bank when commercial banks borrow. Treasury bills are used by governments to finance short-term budgetary deficit.

The opportunity cost of capital for development banks should be accounted in two levels: the cost of capital for development banks as a financial institution and the cost of capital for development banks as a development institution. As a financial institution the cost of capital should be accounted on the firm level (micro or private point of view), and as a development institution the cost of capital will consider its impact to the whole economy (macro or public point of view).

On the private point of view, the development bank should recover the cost of "buying" the capital and the operation cost for "selling" the capital. In this capacity, the development bank is operating just like any commercial bank. As a corporate entity, the opportunity cost for development banks is equivalent to the cost of their borrowing or to the average return on investment (ROI).

On the public point of view, the opportunity for development bank is equivalent to the cost of capital in the country which is roughly equivalent to the interest rates of short term treasury bills or the national discount rate. This is based on the theory that if the government borrows from the "public", it should at least recover its borrowing cost when it invests.

The private opportunity cost is being used by development banks in setting their lending interest rates and the public opportunity cost is being used by development banks to determine the economic feasibility of development projects.

COST OF CAPITAL FOR DEVELOPMENT BANKS

Development banks raise their capital from different sources including government contribution and subsidy, foreign and local capital markets, international and regional development banks, foreign aid agencies, and nontraditional sources. Each source has a concominant acquisition cost. The range include the most expensive commercial rates from foreign commercial banks to the subsidized rates and "free" capital from the aid agencies and the government.

Development banks will use the ranking of capital according to their acquisition cost as a guideline in investing in projects ranked according to bankability scale.

CAPITAL FROM GOVERNMENT CONTRIBUTION AND SUBSIDY

Government-owned developmentd banks get their initial capitalization from the government, either through direct capital contribution or bonding. The bank should revolve this capital unimpaired. It means that it should be able to recover the loaned capital through repayments. The repayments should include the portion of capital and the interest charge. The interest charge in turn should include the cost of that capital plus the operation cost of the bank. Failure to do so would necessitate continious injection of capital from its owner, the government. In theory, this source of capital is "free"since its owner, the government is not expecting to be repaid in terms of dividends. All the bank has to do is recover its operation cost. In practice, governmentowned develoment banks would build up capital reserves in addition to their attempt to recover the operation costs. Their lending rates would be set to a point lower enough to attract private investors who could not afford commercial rates but high enough to build up capital reserves and recover the operation cost. This is its opportunity cost as far as such source of capital is concerned.

From time to time, government may subsidize the operation of the development bank in terms of underwriting a portion of its operation cost or injection of more capital. This is especially true in pioneering investments such as in technology transfers, new industrial ventures, rural development, and microenterprise. The government recognizes the risks in investing in these areas. In this case, the opportunity cost for development banks is equivalent to its costs as a "bank" and will exclude government subsidies.

Development banks are also used as "conduits" by the government for special development funds. In this capacity, the development bank is serving as a "dispenser" of government funds. The special development fund may or not carry an interest charge. If it does, it is normally a subsidized rate. An example is when the government provides "seed money" for providing po-

table water supply through the local governments. The local government wanting to establish a water supply project would apply for a loan from the development bank. Funds for microenterprise development also follows a similar model. In this case, the opportunity cost for development banks is equivalent to its cost dispensing the seed money including the cost of technical assistance given to the borrower. The technical assistance is mostly in the preparation of feasibility studies.

So far, we just discussed the opportunity cost of capital for development banks as a financial institution (private point of view).

As a development institution, the opportunity cost of the development bank should be accounted on the public point of veiw (macro). This is on the assumption the bank is dispensing public money intended for development. We mentioned previously that the opportunity cost of public investment should be equal or more than cost of capital in the country which is roughly equivalent to the interest rates of short term treasury bills or the national discount rate. It implies that the projects to be financed (fully or partially) by development banks should have an internal rate of return (IRR) equal or more than the interest rates of the short term treasury bills or the national discount rate. This IRR should be computed using public point of view. This concept is very important since the IRR for private point of view and the IRR for public point of vew may differ. The section on the design and analysis of projects for development banks will elucidate this point.

To summarize, as a financial institution, the lending rates for development banks should be equal or more than its cost of capital. This is strictly based on the private or micro point of view. For example, if the cost of capital (acquisition cost plus operation cost for dispensing such capital) is 8%, the development bank can lend at 8%. At this rate, it is able to recover the capital acquisition cost plus its operation cost.

When it actually gives a loan to a project however, the development bank should see to it that the project's IRR based on the public point of view (macro) should equal or more than the interest rates of short term treasury bills or the national discount rate. For example, if the interest rate of short term treasury bills is 11%, the project will pass public point of view economic feasibility test if the public IRR is equal to more than 11%. At this rate, the whole economy (macro) is able to recover the cost of national capital.

Instead of lending, the development bank may participate in project financing as a co-owner (equity contribution). As a co-owner, the same dual role of development banks applies. As a financial institution using a private corporate point of view, the project private IRR should be equal or more than the opportunity cost of the "owners". We mentioned before that the opportunity cost of corporate investors is equivalent to their average ROI. For example, if the development bank is the sole owner of the project, which is most unlikely, the project private IRR should be equivalent to the bank's ROI. Supposed that its ROI is 10%, the project's private IRR should be equal or more than 10%.

In a package financing, a particular investor will not participate if the project's private IRR is less than his ROI. This is the dilemma in packaged financing consisting of equity contributions from more than one investor. For example, if there are 3 co-owners (one of which is the development bank), the project's private IRR should be equal or more than the highest ROI among the three investors. Let us assume that there are 3 co-investors: Investor A, Investor B and Investor C (the development bank). Let us further assume that their ROIs as follows: 12% for Investor A, 11% for Investor B and 8% for Investor C. If the project's private IRR is 12%, the project is feasible for the 3 investors. If the project's private IRR is 11%, investor A will pull out from the consortium. However, the story is not yet finish at this point because one of the investors, Investor C, is a development bank with two personalities.

As a development institution, Investor C should see to it that the public IRR of the project should be equal or more than the national opportunity cost. If the national opportunity cost is 14%, the project's public IRR should be equal or more than 14%. Among other things, public IRR is derived by adding the imputed values of development benefits such as employment generation, etc., to financial benefits (revenues). In the cost side, the imputed value of negative environmental impact is considered. These values are not included in the computation of private IRR. Private IRR is normally based on financial costs and financial benefits.

CAPITAL FROM FOREIGN AND LOCAL CAPITAL MARKETS

Development banks can raise capital by borrowing from large foreign commercial banks. To reduce acquisition cost, it would be buying capital in bulk (wholesale). This buying spree is normally during the time when there is a glut of capital abroad, usually from the developed countries or when central banks in these countries lower interest rates. Development banks would then sell this capital locally on "retail" through its lending activities. The main concern in foreign borrowing is the fluctuation in foreign exchange. Such fluctuations will surely impact on the cost of such capital. Currency swap or forward agreements could minimize this risk.

In determining the opportunity cost of this specific source of capital, similar rules that were discussed above apply. In the private point of view, the opportunity cost is equal to the cost of capital acquisition plus the operation cost in dispensing it. It means that the lending rate should be set to recover such costs.

CAPITAL FROM INTERNATIONAL AND REGIONAL DEVELOPMENT BANKS

International and regional development banks such as the World Bank and Asian Development Bank give loans to developing countries. These loans may be targeted to specific development sectors such small and medium scale manufacturing, agriculture, education, health, microenterprise development etc. Development banks may be used by the government as a conduit to manage the fund that was established through these loans. This is specially true in projects requiring some forms of financial intermediation.

International development banks may charge a commercial rate of interest in their lending activities but the discounted cost might be lower due to longer repayment period. The International Development Association (IDA), a member of the World Bank Group gives subsidized rates to less developed countries. Again, the opportunity cost for this type of capital should be determined in two levels: as a financial institution serving as a conduit for dispensing the fund and as a development institution serving as the agent of the fund's sponsors (international development bank and the government).

CAPITAL FROM FOREIGN AID AGENCIES

Foreign aid agencies such as the United States Agency for International Development (USAID), Canadian International Development Agency

(CIDA), Japan International Cooperation Agency (JICA), and similar aid agencies give loans and grants for specific development projects in developing countries. Sometimes, these loans are combined with other loans from international development banks and other foreign aid agencies.

Some of these loans and grants are channeled to development banks. The acquisition cost for these type of capital is normally lower than the cost of capital from international and regional development banks. This is because the aid agencies are not expected to revolve their funds and there is no "private banking interest" to protect. They are strictly development institutions. As such, their main interest is for their financial assistance to produce the desired development benefits. In addition, these agencies extend technical assistance to projects further lowering the acquisition cost of capital. The rule for determining the opportunity cost of this type of capital is similar to one discussed in conjunction with the international and regional bank.

CAPITAL RAISED FROM NON-TRADITIONAL SOURCES

Non-traditional sources include people who are not participating in the mainstream financing system. Their surplus (if there is any) is used for additional consumption or kept as "idle" capital. An example is when a farmer's family increased their consumption of semi-luxury goods during the time of bumper crop or buy jewelry (less-liquid capital) as a deposit or savings. There is also the fact that many people do not deposit their money in the bank because their saving is so small. These small savings taken together could result to a sizeable amount that could be used to finance viable economic projects.

A number of techniques to induce the non-traditional depositors to put their money in the bank have been tried. Some are successful, some are not. Here are some examples: 1) In an agricultural loan program, the farmer is required or encouraged to deposit certain amount in addition to his repayments. The saving deposit is combined with the repayment. The accumulated deposits would increase the ability of the bank to extend more agricultural credits either to the same farmer or to other farmers. This model has been applied in microenterprise financing. 2) The bank can sell crop insurance to the farmers and their collective premiums could be used for finance

cing an agricultural lending operation. The government would underwrite such insurance scheme. 3) The bank can accept low minimum deposits to encourage as many people as possible to put their money in the bank. The government could subsidize the operation cost for these accounts since it could be very expensive to manage many small accounts on the part of the bank.

Technically, this source of capital is the most expensive, both in private and public point of view. In private point of view, the dissemination cost to encourage people to deposit their savings and the operation cost for maintaining the accounts could be high. In public point of view, the opportunity cost of such savings on the part of the farmer is his sacrifice of consumption. The consumption interest rate for poor people is high. This is the reason why capital raised in this way is used for the benefit of those people who contributed it.

However, the economic benefit of these schemes is very significant. The mere fact that "idle" capital is put into use is a development benefit by itself. The economy gains in terms of additional production as a result of pooling small amounts of savings and permitting an "economic-size" production. By taking these benefits into consideration, the effective cost of capital from non-traditional sources is actually lower.

THE RATE OF BANKABILITY

Investments can be broadly categorized as those with high rating on the "development impact" scale and those with high rating on the "interest rate" scale. The former promises more socio-economic benefits and the latter promises more financial returns. Unfortunately, investments with high rating on the development impact scale are low in the interest rate scale. It is due to the fact that the former investments are more costly to administer, with insufficient or little financial revenue, and risky. It makes them unattractive to commercial banks. Projects, which open up new areas of economic development with little or no commercial viability, will also score low in the interest rate scale. However, such investments have many important socio-economic benefits for a country that is trying to attain a higher level of economic development. Private investors and financiers will invest only after these new indus-

tries have proven to be commercially viable and adequate demand has been created.

The rate of bankability applies to the interest rate scale. The higher the project scores in the interest scale, the higher is its bankability rate. Commercial banks prefer to invest in projects with high bankability rate leaving the others to development financing institutions, including development banks. However, I mentioned earlier that development banks have dual personalities: one as a bank and the other as a development institution.

As a development institution, development banks are expected to invest in projects with high development impact but as a banking institution it is expected to invest in projects with high rating on the interest rate scale. In short, as development institutions, development banks are supposed to invest in social oriented projects and to initiate investments in new industries, which taken together, will bring about a higher level of economic development. In addition, development banks are expected to develop the entrepreneural sustainability of these industries in terms of managerial skills and technology. Unfortunately, these investments are risky and may not have adequate revenues to pay off loans. This impairs the ability of development banks to revolve the funds entrusted to them. As a "bank", development banks have the responsibility to revolve its financial resources unimpaired. It means that they should recoup their loans and get enough surplus to cover their operation cost. However, if they invest in projects with high financial returns and with good probability of recouping the loans, they might compete with commercial banks. Competing with commercial banks may impair their ability to finance new industries and socially oriented projects. Some guidelines on how to get out of this "chicken and egg" dilemma are discussed later in this paper.

Bankability rate ranges from 100% to zero percent. Projects with 100% bankability would invite private financing and private financing would gradually drop as the project slides to lower bankability rate. This is where development banks come in.

Example of projects with high bankability rates include industrial projects that have been proven profitable and a host of commercial ventures that promise adequate financial returns. Investments in these areas could have been initiated by development banks and other development financing institutions during the initial phase of industrialization and commercialization

(pre-takeoff to early takeoff stages). During that time, these projects are considered low in bankability rate. Now, these projects are now attractive to commercial banks.

Investments in agriculture, rural development, housing, small scale industry and microenterprise, technology transfer, health and education are still low in bankability rate in many developing countries.

FUNCTIONS AND PERFORMANCE STANDARDS FOR DEVELOPMENT BANKS

Evaluating the performance of development banks is a daunting task. The difficulty is compounded by the fact that different development banks are governed by different charters and covenants with its "owners". The difference in operating charters and its responsibility to its owners are important but can be considered tangential in judging the performance of a development bank. The main evaluation indices should point directly to the institutional functions of a development bank. The previous discussion already give us ample ideas in describing this institution.

The institutional functions of a development bank can be categorized as follows: financial function, development function, technological function, and data management function. On the minimum, the development banks should be evaluated on how well it performed on these functions.

FINANCIAL FUNCTION

As a financial institution, development banks should be evaluated just like any other bank. The performance standards should be based on how well it utilized its financial assets to bring about a satisfactory return from its investment. On the minimum, it should recover its operating expenses and have fulfilled its fiduciary responsibility of safeguarding the financial assets entrusted to its care by its owners and depositors. The balance sheets should show how it applied its assets, leveraged its liabilities, maintain liquidity and stay solvent, and avoid the risk of bankruptcy. The operating income statement should show that it has been efficient, effective, and economical in "buying and selling" financial products (raising and investing capital). And as a result, it has earned profits for its owners. The profit margin (from the

income statement) could be divided by the total performing asset (from the balance sheet) to compute the return on investment (ROI). The ROI of one development bank could be compared with the ROI of another development bank or the average ROIs in the industry. It is that simple.

Unfortunately, it is not that simple. The financial ratios could easily be computed but comparing them with another bank and the performance of the whole industry is a problem. Government-owned development banks would be satisfied even if its ROI is barely enough to cover its cost of capital. Privately-owned development banks would like to see higher ROIs to keep their stockholders satisfied. The "industry" to which the development bank belongs should also be redefined. Does the "industry" includes all banks such as commercial banks or should be confined to the industry of development banking. Industrial banks and other development banks investing in more commercialized projects are expected to have higher ROIs compared to development banks investing in less commercialized activities such as in rural development, microenterprise, low cost housing, health and education. The bottom line: the ROI of a development bank should be equal to the opportunity cost of its capital. The opportunity cost of capital includes the cost of dispensing the capital. As a financial institution, the opportunity cost of capital should be computed using private point of view. Please refer to the previous discussion on determining the opportunity cost of capital for development banks.

DEVELOPMENT FUNCTION

Development banks invest in development projects. Development projects includes any investment that brings "development benefits", which literally embrace a wide range of projects both in the private sectors. For the purpose of financing, development projects will have a more limited definition. Development projects are those projects that need long-term financing, relatively risky, brings more socio-economic benefits, low in bankability rating scale, and are considered to supply the missing ingridients. These are the projects where the private sector is reluctant to enter and will only invest if development banks take the initiative.

As a development institution, the performance of development banks should be evaluated in terms of their development contribution. Develop-

ment banks are expected to bring about economic and social benefits such as creation of employment, saving or earning foreign exchange, increasing savings rate, increasing investment rate, modernization of the agricultural sector, linking industry to agriculture, and more equitable distribution of income. Development banks are also expected to help the government in the supply of social overhead capital (SOC) such as roads, communication energy, housing, education, and health. If you think that such expectation are too much, the answer is plain "yes".

In our previous discussion, we say that development banks are "banks" in the "business of development". For financial institutions, the business of development is a tricky one. While the direct investment cost is shouldered by the bank, the development benefits do not accrue to the bank. These benefits do not contribute to the bottom line of the bank. The socio-economic benefits accrue to the different external beneficiaries whose advocate is the government. The ROI in this type of business includes the imputed values of socio-economic benefits received by the society as a whole. As a development institution, the opportunity cost of development bank capital is different from its opportunity cost as a financial institution. As a financial institution, the opportunity of cost capital is equivalent to the cost of acquiring capital from different sources plus the cost of dispensing such capital. As a development institution, the opportunity cost of capital is equivalent to government cost of borrowing or the imputed value of economic resources that the government collect (obviously from taxes).

TECHNOLOGICAL FUNCTION

Technological improvement is a major function of development banks. It is a subset of its development function. Technological function is given a separate treatment because of the importance of technology transfer as one of the "missing ingredients". If the private sector (private investors and commercial banks) are not responding adequately to the demands for technology transfer, it is incumbent for the development banks to lead the way. In cases where the demand for technology transfer is missing, development banks should create such demand.

Technology is the key to modernization. Countries without adequate economic surplus to invest in scientific research would require transfer of technology from a supplier country, mostly through aid. Countries with economic surplus but do not have time and capability to develop their own technology would find it easier to buy technology. Technically speaking, development countries could develop their own technology. However, technology development is costly and the research and development (R & D) process takes a long time. Most developing countries like to attain a higher level of economic development at the shortest time possible, hence the need for technology transfer.

The key to successful technology transfer is sustainability. The more popular term is appropriate technology. The technology is appropriate if it is the mix required in the country's push for a higher level of economic development and whether the country, in its current level of economic development, has the adequate technological assets to maintain it.

There are four actors in technology transfer, namely, the supplier firm, the supplier country, the recipient firm, and the recipient country. The normal trajectory of technology transfer is from the more developed countries (supplier countries) to developing countries (recipient countries), the firm in the supplier country is called the supplier firm and the receiving firm in the recipient country is called the recipient firm. Technology transfer could be commercial and non-commercial. Commercial technology transfer is intended for profit and non-commercial transfers are not. Technology transfers intended to combat the spread of HIV and malaria are examples of non-commercial transfer. Industrial technologies are examples of commercial transfers.

In performing the technological function, development banks should be evaluated on its ability to determine the appropriate technological mix for the country and to transfer such technology into the country. The grading system for this function should include the development impact of the transferred technology. Technology transfer could cause both positive and negative impact. On the positive side, technology transfer could improve production efficiency and increase output, save and earn foreign exchange, improve health conditions and improve education system delivery. On negative side, technology transfer could cause pollution and human misery. Technology transfer can also cause dislocation and waste of scarce economic resources.

DATA MANAGEMENT FUNCTION

The data management function of development banks does not necessarily refer to keeping records of its operation but the monitoring and analysis of socio-economic and financial condition, both at home and abroad. Development banks should be aware of the socio-economic profile (SEP) of the country: its development objectives, the socio-economic conditions of the country's trading partners, sources of technology, and the coming and going in the international capital markets. Failure to collect and analyze these information will put the development bank in a very disadvantaged position in performing its financial, development, and technological function.

The socio-economic profile (SEP) can be described as a snapshot of the country in a point in time. It describes the current level of economic development and the current social condition. On the minimum, the following information should be included in the SEP: Gross National Product per Capita, the leading production sector, import and export, consumption pattern, percentage of labor still in agriculture, external debt, level of development assistance, energy consumption, level of technology, level of urbanization, distribution of income, population growth rate, literacy rate, life expectancy. These information would collaborate each other in describing the current level of economic development as well as the level of social progress. After the above mentioned parameters are determined, the collection of data could be expanded to serve the specific mandate of the development bank. For example, an import-export bank will need more elaboration on international trade, major trading partners, foreign exchange reserves, sources of foreign exchange, list of products imported and exported, sectors using and earning foreign exchange, etc. For development banks dealing with investments in public housing, data on urbanization, population density, migration, growth centers, distribution of income, disposable income by population growth would be important. For industrial development banks, more data on sources of long term finance, conditions in the international financial market, level of industrialization, employment, technology transfer, etc. are relavant. Development banks dealing with agricultural development would need more elaboration on agricultural production, agricultural income, pricing of agricultural products, import and export data, sources of agricultural

technology, and other relevant data. The idea is for each development bank to be familiar with the general socio-economic condition of the country and the sector it is serving.

The socio-economic data including data on financial markets can be obtained from central planning agency, national statistical offices, central bank, and reports from different government ministries and agencies. The central economic planning agency, for example, forward these information to the United Nations and the World Bank. The World Bank compiles these information from different countries in preparing its World Report. United Nations agencies such as WHO, ILO, UNICEF, UNIDO, and others also compile worldwide information on health, education, employment, industrialization, and other socio-economic data. Data from these sources should be compiled, summarized, and analyzed to serve the specific purposes of the development bank. In some cases, the bank should do its own survey.

The bank should make the above-mentioned information available to the bank staff and its clients, through information memoranda, information brochure, computer websites and periodic information forum.

INVESTMENT GUIDELINES FOR DEVELOPMENT BANKS

The following guidelines are generic. It should be modified and tailored according to the mandate of the development bank, its size, and sources of capital.

The mandate for development bank refers to its charter, area and sector of operation, and its clients. The mandate normally defines the sources of capitalization. Aside from general purpose of development banks, these development financing institutions are established to serve specific clients and offer specific banking products. There are development banks offering services for importers and exporters, giving loans to farmers, giving loans and financing to food processing industries, tourism, cooperatives, microenterprise, housing, etc.

The size of the bank refers to the total amount of its financial asset. Its size determines its ability to invest. A small rural bank could not invest in large industrial projects and big industrial banks will not be interested in small projects. Large banks would be able to engage in long term finance than a small development bank. Large banks would be able to invest in more

social-oriented projects than smaller banks. For example, the World Bank due its size could invest in many social-oriented projects around the world. However, even the World Bank needs some guarantee for the repayment of loans from respective governments.

Sources of capital for the development banks ranges from the more expensive capital (from the open capital market, domestic and abroad) to less expensive international aid and government subsidies. Please refer to the previous discussion describing these sources of capital and their respective opportunity costs.

The guidelines are presented in connection with financial, development, and technological functions of development banks. Some of these guidelines are also applicable to commercial banks involve in development financing (universal banking).

FINANCIAL FUNCTION

As a financial institution, development banks performance and efficient utilization of resources are determined on the basis of financial statements showing profitability and rates of return. They are expected to revolve their financial resources unimpaired. Compared with commercial banks, development banks have access to government subsidy and cheaper capital provided by international aid agencies.

Guideline 1: Set the limit for financing projects

The limit for financing projects should be set to a point whereby the rate of return would be sufficient to cover operation costs and the cost of applied capital. The cost of applied capital would be lower if it involves government subsidies.

Guideline 2: Rank capital according to their cost of acquisition

The bank should rank capital according to their cost of acquisition and apply them accordingly. The most expensive would be those acquired in the open capital market and the least expensive (in the level of a firm) are the subsidies from government and international aid agencies. To protect their

financial position, the bank should apply the available capital proportional to project risk and potential financial return.

Guideline 3: Apply capital based on the level of risk

In financing industries proven to be profitable and the potential investors have adequate experience in similar production, the bank could apply a more expensive capital in their arsenal. For example, if the investment in question would bring incremental improvements in food processing and there are established food processing industries in the recipient country, such application will have a higher probability of success. If the investment in question will overhaul the whole food processing industry, its financial return would be subjected to higher level of risk. In this case, the bank should apply the less expensive capital.

If loan collaterals (such as real estate, equipment, or receivables) are not sufficient to reduce risks to a tolerable level, the development bank should avail of a loan guarantee insurance. Many countries have established guarantee insurance funds for industrial and agricultural sectors. Some export-import banks provide guarantee insurance. The Multi-lateral Investment and Guarantee Agency (MIGA) at the World Bank provide protection to foreign investors against many risks inherent in international investment.

Guideline 4: Apply capital based on the rate of bankability

Bankability is the ability of the project to bring financial and socioeconomic returns. Development projects with promise of high financial returns are high in the bankability scale. In many cases however, projects with high socio-economic returns have low financial or no financial returns. These "social" development projects are low in bankability rate. Development banks as financial institutions would be getting the financial benefits (micro point of view) and the public (government) will be getting the socio-economic benefit (macro point of view).

Apply capital according to sliding bankability rates. More expensive capital can be applied to projects with higher bankability rate and less expensive capital to projects with lower bankability rate, only up to a point where the financial internal rate of return is equal the cost of capital acquisition.

Projects with very low or no financial return should be financed with capital acquired "free" from the government and international development donors. After all, it is the public that is getting the most socio-economic benefits. Many developing countries use development bank as conduits for such purpose. In some instances, such financing should be passed to non-bank development financing institutions.

Guideline 5: Engage the private investor up to the limit of their ability to invest

Private investors will always try to minimize their financial exposure and maximize financial return. They will minimize their risk exposure as much as possible. It is a normal economic behavior. The bank should engage them up to their maximum financial ability. A higher exposure would mean that the private investor has invested enough energy and talent in analyzing the project and would be very much interested in its successful implementation and operation.

Guideline 6: Development banks should lead in the development of financial consortia and involve the commercial bank as much as possible

As the country develops, the industrial sector becomes more and more "commercialised". It means, that the sector has proven its ability to earn profit and manage the risk. From this point on, development banks should assume a role of a "catalyst" for industrial projects and engage the commercial banks more in project financing. In many countries, commercial banks have already taken over medium term financing and big commercial banks are into long-term financing of projects. In countries with advanced stage of development, commercial banks have taken over industrial financing and some industrial development banks have gone private.

As the country enters industrialization, development banks should initiate financing packages that would involve commercial banks. The fact that the development bank is still a participant in the financial package demonstrates that the project is a good investment. After all, it is still the responsibility of development bank to help the private sector to design the project properly. Commercial banks should be financing industries that have been

commercialized and the development banks should be looking for more opportunities to supply the remaining "missing ingredients".

DEVELOPMENT FUNCTION

Development banks invest in development projects. Development projects includes any investment that brings "development benefits", which literally embrace a wide range of projects both in the private and public sectors. Development projects are those projects that need long-term financing, relatively risky, brings more socio-economic benefits, low in bankability rating scale, and are considered to supply the missing ingredients. These are the projects where the private sector is reluctant to enter and will only invest if development banks take the initiative.

Guideline 7: Design the project using both private and public points of view

Projects with significant private investor contribution and are intended for commercial operation should be analysed in both private and public points of view. Development banks should not invest in projects that will not pass the feasibility test for both private and public point of view.

In private point of view (micro) the internal rate of return (IRR) should be equal or more than the opportunity cost of private capital. Projects that are feasible in private point of view may not be feasible in public point of view since subsidized rates from development banks and the government would increase private IRR. On the other hand, private investors would not invest if their return is not sufficient to cover their own capital. Private investors would only consider financial benefits (as compared to social benefits) for the computation of IRR.

In public point of view (macro), the internal rate of return (IRR) should be equal or more than the opportunity cost of "public" capital. Public capital includes all the contribution from the private and public investors. In this analysis, the subsidy from development banks and other government agencies are considered as full cost. The project benefits will include both financial and social benefits and project costs will include both financial cost and social cost. The prevailing interest rates of government treasury bonds and

the national discount rate can be considered the opportunity cost of capital in public point of view.

Guideline 8: Make sure that the private investors have adequate entrepreneural and managerial capability to manage the project. If not, development banks should make additional "investment" in training. Entrepreneural and managerial skills are missing ingredients in many developing countries.

TECHNOLOGICAL FUNCTION

Technological improvement is a major function of development banks. If the private sector (private investors and commercial banks) are not responding adequately to the demands for technology transfer, it is incumbent for the development banks to lead the way. In cases where the demand for technology transfer is missing, development banks should create such demand.

Guideline 9: Invest in "Appropriate Technology"

I mentioned earlier that technology would not be appropriate if there is no adequate technological base in the recipient firm and recipient country.

Guideline 10: Invest in technology improvement gradually

For its "supply-leading" role, development banks should invest in technology improvement one step at a time. It should transfer a technology that needs minimal investment in preparing the recipient firm to absorb it. Many developing countries already possess sufficient stock of educated manpower, energy supply and other physical infrastructure to support low level or medium level technology. In many instances, the recipient firm already has skilled employees and it is just a matter of training these employees to absorb a higher level of technology. Development banks should invest in improving the technological base before investing in higher form of technology.

The logical sequence is from low level technology to medium level technology to high level of technology.

Guideline 11: Actively participate in the analysis of the "technical aspects" of the project design

Other aspects of a project design such as economic, financial, commercial, administrative, and environmental aspects emanate the technical aspect. The technical aspect determines whether the organization or the business firm has adequate capability to implement and sustain the project through its economic life. If not, then the project is not "technically feasible". Development banks should adopt an "insider-partner" attitude with the private investor when it comes to technology transfer. It should determine if the recipient firm needs help in developing its absorptive capability. As partners, both the development banks and the private investors know that their fortune depends on the success of the project.

Guideline 12: Actively participate in the pricing of technology

The price of technology transfer can be determined more accurately by "disaggregating" its components. Packaged technology transfer would result to a monopolistic pricing since the cost of individual components could not be determined. In a dissagregated technology transfer, the recipient firm could determine what components to buy and what components can be supplied locally. Examples of such components include installation, training, maintenance, and accessories that can be supplied in country.

Guideline 13: Support technology transfers that will maximize the comparative advantage of the recipient country such cheap labor and other available local inputs.

Guideline 14: Support technology transfer that will support the development priorities of the recipient country

Technology transfer is one of the missing ingridients for development and its supply should be sychronized with the development plan of the recipient country. The need and the desire to reach a higher level development is reflected in the development priorities of the recipient country.

ASPECTS IN DESIGNING DEVELOPMENT PROJECTS

It is the responsibility of development banks to help its clients in designing development projects. In some cases, it is the development bank that takes the initiative of designing the project with client participation. In other cases, it is the client that takes initiative and submit the project design as a part of a financing proposal. In either case, the development bank should see to it that the project is designed properly.

Project aspects are the major parts of a project design that should be given significant consideration in determining the feasibility of projects. The overall feasibility of a project depends on whether it passes the constraints and requirements of the different aspects considered important by sponsors, planners, and target beneficiaries.

The most common aspects in project design and analysis are: a) technical aspect, b) economic aspect, c) financial aspect, d) administrative and organizational aspect, and e) commercial aspect. Very recently, developing countries realize the importance of analyzing the ecological effects of projects and began to require a thorough environmental impact study which is important aspect in designing development projects. Participation could be a separate aspect if people's involvement is a critical factor in project's implementation.

TECHNICAL ASPECT

The technical aspect describes the technical specification of projects. It includes location, lay-outs and engineering plans, technology requirements, manpower needs, implementation strategies, production process, and other technical requirements. The analysis of the technical aspect yields important information such as initial investment, level of operation and maintenance costs, replacement costs, disposal of wastes and other materials, transportation of inputs and outputs to and from the project location, and other information that are important for the analysis of other aspects of the project.

ECONOMIC ASPECT

The economic aspect involves the determination of economic costs and economic benefits based on varying social and economic objectives of sponsors. It also involves the implied or express assurance that the target beneficiaries will receive portions of project benefits.

The principal beneficiaries of private investment are the owners or stockholders. Needless to say, creditors such banks are also beneficiaries.

The beneficiaries of public investment include groups of people targeted by the project. Example: Farmers and investors engaged in small scale manufacturing and agricultural processing are the primary beneficiaries of a rural electrification project.

There are three commonly accepted measures of economic feasibility, namely, Net Present Value (NPV), Benefit/Cost Ratio (B/CR), and Internal Rate of Return (IRR). These measures use the process of discounting by using the opportunity cost as the discounting rate. The variables that are included in the computation of these measures include initial investment (Ko), periodic benefits (b), periodic cost, (c), economic life (t), and the discounting rate (i).

The Net Present Value (NPV) is the summation of discounted net benefits minus initial investment. Projects whose NPV is positive pass this feasibility test. NPV is useful in analyzing large projects in order to determine its total contribution to the economy or private income. However, it has one serious weakness. It can not be used to compare projects with different (Ko) and (t).

Benefit/Cost Ratio (BCR) is another good measure of economic feasibility. It is a ratio between the total discounted benefits and the total discounted costs (including Ko). As a ratio, it permits comparison and ranking of projects. Projects with BCR equal or more than (1.0) pass this feasibility test. BCR is useful in the analysis of medium size or small scale projects which are usually compared with each other.

The Internal Rate of Return (IRR) is also a good measure of economic desirability. Although it is somewhat difficult to compute, IRR is easier to explain, since it is expressed in percentage. An IRR of 15% simply means 15% return on investment. Besides giving sponsors a clear idea on returns on investment, IRR also permits comparison and ranking of different projects.

Projects whose IRR is equal to or more than the opportunity cost pass this feasibility test.

Externalities (E) are not included in the computation of NPV, BCR, and IRR unless they are qualified and included (internalized) in (Ko), (c), or (b). Many analysis prefer to treat externalities separately regardless of whether they are quantifiable or not since in some cases it serves as an important factor for approving of disapproving a project. This is specially true in projects proposed by private investors requiring government permits or assistance. Externalities also apply an important part in selecting between project whose BCRs or IRRs are very close.

FINANCIAL ASPECT

Financial aspect refers to the determination of total fund requirements, sources of financing, cash inflows and cash outflows. In commercial ventures, financial feasibility includes the determination of an acceptable margin of profit. It is also customary to denote financial rates of return (FRR), as compared with economic rates of return (ERR), to indicate the commercial nature of the venture. In many cases, the difference between economic IRRs and financial IRRs depends on what costs and benefits were considered and whether shadow pricing was employed.

For development projects that are required to have autonomous operation, the financial feasibility test includes the determination of whether perdiodic revenues can finance periodic operation and maintenance costs. In some cases, the project is also required to repay the initial investment that was advanced by the government.

ORGANIZATION/ADMINISTRATIVE ASPECT

The project proposal will not pass this aspect unless there are adequate assurances that the required entrepreneural, and managerial talents are committed to the project.

Organizational requirements involve the identification of actors in the implementation and operation of a project and securing their commitment for doing their assigned roles.

Administrative requirements include the legal guidelines of projects, securing of necessary permits and licenses, and the required administrative support during the implementation and operation of the project.

COMMERCIAL ASPECT

The commercial aspect involves the analysis of important project attributes pointing to an autonomous commercial operation such as marketing outlets, level or revenues, margin of profit, and the ability to acquire and maintain credit. This aspect is relevant for development projects that are expected to maintain an autonomous operation after a subsidized start-up and for projects that are planned to be privatized.

ENVIRONMENTAL ASPECT

Environmental aspect refers to the study of the project's impact on the surrounding area. It involves the determination of the long term effects of projects on people and their environment as compared to the more immediate costs and benefits.

One important consideration in this aspect is the effect of the project on people. Projects may introduce new modes of conduct, behavior, and belief which may affect the stability and well-being of the communities.

Another consideration in this aspect is the effect of projects on the ecology of the area. The planners should assure the sponsors that the project will not pollute and destroy the ecology of the surrounding area which in the long run might be more important than the immediate economic benefits.

THE FEASIBILITY OF THE WHOLE PROJECT

Project should be analyzed and designed in its entirely as opposed to a segmented approach to feasibility studies and should pass the feasibility test of each aspect before it can be considered for implementation. It is a common mistake to based project decisions solely in financial and economic considerations.

SUMMARY

Development banks are "banks" in the business of "development". It should protect its own financial position in the pursuit of socio-economic benefits. Development banks belong to the community of development financing institutions whose task is to supply the "missing ingredients" in the development equation. For most developing countries, the missing ingredients include capital, technology, entrepreneural skills, managerial skills and technology.

In supplying the missing ingredients, development banks are playing a "supply leading" role by creating the demand for them if such demand is not forthcoming. In this role, the development bank is both an advocate and initiator of development projects. It should work closely with other financing institutions such as commercial banks and non-bank development financing organizations. As a development advocate, the financing activities of development banks should be synchronized with the development objectives of the country. These objectives are envisioned to bring the country to a higher level of economic development.

DEVELOPMENT BANKING AND ECONOMIC DEVELOPMENT

by: J. P. Estanislao, Ph. D

Development has many names and meanings. These names and meanings elevate development to a level higher than the mere accumulation of material resources and bring it to a sphere wider than economic growth alone.

It is no longer possible to delimit development to the demands of financial viability and to narrow calculations based on self interest. This is because it encompasses the development of the whole individual as a person and the development of the entire family of Man.

Having been so broadened, development can be defined by some of its key elements, which are merely indicators of its fuller and wider dimensions.

I. KEY ELEMENTS OF DEVELOPMENT

Conceptually, development is a process that is long term, i.e. sustained over a long period of time. Its initiation cannot be easily dated; but its picking up of steam can be palpable enough to a great mass of people, more than a few of whom can be disadvantaged by it; and the causes for its slowdown can go unnoticed or willfully ignored by many experts.

Nonetheless, because of the length of the process, it invariably involves deepseated changes. These changes go beyond the lifting of the people's material standards of living. They include fundamental shifts in the relative importance of the sectors, industries and regions from which the population earns income and of the uses to which incomes are applied. Moreover, the transformation can be so radical that even the foundations of society, i.e. its values and attitudes are affected and altered.

The process of development in particular builds up interdependencies among the different elements of society and of the economy. Their interrelations are tightened, and a system is set up which is more closely knit and whose components are much more interconnected. Where underdevelopment permitted linkages to be very loose or to hardly exist, the process of development deepens and widens them such that teamwork becomes so much more important organization so much more crucial, and personal discipline as well as restraint become so much more critical.

Such a process demands that institutions be strengthened and that systems be depersonalized, functioning efficiently without undue dependence on individual talents and charisma. A deeper sense of solidarity is required from all individuals and segments of the community so that instead of pursuing narrow selfish interests, they bring about common good more expeditiously and effectively.

For such an intricate system to function smoothly, the number of market-disciplined entrepreneurs must increase. These entrepreneurs must be the type who play by the fair rules of the market place. They must not overdepend on special privileges and preferential treatment extended to them by government. They must abide by the test of economic and financial viability. They must be convinced that unless they pass this test, they will only become a burden to society whose interest cannot be served if it is continually bled by subsidies and support programs for no-viable and non-competitive enterprises. On the other hand, they must have a deep sense of social responsibility, which lead them to search for more ways by which they can do more for the community and contribute more to the common good.

Development flourishes in an environment of freedom of enterprise. Private initiative is encouraged and nurtured. A multiplicity of undertaking is permitted and promoted. But each enterprise must measure performance not only by bottom line profitability, but also by the bigger yardstick of social impact and contribution to development.

Increased savings and investments are easily measurable contributions to development. Savings are a reflection of the willingness and ability of individuals and institutions to divert resources away from current needs and instant gratification to future requirements. Investments are positive decisions which enable future incomes to be earned. Both are statements of faith and hope in the future. Both are bases for economic growth and change.

Growth and change create jobs, more income opportunities, and an expanded economic horizon. They provide wide room for improvement in productivity, which is the major basis for even higher levels of income. As these higher levels are achieved, a wider spread of property ownership becomes possible, the middle income class expands, and many more indviduals are given more opportunities for self-fulfillment.

It is in this sense that development, based on higher levels of productivity, is achieved by people. Since it provides for material well-being and for personal welfare, development is also for people. Finally, since it allows for personal creativity, self-expression and the full use of one's God-given talents, development is of people.

Development has breached the narrow boundaries within which it had been perceived and pursued in the past. It is a clearly wide-ranging process, involving deep changes demanding new values, and imposing serious social responsibility commensurate with the increase in welfare it makes possible.

II. KEY PRINCIPLES OF DEVELOPMENT BANKING

Development banking is supposed to serve the cause of development. Consequently, the principles that must underline the former are dictated by the key elements defining the latter.

Of the key elements cited for the development process, the conditionality of market-disciplined entrepreneurs imbued with a deep sense of social responsibility assumes a special significance. Such entrepreneurs are the ones who initiate the process of development. They are the ones who build up linkages, tighten interdependencies, and set up a more closely-knit functioning socioeconomic system. Moreover, they create the institutions so instrumental to bring about the causal consequences of development such as increased income, savings, and investment; employment generation; productivity improvement; and a wide spread of property ownership.

But if market discipline and social responsibility observed by entrepreneurs are a *conditio sine qua non* for development, then a key principle of development banking is economic and financial viability.

A development bank must safeguard its economic and financial viability. Without this, it cannot play a developmental role. It cannot long operate as a bank since its resources would soon be depleted and its responsibility completely lost. To preserve its integrity as a development bank, it must assign the highest priority to depending and promoting its own viability. Consequently, it must be exigent in observing all the rules of financial prudence and professional behavior. Its credit system must be kept inviolate and free from undue interference. All the dictates of business discipline and institutional decision-making must be scrupulously followed.

A development bank cannot entertain romantic illusions about dole-outs and preferential options for non-viable enterprises. While it is clear that many houses of charity are needed in a developing country, just as clearly a development bank cannot be one of them. This is because development itself demands that more and more individuals and institutions observe market discipline, and that a development bank must therefore promote the observance of this essential discipline. It should start by securing economic viability for itself so that it can spread it much more widely throughout the system.

A development bank's first mission is to prod everyone to rise to and eventually pass the test of market efficiency and competitiveness. While insisting on this, it can not lose sight of its broader development mission, which is to help ensure that entrepreneurs work towards meeting basic needs, fulfilling the basis requirements of economic growth, and answering the basic personal and social imperatives.

We must address ourselves to the basic needs of our people for adequate and affordable food, clothing and shelter. Many of these needs can be met by local entrepreneurs using local materials and producing the required goods in sites not too far from their final markets. Many small and medium scale enterprises can be involved. The challenge for the country is for economic zones or areas in the different regions of the country to be given a development impetus by addressing these basic needs.

The impetus can be seconded by having to fulfill the basic requirements for growth. More specifically, after infrastructures are laid down, other utilities have to be put in place. Power and water have to be made available. Transport and communication facilities have to be provided. Opportunities for small and medium enterprises to grow and to depend upon one another must be opened and materially supported.

The opening of horizons and opportunities is also made possible by satisfying the basic imperatives for better quality education and health care. Schools and hospitals must be set up. They must be made to function effec-

tively. They must be encouraged to become instruments for change and progress. Schools and hospitals can take the lead in improving all aspects of community life particularly in an urban setting where environmental standards must be higher and where the demands of physical planning are more intricate and complex.

The development mission of a development bank appears to be so all encompassing that the impression is easily created of its spreading itself thinly over a very wide field, trying to do too much relative to the resources and capability within reach of a single institution. The impression would be valid if a development bank tries to go about its development mission without a strategy.

The strategy of a development bank is to be defined by its active search for partners in progress. It is delimited by the conviction that development is too important task to be left to a development bank alone. However, with many dynamic, entrepreneurial partners in progress, a development bank can go far in fulfilling its development mission.

In order to begin to succeed in its mission, a development bank must therefore promote, nurture and spread the spirit of enterprise. It must try to be a haven for entrepreneurs, who in most instances, may have to start small. It must prod them to risk resources, time, effort and expertise in an economically meaningful enterprise. It must try to provide a network of support mechanisms so that these entrepreneurs can link up with one another, and so they are made aware of changes in market opportunities, in the technical aspects of the production process, and in available financial packages.

Support to entrepreneurs particularly of small and medium scale enterprises can be effective and gain much weight if a development bank can source resources from the medium and long-term funds market. Very often, it has to take the lead in activating and developing the capital market. It has to show creative initiative so that a mass of savers can be persuaded to put their savings in medium and long-term financial instruments. It also has to look for ways of effectively supplementing local savings with development grants and funds sourced from outside.

Development lending however is much more than the responsible provision of medium and long-term funds to entrepreneurs with economically viable and meaningful projects. It also involves working with other individuals, institutions, associations and organizations that can provide resources

and other types of assistance to projects with a clearly defined developments impact. Thus, a development bank must have an imaginative outreach program to allow the development network to spread far and wide. It must include not only the entrepreneurs themselves, but also corporations and other institutions who share the same development concerns and who can contribute substantively to addressing those concerns.

The development strategy of a development bank is therefore specific to the comparative advantage it has in promoting market-disciplined entrepreneurship. In summary, to entrepreneurs willing and able to play an active part in speeding up the development process and to pass the test of economic viability, a development bank can go all the way in becoming a partner in progress: through the provision of medium and long-term funds, through the support mechanisms that can be taken advantage of subject to clear conditionalities consistent with the dynamic requirements of the development process; and through the networking program designed to fill in the gaps, to catch activities that may have fallen in between chairs, and to firm up strategic positions for hastening the development process.

III. CONCLUDING CONSIDERATION FOR THE DEVELOPMENT BANK OF THE PHILIPPINES (DBP)

The key elements of development and the key principles of development banking articulated above have become the major considerations in formulating the plans and programs of DBP. These considerations are fully consistent with DBP's Family Credo, Mission Statment, and Strategic Vision. In this sense, DBP's plans and programs have been inspired by them.

Consequently, a major emphasis has been laid in promoting entrepreneurship. Through DBP's Entrepreneurs Forum, we have an informal and loose grouping of entrepreneurs, committed to be self-reliant and socially responsible, and who thereby wish to play their distinctive roles in the process of development.

The Forum has the very limited objective of fostering the exchange of experiences and ideas among entrepreneurs who have been successful and who aim to succeed by observing market discipline and competitiveness. It foreswears even the mere possibility of preferential treatment and access to DBP's lending windows. It discourages even the slightest suggestion that

loans can be made available at giveaway rates that can undermine the viability of DBP itself.

DBP has also become deeply aware of its duty to take the lead in the capital market development within the financial system. As a development bank, there can be no excuse for DBP if it fails to accord to this task, a very high priority. DBP recognizes that it can be only one of several major players in the Philippine financial system who must work closely and harmoniously with each other to develop the medium and long-term funds market. Nonetheless, its development duty dictates that it should be prepared to go further and work harder than others in this regard.

Its broader development mission of helping entrepreneurs provide for people's basic needs has led DBP to set up its first umbrella program of Area and Regional Development. This encompasses lending to small and medium enterprises in agriculture, in small and medium industry that cater to food, clothing and shelter requirements of people in different areas and regions of the country. Where there are opportunities for linking entrepreneurs together so that basic needs can be more adequately and affordably met in specific areas and regions, DBP together with others aim to exploit them.

DBP's commitment to the broader development mission of helping meet the basic requirements of growth has led it to formulate its second umbrella lending program. This includes the further development of such strategic sectors as power and water supply, transport and communication, education and health care. In all these sectors, DBP can encourage key corporations and institutions to play the lead role. Through their own outreach programs, they can ensure greater efficiency and operational effectiveness within their respective sectors. Through their own networking program, they can tap the normal economic interdependencies inherent in the sector so that a more widespread but more integrated system begins to function.

A third umbrella lending program for urban renewal and development reflects DBP's advocacy of the development mission to help improve the physical environment, particularly in an urban setting, from the standpoint of greater orderliness and functionalism. Communities after all are an integral whole, and the proper as well as intelligent use of physical spaces in urban areas can contribute to higher economic efficiency, deeper involvement in community affairs, and better quality of life in general. Urban renewal and development are a tall order. They can be met step by step, perhaps block

by block, and only by working in close tandem with many private sector developers and various public agencies.

Indeed, all of DBP's umbrella lending programs are an articulation of the cause of development which is served through a strategic alliance enabling bigger institutions to undertake developmental projects directly; nongovernment and private volunteer organizations as well as other reputable associations to carry on outreach programs of their own; corporations and cooperatives to serve as anchors for many small satellite economic units to which they lend resources or in whose behalf they can issue guarantees for credit.

For DBP, it is not a matter of choosing between small and big economic enterprises. It is rather a matter of strategic approach; of encouraging small business enterprises to organize themselves into cooperatives and to grow into bigger scales; of avoiding the substantial diseconomies arising from having to tend to hundreds of thousands of accounts with little relation to one another; and of using the more viable and credit worthy enterprises as a base from which to reach out to as many development initiatives as possible.

DBP's plans and programs may look and sound so widely encompassing. This is because they stem from a view of development that is as broad and challenging as the demands of personal and national life.