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New directions for development banking in the Caribbean: financing to take advantage of unlimited supplies of labour skills and entrepreneurship

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Abstract

In the early 1980s, within the wider structural adjustment and liberalisation framework, financial sector reform were initiated to allow greater facility of market forces in the pricing and allocation of financial resources. The sector has been increasingly liberalised since then with subsequent on-going reform addressing the legislative and regulatory frameworks. The on-going reforms have sought to improve resource flows for productive investment. Nevertheless, there are persistent fractures and imperfections in the credit market.

Development banking seeks to define and resolve the imperfections in credit markets and to address concerns regarding social equity by targeting loan and other support resources to priority sectors that seek to use underemployed resources for capital accumulation and growth.

This document is concerned with how development banks might be reformed to be part of the wider agenda of development of the financial sector.

The paper argues that the key reforms needed must emerge from the introduction of derivative instruments into the financial markets that define, price and market, and hence spread, the significant credit risk attached primarily to provision of credit as either working capital or finance for fixed capacity building to create capital or to absorb it into production of consumer goods and services. Reforms of development banking are proposed that focus on their role as counterparty in derivative contracts, with emphasis on the introduction of a variety of securitization devices involving redeployment of the public sector resources to which they have access.

Introduction

This paper is concerned with how development banks might be reformed to be part of the wider agenda of development of the financial sector in the Caribbean region, including the market for commercial paper and bonds and the equity market. Ongoing reforms in the financial sector seek to improve resource flows for productive investment. Development banking seeks to target such resources to priority sectors that seek to use underemployed resources for capital accumulation and growth. The paper suggests steps that reconcile these objectives in a Caribbean economy.

Method and framework of analysis

While the analysis is intended to relate to the set of states in CARICOM, including Jamaica, Barbados, The Bahamas, Guyana and Suriname, Trinidad and Tobago and the countries in the Organisation of Eastern Caribbean states, a disproportionately large part of the data relates to Trinidad & Tobago and Jamaica. This is because limitations of time, resources and public access to data have not allowed detailed exploration of materials from all territories. The same caveats apply to the coverage of banking institutions within Jamaica and Trinidad and Tobago. Resources and access to data have allowed only a detailed analysis of representative cases. Nevertheless, the general analysis is based on a reasonable sample of cases that allow summary picture of trends with development banking in the CARICOM region. More important, allowance was made by convening a meeting of Jamaica's sector stakeholders to provide guidelines on the nature of the problem and the way forward. The outcomes of this stakeholder's meeting are also incorporated into the study.

The framework of analysis for the report is an extension of the classical multi-sectoral model of Lewis (1954), sufficient to embrace much of what is sound about Caribbean economic analysis since then. The multi-sectoral classical framework can address the two key developments evident in the micro data on the labour market and capital development process of Caribbean economies:

- **A labour market** with large numbers of persons who are still outside the capitalist wage-labour market and who are **mainly the self-employed (without employees)**. These workers represent the principal labour potential to be put to work to build and accumulate capital and expand and transform the capitalist sector of the economy.
- **The development of a real capital sector – human and physical** based on structural change to the successful use of domestic capital to make capital and the creation of significant externalities when domestic capital is applied in the production of capital. This is a fundamental development beyond the condition observed by Lewis (1954), which is that domestic capital can be created with little or no capital to speak of. In 2006, we can all agree that domestic capital is now being created with both domestic capital and labour; a good example being the production and use of education. The contrast with the traditionally dominant consumer goods (including exported intermediates) sector is clear. These made capital with labour alone and produced primarily by intensive use of imported capital.

Indicators

The classical multi-sectoral framework also provides a straightforward way to incorporate monetary expenditures into the analysis of how an economy increases its saving rate and grows. In principle, the classical framework interprets monetary expenditures for profit as the prime motivator and driver of production and change along some irregular path. In this framework, the fundamental consequence of the two developments above is that accumulation of domestic capital has become the principal means by which firms successfully increase asset turnover (interpreted as return on assets or the income productivity of assets) and ultimately develop the economy. This finding shapes the interpretation of the priority sectors and the path of development banking in this study and motivates the core propositions about how development banking might be successfully reformed in service of financial sector development. Development banks were established to operate primarily in Tier II mode, in the sense of direct lenders and suppliers of other complementary support to the final end-users of credit. Except for the regional Caribbean Development Bank, Tier I status refers to lending to the financial intermediaries serving end-users, such as commercial banks, credit unions and other financial intermediaries and has evolved over time, largely in response to the need for reform of the Tier II institutions.

Related to the concern with targeting a high percentage of loans to capital-intensive activity in order to achieve a high asset turnover is the nexus of financial evaluation measures linked to the objective of viable development banking. It is intuitively reasonable to assume that viability requires that development financing institutions maintain a low loss rate of direct loans, especially since the loss rate is an integral part of the cost of providing credit. In addition, one has to be concerned with whether the development bank flows are providing adequate coverage of the intended market and whether the program is having an impact on improving the growth rate and economic viability of the target groups. Where data are available, such measures are considered but a major problem confronted by this study was lack of secondary data and lack of resources to field suitable primary surveys to collect relevant information.

Growing significance of market forces

In the early 1980s, within the wider structural adjustment and liberalisation framework, financial sector reform were initiated to **allow greater facility of market forces in the pricing and allocation of financial resources**. The sector has been increasingly liberalised since then with subsequent on-going reform addressing the legislative and regulatory frameworks. In Trinidad and Tobago and Jamaica, after various significant crises attending precipitate liberalisation, recent reforms have focused on development of the legislative and regulatory framework for financial sector liberalisation (Ministry of Finance, TT, 2004; GOJ, 1994/5).[1] Some of the reforms have targeted the development banking sector, with (i) privatisation initiatives; (ii) integration of institutions and internal reforms to achieve greater financial viability and less dependence on the state; and (iii) conversion from the founding Tier II mode to Tier I mode. Ultimately, the initiatives seek to promote high professional standards, efficient liquidity management and deployment and the orderly and efficient operation of the money and capital market, including the development of a corporate bond market and a variety of secondary markets such as the secondary market for loans.

Generally, these initiatives have led to more viable Tier I enterprises but the Tier II development banks remain a problem, except in cases where these banks are servicing the export sector. Further, crucially, the reforms have not yet successfully triggered progress towards solving either the problem of persistent excess liquidity or the problem of very narrow and underdeveloped markets for corporate bonds, or secondary markets for any financial instruments. Just as crucial in the context of this study, neither the broad financial sector reforms nor the more targeted frequent reforms of development banks have solved the historical problem of inadequate and unduly expensive credit to priority sectors. This paper revisits the needed reforms of development banking, this time with priority sectors characterised by the production or intensive use of domestic capital.

Structure of the report

The paper will comprise 4 sections. As a way of organising stylised facts, Section I of the paper will briefly point to selected implications of an update of the Lewis model of development that guided the establishment of development banking in the Caribbean, including the Caribbean Development Bank established in 1970-1974. In particular, Section I will first provide an updated analysis and identification of the priority development sectors, in terms of the resource available and targeted for exploitation, the profit, savings trend and growth rates generated, and the governing relative prices and industrial restructuring achievable. Then, it will specify how expansion of the money supply through an increase in credit to the priority sectors can supplement profits as a source of working capital and finance for fixed capacity building to create capital and therefore create profits and savings at an increasing rate. The research focuses centrally on the **process** by which development banking can expand the flow of credit and other financial services for these purposes to priority sectors identified by public policy, and thereby facilitate capital production and accumulation and development in the modern Caribbean economy.

Section II of the paper uses the framework of Section 1 to bring up to date the experience of development banks in the Caribbean seeking to provide specialized and subsidized financial services as a model for expanding the supply of financial services to underserved entities and targeted sectors. The particular institutions considered would include agricultural development banks at core, Tier I and Tier II, but the experiences of low-income mortgage banks, credit

[1] The GOJ (1994/1995) noted that “The experience of a number of Latin American countries has shown that stabilization and regulatory reform must precede financial sector liberalization to avoid financial sector crisis. The importance of proper sequencing is underscored by the fragile nature of financial markets and potential adverse impact on real activities.”

cooperatives/unions and similar entities get into the picture as a source of crucial lessons. The broad question concerns the capacity of development banks to borrow or earn market-determined surplus and thus supply suitable financial services to targeted development sectors with confidence. Central to evaluation of this experience is the mix of working capital and capacity building financing on the one hand, and the targeting of the capital producing sectors on the other. Significant attention is therefore given to the share of credit capacity going to non-development (non-priority) sectors establishing import-intensive capacity, especially because such investments also imply high risk attached to the small scale of the activities that employ such import-intensive capacity. The quality of the development bank allocations would be closely related to the proportion of assets allocated to capital-developing (and using) sectors versus import-intensive sectors. The purpose of the section is to see what lessons can be learned about how reform of development banking might expand in a sustainable way the resource base of the financial sector and cause improved financial services to be provided to priority sectors. Significant attention is given to lessons learned about the optimal mode, Tier I or Tier II.

In the light of the development paradigm of Section I and the lessons of history in Section II, Section III considers necessary reforms of development banking in a number of areas. The central proposition of Section III arises from the capital development focus of the priority (development) sectors. Specifically, it is argued that the key reforms needed must emerge from the introduction of derivative instruments into the financial markets that define, price and market, and hence spread, the significant credit risk attached primarily to provision of credit as either working capital or finance for fixed capacity building to create capital or to absorb it into production of consumer goods and services. Reforms of development banking are proposed that focus on their role as counterparty in derivative contracts, with emphasis on the introduction of a variety of securitization devices involving redeployment of the public sector resources to which they have access. Section IV summarises conclusions and recommendations.

1. Implications of an updated Lewis model

Cheap labour available at a constant wage is a thing of the past in the Caribbean economies, accounting for no more than 10% of the Caribbean labour market. The fundamental means of generating rising profits, savings and transformational growth has now changed along with the available engine of growth. The first key change is to reliance on a large flow of externalities from investment in domestic capital, especially education to embody commonly available knowledge, development/acquisition of new/novel knowledge and the skills to use both forms of knowledge. The greater benefits accrue from accumulation of new knowledge and technologies and related skills (James, 2005). The second key change is to production of domestic capital with both labour and domestic capital, as distinct from production of domestic capital with labour alone as was assumed by Lewis (1954). The crucial implication of an updated Lewis model based on these updated assumptions is that development activity is now primarily the build up of the domestic capital component of the net assets (capital) of firms and the self-employed, and the related rapid increase in net asset turnover (return on assets) and profitability.2 The key challenge of development banking today is to facilitate this process.

[2] This is the same as the accounting definition of net asset turnover. All financial indicators of profitability in relation to domestic capital investment are relevant.

Asset and value growth

In the presence of externalities, the wage varies with the accumulation of capital and productivity and consumption per worker varies with the rate of growth, both typically in nonlinear relations. When the governing wage-price-profit-import rental functions and the governing growth-consumption-output-imports functions are linked in this context, an important consequence relevant to this study is that the deterministic growth of asset value (of the firm or economy) is governed by a partial differential equation indicating that the non-stochastic growth of domestic capital per worker in the domestic economy is the primary positive influence on asset turnover and the growth of real gross asset value.

The agenda of rapid growth of domestic capital has been present in the Caribbean policy framework since the 1950s. For example, featured in the Jamaica National Plan, 1957 (Central Planning Unit, 1958:46)[3] the National Industrial Policy (1996/7) and its implementing policy frameworks are education, health, housing, infrastructure and use of "local inputs", including the use of domestic output of intermediates such as oil, gas and bauxite to add value upstream in local production processes. One finds a similar focus in other development plans and policy frameworks across the Caribbean (Ministry of Finance and Economic Affairs, 1987; Ministry of Planning and Development, 1970; National Planning Commission, 1990; Government of St. Lucia, 1996). The impact of such moves has been significant, as demonstrated in macroeconomic estimates for the case of Suriname (Birchwood, James and San-A-Yong, 2004). Except for the case of Barbados, implementation has been weak. The key missing ingredients in the policy framework have generally been support for development of the novel capital assets and related copyright industries developed by the self-employed, the location of investment in infrastructure relative to the locus of innovative activity, the relevance and problem-solving character of the education offered at secondary and tertiary levels, and crucially the proper calibration of the rate of production and accumulation of domestic capital to grow faster than all others forms of output as well as imports of all kinds (**see Annex I**). The need for domestic capital to grow faster than other output has not been much appreciated by policy makers, and indicates how critical it is to use a proper and relevant policy and planning framework to set macroeconomic policy in a development context.

A significant share of the problems also has to do with the failure of the financial system generally, and the development banks in particular, to shift credit efficiently to those sectors seeking to invest in domestic capital development or its intensive use. It was well-known that expansion of the money supply through adequate credit flows from banks to priority sectors can spur creation of capital with capital and related increase in the domestic capital share of the assets of firms, resulting in a rising capital productivity (asset turnover) and rising profitability (asset value). However, guided by the work of Lewis (1954), development banks were built on the rationale of supply of working capital to exploit low cost labour for capital creation. Cheap labour is now a thing of the past and the framework of evaluation of the development banks necessarily has to shift to the extent to which it is able to deliver a flow of credit aimed at increasing the asset turnover and asset value through investment to build up the share of domestic capital in the assets of firms and the economy as a whole.[4] More important, as indicated above, neither the scale, scope and focus of the required credit flows nor the collaborative public policy needed for success have been properly addressed by the government-dominated boards of the development banks and guiding policy frameworks.

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[3] See also the 1957 edition, page 5.

[4] In that regard, it is worth observing that there is no routine monitoring of this variable at either the national or sector level. Focus continues to be on monitoring labour productivity.

Selected development consequences of credit expansion in modern context

If credit is targeted to the priority sectors along the lines described above, then development is achieved through growth of domestic capital per worker and growth of domestic capital per unit of import capacity. The resulting externalities also allow growth of consumption per worker in the capitalist sector and among the self-employed. At the same time, the rental to imported capital and foreign direct investment falls and the average of the consumption rate and the import rental rate also falls. This allows the profit rate on domestic capital and the domestic saving rate to rise, thereby sustaining the transformational growth process. As long as the fall in the rental going to foreign direct investment is relatively greater than the growth of consumption per worker, the effect of the increased credit is to accelerate the investment in domestic capital per worker while total employment grows. There will also be a net withdrawal of labour and embodied skills from non-capitalist uses into the capitalist sector induced by the rising capitalist wage. This condition is non-trivial. Net withdrawal of labour and capital into the capitalist sector boosts its capitalisation, increases the relative concentration of skills in the sector and with that externalities and capital productivity – the asset turnover target to be addressed by development banking. This occurs even as import productivity, import capacity and imported inputs grow. If the importers are powerful enough to prevent this falling rate of return, then all bets on structural transformation are off. Otherwise, the process comes to an end only when the capitalist sector is fully transformed and the self-employed without employees are an insignificant share of the labour market.

Exploitation of this development impact of credit should be the purpose of any reforms of development banking, with particular concern to speed up the efficient flow of credit to the self-employed promoting use of domestic capital in order to accelerate their transformation into either successful capitalists or successful workers in the capitalist sector. Data below show that development banks have not been successful in pursuing such an agenda to date. A crucial challenge of any reform is to ensure effective targeting as described while lowering the cost of credit to the priority sectors.

Credit and inflation

Expanded credit financing is usually thought to have inflationary consequences and this was a significant concern to monetary authorities throughout the history of development banking in the Caribbean. The central issue has generally been the tendency for credit to cause expansion of the money supply at a rate above both nominal and real GDP, especially real domestic consumer supplies.[5] The period of establishment of development banks, especially in 1968-1974, coincided with high inflationary pressures that were officially traced at the time to rapid expansion of credit in both the international and local economy. High liquidity in the local banking sector allowed banks to respond flexibly to the demand pressures, especially from consumers, while failing to target the domestic capital sector. For example, in Jamaica, local and international monetary policy treated inflation as a matter of priority throughout these decades, with significant focus on the restraint on the growth of domestic credit (Central Planning Unit, 1969:100, 102; 1970:88, 94). By 1973/1974 policy to control credit were being introduced to complement development banking allocations as a critical basis for controlling inflation (National Planning Agency, 1973:5, 12-15; 1974:36). Such policies to use direct restraint and targeting of credit money flows to manage inflation continued during the oil shocks of 1973-1980 (National Planning Agency, 1976:82-84; 1977: 98-102; 1978: 6.1, 6.6-6.8; 1979: 6.1, 6.8; 1980: 5.1 -5.3). After 1980, policy shifted with a change of government to restrict public sector credit while allowing the shift of most credit flows to the private sector but the overall emphasis of policy on restraining credit as the basis for managing inflation remained,

[5] See for example National Planning Agency (1980), pp.5.2 and 5.3.

even if sometimes via the management of the balance of payments and the exchange rate (National Planning Agency, 1981: 6.1, 6.5-6.6; 1982:6.1; PIOJ, 1992: 5.1; 1994:5.1).

However, in the medium term, inflation is not an inherent consequence of credit expansion to address modern development possibilities as set out above, especially if regulatory capacity is considered. If credit is used to bring the labour, tacit knowledge and skills of the self-employed into capitalist employment, whether as capitalist or worker, the productivity and profitability of consumer output grow along with the wage. So, the growth of the money supply in the hands of consumers (as wage earners or borrowers) does not rapidly outstrip the flow of domestic goods and services they can buy. Moreover, supplies of domestic capital goods will grow relatively faster than consumer supplies and will be continually put to use to produce both capital and consumer output that allow the consumption rate to rise with the flow of credit without triggering an inflationary spiral. The underlying reasons are: (1) the self-employed are first entrepreneurs interested in accumulation and in the presence of externalities would suppress consumption relatively while creating knowledge and capacity accordingly; and (2) if the self-employed enter the capitalist labour market as workers because of business failure, they would be at a substantial disadvantage in terms of their ability to drive up personal wages even in the presence of externalities. Slower growth of wages moderates the growth of demand for domestic consumer output and imports and keeps the growth of such output from outpacing the production of capital. Further, the growth of import productivity expands the supply of foreign exchange and lowers its cost while import prices are falling. There is no inherently strong upward inflationary pressure other than those attending exogenous shocks; indeed, the flow of credit itself slows incrementally over time.

The really important underlying dynamic is the rising externalities that increase profits faster than prices and wage income or consumption and rapidly increases the capacity of the entrepreneurs to finance further capital formation (i.e., meeting both working capital and long-term capacity expansion) out of profits without relying on continued relative expansion of the money supply. This leads to a rapid convergence process that limits the demand for credit and hence the extent of inflation due to the expansion of credit. The rate of convergence is governed by the amount of the income created by use of credit that has to be shared with workers, since it is this sharing that governs how fast profits can grow relative to output and income. In general, the higher the profit share, the faster the rate of convergence. The process can also converge rapidly if development banking systems can use suitable devices to drive a rising share of credit to support growing domestic capital investment by the priority sectors.[6] However, in the modern era, development banks would have to be designed to focus less on supply of working capital and import capacity and more on financing development of the domestic capital component of the asset base even as all forms of spending grow.

The essential credit-flow problem

One of the central problems of economic and social analysis in the Caribbean is the gross lack of adequate data, especially data on the financial sector. Nevertheless, taking into account discussions held with stakeholders during this study, the basic outline of the credit flow problem is that high risk and economic uncertainty concerning the production of domestic capital and related capital-intensive output create substantial difficulty for such entities to demonstrate their creditworthiness to lenders, especially the commercial sector. Many capital-intensive producers lack significant experience and credit history, or have limited or highly volatile and uncertain income, even when involved in global trade (good or service). On the other hand, special skills and elaborate information systems are needed to define and evaluate loan requests because much domestic capital-intensive activity starts among the self-employed without employees or grows into the small and medium creative and copyright-intensive enterprises who have been historically ignored by the

[6] Of course, taxes and a rising share of imports can have similar effects.

traditional banking sector. Many capital-intensive operators are therefore forced to use creative financing, such as informal venture capital, and hence operate in highly uncompetitive markets for a very limited flow of financing. Even Development banks have not traditionally participated in this sector. This has a cost in terms of high rates, a share of the value added, loss of copyright and other very unfavourable terms of access to limited financing.

Relevant reforms in Development banks to make direct loans available to this sector facilitates the provision of credit which can help support the transition of the self-employed into the capitalist sector, the growth of small and medium enterprises into large ones and the adoption and development of new domestic and foreign capital and technologies that will make domestic capital-intensive operations more competitive and grow at the rapid rate that is necessary in changing global economic conditions. That in turn would require an appropriate capacity to capture and spread the associated risks. The next section shows that they are not so designed. Section III shows what the alternative design might be.

2. Evolution of development banking

This section reviews the nature, history and experience of development banking in the Caribbean. The review shows that, from the facts surrounding the emergence and achievements of development banking, these institutions cannot efficiently allocate credit to the modern priority sectors at optimal prices. Development banks, under government ownership and control, were forced to function in a manner that converted them into social-sector transfer mechanisms, transferring public funds to address the needs of many sectors in a way that offered little prospects of viability. Apart from being highly inefficient and financially and socially unprofitable in Tier II mode, the development banks were not able, unilaterally, to promote development by building up the domestic capital forms critical to raising the asset turnover and hence the asset value and viability of the target sectors.

Reforms have moved in the direction of increasing the internal efficiency of the Tier II banks lending directly to the end-users of credit, privatisation, or establishment of Tier I banks that lend to, and on-lend through, the direct lenders. Tier I banking has proven to be profitable and to provide some stimulus to the financial sector through the flow of concessionary funds for lending and on-lending. However, these reforms do not address the fundamental challenge of moving resources efficiently to the priority sectors focused on domestic capital accumulation and capacity building in a context where the market would normally avoid exposure to their high credit risk. This evaluation provides the basis for designing reforms that can integrate development banks into the ongoing financial reform agenda. It points to the need to introduce strong credit risk measurement, risk pricing and hence risk spreading devices, ultimately by joining the global trek to establishment of derivatives markets.

Purpose

Development banking was established to facilitate exploitation of the development resources of the region, at the time thought to be cheap labour, by providing direct credit and related services to selected priority sectors and by operating in a manner that promoted the development of the financial sector. Development banking exists at both the regional and national levels.

Regional development banking

It is useful to observe that there was always a "regional" flavour to development banking. In particular, there was a harmonised approach pushed by the colonial governors across the region, resulting in simultaneous establishment of Development Finance Corporations around 1959 to function as **Tier II** agencies in the first instance. The objective in Jamaica, reflective of objectives in the other countries, was to "meet the need for medium and long-term credit in certain sectors of the economy…" and the priority activities were "industry, housing and tourism" (Central Planning Unit, 1959: 52). Industry meant the "manufacturing sector" the intended principal user of cheap labour (Government of Jamaica, 1962).

The regional flavour was also expressed early in the third Caribbean development decade, when Lewis was invited to found the Caribbean Development Bank (CDB) (1970-1974) and the Caribbean Investment Corporation (CIC) was established as part of the Georgetown Accord. The mandate of the CDB was to assist its borrowing member countries to optimise the use of their resources, develop their economies, and expand production and trade; promote private and public investment, encourage the development of the financial upturn in the region, and facilitate business activity and expansion; mobilise financial resources from both within and outside the region for development; provide technical assistance to its regional borrowing members; support regional and local financial institutions and a regional market for credit and savings; and to support and stimulate the development of capital markets in the region (**Table 1**). The institution has evolved as an important "**Tier I**" regional lending agency lending to commercial banks, development banks or directly to government projects.

The principal function of the CIC was to provide "a source of loanable funds for the industrial development projects of the less developed territories of CARIFTA" (National Planning Agency, 1973: 19).[7] The CIC has proved to be a minor Tier I source of funding as could be gauged from its initial capital of EC$15 million. Its flexibility to respond to market forces is reflected in the fact that 60% of its initial capital was to be subscribed by the Regional Governments and 40% by the private sector.

[7] The less developed countries were designated specifically as the OECS countries, rather than by the more usual per capita standard.

Table 1
CARIBBEAN DEVELOPMENT BANK PURPOSES AND FUNCTIONS

PURPOSES	FUNCTIONS
1. To contribute to the harmonious economic growth and development of the member countries in the Caribbean 2. To promote economic co-operation and integration among them, having special and urgent regard to the needs of the less developed members of the region.	To carry out its purposes, the CDB must: 1. Assist regional members in the co-ordination of their development programmes with a view to achieving better utilization of their resources, making their economies more Complementary, and promoting the orderly expansion of their international trade, in particular intra-regional trade. 2. Mobilize within and outside the region additional financial resources for the development of the region. 3. Finance projects and programmes contributing to the development of the region or any of the regional members. 4. Provide appropriate technical assistance to its regional members, particularly by undertaking or commissioning pre-investment surveys and by assisting in the identification and preparation of project proposals. 5. Promote public and private investment in development projects by, among other means, aiding financial institutions in the region and supporting the establishment of consortia. 6. Co-operate and assist in other regional efforts designed to promote regional and locally controlled financial institutions and a regional market for credit and savings. 7. Stimulate and encourage the development of capital markets within the region. 8. Undertake or promote such other activities as may advance its purpose. 9. Where appropriate, co-operate with national, regional or international organizations or other entities concerned with the development of the region.

Source: Agreement Establishing the CDB.

National banks

On the national scenes, the Development Finance Corporations (DFC) were found to be inadequate to their tasks of issuing credit and related advisory support directly to the sectors targeted by government and ultimately phased out. In fact, recurring commercial failure and burden on the national purse has been the key cause of repeated restructuring of the Tier II development banks. Generally, the historical focus of reforms has been on improving financial viability by introducing measures that were intended to improve their delivery of services and recovery of assets. This has meant initiatives such as the merging of various institutions to achieve scale-related benefits; more stringent monitoring and supervision of loans to achieve better capital adequacy; asset quality; liquidity; earnings and growth as well as to improve collections on loans outstanding and interest due. The central solution was establishment of at least one development bank in each territory by 1980.

In Belize, the Development Finance Corporation was established in 1963. The Grenada Agricultural Bank was established in 1965 and St. Kitts and Nevis created the Development Finance Corporation in 1968. The Bahamas created the Bahamian Development Bank in 1974 by legislation but it became operational in 1978.

In historical terms, following the early formation of the development banks, there was repeated rationalisation of some of these entities as part of the wider structural adjustment programme of the 1980s, particularly as it was recognised that these banks were a drain on the national treasury. In Grenada, the Grenada Agriculture Bank became the Grenada Agriculture and Industrial Development Corporation and subsequently the Grenada Development Bank in 1980. In St. Kitts and Nevis, the Development and Finance Corporation was succeeded by the Development Bank of St. Kitts and Nevis in 1981. Similarly in Jamaica, the National Development Bank of Jamaica Limited and the Agricultural Credit Bank of Jamaica were merged in 2000 to become the Development Bank of Jamaica Limited. In the case of Trinidad and Tobago, the Industrial

Development Corporation was closed and private interests were brought into the Development Finance Corporation and the institution was renamed as Development Finance Limited. In all cases, the move was intended to shift the burden of the banks from the national budget. The specifics from the two largest economies are instructive.

Jamaica

In the case of Jamaica, a new institution, the Jamaica Development Bank (JDB) was established in 1969 to "provide the type of assistance required to facilitate the establishment and operation of "development enterprises" identified in the Jamaica Development Bank Act, 1969 specifically as "industrial, tourist, housing, and commercial agricultural enterprises." The JDB was established with a subsidiary, the Small Industry Development Finance Company (SIFCO), set up for the purpose of targeting small enterprise. The services envisaged included "direct loans, loans with equity participation, the underwriting of securities, guarantees, and the provision of financial advice to potential as well as existing clients" (Central Planning Unit, 1969:113). From the start, the commitment to support the development of the financial sector was explicit. For example, the Act specifically charged the JDB with responsibility to "assist persons in establishing, carrying on, or expanding development enterprises by participating in share capital, granting loans, and providing other forms of financial assistance," and crucially to "foster the development of money and capital markets" (Jamaica Development Bank Act, 1969: s 4.1; Central Planning Unit, 1970:103). It should be noted that notwithstanding the presence of discretionary powers to "furnish financial advice and provide **or** assist in obtaining managerial, technical, and administrative services for development enterprises in Jamaica," these extension activities were not viewed as a mandate and were not given priority focus in the general scheme partly because of limited capacity to deliver on the part of the development banks.

By 1981, policy makers in Jamaica formed the view that the JDB and SIFCO were not operating as a viable Tier II financial institution, especially in the context of large-scale lending to government, and in particular had lost the ability to raise finance on the international markets. These institutions were therefore replaced in 1981/1982 by the National Development Bank (NDB) and the Agricultural Credit Bank (AC Bank), designed to operate as **Tier I national** institutions on a new principle of **direct lending only to commercial banks and approved financial institutions.** For example, the AC Bank took over lending to agriculture from the pre-existing Agricultural Credit Board and was expected to "be run as a viable enterprise … to provide credit to farmers on a timely, cost-effective and relevant basis." The AC Bank was designed to "operate as a wholesaler of credit" and to "on-lend funds to commercial banks and approved institutions such as the People's Cooperative Banks and Cooperatives" that in turn operated as the Tier II institutions designed to "retail credit to farmers and … bear the risk of the loans". The NDB took over the assets of the JDB and SIFCO, with the mandate to "only offer loans to commercial banks and approved financial institutions." The intent in both cases was to minimise credit risk, so that the institutions could lower interest spread and enable commercial banks and approved institutions to lend to their customers with minimal increases in the interest rate charged to the borrower. At the same time, the NDB was required to operate "a special facility for small business to give advice to prospective borrowers on finance and project implementation …" The purpose here was primarily to assist them in approaching commercial banks and financial institutions (National Planning Agency, 1982: 6.17). The most recent reforms to address viability have led to formation of the Development Bank of Jamaica (DBJ) to provide both Tier I and Tier II lending services.

Important elements of the regional development banking landscape are the Jamaica Students' Loan Bureau and the highly successful National Export-Import Bank of Jamaica Ltd (EX-IM Bank). It is interesting in the light of the proposals advance later in this study, that the EX-IM bank was established in 1986 to take over and execute the functions of the Jamaica Export Credit Insurance Corporation, which had not performed up to expectations with respect to the provision of

trade financing and export credit insurance as well as to support businesses involved in import substitution. The Jamaican Students' Loan Bureau was established in 1996 in an overarching reform of previous loan arrangements to facilitate increasing cost-sharing by the private sector in a context of tightening budget constraints (World Bank, 1996).[8]

Trinidad and Tobago

In Trinidad and Tobago, the Industrial Development Corporation (IDC) was formed as early as 1959, and this was later followed by upgrading or establishment by 1968 of other development agencies including the Development Finance Corporation and the Export Development Corporation and the Agricultural Development Bank (ADB).[9] The institutions were designed as Tier II lending institutions came out of recognition by government that the credit needs and supporting extension requirements of the industrial and agricultural sector were not being adequately met. The IDC was ultimately closed because it core objectives of stimulating long run industrialisation on an import-substitution base were not being achieved.

The ADB has survived, but has not been effective. When established, its objective was to encourage and foster the development of agriculture and commercial fishing and industries connected therewith and to mobilize funds for the purpose of such development. The ADB committed to investment in plant and equipment needs, working capital, construction and infrastructure works, raw materials and related activities and other inputs of importance to its client base. As we shall see, its loan portfolios and financial performance also tell a story of general failure to achieve its goals while operating in Tier II mode and subject to public sector directives. Reforms over the years included the end of government subsidies by 1985; radical upgrading of the internal operations by 1993, with the technical assistance of the IADB to address perceived organizational and operational deficiencies, strategic planning, loan evaluation and management practices, strategies to address (sell) bad loans and other related internal matters (ADB, Annual Reports, various years).

The DFC in Trinidad and Tobago was itself reformed and privatised, converted into the Development Finance Limited (DFL) and ultimately redesigned to provide both Tier I and Tier II services to meet the needs of manufacturing, tourism and the industrial and commercial services in Trinidad and Tobago and the Eastern Caribbean. Of significance in this context, the reformed institution finances plant and equipment needs, working capital, construction and infrastructure works, raw materials and related activities and advertises its interest in promoting investment in the capital sectors of health, education and professional services (www.dflcaribbean.com).

Ownership and governance of national development banks

Development banks have generally been established as government-owned or controlled institutions. With the exception of DFL, privatisation and in particular private control is not characteristic of the sector and in the few cases on record largely evolved from concern with solvency and the continued burden of accumulated losses on the public purse (**Table 2**). This also applies to the CDB. In the case of the CDB, the public ownership structure is defined to include international non-regional members who in turn afford opportunity for the World Bank and the British Department for International Development to participate (**Table 3**).

Placed in the context of the lack of transparency of national governance arrangements, the absence of sector-wide approaches and joint decision-making processes that bring all hands on board to define national policy and also the absence of public expenditure review mechanisms that is characteristic of governance and public sector budgeting in the Caribbean, public ownership has

[8] World Bank (1996). Staff Appraisal Report: Jamaica's Student Loan Project. Report No. 15594-JM, Country Department III, Human and Social Development Group, Latin America and the Caribbean Region, Washington D.C: The World Bank.

[9] Established by the Agricultural Development Bank Act, 1968.

meant that development banks have largely responded to public policy directives rather than private market signals. Throughout its history therefore, as a direct consequence of predominantly public ownership, the development banking sector has featured little overall flexibility to adjust policy perspectives and respond to market signals even when forced to operate without government subventions. Nevertheless, as in the case of the CDB and the EXIM Bank of Jamaica, public ownership has served to demonstrate the overall financial strength that collaborative ownership can achieve were development banks to be further reformed to upgrade their roles in collateralising and securing lines of credit to commercial entities and development entities in the private sector.

Table 2

STATE OWNERSHIP OF DEVELOPMENT BANKS IN THE CARIBBEAN

Development Bank/Financing Institutions	Ownership
The Bahamian Development Bank (Bahamas)	State
The Development Finance Corporation /Farmer's Bank (Belize)	State
The Grenada Agricultural Bank (Grenada)	State
Development Finance Corporation (St Kitts/Nevis)	State
Jamaica	
Jamaica Development Bank/SIFCO/Agricultural Credit Banks	State
National Investment Bank of Jamaica/National Development Bank/Development Bank of Jamaica	State
Students' Loan Bureau	State
Trinidad and Tobago	
Industrial Development Corporation / Agricultural Development Bank	State
Development Finance Limited	Private Sector; Minority State

Table 3

CDB OWNERSHIP STRUCTURE WITH REPRESENTATION

Membership type	Member states
Regional	Anguilla, Antigua and Barbuda, The Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands (In all cases through the Ministry of Finance)
Other Regional	Colombia (Bank of the Republic), Mexico (Ministry of Finance), Venezuela (Venezuelan Economic and Social Development Bank)
Non - Regional	Canada (Canadian High Commission), China (Peoples' Bank of China), Germany (World Bank), Italy (Ministry of Economy and Finance), United Kingdom (Department for International Development)

Source: CDB Website www.caribank.org

Sources of funds – regional and national patterns

Government and international agencies are the main sources of concessionary funds for development banking in the Caribbean. The CDB is becoming an increasingly important medium through which the national banks receive international concessionary funding.

In the case of the CDB, concessionary funding comes from its Ordinary Capital Resources (OCR), its Special Development Funds and Other Special Funds. The OCR comprises borrowing from the private capital markets (regional and international) and from international financial institutions, paid up capital by member countries and a risk cover built up from accumulated retained earnings. By achieving AAA rating status, the CDB has built up a significant capacity to finance concessionary lending by borrowing from the international capital markets at very reasonable rates varying widely between 3% and 6% depending on source. The main assets generating a substantial flow of retained earnings are the high-performance loans to member countries (http://www.caribank.org/BOG2005.nsf/AR-2005?OpenPage – Annual Report 2005).

The DFL of Trinidad and Tobago stands out as a privately owned and financed bank that maintains its development orientation. Its main sources of funds are the local, regional and international capital markets as well as its own cash flows and profits (www.dflcaribbean.com).

With respect to the other national development banks in the region, in the inception period from the 1950s to 1979, government transfers were the main source of financing, including funds to cover bad debts. There was also significant funding from international sources via the CDB and other multilateral agencies such as the IDB and the European Development Funds tied to the Lome convention. As Development banks have been moved increasingly to Tier I status, there has also been a shift by government to use of loan arrangements as the mode of financing. Since 2000, long-term loans have formed the major source of funds for the development banks in the region. The proportion of long-term loans to assets for the sample of development banks examined for the period 2002 to 2004 was over 44 per cent, with four of the seven banks recording a ratio between 50 to 70 per cent, see **Table 4**. Sixteen years earlier, i.e., in 1986, the banks accessed a slightly lower proportion of long-term finance. The loans to assets ratio was under 65 per cent for four of the five banks examined for that period. Note however, that reliance on long term loans did not necessarily mean the end of heavy dependence on the state since much depends on how unpaid debt to the state are managed.[10] The major sources of long-term loans were government, local agencies, the Caribbean Development Bank and the Multilateral Banks such as the IDB, European Development Agencies, American Development Agencies and commercial banks in the region. Development banks in Belize, Jamaica and Trinidad and Tobago were able to raise funds by floating government backed bonds. In addition, development banks in the Belize and the OECS countries were able to adopt the controversial and socially high-cost practice of borrowing from their national security schemes while some development banks obtained loans directly from the Central Bank. Borrowing from the national security scheme is currently being considered for adoption in Jamaica.

[10] It is perhaps too early to assess how this mechanism would work if the Tier I institutions get into financial trouble.

Table 4
RATIO OF LONG TERM LOANS TO TOTAL ASSETS OF DEVELOPMENT BANKS, (2002-2004)

Year	Development Bank						
	Antigua Barbuda Development Banks	Development Bank of Jamaica	Development Finance Corporation, Belize	Development Bank of St. Kitts and Nevis	Grenada Development Bank	Bahamas Development Bank	Agricultural Development Bank of Trinidad and Tobago
1986	36.9%	47.1%	64.8%	NA	63.1%	88.6%	NA
2002-2004	44.2%	64.7%	50.8%	64.1%	108.5%	91.3%	68.0%

Source: Annual Reports of the various development banks.

Management capacity of development banks

The weak asset base and dependence on the government budget has been highly consequential. The technical capacities of the development banks tend to be within the normal range of the local public sector, and on average as well or better educated than the private sector. However, the institutions have generally lacked entrepreneurial drive. Especially in their Tier II functions, they have been unduly inflexible in evolving suitable autonomy in loan award decision making and flexibility to address the needs of private investors (as distinct from government). We return to this in evaluating performance. Both discussions with the stakeholders and several confidential reports prepared by reputable international agencies[11] have indicated that the absence of adequate room to practice entrepreneurship as indicated by factors such as too many control point in loan processing that result in delays in loan approvals, uninformed limitations on the size and quality of loans with respect to capital-intensive sectors, inadequate focus on marketing, advertising and research as well as absence of independence and autonomy in shaping policy because of government's dominance of the boards.

This is not only due to the restraints imposed by publicly controlled boards, but also the lack of room to invest in developing high quality staff trained in finance and the development of suitable instruments to address credit risk. This has been a significant constraint on the development of the finance-related capacity of the sector and its ability to lead development in the financial sector as well as the technical and related political credibility to lead the public sector in development financing matters. Many governments are under very tight budgetary constraints as budget deficits have been growing absolutely (**Table 5**) and as a share of GDP (**Table 6**), restricting flexibility to meet the needs of the development banks for large-scale low-cost funds to meet the demands of customers. In some case, such as Belize and Jamaica, the growth of the deficit has been very large, more than doubling in each year in the context of related inflation, and only Bahamas, Barbados and Trinidad and Tobago have met the desired CARICOM average target in terms of share of GDP (3%). Correspondingly, the institutions have lacked the required novelty in the reading of, and responding to, the emerging market trends and signals; and have been excessively vulnerable to political interference and directives and to corrupt influences. Indeed, for these reasons, they have also become excessively burdened by the bureaucratic approaches to administration, even after repeated reforms and have lacked both the autonomy and the will to design suitable methods of defining and addressing credit risk.

[11] Some of these reports were examined for reporting in this study but without permission to quote.

Table 5
CARICOM: OVERALL FISCAL BALANCES (MILLIONS, NATIONAL CURRENCIES) AND GROWTH OF DEFICITS, 1996-2003

Country	1996	1997	1998	1999	2000	2001	2002	2003	Average 1996-2003
Bahamas	-63.5	-135.5	-80.4	-51.4	-14.3	-95.3	-134.3	-207.6	
Deficit Growth Bahamas		113%	-41%	-36%	-72%	566%	41%	55%	89%
Barbados	-128.4	-39.0	-39.2	-117.2	-78.2	-182.0	-316.3	-164.8	
Deficit Growth Barbados		-70%	1%	199%	-33%	133%	74%	-48%	36%
Belize	-4.6	-25.3	-28.6	-29.1	-139.9	-142.4	-68.8	-212.9	
Deficit Growth Belize		450%	0.1	2%	3.8	2%	-0.5	209%	144%
EC Currency Union	-107.9	-170.9	-325.4	-215.5	-337.0	-555.7	-698.9	-414.8	
Deficit Growth ECCU		58%	90%	-34%	56%	65%	26%	-41%	32%
Guyana	-1,587.2	-7,403.7	-7,317.3	-2,431.1	-9,478.7	-12,790.1	-9,869.7	-9,547.2	
Deficit Growth Guyana		366%	-1%	-67%	290%	35%	-23%	-3%	85%
Jamaica	-11,013.0	-18,742.3	-13,140.2	-12,140.0	-2,684.9	-20,945.5	-32,342.8	-42,631.6	
Deficit Growth Jamaica		70%	-30%	-8%	-78%	680%	54%	32%	103%
Suriname	-6,262.0	-10,499.0	-43,200.0	-73,000.0	-142,765.0	52,900.0	-157,400.0	6,700.0	
Deficit Growth Suriname		68%	311%	69%	96%	-137%	-398%	-104%	-14%
Trinidad & Tobago	171.0	41.4	-741.0	-1,355.3	819.1	-40.6	186.8	1,835.0	
Growth Trinidad and Tobago		-0.76	-18.90	0.83	-1.60	-1.05	-5.60	8.82	-261%

Table 6
OVERALL FISCAL BALANCES AS % OF GDP, 1996-2003

Countries	1996	1997	1998	1999	2000	2001	2002	2003	Average
Bahamas	-0.9	-3.4	-1.9	-1.1	-0.3	-1.9	-2.7	-4.1	-2.0
Barbados	-3.2	-0.9	-0.8	-2.3	-1.5	-3.6	-6.3	-3.1	-2.7
Belize	-0.4	-2.0	-2.3	-2.1	-9.0	-8.8	-4.9	-10.8	-5.0
EC Currency Union	-1.7	-2.6	-4.6	-5.8	-7.6	-10.1	-11.6	-8.5	-6.6
Guyana	-1.6	-6.9	-6.8	-2.0	-7.3	-9.6	-7.1	-6.6	-6.0
Jamaica	-4.9	-7.6	-5.0	-4.3	-0.8	-6.0	-8.5	-9.8	-5.9
Suriname	-2.0	-3.0	-9.7	-9.6	-12.2	3.2	-7.0	0.2	-5.0
Trinidad & Tobago	0.5	0.1	-1.9	-3.2	1.6	-0.1	0.3	2.7	0.0
TARGET	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	3.0

Development banks - a performance evaluation

Credit allocation

The crucial challenge of development today is to achieve rapid accumulation of domestic capital as the basis for achieving rapid growth of asset turnover. So, in terms of sectoral allocation, the key test for development banks is whether they are able to flexibly allocate resources to the sectors that are achieving the highest asset turnover through these means. This requires an increasing allocation to sectors that use domestic capital intensively, including those that make intensive use of copyright to earn income.

Allocations of the CDB

Provision of lines of credit to the national development institutions is CDB's main method of supporting the CARICOM development agenda,[12] so a reasonable assessment of the institutions allocation of resources is achieved by examining the allocation patterns of these beneficiary institutions across the region.

The general regional pattern

There was a sharp contrast between the credit allocation of development banks in Belize along with the OECS islands, compared with the rest of the member territories of CARICOM, see **Table 7**. Housing was the dominant sector which received loans by the development banks in Belize and most of the OECS islands in the sample. In addition these banks also provided credit for other human resource development through student loans. The allocation to human capital development is consistent with development needs but the failure to adopt a reasonable market-driven business model in the process has led to significant problems of viability in the case of Belize.

The pattern is different for the other territories, as loans to industry featured in the lending of those development banks. Interestingly, the development bank in Jamaica allocated about half of its loan portfolio to government. Conventional interpretation would suggest that there was some level of crowding out of private sector loans by this development bank while government gained low cost loans. A more useful interpretation is perhaps that this, like the problems with the high allocation to housing in Belize, are manifestations of the inherent conflict that exists between government-ownership and control under non-transparent governance arrangements and the need for the ownership of Development banks to rationalised and privatised to respond adequately to market signals in what are increasingly market driven CARICOM economies.

In terms of the productive sectors, the evidence suggests that the allocations of the national development banks are mainly to the traditional manufacturing and agricultural sectors that do not have a significant share of domestic capital in their net assets and that are not focused on accumulating such capital assets. This is illustrated for the cases of Trinidad and Tobago and Jamaica. Services and tourism, which are relatively more capital intensive and are the key growth sectors of the economy, tend to receive a stable rather than growing share of development credit. This is well illustrated by the Jamaica case data, with allocations of about 60% to its manufacturing sector and 20% to services and tourism (**Table 8**). Indeed, within the agricultural sector, most of the loan funds went to sugar, coffee and other sectors that make intensive use of imported capital, even if not modern form of such capital (**Table 9**). These sectors are typically selected by government, often for an underlying social policy purpose, but not inherently linked to high current or potential productivity, profitability and savings, as dictated by the changing development conditions.

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[12] This is the CDB's description of its record. See for example, The Caribbean Development Banks Operations in 2005 on http://www.caribank.org/BOG2005.nsf/AR-2005?OpenPage.

This pattern of allocation is mainly because throughout their tenure development banks inherently lacked both the flexibility to address the needs of all aspects of the private sector (as distinct from government), as indicated by market forces,[13] and the autonomy in loan award decision making to meet such a challenge. The banks tend to operate with a very low debt ratio,[14] relying mainly on government funding to meet commitments and address insolvency. In the absence of strong complementary joint decision-making processes that give the private sector a firm role in national or local government budgeting, the banks are mainly dominated by government's reading of development needs and are ill-placed to define their roles in terms of market signals about development needs. The issue here is not management skills. Development banks are generally run by persons with comparable technical skills to those in the private sector. However, even with high-quality management capacity, the banks are generally subject to excessive political interference that results in an inadequate role for asset turnover and commercial viability when making allocation choices.

Corresponding to an inadequate focus on meeting the domestic capital growth needs of the private sector is an excessive share of short-term loans (working capital supports) in their asset structure and an inadequate focus on viable long terms loans. The data is not frequently published but when available, such as for the ADB in Trinidad and Tobago, the indicator is that there is excessive focus on both working capital needs and on foreign capital inputs. In 1993 and 1994 at least 70% of the input costs financed went to working capital and foreign inputs[15] in a context in which the prospects for increasing viability were increasingly to be found in investment in domestic capital (**Table 10**). And in 2001, 8 years after the initiation of the aforementioned reforms in 1993, there was neither a focus on domestic capital development nor on use of interest differentials to promote investment in its various forms. The Ministry of Food Production and Marine Resources (2001) in its review of sector policy, had to lament that investment in the most important input, new local knowledge and skills, was inadequate: "The concern is that the education and training system is not providing the knowledge and skills necessary for the development of the agricultural sector" (p.20).[16]

Equally compelling evidence exists that there was insignificant capital accumulation through acquisition and development of land, a main form of capital accumulation and rising asset turnover under the current agricultural technology. More than 36 years after the establishment of the ADB in Trinidad and Tobago, the data from the Agricultural Census of 2004 showed that 87% of all farmers hold less than five hectares of land. These are clearly insufficient lands to address seriously the issue of asset turnover and underwrite the growing viability of the clients of the institution. The associated degree of inequality is high, as indicated by a **Theil** index of the inequality of land distribution of **0.52**. That is to say, the inequality-adjusted average level of land holdings is about 52% below what would be desirable if the society was interested in consolidating and capitalising agricultural acreages equitably in the hands of those who are concerned with successful farming as a livelihood. It could hardly be reasonable to expect that under such circumstances the majority of the clients of the development banks, tiny farms and small operators, could support increasing viability of the institutions (**Table 11**). The failure to target capital accumulation helps to explain why in 1994 only 2.0% of allocations went towards financing land acquisition and development (**Table 10**).

[13] That is to say as indicated by the rankings of (industry performance) indicators such as asset turnover or capital productivity or profitability in the market.

[14] That is, a low debt to total assets ratio.

[15] Estimates exclude installation and maintenance.

[16] This evaluation did not reflect full appreciation of the changing market conditions. The same report interpreted the impact of rising productivity and wage reservations as "Dutch Disease" in Trinidad and Tobago, rather than as the consequence of inadequate domestic capitalisation that had the effect of inhibiting the growth of capital and import productivity, i.e., asset turnover, in agriculture and related industries such as tourism. This illustrates how important it is that policy-makers addressing development issues be guided by sound microeconomic data analysis and related appropriate macroeconomics.

Table 7

LEADING TWO SECTORS RECEIVING LOANS FROM SELECTED DEVELOPMENT BANKS (2002-2004)

	Development Banks in the OECS			Other CARICOM Development Banks		
	Grenada Development Bank (% of total loans)	Development Bank of St. Kitts and Nevis (% of total loans)	Bank of St. Lucia Limited (% of total loans)	Development Bank of Belize (% of total loans)	Bahamas Development Banks (% of total loans)	Development Bank of Jamaica (% of total loans)
Services					44.4	
Fishing					19.6	
Government						47.5
Loans to Financial and Agricultural Institutions						31.6
Housing Development	14.0	96.7	46.0	41.4		
General		2.5				
Student loans	66.7		25.0			
Micro Enterprises				24.5		

Source: Annual Reports of the respective development banks.

Table 8

ALLOCATION OF DEVELOPMENT BANK LOANS BY ECONOMIC ACTIVITY, JAMAICA

Year	Sector									
	Agric (J$m)	Mfg (J$m)	Services (J$m)	Tourism (J$m)	Mining and Quarrying (J$m)	INTECH (J$m)	Other Small Business (J$m)	Total (J$m)	Mfg Share (%)	Service and Tourism Share (%)
1969	0.725	2.3		0.825			0.60	4.5	51.7%	18.5%
1970	0.725	3.2		1.2			0.04	5.2	62.0%	23.3%
2001	377.6	2338.3	322.3	471.7	59.6	308.8	2.30	3880.6	60.3%	20.5%
2002	252.7	2364.4	382.2	357.9	56	43.7	2.50	3459.4	68.3%	21.4%
2003	261.8	2266.9	569.4	128.6	436.7	5.4	0.00	3668.8	61.8%	19.0%

Source: Economic and Social Survey of Jamaica, various years.

Table 9

ADB DISBURSEMENT OF LOANS BY SECTOR

Sector	1993		1994		1995	
	Total ($'000)	% of Total	Total ($'000)	% of Total	Total ($'000)	% of Total
Cereals	1 020.2	1.44%	1 887.6	5.00%	375.0	0.67%
Roots & Starches	671.1	0.94%	472.7	1.25%	375.0	0.67%
Vegetables	3 015.7	4.25%	2 187.9	5.79%	2 250.0	4.00%
Pulses & Nuts	5.4	0.01%	2.7	0.01%	37.5	0.07%
Fruits	602.0	0.85%	371.0	0.98%	900.0	1.60%
Cocoa & Coffee	721.7	1.02%	576.6	1.53%	1 875.0	3.33%
Sugar Cane	7 347.0	10.34%	6 549.8	17.35%	7 875.0	14.00%
Condiments	492.4	0.69%	3.5	0.01%	75.0	0.13%
Other Crops	10.0	0.01%	50.1	0.13%	225.0	0.40%
Plant Propogation	17.0	0.02%	7.0	0.02%	150.0	0.27%
Poultry	1 636.4	2.30%	1 178.3	3.12%	900.0	1.60%
Dairy	644.0	0.91%	661.1	1.75%	600.0	1.07%
Beef	19.7	0.03%	40.4	0.11%	187.5	0.33%
Pigs	114.6	0.16%	137.8	0.36%	337.5	0.60%
Sheep & Goats	110.3	0.16%	223.9	0.59%	150.0	0.27%
Other Livestock	0.0	0.00%	0.0	0.00%	75.0	0.13%
Bees	85.5	0.12%	89.9	0.24%	75.0	0.13%
Forestry	159.0	0.22%	52.5	0.14%	3 000.0	5.33%
Fish	2 051.4	2.89%	1 399.2	3.71%	1 500.0	2.67%
Aquaculture	79.9	0.11%	2.0	0.01%	750.0	1.33%
Agro-Industry	48 799.0	68.71%	19 121.5	50.64%	30 000.0	53.33%
A.C.S.	74.2	0.10%	95.0	0.25%	187.5	0.33%
Ornamental Horticulture	1 889.8	2.66%	1 787.6	4.73%	3 000.0	5.33%
Marketing	251.6	0.35%	84.9	0.22%	1 350.0	2.40%
Mechanical Services	301.2	0.42%	643.2	1.70%	0.0	0.00%
Agri-Bus. Input Sup.	63.0	0.09%	0.0	0.00%	0.0	0.00%
Service Charge	745.7	1.05%	0.0	0.00%	0.0	0.00%
Other Income	93.7	0.13%	130.7	0.35%	0.0	0.00%
TOTAL	71 021.5	100.00%	37 756.9	100.00%	56 250.0	100.00%

Source: Agricultural Development Bank, Trinidad and Tobago.

Table 10

ADB LOANS DISBURSED BY INPUT PURPOSE

Input Allocation	1993		1994	
	Total ($'000)	%	Total ($'000)	%
Pirogues, Engines, Nets	817.4	1.34%	1492.1	2.4%
Trawlers, M.P. Boats, Equipment	602.8	0.99%	180.0	0.3%
Farm Machinery & Equipment	2666.1	4.38%	3938.8	6.3%
Farm Vehicles	1167.0	1.92%	2533.3	4.1%
Farm Buildings	2823.7	4.64%	359.4	0.6%
Infrastructure	1074.6	1.76%	337.4	0.5%
Land Acquisition	196.5	0.32%	888.6	1.4%
Purchase Of Stock	649.7	1.07%	924.3	1.5%
Establishment	2172.8	3.57%	1984.6	3.2%
Op. Costs re Primary Production	2404.3	3.95%	1211.4	1.9%
Rehabilitation	67.0	0.11%	123.8	0.2%
Plant Machinery & Equipment	7845.4	12.88%	8787.2	14.1%
Factory Buildings	76.8	0.13%	2058.1	3.3%
Working Capital re Agro Industry	27830.3	45.70%	24790.9	39.8%
Farm Dwelling House	345.2	0.57%	452.0	0.7%
Establishment / Maintenance	3326.8	5.46%	2321.7	3.7%
Maintenance	5428.5	8.91%	6935.8	11.1%
Rehabilitation / Maintenance	10.0	0.02%	34.2	0.1%
Transfer of ADB Loan	764.3	1.26%	1345.6	2.2%
Draught Animal	3.0	0.00%	0.0	0.0%
Re-lending	44.2	0.07%	64.0	0.1%
Harvesting	49.0	0.08%	26.5	0.0%
Transport-Market	14.2	0.02%	50.3	0.1%
Contingency	2.0	0.00%	217.4	0.3%
Insurance	2.2	0.00%	164.3	0.3%
Liquidation of Non ADB Loan (SLDF)	380.8	0.63%	94.4	0.2%
Marketing	0.0	0.00%	194.0	0.3%
Service Charge	129.9	0.21%	765.9	1.2%
TOTAL	60894.5	100.00%	62276.0	100.0%
Total Working Capital and Imported Inputs	44937.30	73.8%	46986.00	75.4%

Source: Ministry of Agriculture, Planning Division.

Table 11
FARM LAND DISTRIBUTION IN TRINIDAD AND TOBAGO, 2004

Hectares	No of Holdings	Relative Frequency of Number of Holdings	Mean Hectares	Total Hectares in Class	Group Share of Total Hectares	Group Hectares Relative to Mean	Log of Group Hectares Relative to Mean	Theil Inequality Index
<0.5	4166	0.2196	0.25	1041.50	0.014	0.14	-1.95	-0.28
0.5-<1	2438	0.1285	0.75	1828.50	0.025	0.25	-1.39	-0.35
1-<2	3453	0.1820	1.50	5179.50	0.071	0.71	-0.35	-0.25
2-<5	6464	0.3408	3.50	22624.00	0.309	3.09	1.13	3.48
5-<10	1693	0.0893	7.50	12697.50	0.173	1.73	0.55	0.95
10-<50	699	0.0369	30.00	20970.00	0.286	2.86	1.05	3.01
50-<100	30	0.0016	75.00	2250.00	0.031	0.31	-1.18	-0.36
100-<200	14	0.0007	150.00	2100.00	0.029	0.29	-1.25	-0.36
200-<500	9	0.0005	350.00	3150.00	0.043	0.43	-0.84	-0.36
500+	2	0.0001	700.00	1400.00	0.019	0.19	-1.65	-0.32
	18968	1.0000		73241.00	1.00			0.52

Source: Agricultural Census 2004 as reported in ADB Strategic Plan, 2005-2007.

Credit expansion

There are significant differences among Development banks with respect to the intensity of long term loans in their asset portfolio. As noted above, at the regional level, the main assets generating a substantial flow of retained earnings are the high-performance loans to member countries (http://www.caribank.org/BOG2005.nsf/AR-2005?OpenPage – Annual Report 2005). For the DFL, also an institution with a high performance rating, loans are also the major assets driving sound cash-flow and retained earnings performance (www.dflcaribbean.com).

With respect to the national development banks, examination of the sample of development banks in **Table 12** reveals that long term loans accounted for less than 60 per cent of the assets of four out of the seven development banks in the sample. However, the loan concentration ranged between 73 per cent and 90 per cent for the other three banks. Regarding the loans to debt ratio, the Development Bank of Jamaica, which now operates primarily as a Tier I institution or direct lender to government exhibited the best indicators, with loans more that 13% above debts.[17] Except for the Bahamas Development Bank, other Development banks operated with loans to debt ratios that are significantly below 100% and therefore a matter of considerable concern.

The significant differences between the ratio of long term loans to assets as well as debt reflected: (1) differences in the liquidity preferences of development banks, (2) differences in credit demand, (3) differences in the diversification by development banks in other activities and very likely, (4) differences in the quality of loans disbursed under the influence of politically oriented boards. For example, in the sample, the Agricultural Development Bank in Trinidad and Tobago exercised the greatest preference for liquidity in the sample, as this entity held about 36 per cent of its assets in financial instruments, thus suggesting supply or demand constraints in the credit market. However, under the influence of public policy, two of the other development banks diversified their activities into the real estate market. In 2002, the Development Finance Corporation (Belize) held 24 per cent of its assets in speculative real estate activities including housing projects that have generally been non-performing. The development bank of St. Kitts and Nevis held 39 per cent of its assets in 2004 in the form of equity in the manufacturing sector and other activities.

[17] It is not clear how much this indicator is influenced by the high rate of lending to government.

Table 12
TOTAL LOAN SHARE IN ASSETS AND DEBTS OF DEVELOPMENT BANKS: 2002-2004

Ratios	Antigua Barbuda Development Bank	Development Bank of Jamaica	Development Finance Corporation, Belize	Development Bank of St. Kitts and Nevis	Grenada Development Bank	Bahamas Development Bank	Agricultural Development Bank of Trinidad and Tobago
Loans to assets	7.8%	72.8%	42.1%	56.4%	86.8%	90.4%	58.3%
Loans to debt	17.5%	112.6%	82.8%	88.0%	79.9%	99.0%	85.7%
Development banks Loans to Commercial Bank Loans		22.8%				1.1%	2.0%

Source: calculated from annual reports of the respective development banks and the monthly and annual statistical digest of the commercial banks.

Default risk

The loan default risk observed in the local development banks is a function of the intrinsic risk associated with borrower type, the level of credit rationing practised by the banks, the willingness of borrowers to repay and the strength of the loans collections department. Regarding borrower type, the failure to focus on allocation for accumulation of domestic capital to increase asset turnover tends to cause a low asset turnover by the development banks and a high failure rate among its clients as indicated by the high rate of bad-debt provisions in its assets and high accumulated losses. In particular, the lack of viability resulting from inadequate focus on the development of domestic capital is reflected in a high proportion of investment going to uncompetitive activity and hence to a high proportion of non-performing loans, notwithstanding repeated reform of the practices of development banking institutions.[18]

The differences in the accounting practices between development banks made comparisons difficult with regards to the severity of loan default. For example, while one development bank in the sample reported actual non-performing loans of 43.8% of portfolio, the others reported provision for loan losses as low as 1.6% of portfolio (**Table 13**). Moreover, the basis of the provisions was not clear and it appears to vary among the banks. In particular, it is not clear whether the provisions were made before or after substantial write-offs by government. Nevertheless, the figures given by the development banks can serve as a useful guide since they at least give an idea that the problem of non-performing loans ranges from severe to moderate across the region, even after taking account of how political expediency influences reporting standards. Indeed, development banks went through restructuring and consolidation in the structural adjustment period since 1979, mainly because earlier versions of the banks reflected high proportions of non-performing loans (essentially defaults). The data presented in **Table 13** relates to the period after the reforms of the entities. So the idea that the problem of significant non-performing loans has again arisen since these reforms indicate existence of significant underlying problems with the current principles of development banking. A significant contributor to the problem of default risk is the absence of a strong regional debt collection mechanism with adequate international affiliation operating in the wider Caribbean region.

Most of the development banks in the sample did not set aside a large proportion of total loans to cover loan defaults. In analysing those where the risk of loan default appears to be low, certain features stand out. The Agriculture Development Bank of Trinidad and Tobago exhibited high liquidity, where about a third of their assets were liquid and invested in financial assets. The bank may have engaged in credit rationing and it was able to use the high degree of liquid assets to

[18] The lack of viability of the long term loans is also related to the intensive use of imported inputs that then require a high export performance to achieve minimum efficient size and be viable.

hedge against loan default risk. The development bank in Jamaica contained the risk of loan default by holding government debt – ranked as having zero default risk – as the major portion of their portfolio. Similarly, the development banks in the OECS and Belize exhibited the largest portfolio exposure to mortgage loans, and these default rates were lower than loans to industry. In contrast, the Bahamas Development Bank had very large portfolio exposures to industry where default rates were higher. Moreover, the bank was not very strong with regards to collections as it only recently established a loan collections department.

The experience of the ADB is instructive. In 1993 the ADB experienced rapidly worsening asset quality as indicated by a rising ratio of non-performing loans to total loans and a rapidly rising ratio of provisions for non-performing loans to total loans well outside of IADB established norms it had adopted as performance standards (**Table 14; Table 15**). While remaining a Tier II institution, the ADB adopted and began implementation of a complete basket of reforms developed with the assistance of the IADB and covering updates of the following:

- Management information systems, with particular reference to loan management and the general ledger and an updated payroll system.
- Audit systems.
- Loan administration covering matters such as review and classification processes; loan loss provisions; loan pricing addressing interest rate structure, cost factors such as operating expense, financial charges and capital, cost of money, loan loss provisions, exceptional factors, profit spread and loan tenor; average portfolio tenor; establishment of a risk rating system and risk management modalities; liability control.
- Management quality, internal organisation and training.

The fundamental problems were not resolved. A review of ADB performance of 1998 indicates that, typical of Tier II development banking in the region, the problem of rapidly worsening loan quality was recurring despite effective write-offs achieved by the loan loss arrangements and provisions instituted. Large losses continued to accumulate (**Table 15; Table 16**). By 2001, the problem had become so bad that the ADB declared itself to be “confronted with a financial crisis” and *status quo* that “does not offer viability prospects”. It warned that “should the Bank continue on its present course, its financial performance will continue to deteriorate to the point of collapse” (ADB, 2001: i). In that context, it urged that to achieve sustained viability, the Government of Trinidad and Tobago will be required to provide large scale financial support to the Bank to write off accumulated losses (ADB, 2001:iii). The situational assessment in its Strategic Plan of 2005-2007 is hardly better (ADB, 2004:39-42).

Table 13

SEVERITY OF NON-PERFORMING LOANS (2002-2004)

% of total loans	Grenada Development Bank (% of total loans)	Development Bank of St. Kitts and Nevis (% of total loans)	Development Bank of Belize (% of total loans)	Bahamas Development Bank (% of total loans)	Development Bank of Jamaica (% of total loans)	Agriculture Development Bank of Trinidad and Tobago
Non-Performing Loans				43.8		
Provision for loan losses	15.9	1.6	3.8		6.3	3.8

Source: Annual Reports of the respective development banks.

Table 14

ADB ASSET QUALITY, VARIOUS YEARS

Year	Loans (TT$M)	Non-Performing Loans (TT$)	General Provision	Non-performing Loans Ratio to Total Loans	Relative to IADB 20% Performance Standard	General Provision Ratio to Total Loans	Relative to IADB 3% Performance Standard
1991	1,418.14	699.14	179.40	49.30%	246.50%	12.65%	421.70%
1992	1,558.25	895.84	243.40	57.49%	287.45%	15.62%	520.70%
1993	1,861.59	1075.07	299.72	57.75%	288.75%	16.10%	536.70%

Source: ADB Strategic Plans, various years.

Table 15

ADB PERFORMANCE INDICATORS 1995-1999

	Asset Quality	Earnings			Liquidity	Capital Adequacy	
Year Ended	Provision for Loan losses to Total Loan Portfolio**	Net Profit/Loss to Total Average Assets	Net Profit/Loss Total Equity	Operating Expenses to Operating Income	Cash & Liquid Investments to Total Assets	Total Equity to Total Risk Weighted Assets*	Total Liabilities to Total Equity
1995	3.58%	-5.50%	-42.64%	487.05%	13.34%	23.51%	708.28%
1996	11.79%	-7.71%	-50.96%	338.89%	19.62%	30.97%	526.69%
1997	16.56%	-2.79%	-20.40%	172.52%	16.78%	23.98%	165.58%
1998	14.84%	3.24%	19.26%	68.83%	13.06%	25.95%	125.76%
1999	17.54%	1.22%	5.80%	85.24%	15.75%	33.87%	89.99%

* Before risk adjustment.

** Total loan portfolio includes interest.

Table 16
ACCUMULATED LOSSES OF THE AGRICULTURAL DEVELOPMENT BANK, TRINIDAD AND TOBAGO, 1977-2000 ($M)

Item	Value	Notes
Opening accumulated losses brought forward 1977	-1.827	
Loss for the financial year 1977	-0.481	
Profit for the financial year 1978	0.047	
Loss for the financial year 1979	-3.495	
Loss for the financial year 1980	-0.529	
Loss for the financial year 1981	-4.612	
Loss for the financial year 1982	-8.160	
Profit for the financial year 1983	1.124	
Profit for the financial year 1984	1.199	
Loss for the financial year 1985	1.918	
Loss for the financial year 1986	-	Adjustment of $23.5 million, to reverse interest accrued in previous years, change in accounting treatment to recognize interest only on performing loans
Loss for the financial year 1987	-12.717	
Loss for the financial year 1988	-3.587	
Loss for the financial year 1989	-8.210	
Loss for the financial year 1990	-7.433	
Loss for the financial year 1991	-11.654	
Loss for the financial year 1992	-5.907	
Loss for the financial year 1993	-25.228	Exchange loss 16 million on restatement of CDB
Loss for the financial year 1994	-90.622	Loan loss expense 73 million
Loss for the financial year 1995	-71.320	
Loss for the financial year 1996	-80.760	
Loss for the financial year 1997	-5.871	
Profit for the financial year 1998	6.630	
Closing accumulated losses as at 31/12/98	-222.959	
Closing accumulated losses as at 31/12/99	-220.900	
Closing accumulated losses as at 31/12/00	208.100	
Closing accumulated losses as at 31/12/01	209.900	
Closing accumulated losses as at 31/12/02	203.000	
Closing accumulated losses as at 31/12/03	189.600	

Source: ADB Strategic Plans, various years

Efficiency and profitability

This section provides two broad indicators of the performance of the development banks, efficiency and profitability. The next will consider the impact of the system on the regional financial sector, using as indicators the impact in the two largest economies, Jamaica and Trinidad and Tobago.

Efficiency

The Costs of development banking - level and structure

Salaries formed about 1/3 to 2/5 of total costs of most of the development banks in CARICOM (**Table 17**). One can perceive that this performance tends to be relatively weak when viewed against that fact that the CDB achieved rates within the 27% to 41% range for all administrative expenses, including translation adjustments to address significant variations in exchange rate (**Table 19**).

When measured as operating cost to assets, the development banks reflected efficiency levels varying between 1 and 10 per cent (**Table 17**). The CDB has been achieving ratios between 2.3% and 3.5% in 2001-2005 (**Table 19**). Direct comparisons of this ratio is limited by the fact that the banks were not homogeneous in their mode of operations or standardised in accounting practice, inclusive of accounting for bad debts. For example, regarding mode of operations, some banks diversified their activities and the composition of sectors in the loan portfolio was radically different in some cases. Nevertheless, it is apparent from the sample data and the CDB standard that the smaller Banks and the Tier II banks such as the Grenada Development Bank and the Bahamas Development Bank tend to be less efficient and that this has significant consequences for the cost of credit. Development banks with lower efficiency levels found it more expensive to expand credit (**Table 17**). For example, the least efficient banks in the sample, Bahamas Development Bank and Grenada Development Bank, expanded credit by 9.2 per cent and 7.2 per cent per dollar of overhead cost, while the most efficient bank in the sample, the Development Bank of Jamaica expanded credit by 52.8 per cent per dollar of unit cost.

An important indicator from the viewpoint of the operating cash-flows is the high share of staff costs in net revenues. The usual target is under 12%. The CDB standard achievement for all administrative costs is typically in the 15%-17% range (**Table 19**). Against this standard, the staff costs of the national development banks of the region tend to be relatively high even for the more efficient Tier I banks. In the case of Jamaica, for example, even after the reforms that led to the formation of the DBJ, the percentage of staff costs in revenues has tended to exceed 15% (**Table 18**). The share of staff costs are even higher in the ADB of Trinidad and Tobago and in other Tier II development banking banks and such high staff costs plagued Jamaica's NDB until its reform into the DBJ.

Table 17

UNIT COSTS OF DEVELOPMENT BANKS (2002-2004)

Indicator	Development Bank					
	Development Bank of Jamaica	Development Finance Corporation, Belize	Development Bank of St. Kitts and Nevis	Grenada Development Bank	Bahamas Development Bank	Agricultural Development Bank of Trinidad and Tobago
Cost to Assets	1.38%	1.90%	2.47%	9.73%	9.62%	2.33%
Salary to total Cost	43.40%	30.92%	6.21%	31.43%	34.33%	NA
Loans Expansion to Overhead cost	52.8	22.5	22.8	7.2	9.2	25.0

Source: Annual Reports of Development Banks.

Table 18

STAFF COSTS AND OTHER COSTS IN PROFIT AND LOSS POSITION, DBJ

Item	2000	2001	2002	2003
	$'000	$'00	$'000	$'000
Interest Income, on				
Loans	1,001,857	978,220	999,377	991,083
Government of Jamaica Infrastructural Loan Programmes				820,682
Fixed deposits	76,915	23,177	39,050	51,927
Other	11,466	64,909	176,365	138,486
Gross Revenues	**1,090,238**	**1,066,306**	**1,214,792**	**2,002,178**
Interest Expense	635,290	666,093	596,363	1,282,023
Net Interest Income	454,948	400,213	618,429	720,155
Non-Interest Income	294,990	199,137	119,623	181,852
Net Revenue	**749,938**	**599,350**	**738,052**	**902,007**
Depreciation	26,005	23,395	21,105	19,368
Provision for losses on loans	116,545	103,876	70,001	49,568
Staff costs	128,003	67,719	110,604	134,267
Other operation expenses	105,664	217,604	88,552	106,188
Total Operating Expenses	**376,217**	**217,604**	**290,262**	**309,391**
Operating Profit	373,721	381,746	447,790	592,616
Profit before exceptional items	373,315	381,746	447,790	592,616
Exceptional Items	-80,109	-26,811	158,068	582,235
Net Profit	**293,206**	**354,935**	**605,858**	**1,174,851**
Staff costs % of Gross Revenue	11.7%	6.4%	9.1%	6.7%
Staff costs % of Gross Revenue	17.1%	11.3%	15.0%	14.9%
Operating Expenses as % Net Revenues	50.2%	36.3%	39.3%	34.3%

Source: Annual Reports, Development Bank of Jamaica.

Note: Financial Year Ending March.

Table 19

CDB COST INDICATORS, YEAR ENDED DECEMBER 31 ($'000 FOR VOLUMES)

Ratios	2005	2004	2003	2002	2001
Cost to Assets	2.9%	2.6%	2.3%	2.9%	3.5%
Admin Expense to Total Expenses	27%	41%	40%	30%	33%
Admin Expense to Average Earning Assets	0.8%	1.1%	0.9%	0.9%	1.2%
Admin Expense to Net Income	15%	20%	17%	16%	16%

Source: CDB Annual Report, 2005.

General profitability

As with all institutions operating in a market economy, long run viability of development banks requires that over time there is growing relative reliance on profits and net cash flows to finance expansion. In that regard, the profitability of development banks is a matter of concern, especially when viewed from the viewpoint of asset turnover (asset productivity) since this indicates the capacity of the institutions to generate increasing flows to target sectors over time.

CDB profitability

As an AAA-rated entity, the CDB essentially represents a sound gold-standard by which other Development banks in the region can be judged with respect to asset productivity. In that regard, since 2001 its return on assets has tended to be above 5% (**Table 20**).

Profitability of national development banks

Many of the Caribbean's Development banks now record small net profits, reflecting the reversal in performance since structural adjustment and consolidation. This includes the ADB in Trinidad and Tobago (**Table 15**). Two Tier I development banks, Development Finance Corporation (Belize) and Bahamas Development Bank, have been recording losses, with the loss being minor for the latter bank (**Table 21**) and the consequence of a poor business model and government interference in the case of the DFC. The more important consideration however, is that the return on assets, the key indicator of performance that signals long term capacity to lend, tends to be well below the average market performance of the CDB. In all cases, asset productivity is below 2.6%, which was achieved by the most efficient DBJ, a Tier I institution and lender to government. The sample of development banks provides no reliable indications that in current mode they have the long run capacity for viable credit expansion to the target sectors on an increasingly cost effective basis.

Here, the Tier I banks must be distinguished from the Tier II cases. The evidence suggests that Tier I development banks can indeed by economically viable. This is supported by the fact that while most banks in the sample exhibited net profits, the Tier I cases are able to offer credit at a higher rate and much more efficiently that the Tier II cases. As a general matter, one might conclude that Tier II development banking operations have characteristically low profitability or high loss rate, with high operating expenses to operating income, and high liabilities relative to total equity. With such performance, it is clear that even the subsidised interest rates offered by the Tier II institutions tend to be high in real terms to the economy, since these interest rates must be adjusted upward to reflect the consequences to society of excessive costs of operations and accumulated losses.

Table 20

PROFITABILITY INDICATORS FOR CDB, 2001-2005

Indicator	2005	2004	2003	2002	2001
Annual Return on Average Earning Assets	5.47%	5.12%	5.09%	5.20%	6.99%
Return on Loans	6.27%	6.01%	6.10%	5.89%	7.43%
Return on Investments	2.64%	2.01%	2.15%	3.37%	5.22%

Source: CDB Annual Report, 2005.

Table 21

RETURN ON ASSETS (NET INCOME TO ASSETS RATIO OR ASSET PRODUCTIVITY) 2002-2004

	Institution						
	Antigua Barbuda Development Banks	Development Bank of Jamaica	Development Finance Corporation, Belize	Development Bank of St. Kitts and Nevis	Grenada Development Bank	Bahamas Development Bank	Agricultural Development Bank of Trinidad and Tobago
Return on Assets	2.0%	2.6%	(0.1%)	0.5%	0.7%	(4.7%)	2.6%

Source: Annual Reports, various Development Banks.

Selected lessons from privatisation and Tier I development banking

The DBJ and the DFL (Caribbean) are good examples of the consequences of reforms that promote internal efficiency and profitability in the development banking sector. These reforms have tended to be either privatisation or focus on pure Tier I banking. In the case of the DBJ, the move was to abandon most if its Tier II operations and shift largely to Tier I operations. By contrast with the Tier II operations, in the four years since the reforms that led to the formation of the DBJ to focus on Tier I operations, the bank has been profitable and the level of profits has grown over time. Provisions for bad loans have also fallen both in volume and as a proportion of the profits generated.

In the case of the Development Finance Limited (DFL) of Trinidad and Tobago, the reformed institution emerged in 1970 from the Development Finance Corporation the original intent was to create a Tier II institution that would lend directly to the private industrial sector, operating as a sister institution of the ADB. It had much the same fate, being organised in the same way. Initially the government of Trinidad and Tobago provided equity of 95% and controlled all major operations. One of the key initial objectives was to foster the development of the capital market but this never materialized from its Tier II operations.

In 1987, its failure to achieve its objectives led to wider reforms that brought in major private sector injection of equity and a restructuring of the company. As at 2002, government owned only 28.1% of share and there was significant international participation. The top shareholding percentages are as follows:

- RBTT Financial Holdings Limited 29.7%
- Government of T&T 28.1%
- European Investment Bank 8.5%
- Inter-American Investment Corporation 8.5%

The main focus was placed on profitability, so new areas of activity and modes of operation tackled, as follows:

- International lending
- Investment in risk capital operations
- Foreign currency lending
- Lending to export-oriented manufacturing, industrial services and tourism

Today, the DFL has evolved into a vibrant, competitive, leading-edge provider of finance, risk capital and strategic management services in the region. It has left the ranks of development banking and operates as a normal private merchant bank and finance company licensed under the Financial Institutions Act of Trinidad and Tobago as such. It is a member of the Deposit Insurance Corporation of Trinidad and Tobago and is registered with the Trinidad and Tobago Securities and Exchange Commission. DFL describes itself as the region's private industrial development bank serving the private sector through its subsidiaries operating throughout the region. These include:

- Caribbean Development Capital Limited – **private equity investments**
- Caribbean Development Network Limited – **industrial management consulting**
- Caribbean Microfinance Limited – **creating entrepreneurs of the future.**

It finances

- Plant and equipment needs
- Construction and infrastructure works
- Working capital needs
- Raw materials
- International trade
- IT
- Agro-processing
- Manufacturing

The DFL is financially sound, as demonstrated for example by its strong capital adequacy and the ability to raise funds on capital markets. It has a long-term foreign currency rating of BB from FITCH Inc. which allows it to be compared internationally with any other rated bank in terms of its ability to meet foreign currency commitments to its investors. However, in practice, the institution has low exposure to the high-risk domestic capital sectors that are crucial to the current development process.

The experiences of the DFL and the DBJ appear to point to two important lessons regarding the type of lending institution development banks should be. First, in so far as it remains in the lending business, development banking should perhaps be Tier I operations and large-scale private equity is desirable to increase responsiveness to market signals. Second, the private sector seems willing to address the capital sector and its development needs. For example, the DFL is not only willing to lend to “the entrepreneurs of the future” but is also willing to consider domestic capital needs. However, as signaled by the fact that the economies remained inadequately domestic capital intensive, Tier I operations and privatisation have not yet significantly led to a sufficiently flexible and rapid flow of resources, at optimal prices, to meet the needs of the priority capital development sector (Ministry of Finance, TT, 2004). Thus, the role of an efficient public sector in addressing market failure cannot be abandoned.

Importance of development banking in the financial sector

This section assesses the current significance of development banks as measured by their share of the assets and credit flows of the financial system as a whole. Evidence is drawn from the two largest CARCOM economies, Jamaica and Trinidad and Tobago.

Public capitalisation, asset share and capacity to issue credit

Public capitalisation has been substantial in a few cases but, by and large due to the limitations of the public budgets and public policy perspectives, development banks have tended to be tiny-to-small-capitalised institutions. This is clearly evident in the overall asset position of the sector in relation to the private commercial system.

In relation to the capacity to issue credit, the share of total banking assets also reveal that development banks are of limited significance in the general scheme. Data for Trinidad and Tobago show that development banks account for less than 8% of total lending capacity of the main subset of lending institutions, including commercial banks, merchant banks and credit unions (**Table 22**). Moreover, despite ongoing reforms to improve their financial performance, the relative share of development banks in the asset base and lending capacity of the economy has been declining

steadily since 1985 rather than growing to reflect increasing opportunities arising from the changing development prospects of the region. In the case of Jamaica, the share of development bank assets in the total assets of the set of institutions including commercial banks, credit unions and merchant banks has consistently been below 6% since 1980 (**Table 23**).

Table 22
DEVELOPMENT BANK ASSETS AS A SHARE OF SELECTED FINANCIAL INSTITUTIONS, TRINIDAD AND TOBAGO

Year	Commercial Banks TT$ M	Finance Companies and Merchant Banks TT$M	Credit Unions TT$M	Development Banks TT$ M	Share of Development Banks in Subset Assets
1966	300.5	-	13.1	4.1	0.013
1975	1555.9	79.6	52.7	73.9	0.042
1980	5215.9	485.3	210.5	297.3	0.048
1985	10165.1	1235.1	695.3	980.4	0.075
1990	12178.2	1172.3	1722.4	1075.6	0.067
1995	20053.6	2090.3	2500	993	0.039
1999	26474	4014	2800	1009	0.029
2001	32933.1	4791.5	2837.6	1349	0.032
2002	38136.8	6251.2	2837.6	1326.9	0.027

Source: Ministry of Finance (2004). Reform of the Financial Sector of Trinidad and Tobago - A White Paper, p. 6

Table 23
DEVELOPMENT BANKS ASSETS AS SHARE OF SELECTED FINANCIAL INSTITUTIONS, JAMAICA

Year	Commercial Banks JA$M	Finance Companies and Merchant Banks JA$M	Credit Unions JA$M	Development Banks JA$ M	Share of Development Banks in Subset
1980	2100.4	527.6	168.2	133.4	0.046
1985	3046.7	1873.9	429.2	203.2	0.037
1990	17327.5	7873.5	854.2	634.9	0.024
1995	44700.0	18311.4	4783.3	3741	0.052
1999	185605.3	51637.7	12098.8	9437.2	0.036
2001	221116.7	67449.4	17278.5	12057.9	0.038
2002	257635.2	83116.5	20002.7	21764.5	0.057

Source: Economic and Social Survey of Jamaica, various years.

Note: F.I.A Includes Merchant banks, Finance houses and Trust companies

Share of credit flows

One consequence of the problems of governance and capacity is that, over the years, even as the financial sector has significantly increased its capacity to lend to the development sector without inherently improved risk measurement, premiums and developmental effects, development banks have consistently accounted for a very small or declining share of the total flow of credit in the economy. They have not been able to fill the void of development financing. In the case of Jamaica, the sector exceeded 7% only during the period 1976-1980 when government was using the sector to draw down on the lending opportunities afforded by the international community in order to attempt to control the productive sectors of the economy (**Table 24**). The relative insignificance of development banking in Jamaica is perhaps best illustrated by the virtual abandonment of reporting on this aspect of development banking in the Economic and Social Survey of Jamaica (ESSJ) after 1981 when basic reforms and merging to create the NDB were undertaken to restore viability and

transparency to the operations of the subsector. In Trinidad and Tobago, the pattern was broadly similar, with the credit share declining over time.

The data on the declining significance of development banking in credit flows cannot be adequately evaluated without reasonable information on the distribution of deposits, applicants and approvals in the commercial sector. Development banking might be declining in significance but for the high-risk market of creative domestic capital-intensive activity and the socially disadvantaged traditionally excluded by the commercial sector, the share of development banks in assets and credit flows would tend to be significantly higher and even of growing significance. The same is likely to be true of other high-risk groups that can only attract credit through large cash flows and high turnover, such as groups with relatively high debt-to-asset ratios, low solvency, high cash-flow variability and inadequate assets available for collateral even if cash-flow potential is high. Without a sound development banking system to generate loans at reasonable cost, many of these actual and potential borrowers would most likely remain unable to obtain sufficient credit, even if guaranteed, to begin or maintain their operations. Adequate data are not available on the structure of credit flows to these sectors, when evaluated in terms of structure of assets and capital, and related risk profile.

Lack of access to this data is a significant limitation of the entire study. However, some indications are available for selected sectors known to be historically high-risk or to be among the emerging sectors. For the case of Jamaica, the data in **Table 25** show that Development banks accounted for more than 55% of agricultural and agro-industrial credit since 2002, with the share growing up to 2004. The share declined to 45% in 2005 reflecting both a decline of DB credit and an increase of commercial bank flows to the sector. It is interesting that the development bank share of tourism sector credit also declined steadily from 10% to 3.6% between 2002 and 2005 mainly because credit from commercial banks increased substantially. Even more interesting, commercial banks offered all significant, if only small, credit to the entertainment sector. Entertainment makes highly intensive use of domestic capital and tourism is highly integrated with the entertainment sector. The trends for these two sectors reveal not only the tendency for commercial banks to increase exposure to the high-risk, high-profit domestic capital-intensive sectors but also for development banks to avoid or minimise similar exposure. The trend reflects the regional failure of the development banking sector to be adequately guided by sound interpretation of the development problem.

The credit share of agricultural loans of the ADB of Trinidad and Tobago is particularly interesting, since it has survived as a single entity throughout the development era and remained focused on the agricultural sector throughout. The volume and share of ADB credit in total credit to the agricultural sector has been falling steadily since 1995 in a context of overall decline in lending to the sector. The ADB led the decline in lending and its share in total loans outstanding fell from 23.3% in 1995 to 16.9% in 2003 (**Table 26**).

In general, the evidence suggests a tendency for development banks to be of minor significance in the current financial system and indeed to be losing its significance as the commercial sector increases its exposure to the credit risks of the priority development sectors of the economy. One reason for this is that development banks have been mainly small government owned institutions that have been unable to adjust to the possibilities and dictates of the market. Perhaps even more important, by failing to adequately serve the emerging creative sector, the development banking sector has not tended to grow based on the changing structure of the economy. The main reason may be the historical policy vision that development banks should be Tier II institutions catering to the socially disadvantaged or to a few emerging sectors that are not well known by the commercial sector. However, if appropriately reformed, development banks can play a more powerful role in the development of services that ultimately stimulate the

transformation of the commercial sector itself while meeting the needs of the target sectors. That is the thrust of the proposals below.

Table 24

DEVELOPMENT BANK SHARE OF COMMERCIAL AND DEVELOPMENT CREDIT, SELECTED YEARS, JAMAICA

Year	Commercial Bank Credit (J$m)	Development Bank Credit (J$m)	Share of Development Banks (%)
1969	244.4	3.0	1.2%
1972	420.1	9.8	2.3%
1976	673.0	88.9	11.7%
1978	767.7	106.3	12.2%
1979	900.9	109.8	10.9%
2001	52061.4	3880.9	6.9%
2002	77507.0	4003.7	4.9%
2003	105081.1	3743.0	3.4%
2004	120221.3	4208.4	3.4%
2005	140765.5	3583.5	2.5%

Source: Various Development Banks; ESSJ; Bank of Jamaica

Table 25

DEVELOPMENT BANK SHARE OF CREDIT, SELECTED SECTORS, 2002-2005

Year	Agriculture/Agro Industry			Entertainment		Tourism		
	Commercial* (J$M)	Development Banks (J$M)!	% Development Banks	Commercial* (J$M)	Development Banks (J$M)	Commercial* (J$M)	Development Banks (J$M)	% Development Banks
2002	1,809.1	2,246.8	55.4%	205.1	0.0	7,334.1	825.8	10.1%
2003	1,515.5	2,054.4	57.5%	111.5	0.0	12,342.9	822.0	6.2%
2004	1,543.0	2,247.9	59.3%	310.0	0.0	16,077.4	1,116.3	6.5%
2005	2,362.6	1,923.5	44.9%	345.9	0.0	23,764.9	897.5	3.6%

Source: Annual Reports, BOJ.

* Includes Financial Institutions Act Licensees (FIA's); !includes the National Export-Import Bank of Jamaica.

Table 26

AGRICULTURAL DEVELOPMENT BANK MARKET SHARE OF AGRICULTURAL CREDIT, TRINIDAD AND TOBAGO

Year	Total Loans Outstanding to Agricultural Sector (TT$m)	ADB Loans Outstanding to Agricultural Sector (TT$m)	ADB Share of Sector Credit
1995	514.0	120.0	23.3%
1996	580.0	116.0	20.0%
1997	600.0	131.9	22.0%
1998	689.3	141.6	20.5%
1999	645.8	134.1	20.8%
2000	547.0	120.0	21.9%
2001	507.0	96.0	18.9%
2002	516.0	83.0	16.1%
2003	498.0	84.0	16.9%

Source: Agricultural Development Bank Strategic Plans, various years.

Weak development banking in the midst of high liquidity and idle financial capital and unmet needs of the target sectors

There is substantial evidence from the two largest economies of CARICOM that the declining impact of the Development banks is occurring in the context of a persistent and high degree of liquidity in the banking and simultaneous high real interest rates, indicated by the high liquid assets to deposits ratio of commercial banks. For example, in Trinidad and Tobago since 1994, excess liquidity, as measured by the ratio of actual to required liquidity has generally been more than 24% above requirements (Table 27). In Jamaica, the liquidity ratio has been lower than in Trinidad and Tobago but still in excess of what is required for efficient inflation management (Table 28). The data in both Table 27 and Table 28 also hint at the patterns of interest rate movement that is relatively independent of the level of liquidity though the time series is not long enough the make a definitive measure. The problem has plagued Caribbean policy makers since the 1960s because of the built in capacity of the private banks to respond flexibly to demand pressures and trigger inflationary pressures especially from consumers, while failing to target the domestic capital sector. For example, in Jamaica, local and international monetary policy treated inflation as a matter of priority throughout these decades, with significant focus on the restraint on the growth of domestic credit (Central Planning Unit, 1969; National Planning Agency, 1973; National Planning Agency, 1980; PIOJ, 1992: 5.1; 1994:5.1). Indeed, this condition of excess liquidity has come to be viewed as a central characteristic and problem of the financial sector in the Caribbean; partly because of the problem it poses to financial regulators seeking leverage to control inflationary pressures. It has also long been coincident with inadequate credit flows at high costs to priority sectors – the core indicator of financial market failure. The development banks were established to address this problem.

Table 27
LIQUIDITY IN THE TRINIDAD AND TOBAGO FINANCIAL SECTOR

						Interest Rate Indicators				
Period Ending	Deposits	Liquid Assets	Liquidity Ratio	Required Liquid Assets	Required Liquid Assets Ratio	Excess Liquidity Indicator	Mean 3-12 Month	Savings	Gov't	C- Bank Prime
1994	11,238.30	2,925.10	0.26	2,115.50	0.19	0.38	-	-	-	-
1995	12,349.90	2,661.90	0.22	2,013.20	0.16	0.32	-	-	-	-
1996	12,888.10	3,049.70	0.24	2,122.30	0.16	0.44	-	-	-	-
1997	14,164.20	2,959.20	0.21	2,512.30	0.18	0.18	-	-	-	-
1998	16,202.40	3,443.40	0.21	2,770.00	0.17	0.24	-	-	-	-
1999	16,462.20	3,412.20	0.21	2,557.70	0.16	0.33	14.1	11.4	18.7	9.7
2000	18,478.40	3,832.40	0.21	2,943.00	0.16	0.3	13.2	9.9	18.3	8.9
2001	21,230.50	4,468.40	0.21	3,465.80	0.16	0.29	12.1	9.1	15.7	7.6
2002	21,455.40	3,783.20	0.18	3,071.60	0.14	0.23	10.3	9	15.7	6.9
2003	21,524.70	3,666.00	0.17	2,955.30	0.14	0.24	10.5	7.3	19.9	6.7
2004	25,868.80	3,439.50	0.13	2,782.50	0.11	0.24	7.8	6.5	13.8	6

Source: Central Bank of Trinidad and Tobago Website.

Table 28
LIQUIDITY AND INTEREST RATES IN JAMAICA'S FINANCIAL SECTOR

Year		Liquid Assets (1)	Deposits (2)	Liquidity Ratio =(1/2)	Interest Rate Indicators			
					Mean 3-12 Months	Savings	Government	Commercial Bank Prime
1957	£M	5.7	36.4	0.157	3.0	2.0	2.5-3	7.0
1958	£M	5.9	38.1	0.155	3.0	2.0	2.5-3	5.5
1959	£M	8.2	41.8	0.196	2.0	2.5	2.5-3	5.5
1999	$M	11695.7	123142.1	0.095	14.1	11.4	18.7	9.7
2000	$M	13874.0	137631.0	0.101	13.2	9.9	18.3	8.9
2001	$M	17514.2	150950.1	0.116	12.1	9.1	15.7	7.6
2002	$M	20373.0	169908.2	0.120	10.3	9.0	15.7	6.9
2003	$M	34394.5	190050.4	0.181	10.5	7.3	19.9	6.7
2004	$M	38051.5	228425.4	0.167	7.8	6.5	13.8	6.0

Source: Bank of Jamaica

In addition, investment opportunity for banks and other financial institutions remains narrowly focused on foreign stocks or mutual funds, the narrow range of stocks in the local markets in Trinidad and Tobago, Barbados and Jamaica, and most importantly government bonds.

The sector features other weaknesses related to the capacity to finance domestic capital development and accumulation, with respect to matters such as the patterns of credit allocation; interest rate spread, the cost of credit and the reserve requirements established for commercial banks; consumer and investor protection; the structure of the capital markets; the underlying information architecture; credit rating and the governing legislative and regulatory frameworks as well as accounting standards (**Table 29**). In particular,

- The financial sector generally concentrates most of its credit on consumer activity and on increasing consumption per worker rather than on the development of a capital sector and increasing the relative size of the domestic capital sector and therefore raising domestic capital per worker and capital per unit of imports at the level of the firm, productive sector or economy.
- Very little of the credit that goes to the productive sectors targets domestic capital development and accumulation.
- The sector is almost completely locally focused, does not develop its own technologies, and is correspondingly subject to a number of problems associated with small markets in which high minimum efficient size binds.
  - The interest rate on loans in most countries is relatively high and correspondingly so is the interest rate spread.
  - Moreover, the spread is growing with the liberalisation of financial markets partly because financial institutions have high fixed and operating costs relative to their (low) volume of operations, the inadequate development of the methods/instruments needed to penetrate foreign markets and high opportunity costs associated with high reserve requirements.
  - These reserve requirements are set to give the financial authorities sufficient traction to deal with high liquidity in the banking sector in the absence of a wide range of financial instruments that can absorb such liquidity.

- Inadequate flow of information to clients, a flow which is mainly demand-driven rather than routine information sharing and disclosure. There are no significant commercial vendors of information. At the same time, there is significant unauthorised sharing of confidential information and weak market surveillance.
- Associated with the inadequate flow of information is the inefficient definition, measurement, pricing and spread of risk and hence the slow pace of development of risk-spreading instruments. Correspondingly, issuers of bonds (including government) and other instruments are not required to have credit rating or capital adequacy requirements, so efficient credit-rating agencies have not developed to underpin the development of the financial markets.
- Regional financial institutions have a relatively poor reputation as low quality and uncreative institutions.
- The markets are narrow and fragmented, with
  - A limited number of participants in primary market and fewer in secondary market;
  - A narrow range of instruments, mainly national and regional government bonds.
  - Bias toward debt financing over equity; and bias to equity from existing closed network of shareholders.
  - Limited private sector involvement, a tiny stock market with high degree of interlocking directorships, non-transparency, and low liquidity.
  - A resulting low capacity to mobilise funds and allocate resources efficiently, especially to facilitate domestic capital development.
- With the exception of Jamaica since its financial crises of the late 1990s, the legislative and regulation framework of the region is still relatively weak and accounting methods employed in the region are yet to be fully standardised around the lines of the IFRS though significant strides have been made in this direction by Jamaica and the CDB.

At the same time, even without reference to privatised development institutions such as the DFL, there has been growth of bank credit to the business sector, and in particular to the target sectors, including students investing in education. This reflects a changing demand for portfolio diversification and a related supply side adjustment on the one hand and an increase in the average productivity and general viability of the target sectors on the other, with particular regard to businesses run by self-employed without employees. The increase in exposure to the target sectors has been supported by an interesting development of credit insurance, referred to as creditor life insurance plans, a form of term insurance over the life of the loan, offered by insurance and the banks who have been taking advantage of financial sector liberalisation to establish insurance subsidiaries within banks. Correspondingly, as documented above, development banks have been servicing a declining share of the market, even in highly specialised areas such as agriculture. Ultimately, it is this trend that has to be boosted by financial sector and development banking reforms, just as some of the problems identified should be addressed by the types of reforms proposed for development banks.

Table 29

CHARACTERISTIC WEAKNESSES OF THE FINANCIAL SECTOR IN THE CARIBBEAN

Characteristic	Observed Weakness	Desired Condition	Main Challenges Facing Financial Sector
Credit Allocation	° Consumer sector is the largest recipient of credit. ° Among productive sectors, domestic capital receives minimal credit.	° Majority of credit should be extended to productive sectors of strategic importance. ° Credit flows to capital producing sectors should grow faster than to all others.	° Develop market mechanisms, in particular derivative products, to allocate credit to the capital producing sectors.
Interest Rate Spreads	° High interest rate spread. ° Spread growing with the liberalisation of financial markets. ° High fixed costs tied to inadequate development of the methods/instruments needed to penetrate foreign markets. ° High opportunity costs of holding high reserves.	° Low interest rate spread. ° Spread falling with the development of the financial sector.	° Develop market mechanisms, in particular derivative products, to cut the cost of credit to the capital producing sectors. ° There is some evidence that high official reserve requirements may not be the main factor here. The internal market structure of the commercial market is more important in this regard, along with high economic reserves and related high admin costs, etc. It is important for the financial sector to develop instruments to address these conditions.
Economic Reserves	° Official reserve requirements for banks are set to address the negative (inflationary) effects of excess liquidity in the banking sector. However, they do not appear to be binding. Banks hold significantly higher economic reserves.	° Lower reserves consistent with cost reduction.	° The key here may not simply be to lower official reserve requirements in relation to capital market development requirements. This appears to require a creative banking sector developing of suitable investment instruments in relation to its build up of information and the definition of risk.
Consumer and Investor Protection	° Fraud; misuse of funds; ° Inadequate flow of information to clients; mainly demand driven. ° Unauthorised sharing of confidential information. ° Reputation as low quality and uncreative institutions.	° Improved the flow of information flows. ° Flexible instruments of higher quality.	° Timely settlement of disputes. ° Improvement of regulation; accounting standards. ° Routine flow of information. ° Creative product design to penetrate local regional and international markets.
Structure of capital market	° Narrow and fragmented market, with limited number of participants in primary market and fewer in secondary market. ° Narrow range of instruments, mainly national and regional government bonds. High premium on government bonds. ° Bias toward debt financing over equity; and bias to equity from existing closed network of shareholders. ° Limited private sector involvement, tiny stock market with high degree of interlocking directorships, non-transparency, and low liquidity. ° Low capacity to mobilise funds and allocate resources efficiently, especially to facilitate domestic capital development. ° Weak information systems and inadequate market surveillance.	° Broader market and stronger secondary market. ° High quality and transparent corporate governance. ° Standardised disclosure requirements.	° Upgrade information systems to international standards. ° Improve transparency in market process to meet international standards. ° Lower premium on government bonds in line with global standards. ° Improved regulation; accounting standards to meet changing international standards. ° Improved risk measurement and pricing. ° Integration into the international financial markets and increased capacity for local agencies to compete with international agencies in both the local and global markets.

Table 29 (conclusion)

Characteristic	Observed Weakness	Desired Condition	Main Challenges Facing Financial Sector
Information Architecture	° Absence of routine and continuous disclosure and information sharing. ° Absence of commercial vendors of in formation. ° Inefficient measurement and pricing of risk and hence of securities.	° Routine information sharing ° Appropriate yield curves (term structure of interest rates).19	° Introduction of commercial vendors ° Routine construction of full yield curve from market data. ° Sustained credit rating of all participants
Credit Rating	° Issuers of bonds and other instruments not required to have credit rating or capital adequacy requirements. ° Absence of efficient credit-rating agencies	° Issuers of instrument in the key markets have adequate capital. ° Trusted credit rating agencies linked to the international rating agencies.	° Establishment of credit rating agencies tied to the international agencies but taking account of local circumstances. ° Supporting legislative framework to require credit rating of issuers.
Legislative Framework, Regulation and Accounting Standards	° Weak regionally, especially when viewed regionally, primarily with respect to accounting standards.	° Jamaica has adopted IFRS; Legislative frameworks has been strengthened in Jamaica following Finsac experience; A regional harmonisation of practices is needed.	° Comprehensive legislation covering all financial sector. ° Adoption of IFRS regionally. ° Introduction of adequate supervisory and regulatory system, with regional harmonisation.

Source: Annual Reports, Interviews with Institutions and Discussions with Stakeholder Focus Group.

Stakeholder views

To make up for the absence of strong secondary data or a primary survey of customers and institutions, a meeting of stakeholder financial institutions was held in Jamaica to ensure adequate representation of the opinions and experiences of the development banking sector in shaping the way forward. It is important to observe here that Jamaica is the largest CARICOM economy in population terms and has about 40% of its labour force in subsistence activity. The meetings and interviews provided the data reported in **Table 30 and Table 31.**

Customer needs

Regarding customer needs (**Table 30**), stakeholder responses placed emphasis on the need in the target sector for cheaper credit, greater sharing of risks, better advertising of options by development banks and better technical support with respect to the development of business models, including special attention to the needs of small and medium enterprises. There was also considerable emphasis on the need for the development banks to better understand the profiles of all potential clients in the target sector and to be less prohibitive in terms of application procedures and more flexible and transparent in loan processing.

Two main consensus views emerged from the stakeholder session. One is the need to give much greater attention to developing collateralisation methods and in that regard to further development and expansion existing provisions for external collateral support to Tier II institutions, such as are provided by the USAID through the Jamaica National Commercial Bank. The other is the need to facilitate more cash-flow based lending by relaxing existing regulations on that form of lending while increasing monitoring and supervision to ensure that new rules are followed and programmes remain viable. Commercial banks were of the view that such relaxation would dramatically increase the flow of credit to all sectors, including the target sector. However, there was some concern that the need to protect the funds of depositors must remain a matter of priority and in that regard collateralisation and securitisation mechanisms had to be correspondingly

[19] The term structure of interest rates (or yield curve) is a function relating the interest rate (cost of borrowing) or yield of fixed income assets to the (term of) maturity of the assets in a given currency at a given time. This is particularly important in the analysis of fixed income securities, such as bonds, to understand how conditions in the financial markets might give rise to trading opportunities. It is also used by economists in so-called developed countries to assess the prospects for a recession (which might occur if short term yields are higher than long term yields and motivate reduction in capital formation). The term structure of interest rates is the natural starting point for pricing fixed-income securities and other financial assets. However, it is not well-developed in CARICOM economies because of the narrow base of instruments.

strengthened even if not simply by seeking such collateral from the direct borrower. The need for external mechanisms in this context could be met through a combination of government-backed assets and foreign development assistance such as is being provided by the USAID. There was support for the view that a special institutional arrangement that is CARICOM in scope should be developed as a vehicle for delivering such support. Commercial banks also expressed the view that if the target group is to be given the best chances of success in the modern marketplace, expansion of credit flows at lower cost and securitisation must be accompanied by much stronger technical support and development of suitable business models for the target sector.

Stakeholder Evaluation of Weaknesses in the Development Banking System

With regard to the weaknesses of the development banking sector to meet the identified needs, the stakeholders expressed views summarised in **Table 31.** The feedback is that notwithstanding high levels of liquidity in the system, Development banks, including Tier I Banks, have inadequate ability to find sufficient cheap funds to make available to the target sectors. This also covers the case of the supply flowing from the CDB to the Tier I banks and from the Tier I banks to the Tier II banks. One reason for that is low financial performance of the Development banks. Another is the incapacity of the governments, as main shareholders, to make the requisite funds available. A leading commercial bank in the consultations expressed the view that government's own high demand for funds to address its deficits was having both a crowding out effect and the effect of making financing of development banks expensive. The stakeholders concurred with the evidence that, as currently organised, development banks have significant efficiency problems, featuring weak information and research systems, weak loan collection systems (especially at Tier II) bureaucratic procedures and the lack of personalised banking tied to the cash-flows of customers.

Further, there was general agreement that the institutions are excessively public-sector oriented in terms of their business models, with a tendency to operate an inadequately goal-driven process and with poor performance monitoring and evaluation. Boards are not known to dismiss management because of failure to meet clear board-specified goals tied to indicators such as the percentage of viable loans to specific target sectors, the credit-cost ratio defined to include loss due to bad loans and provisions for losses and the number of successful businesses assisted in the target sector and that have consequently moved into the commercial sector. There was a strong opinion, expressed in writing and generally supported by the verbal dialogue, that Development banks make inadequate use of credit unions and other similar institutions to provide Tier II services, despite the proven capacity of such institutions to address the needs of the target groups. Finally, in relation to the capacity to devise adequate instruments, DBs were viewed as too uncreative and too reliant on standard collateralising devices or too willing to let the alternative resort to running up bad loans. In one exchange, a leading commercial bank and a leading DB challenged each other to have a serious joint look at updated collateralising and securitisation possibilities, with particular reference to the use of external assistance for this purpose.

Table 30
BANK EVALUATION CUSTOMER NEEDS AND DEMANDS

Issues Addressed	Customer Views
Information about credit possibilities	Customers currently rely on a word of mouth mechanism and many public advertisements to judge credit possibilities. For example, the DBJ agrees that this is fair comment in that the DBs are generally not sufficiently aggressive with advertisement when compared to the other commercial entities. Development Banks do not advertise services as well as the commercial banks do.
Main attraction to Development Banks	Low interest rates Repayment flexibility Collateral flexibility
Complaints	Long loan application forms and tedious application process Long and bureaucratic loan processing Excessively stringent and unclear criteria for granting loans
Customer demands/needs from Development Banks	Less reliance on collateral and security and provide relaxed collateral requirements. Institutions such as the DBJ support the creation of a regional facility for this purpose. Opportunity for cash-flow based borrowing. This is a high risk mechanism; requires strong individual and business credit rating and supporting collateralisation. There is need to clarify the risk structure that attends such a system. Longer terms on available loans Lower interest rates and other low cost services; need to address technical facilitation – applications, proposals, etc. Opportunity to restructure and refinance debt. Opportunity to finance capital expansion Larger loans – increase lending limits without increasing collateral requirements Assistance with loan guarantees / government guarantees Better facilities for small businesses Expansion of the types of businesses that can borrow. Share the risk involved in the investment or offer lower rates to allow better net margin (earnings after interest). Better technical support.

Table 31

STAKEHOLDER FEEDBACK ON WEAKNESSES OF DEVELOPMENT BANKING SYSTEM

Area	Weakness	Comments
Financial Resources	Under the existing business models, the Development Banks are unable to source adequate levels of low cost funds to support their customers' demand for loans, especially after adjusting for the high default rates on the loan portfolios.	This was traced partly to poor financial performance and was viewed as applicable notwithstanding the access to CDB Funds. The current exception may be Trinidad and Tobago but the experience of the ADB does not suggest an exception applies.
	The principal shareholders of the Development Banks (Governments) are unable to provide adequate funds to facilitate the demand of the bank's current customers or to expand coverage to the highly creative capital-intensive sectors. This is especially true if one takes into account the high costs linked to default.	The main reason cited is the growing budget debts and deficits and the high cost of debt servicing that limit the budgetary room of government. However, there is also the policy stance tied to structural adjustment and the WTO agreements. This aspect of the analysis embraces Trinidad and Tobago's ADB.
Efficiency issues	Inappropriate information systems and information management processes, including inadequate data analysis and definition of standards, which result in inefficient decision-making processes.	These problems are aspects of a wider problem of weak information collection and information-sharing systems in CARICOM.
	Failure to use customer-focused research to know the client base from a risk measurement viewpoint. The same therefore applies to research to design suitable product lines for current and new customers.	
	Inadequate attention to innovation.	This was viewed as tied to inadequate investment in suitable human capital in the Development Banks.
	Bank procedures are excessively bureaucratic and lacking in the urgency evident and entrepreneurship evident in the commercial banks. Not all Development Banks agreed, especially the DBJ; the issue is not lack of latitude, it is more a resource constraint and lack of knowledge of the industry; even for matters such as risk assessment.	These were viewed as especially relevant to the creative sector, which has a high need for lending based on actual and pro-forma cash-flow or asset turnover.
	Weak loan collection systems; ADB records and DBJ and others admit that the experience with Tier II lending has not been good on collections; there is a big cultural impediment because people view anything from government as "should be free".	
	Loan processing is not fast, efficient and flexibly personalised in relation to the needs of a creative business sector for cash-flow lending. The DBs hold that cash-flow lending is limited by the habits and methods of default and by the need of a strong collection mechanism and credit rating. The DBs also hold that technical supports would be needed for the primary customers if this must work.	
Organisation Structure	Development Banks do not sufficiently focus on developing new product lines and instruments to attract new types of customers. Inadequate differentiation to reflect variations and changes in customer base. The DBs agree that there is no law to prevent product variation by type of customer but that there is limited resources to go around and, except for agriculture, it is difficult to identify specific industries that require special products.	These practices were viewed as inappropriate for servicing the highly creative and increasingly successful copyright sector and similar sectors that is also very high risk and must be guided by sound risk analysis.
	Development banks do not sufficiently market and advertise their services.	
	Lack of focus on recruitment of new research capacity and high level-skills with new thinking about the problem. Excessive public-sector mind-set.	

Table 31 (conclusion)

Area	Weakness	Comments
Openness, Information sharing, knowledge management and organizational culture	Development banks function as an arm of the public service, with respect to appointments, control functions, bureaucracy and lack of autonomy.	
	Inadequate attention to routine knowledge sharing and knowledge management.	
	Insufficient focus on development of human capital development.	
Management and competitive model	Absence of interest in matching the competition with suitable products and services.	
	Absence of creative management practices.	
	Banks are not guided by and held to specific targets and measurable goals tied to domestic capital development. Goals, where they exist, are sector linked and frequently tied to the emergence of export-oriented activity.	Examples of what is needed were cited in the consultations: (i) percentage of viable loans to specific target sectors; (ii) credit-cost ratio defined to include loss due to bad loans and provisions for losses; (iii) number of successful businesses assisted in the target sector. There was general agreement that targeting should be closely related to the need for rapid development of the domestic capital market, financial and real.
	General tendency to non-participatory public-sector style management	
	Poor performance is treated as in the public sector and management and boards are not normally penalised for failure to meet targets.	
Partnership with the non-traditional financial sector, such as the credit unions	Tier I Development Banks make inadequate use of credit unions and other similar institutions to provide Tier II services, despite the proven capacity of such institutions.	

Summary reflections - Can development banks as currently profiled adequately serve the needs of the domestic capital-intensive sector?

Collectively, development banks in the Caribbean evolved to direct credit to agriculture and industry and to develop domestic human capital and finance low-cost housing. The governments established these institutions in the pre 1980 era, using them to fit into national development plans along with incentive schemes to stimulate sectors in the economy. In essence, the central concept of domestic capital in those development plans was that of human capital in the form of education, health and housing. Even with such narrow focus, the development banks could not meet existing needs while remaining financially viable as indicated by a sufficiently high asset turnover rate (say, a sufficiently high return on assets). Over the years, the related drain on the national purse tied to high loan default led to repeated restructuring of these entities. Those reforms that led to the creation of merged and stronger Tier I institutions have worked moderately in the sense that these are the most efficient institutions able to offer credit to their clients at significantly lower cost than the Tier II institutions. Even when reformed, the Tier II lending institutions have not been very profitable, with very low asset turnover rates relative to the Tier II institutions and to the CDB and with high costs of credit tied to relatively high relative costs and liabilities to assets and equity.

The central questions of concern to this section of the study is whether, in an environment of declining relative significance and more risk-oriented commercial banking, Development banks as currently profiled can adequately target credit facilities to the profitable but highly risky creative domestic capital-intensive sector that often must rely on copyright as the basis for defining incomes and on cash flows from high and changing asset turnover to demonstrate viability? The general answer appears to be "not adequately for development purposes," if the latter is defined in terms of the growing needs of the domestic capital-intensive sector. The specific answer is that as a triple-A-

rated Tier I Multilateral Development Bank, the CDB is strong enough to lead the process and the local Tier I Development banks, with some additional reforms, can be strong partners. Dialogue with stakeholders suggest that these reforms can very beneficially focus on strengthened loan collections and updating of the type of sectors loaned to reflect the trends in the modern Caribbean economy. Some development banks who provide information as stakeholders only recently established collections department. Moreover, the internal structure of the Tier I development bank needs to be further developed, particularly with respect to building the information and intelligence capability of the banks to meet the social objectives assigned to them.

However, generally, the Tier II institutions are relatively inadequate partners for the CDB and the Tier I banks, partly because they are inadequately market oriented and are expensive to operate as government owned entities. What is needed are Tier II institutions designed to attract the high excess liquidity currently flowing to the commercial sector and steer that towards the emerging viable capital-intensive sector. The investment to re-orient the Tier II banks and make the adequate partners in this process may be prohibitive. A new type of Tier II lending institution is needed that can serve as an adequate partner for the reformed Tier I local facilities and the CDB and it is likely that these partners may have to come from the existing Tier II institutions of the private sector that are interested in taking on the risks of the capital-intensive sector. In this regard, there is good reason for some attention to be directed to the institutional design of the DFL and to institutions such as the credit unions and similar indigenous financing institutions that evolved in the private sector with similar goals and objectives and similar target groups as development banks should have and that have also found effective ways to discipline borrowers with respect to repayment practices. Beyond such refocus and strengthening, there is no evidence available of any other approach or large-scale mechanism operating in the Caribbean that would be more effective in assisting high-risk borrowers in obtaining credit to sustain their domestic capital-intensive investments until maturity. We therefore direct most of the remainder of the study to defining how the desired refocus might be achieved and to considering related reforms that would address the insurance of loans and strengthening of the securitisation process as new partnering Tier II institutions are encouraged.

3. Reforming development banks – the key issues

Our main concern in this section is the types of reforms needed to ensure a pool of local Tier II development financing institutions that can achieve the basic goals of the development banking sector while minimising the problems. Consistent with the analyses of the previous two sections therefore, we take as key goals:

- Viable provision of the maximum possible credit flows to the priority sectors defined in terms of their orientation to employ high levels of domestic capital in economic activity.
- Supply of credit at reasonable cost without the large-scale losses that characterise the traditional Tier II development banking system.
- Ensuring timely responses to loan request and loan-servicing requests.
- Improvement of the related technical assistance to the target sectors to ensure development of their economic viability and competitive.

Baseline reforms of development banking sector

There are several baseline reforms suggested by the experience of the development banks, Tier I and Tier II, reviewed above. These are as follows:

- In so far as they remain in the lending business, development banks should be Tier I operations, regional or local I scope, focused primarily on financing the development and employment of domestic real capital in all sectors of the economy but with priority to the capital producing sectors such as education, health, housing and real domestic assets.
- Large-scale private equity is desirable to increase responsiveness to market signals and ensure increasing viability over time, especially as that relates to attracting credit to support increasing investment in domestic capital.
- Significant, but not dominant, public investment is desirable to represent the public interest in addressing market failure in a private sector setting – the board-rooms of privatised development banks. This relative dominance of the private sector would simultaneously ensure the following:
  - Improved and more flexible modalities of capitalisation that gives adequate room for private sector participation and ultimately the phasing out of public equity in the long term.
  - Greater flexibility, institutional autonomy, market sensitivity in loan decision-making that would address the needs of the wider market while still addressing the needs of the development community.
  - Improved, more market-driven recruitment of management skills.
  - Sensitivity to regulatory issues and a means of communicating government policy because of the government participation.
  - Rebalancing of the short term (especially working capital) and long term focus (installation of real capital assets) of the loan portfolio of the banks to reflect a greater measure of the efficiencies demanded by the market.
  - Freedom from undue and inappropriate political interference.
- A crucial lesson of the DFL experience is that international equity participation in the reformed development banks is highly desirable and should be encouraged by specific policy and regulatory initiatives. This should include equity from the large so-called developing countries.
- To address the goal of boosting the prospects for competitive success, a special **CARICOM Regional Technical Support Vehicle (CRTSV)** to provide active and partially subsidised technical support for the target sectors and to develop suitable business models in collaboration with them. The vehicle should be required to operate profitably and should be linked actively to strengthened regional devices such as the CARICOM Regional Organisation for Standards and Quality (CROSQ) and to local counterparts such as the Standards Bureaus and other Research Institutions. One possibility is to reform the Caribbean Industrial Research Institute (CARIRI) for this purpose.
- In the context of some steps to privatisation, Development banks should be required to operate according to specific standards and monitored and evaluated accordingly: These should include
  - Adequate attention to development of product lines and instruments to attract the new types of customers emerging from the development process, with a view to creating pressure on the private sector and the affiliated private Tier II institutions to do the same.

- Development banks should be guided and evaluated by specific targets and measurable goals, including
  - Steady improvement in the viability of supply of credit flows to the priority sectors defined in terms of their orientation to employ high levels of domestic capital in economic activity.
  - Target rate of return on assets or asset turnover.
  - Steady improvement in the supply cost of credit over some target period.
  - Steady improvement in the timeliness of responses to loan request and loan-servicing requests from the key target sectors.
  - The success achieved by the beneficiaries of the services of development banks in the context of the support for development of viable business models.

However, it is not expected that these baseline changes will be sufficient to address the problems inhibiting suitable targeting of credit to the priority sectors. That is because these reforms do not adequately address the management of the risks associated with increased lender exposure to the target sectors while ongoing liberalisation makes the financial markets more competitive. That requires significant change in the functions assigned to some of the reformed banks. We turn now to these functional reforms and the introduction of new risk-management devices to address this issue.

Agreements from stakeholder focus group

This report adopts three propositions from the stakeholder consultations:

- Tier I Development banks, including the CDB, should increase partnership with the credit unions, home mortgage banks and other similar institutions to provide Tier II services to the target sector. Over time, such private affiliated institutions should replace all Tier II institutions that are unable to demonstrate ability to meet clearly designated performance standards.
- A **CARICOM Regional Collateralisation, Securitisation and Collection Vehicle** (CARICOL) should be established to provide a single regional channel for
  - Effective debt collection when default occurs, with adequate recovery opportunity provided in conjunction with the CRTSV.
  - Two types of securitisation and collateralisation supports to customers through Tier II institutions, on the other:
    - Pooled International collateral and securitisation support for customers, similar to the support now provided by the USAID through Tier II institutions.
    - Pooled government collateral and securitisation support for customers, with the support.
- Increase the use of cash-flow lending by the commercial banking sector, with particular reference to the target sector. This should be introduced on a harmonised and phased basis by establishment of a regional financial sector task force to consider the merits and modalities of such a step, including all regulations and accounting standards that would attend the move. The mechanism should be linked to the CARICOL vehicle mentioned above.

Posting of collateral is normally expensive and the ability to use public resources, especially public fixed assets, along with international development assistance will be a distinct advantage if properly administered and monitored.

Regarding the securitisation mechanism, the CDB collaboration agreement is a good example of what should be done. Affiliated Tier II institutions, including those from the private sector, should benefit from the system on the basis of clearly indicated and regionally coordinated agreement on the extent of lowering of interest costs to the target sector.

Phased Introduction of credit default swaps – another view

To provide a basket of supplementary protection for credit issues under the above schemes, a CARICOM initiative should be established to allow for introduction of a regional mechanism for insuring credit to the target sector. The process should start with a Phase I featuring introduction of credit insurance in the form of credit default swaps – to take advantage of simplicity and ease of administration. After a sufficient period of learning by doing, –more sophisticated devices can also be introduced. The synthetic devices will greatly facilitate securitisation, collateralisation and debt collection at relatively low costs. The suggestion that domestic credit default swaps should be introduced is not new. Indeed, one of the more successful government-owned Tier II development banks in Jamaica and CARICOM, the National Export-Import Bank of Jamaica has long been providing export credit insurance as one of its primary services to the export-substitution sector, and in the light of the downturn in such export activity has been actively considering the introduction of local credit insurance as a substitute service. The BOJ (2005) reports as follows:

> The National Export-Import Bank of Jamaica (Ex-Im Bank) remained the only institution in Jamaica offering export credit insurance to protect non-traditional exports against losses due to non-payment by foreign buyers. While this facility is recognized as an indispensable tool, particularly in the area of export expansion, usage continues to be low, reflecting a general decline in non-traditional exports. Notwithstanding the low usage during 2005, the Ex-Im Bank insured exports valued at approximately J$1.0 billion. The institution continued to explore the feasibility of the introduction of domestic credit insurance to complement export credit insurance. This was based on feedback from existing policyholders and exporters utilising Ex-Im Bank's loan programmes. There were indications that there were benefits to be accrued from the introduction of such a product. The new product, if found to be feasible, is projected for implementation in 2006.

In the stakeholder meeting held in Jamaica in relation to this study, the issue of introduction of a credit swap (essentially insurance) was similarly favourably received. The main concern was feasibility and the proposals below suggest a design to that end. Further studies are needed.

Swap design

The proposed credit default swap design is standard and aimed at Tier II lenders:

- The particular Tier II lender provides credit to one or more customers in the target sector.
- The Tier II then enters into a contract with CARICOL to make periodic payments for the protection in return for a lump sum in the event of default, appropriately defined. This would complement the other collateralisation protection offered by CARICOL and can be designed to be attractive but optional if there is also a subsidised price to the other collateral supports.

- CARICOL would also face specific additional risks from the sale of protection, which it can protect against with its own capital assets and asset turnover from is investment programmes.
- Either **single-name** or **multi-name** swaps can be designed but the multi-name swaps are likely to be most relevant to the target beneficiaries. The single-name swaps would be an especially attractive way to deal with those customers who evolve rapidly into large private capitalists and drop out of the scheme. However, perhaps the more important device will be the multi-name credit default swap that groups customers into a basket such that the definition of default would vary in terms of defaults by individual customer or the portfolio as a whole. In the case of the individual, the default conditions would be defined along the following lines:
  - First-to-default - The first of any beneficiary in the basket that defaults would trigger the lump sum and termination of the coverage.
  - Second-to-default - The second of any beneficiary in the basket that defaults would trigger the lump sum and termination of the coverage.
  - Nth–to-default.

If the multi-name credit default swap is set up as a portfolio default swap, then the transfer of risk is specified in terms of the size of the default loss in the overall portfolio rather than the default of individual reference entities. The following options could be defined:

- First-loss-piece of X% - Here protection sellers are only exposed to the number of individual defaults that lead to an X% loss in the overall portfolio.
- Second-loss-piece of 2X% - Here protection sellers are only exposed to the number of individual defaults that lead to a 2X% loss in the overall portfolio.
- Third-loss-piece of 3X% - Here protection sellers are only exposed to the number of individual defaults that lead to a 3X% loss in the overall portfolio.

The credit default swap market would allow Tier II affiliated institutions to transfer some of their credit risk to CARICOL while the DB gets its desired level of exposure to the default risks of the customers, thereby promoting their access to credit at reasonable cost that is subsidised through the national and international development assistance underlying the institution. In the process, the swap would have to be priced in relation to the amount of compensation needed for the potential default that is covered. Thus, as with all markets, it forces the risks to be expressed in a price and as the market evolves pricing and sale (distribution of risk) are done with increasing efficiency.

Rationale for expected attractiveness

The experience with high rates of bad debt and growing credit risk exposure of the Tier II institutions "would normally be expected to lead to more sophisticated risk-management techniques" and the relative deterioration of the credit portfolio from embracing the priority sectors suggest growing need for derivative products to address this risk/exposure (Bomfim, 2005:1; Choudhry, 2004:x; 1-10). Currently, the market forces in the Caribbean work in such a way that commercial banks are compensated with high interest rates, high user fees and other rewards for taking on more credit risk. One form of this compensation is tied to the amount the bank recovers as a result of foreclosure. In the Caribbean, banks have the ability to "insure" credit by pursuing payment of outstanding principal and interest, with applicable interest, in perpetuity after foreclosure. However, this comes without any avenues for recovery of the affected customers and is a very expensive way to address the problem with minimal pay-off. An option is transfer some of this cost into a derivative scheme, which if developed with international collaboration, a reasonable

general subsidy and the securitisation and collection devices referred to above, could actually lower the total cost of managing the risky debt without the destruction of recovery opportunity. If Tier II lenders are credit-risk averse and demand the type of collateral and securitisation mechanisms recommended under the CRTSV and the CARICOL vehicles, it is also rational for them to demand insurance to cover earnings loss if such insurance is delivered in a cost-effective way and can avoid destroying prospects for the recovery of defaulting business on a sustainable basis.

Introduction of such a device can be achieved through sale of protection by **CARICOL** if, as in the case of the CDB, **CARICOL** is established with the level of international and national collaboration and the resources needed to make it a large regional AAA-rated institution in a reasonably short period of time. The effect of CARICOL insurance and the CRTSV would be to transfer at least the credit risks of the target sectors from the Tier II institutions at a price.

Reservations/Cautions

The first reservation in determining if and how CARICOL should be established is that the device should not excessively limit the evolution of private risk pricing in the market. This reservation was raised by the regulatory interests in the stakeholder group. The design protects against this eventuality because not all market segments should be covered by the services proposed. Focus is on the high-risk development sector and those left behind for sociological reasons or lack of adequate assets to cover investment risks.

The second and more important matter to be considered is whether the cost of insurance will be prohibitive and lead to more expensive rather than cheaper credit. This was raised directly by the commercial banking interests in the stakeholder group. The response to the objection is that CARICOL insurance would simultaneously strengthen the other forms of direct collateral support it provides with regional and international collaboration as described above and would also be reinforced by its collection activities. Since the price can be subsidised and the risk coverage will be complemented by the other direct collateralisation and collection services offered by CARICOL, the overall effect should be to lower the cost of credit while encouraging the evolution of a market for another type of financial instrument. Sold at subsidised rates, the swaps together with the other collateral and securitisation devices of CARICOL should lower the cost of the transactions needed to obtain the level of credit default exposure desired by CARICOL. A single sale of protection for a basket of loans could yield the same desired exposure (and earnings net of subsidies) as might two distinct transactions in the cash market, one of which yields earnings from a corporate note and one which yields earnings from a government short-term bond. After taking into account the comparative degree of liquidity in the cash and derivatives markets (which would affect transactions costs), there is a high probability that the single transactions would result in lower costs to the development banks, which are then passed on as cheaper insurance, which are then passed on as lower interest rates on loans, and so on.

How should CARICOL be owned? Lessons from the best practice cases of the USA and UK

In designing CARICOL, some lessons can be learned about the forces, instruments, participants, practices and conventions needed by examining international practice. In the USA and UK, in response to the rising pressures to manage credit risk, a substantial market for credit derivatives has evolved in the last two decades of the 20th Century, with spectacular growth in recent years (Choudhry, 2004:6). Regular studies have been done of the evolving characteristics of the derivatives market. Especially important are the British Bankers Association survey of the credit derivatives market (BBA, 2003/04) and the overview by Bomfim (2005). The BBA (2003/04) reports that a major feature of the credit derivatives market is that the **main market participants**

have been banks, securities houses and insurance companies. However, in the founding years of the credit derivatives market, most derivatives were written against sovereign/public assets. In 1996, 54% of the total underwriting assets were sovereign. However, by 2003, only 11% of derivatives were written against sovereign assets. By contrast, 64% were written against corporate assets. Further, the experience of best practice cases like the USA and the UK is that the major sellers of protection in the credit derivatives market have tended to be large and highly rated financial conglomerates, the closest to which may be the CDB.

A device such as CARICOL could provide for all these features by its design. The conclusion drawn is that, in addition to the regional governments and the international development partners, provision should be made for CARICOL to provide a capital investment opportunity for banks and insurance companies as well as securities houses to develop the desired institution. Moreover, notwithstanding the underlying programme of complementary securitisation with real assets, the goal should be to create a triple-A rated institution with falling public participation over time.

How should CARICOL services be delivered?

In each country, CARICOL services can be delivered through the Tier I development banks, reformed to include a strong credit collateralisation, insurance and collections unit.

Other Considerations

Urgent Strengthening of CariCRIS

Notwithstanding subsidised services, the price of all the CARICOL protection services will ultimately be linked directly to credit rating, at least because any default ultimately absorbed must be counted as part of the cost of credit. So, it is important that a technically sound and well-informed credit rating system be in place as a condition for development of a strong financial market for derivatives. The issue is broader since, as the CDB reports, "[c]apital markets development in the Caribbean has been handicapped by … the absence of national or regional credit rating agencies." The CDB has provided equity support for the establishment of the Caribbean Information and Credit Rating Service Limited (CariCRIS) to address this constraint. Credit rating takes time and skills of the specialist credit analysts and the process of rating is data-intensive (confidential) and costly, addressing characteristics such as the following (Choudhry, 2004:8-14):

- The financial position of the borrower, including its balance sheet position and anticipated cash flows and revenues.
- Management quality and other firm specific issues.
- The ability of the firm to meet scheduled interest and principal payments in any currency as due.
- Industry outlook and competition within it.
- Related macroeconomic economic outlook and competition within it.

Consideration should be given to an accelerated development programme for this agency. One possible step is that part of development banking reform will be the requirement that development banks and affiliated Tier II institutions use its services.

Some gains from CARICOL - standardisation and information flows

To function adequately, CARICOL would need to ensure that certain standards are established as early as possible so that its swaps can be marketed smoothly. These refer to a number of uncertainties related to interpretation of contract provisions that are inherent in a credit swap financial contract. There arise issues of rights and obligations for each party to the contract, whether buyer or seller. For example, in the swap, there will be:

- Monthly or quarterly payments for protection due to the protection seller.
- Provisions for the orderly settlement of contract in the event of default.
- Each contract will contain triggers, specification of events that call forth a payment by one party to another. For example, there are indications as to whether renegotiation of contracts by some targeted beneficiary constitutes a credit event that is a trigger.

In all legal contracts there are uncertainties about how the details of the contracts will apply when there are unforeseen event and these uncertainties create legal risk. In the early stages of development of the credit derivatives market in the USA, the issue became paramount and market participant had to collaborate to address the issues directly. It is appropriate to observe therefore, that one dimension of the CARICOL mandate should be to initiate the process of addressing a number of legal and contractual difficulties that can be anticipated (Bomfim, 2005: 26; 285-297):

- Counterparties are likely to have their own preferred set of stipulations.
- The main end-users are likely to have strong preferences for key definitions and events covered.
- Without standardisation, it would be
  - very expensive to the parties and the market to put together agreeable terms;
  - extremely difficult to arrive at fair market values and premiums for each type of risk;
  - costly for authorities to keep track of the legal, pricing and organisational aspects of the various contracts;
  - unlikely that the derivatives market could grow and achieve the optimal level of liquidity needed to address flexibly the needs of the priority sectors.

Among the related issues to be addressed would be routine data gathering on transactions of Tier II agencies, procedures, disputes and other events, and use these data to guide standardisation and upgrade, and routine information sharing at appropriate levels.

Managing measurement risk

In applying all the collateral devices available to CARICOL, the counterparties need a method of quantifying the risk factors inherent in either the swaps or the direct collateralisation and securitisation and translating these into a fair price. It does not matter that in this case some of the services might be fully subsidised to the end-user. To determine the fair price it should offer for protection to the Tier II institutions and ultimately the end-user, CARICOL would needs good estimates of the following:

- The credit quality and default risk of the end-users (target groups).
- The credit quality and default risk of the Tier II institution.
- The level of legal risk involved.

The Tier II institutions need similar data to determine the best ways to protect its clients, given all options available including those from CARICOL.

A risk measurement strategy has to be developed that is applicable to the circumstances of the Caribbean. Here, the main concerns are (i) the limited data availability in a Caribbean context, where the corporate community does not issue wide range of corporate notes with respect to which a yield curve can be properly specified so that the effective prices can be used as reference point for risk valuation at any given time; (ii) significant differences in liquidity that is likely to exist in the markets for government bonds, stocks and credit derivatives (Ministry of Finance, 2004).20 These situations have to be addressed by suitably dynamic[21] and sophisticated models of the probability of default of the target customers as the basis for discounting and estimating the price of their credit risk, after adjusting for the subsidies. The best option for the market participant in these circumstances is to proceed with access to sophisticated mathematical modelling of credit risk to characterise the fair market value of credit derivatives. These models are generally based on stochastic differential equations[22] and include the structural Black and Scholes (1973) model,[23] reduced from models (Cherubini, et al., 2004: 6-47; Duffie and Singleton, 2003; Jarrow and Turnbull, 1995), and the even more sophisticated recent models based on copula functions (Nelsen, 1999; Cherubini, et al., 2004).[24] There are extensions for realism. Geske (1977) and Geske and Johnson (1977) addressed coupon bond debt. Black and Cox (1976), Leland (1994), Longstaff and Schwartz (1995), among others, introduced default events prior to maturity and the effects of debt seniority structures. The effects of bankruptcy costs, strategic debt-servicing behaviour and absolute priority violations have been considered by Madan and Unal (2000). Shimko, Tejim, and van Deventer (1993) introduced stochastic riskless rates. Some authors, such as Zhou (1996) and Duffie and Lando (2001) address one of the basic assumptions of the BSM, which is that the value of the firms evolves in continuous time, without regard to jump discontinuities. This excludes sudden moves to bankruptcy and the like and implies credit spreads that substantially underestimate reality. Zhou (1996) introduces such jump discontinuities. Duffie and Lando (2001) assume that the value of the firm is non-observable in continuous time.

Development of a sound pricing capability will require that several critical data challenges be addressed to deal with the analytical complexities underlying the development of a price information system. For example, even if a vibrant and broadly ranged corporate bond market was to emerge, a zero-coupon bond would not be a good representation of a firm's liabilities. Further, balance sheet information is also a noisy indicator of the true state of a firm (Bomfin, 2005:178). The value of a firm (assets), a central variable in the standard models, is not observed in practice. The data more usually available are the book value of liabilities, the value of key assets, or shares outstanding or similar data that might be used to estimate equity or net worth in the case of some RDEs. Thus, even for a firm with a simple debt structure, there are substantial data challenges involved in measurement. For the Caribbean, the nature of the information challenge has not been defined. Apart from the specific challenges of the country-specific development paths, the information challenge would include the need to accommodate taxes and the informality reaction,

[20] In these scenarios, simple static replication models and even dynamic models might not capture the effects of the liquidity differentials in the two markets. Indeed, what appears to be an opportunity for arbitrage could turn out to be an underlying function reflecting the ease or difficulty of transacting in corporate notes as compared to credit derivatives. Even more sophisticated models might mis-specify the differentials.

[21] Even standard dynamic replication models will be of little practical value in the Caribbean setting since RDES do not normally issue corporate notes and there are no readily observed prices of notes to be used as reference points.

[22] A stochastic differential equation is a differential equation in which one or more of the terms is a stochastic process, thus resulting in a solution that is itself stochastic. In particular, in finance it is of interest when a standard constant of proportional change usually treated as a rate of return is changed to a stochastic rate.

[23] The Black-Scholes-Merton model is a famous example.

[24] Copula functions are multivariate distribution functions whose one-dimensional marginal distributions functions are uniform on the interval (0,1). They provide the most general methods of measuring the degree of co-movement between any set of random variables, more accurate than correlations even in near linear contexts.

bankruptcy costs, agency costs, variable riskless rates and similar factors that cause the commonly identified relations to break down.

Macroeconomic growth, volatility and linked budgetary reforms

There is also the need to recognise that the value of the firm is not the only variable that would influence either the probability of default or the recovery rate associated with default, especially in the context of the direct collateralisation services offered in collaboration with the international development partners. Thus, data used to model credit spreads (prices of different levels of risk) must capture not only the level of debt and default risk but also the feedback effect on the output and product prices of an RDE. It is now well-known that the problems of risk measurement models can only be solved by capturing both firm-level and macroeconomic data in measuring credit risk. For so-called developed countries, significant steps have been taken in this direction by Tang and Yan (2005). Suitable analysis remains to be done for the Caribbean and are needed even if protection did not include devices such as credit swaps.

A measurement initiative

Against this background, it is recommended that a regional risk measurement initiative be established in the University of the West Indies, perhaps initially at the Mona School of Business to take advantage of the available local datasets on the one hand and the presence of a large pool of target beneficiaries on the other.

Linked budgetary reform

A major source of volatility that affects risk and risk-pricing at the level of the investor is country GDP, in particular its growth and variability. The public interest in achieving desired growth rates while reducing such volatility as a means of cutting the cost of credit should also be simultaneously pursued from a complementary budgetary perspective through a process of democratisation of the budgetary process to feature greater partnership between the state and non-state sectors in order to ensure clear signals and effective leadership to the private sector in defining national priorities, focusing on the following:

- More coherent and transparent planning process in sector-wide modalities and with a financial sector-wide component, aimed at ensuring greater ownership by the non-state stakeholders.
- The process would have to involve adequate representation of the self-employed as stakeholders.
- A concept of development partners broadened to include interests in the so-called "developing countries," especially the emerging large growth engines.
- A strong mechanism for routine data analysis and information sharing, including data on the available resource windows and the market possibilities that the development agenda can address. This would have to be much different to the "demand-driven and reluctant response" culture that prevails everywhere in Caribbean countries today and will take clear national leadership to work.[25]
- Suitable modes of dialogue to ensure that all relevant partner representatives can find a place in the decision-making process to tackle the targeted difficult changes in the historical practices that lead to conflict between maintenance of privilege and pursuit of

[25] It might be worth noting here that recent legislations relating to the public's right of access do not adequately address these concerns. Weak information sharing systems and the absence of inclusive mechanisms of dialogue create a substantial drag on the conduct of both private decision-making and on the preparation of budgets that can adequately signal national priorities with which the non-state financial sector agree, own and will devote resources to implement.

development through the market. In particular, all of the above adjustments should lead to a dialogue mechanism that allows

- Strong articulation between national planning of priority changes,
- The budget exercise.
- Planning of sector/thematic activities.
- Strong private sector awareness of and participation in shaping national priorities.

Selected regulatory issues

It could be expected that once CARICOL issues credit swaps, they will enter the market for securities across the region. Significant regulatory issues also arise once swaps issued by CARICOL enter the securities market. If addressed in the context of the reform of development banks, credit swaps would add further stimulus to the current financial reform process. Some of these relate to the requirement (and the growing practice of development banks documented above) that banks hold capital in reserve to cover eventual default-related losses in their loan portfolios and these are subject to international agreement under the Basle Bank Capital Accords, with current reference to the Basle II Accord.[26]

Among the major benefits of introducing swaps from a triple-A institution such as CARICOL should be is that the swaps simultaneously upgrade the capacity of banks and other financial institutions to manage regulatory capital, diversify their portfolios, short (sell) any available corporate bonds and hedge against risk by buying corporate bonds (local or international). Moreover, development of a swaps market provides monetary authorities and other market participants with an alternative way to measure market and economic performance, especially in a context in which there is no significance yet attached to a local yield curve on corporate (and government) bonds.

The general approach to regulatory capital used by banks and other financial institutions is to move loans to highly rated borrowers off the balance sheet while retaining lower rated borrowers on the balance sheet. One reason for this is that Basle I regulation, still in place in Caribbean countries, gives the same weight to the low rated and the high rated borrower. Essentially, if a stronger secondary market for loans emerges in the Caribbean, banks could increasingly achieve this move by selling or securitising the loans to the highly rated customers, thereby freeing up capital that was tied to these loans. However, there are substantial costs to such a manoeuvre in terms of adverse effects on customer relations. Instead of promoting development of the secondary loan market in the first instance, banks could be more easily encouraged to participate in a CARICOL swaps market and benefit from the anonymity and confidentiality of that process.

Under Caribbean rules, bank exposure normally needs to be reported to appropriate regulatory authorities, who may in turn restrict further the amount of money a bank can lend or the standards of credit worthiness to be met when a bank is holding debt by treating the derivatives in a manner consistent with Basle I. There are two ways the market proposed above can address this issue. One is to promote synthetic securitisation and other derivatives by ensuring high-quality reform of development banks. The other is to phase in Basle II regulations in the latter context.

[26] The general guidelines were first detailed in the 1988 Basle Bank Capital Accord. This has since been updated in 2003.

At the same time, it is clear that when banks are encouraged to employ credit derivatives, this should be consistent with the spirit of the concerns of the monetary authorities with managing inflation and the orderly development of the capital markets. Thus, regulators should carefully consider how to treat the credit default swaps on the books of the banks. Should the derivative still be treated as a loan to the reference entity? Reformed development banks can play a crucial role in developing new practice in the context of the liberalisation of the financial markets to allow CARICOM-wide activity.

Report summary

We can now summarise our findings. This paper is concerned with how development banks might be reformed to be part of the wider agenda of development of the financial sector, including the market for commercial paper and bonds and the equity market. Ongoing reforms in the financial sector seek to improve resource flows for productive investment.

Nevertheless, there are persistent fractures and imperfections in the credit market. Development banking seeks to define and resolve the imperfections in credit markets and to address concerns regarding social equity by targeting loan and other support resources to priority sectors that seek to use underemployed resources for capital accumulation and growth. The paper suggests steps that reconcile these objectives in a Caribbean economy.

Framework of analysis

The framework of analysis takes account of the implications for development strategy of two features of the labour (human capital) market: (i) large numbers of self-employed persons as development potential still outside the capitalist wage-labour market; and (ii) the development of a real domestic capital sector – human and physical and the creation of significant externalities when this capital is applied in production. In Caribbean economies today, monetary expenditure for profit, especially as credit, is the prime driver of production and change. Use of that profit to accumulate domestic capital, in partnership with foreign capital, has become a major means by which firms successfully increase asset turnover and value and ultimately develop the economy.

Development banks are relevant in this context because there are persistent fractures and imperfections in the credit market that severely restrict the flow of credit to facilitate the accumulation of domestic capital. Development banking seeks to define and resolve the imperfections in credit markets and to address concerns regarding social equity by targeting loan and other support resources to priority sectors that seek to use underemployed resources for capital accumulation and growth. This study is motivated by the question of how development banking might be successfully reformed in service of financial sector development to fund the domestic capital accumulation process.

The method adopted was to use available data to assess

- The success in targeting a high percentage of loans to capital-intensive activity in order to achieve a high asset turnover.
- Whether development financing institutions maintain a low loss rate of direct loans relative to a high rate of credit flows, especially since the loss rate is an integral part of the cost of providing credit.
- Whether the development bank flows are providing adequate coverage of the intended market.
- Whether the program is having an impact on improving the growth rate and economic viability of the target groups.

Where data are available, such measures were considered. However, a major problem confronted by this study was lack of secondary data and lack of resources to field suitable primary surveys to collect relevant information. We have used a focus group of stakeholder institutions in Jamaica to address the gaps in data.[27]

Development banks were established to operate primarily in Tier II mode, in the sense of direct lenders and suppliers of other complementary support to the final end-users of credit. Tier I status refers to lending to the financial intermediaries serving end-users, such as commercial banks, credit unions and other financial intermediaries and has evolved over time, largely in response to the need for reform of the Tier II institutions.

In the early 1980s, within the wider structural adjustment and liberalisation framework, financial sector reforms were initiated to allow greater facility of market forces in the pricing and allocation of financial resources. With lesson learned, some costly, the sector has been increasingly liberalised since then with subsequent on-going reform addressing the legislative and regulatory frameworks.

Some of the reforms have targeted the development banking sector, with (i) privatisation initiatives; (ii) integration of institutions and internal reforms to achieve greater financial viability and less dependence on the state; and (iii) conversion from the founding Tier II mode to Tier I mode.

Ultimately, the initiatives seek to promote high professional standards, efficient liquidity management and deployment and the orderly and efficient operation of the money and capital market, including the development of a corporate bond market and a variety of secondary markets such as the secondary market for loans.

[27] The group included the Bank of Jamaica(); Development Bank of Jamaica(General Manager); National Commercial Bank Jamaica Limited(Senior Assistant General Manager and Manager, SME); Jamaica National Building Society; Victoria Mutual Building Society; Jamaica Mortgage Bank; Financial Services Commission; Churches Co-operation Credit Union; written comments (General Manager); University of the West Indies, Mona, (Principal); Mona School of Business (Director). Most institutions sent more than one senior representative.

Generally, these initiatives have led to more viable Tier I enterprises but the Tier II development banks remain a problem. Further, crucially, the reforms have not yet successfully triggered progress towards solving either the problem of persistent excess liquidity or the problem of very narrow and underdeveloped markets for corporate bonds, secondary markets. Just as crucial in the context of this study, neither the broad financial sector reforms nor the more targeted frequent reforms of development banks have solved the historical problem of inadequate and unduly expensive credit to priority sectors, especially the creative sectors that are becoming increasing important for the copyright income they generate.

The key findings

Central development issue

In the modern Caribbean economy, the central development issue concerns how to increase asset turnover by upgrading and restructuring the types of assets employed to include a greater reliance on domestic capital.

Priority sectors

Indeed, the priority development sectors are essentially those that are making intensive use of such domestic capital, and are prone to high creativity in that sense, whatever the specific activity involved – sport, general copyright industries, creative agriculture, and so on.

Efficacy of credit expansion to priority sectors and key challenge

Expansion of the money supply through an increase in credit to the priority sectors can supplement profits as a source of working capital and finance for fixed capacity building and human capital development and therefore create profits and savings at an increasing rate.

The key challenge of development banking today is to facilitate this process by addressing persistent fractures and imperfections in the credit market as well as related concerns regarding social equity. Development banks target loans and other support resources directly or indirectly to priority sectors that seek to use underemployed resources for capital accumulation and growth.

Traditional development banks provide direct Tier II lending. However, Tier I lending has been growing and proving effective. This has largely been in the form of sourcing and steering cheaper funds to direct lenders with the expectation that there would be an increased flow to the priority sectors. The central question is what additional indirect mechanisms might be put in place to encourage a greater flow of credit to the target sectors at a lower cost?

A note on credit and inflation

In the medium term, inflation is not an inherent consequence of credit expansion to address modern capital sector development possibilities as set out above, especially if regulatory capacity is considered.

However, in the modern era, development banks would have to be designed to focus less on supply of working capital and import capacity and more on development of the domestic capital component of the asset base even as all forms of spending grow. That in turn would require an appropriate capacity to capture and spread the associated risks. Recommendations address this capacity.

Experience of development banks

Founded under government ownership and control, development banks were forced to function in a manner that converted them into social-sector transfer mechanisms, transferring public funds to address the needs of many sectors in a way that offered little prospects of viability. Thus, development banks have largely been Tier II institutions. Most of these have not worked well and certainly have not led the transformation of the regional labour market. Jamaica's labour market profile is proof of that.

Specifically, development banks have not created sufficient viable capacity of development banks to borrow or earn market-determined surplus and thus supply suitable financial services to targeted development sectors with confidence. Development banks have achieved relatively greater success when operations shift to Tier I mode.

Reforms have moved in the direction of increasing the internal efficiency of the Tier II banks lending directly to the end-users of credit, privatisation, or establishment of Tier I banks that lend and on-lend to the direct lenders. Tier I banking has proven to be relatively more profitable and to provide some stimulus to the financial sector through the flow of relatively low-cost concessionary funds for direct lending and on-lending.

However, these reforms do not address adequately the fundamental challenge of moving resources efficiently to the priority sectors focused on domestic capital accumulation and capacity building in a context where the market would normally avoid exposure to their high credit risk.

Current importance of development banking in the financial sector

The general tendency is for development banks to be of minor significance in the current financial system and indeed to be losing its significance as the commercial sector increases its exposure to the credit risks of the priority development sectors of the economy. In terms of the capacity to issue credit, the share of total banking assets also reveal that development banks are of limited significance in the general scheme.

Reforms are therefore not likely to be highly costly in terms of a fall in aggregate credit flows even as they bring huge gains in terms of the stimulus provided to boost the flow of finance to priority sectors. On the other hand, with failure to reform the following net social costs of development banks will tend to remain high or even grow:

- The opportunity costs of misallocation of resources and bad debts.
- High social costs of credit even when interest is subsidised.
- High operating expenses to operating income.
- Low or absent profitability.
- Sub-optimal liquidity ratios associated with the inappropriate allocation of resources.
- High level of liabilities relative to equity.

Baseline reforms of development banking sector

Several types of reforms are proposed to ensure a pool of local Tier II development financing institutions that can achieve the basic goals of the development banking sector while minimising the problems. We take as key goals:

- Viable provision of the maximum possible credit flows to the priority sectors defined in terms of their orientation to employ high levels of domestic capital in economic activity.
- Supply of credit at reasonable cost without the large-scale losses that characterise the traditional Tier II development banking system.
- Ensuring timely responses to loan requests and loan-servicing requests.
- Improvement of the related technical assistance to the target sectors to ensure development of their economic viability and competitive.

To pursue these goals, we propose the following:

- There is need for improved analysis of
  - The scale and nature of the persistent fractures and imperfections in the credit market.
  - The degree of inequity as defined in terms of access to credit for domestic capital formation versus access to credit for foreign capital formation.
  - The associated true direct and opportunity costs of inadequate credit to priority sectors.
  - Against this background, the target of development banking should be redefined to emphasize domestic capital formation. That is, development banking seeks to define and resolve the imperfections in credit markets and to address concerns regarding social equity by targeting loan and other support resources to priority sectors that seek to use underemployed resources for capital accumulation and growth.
- In so far as they remain in the lending business, development banks should be Tier I operations, regional or local in scope, focused primarily on financing the development and employment of domestic real capital in all sectors of the economy but with priority to the capital producing sectors such as education, health, housing and the real assets of the creative enterprises.
- Large-scale private equity is desirable to increase responsiveness to market signals and ensure increasing viability over time, especially as that relates to attracting credit to support increasing investment in domestic capital.
- Significant, but not dominant, public investment is desirable to represent the public interest in addressing market failure in a private sector setting – the board-rooms of privatised development banks. This relative dominance of the private sector would simultaneously ensure the following:
  - Improved and more flexible modalities of capitalisation that gives adequate room for private sector participation and ultimately the phasing out of public equity in the long term.
  - Greater flexibility, institutional autonomy, market sensitivity in loan decision-making that would address the needs of the wider market while still addressing the needs of the development community.
  - Improved, more market-driven recruitment of management skills.
  - Sensitivity to regulatory issues and a means of communicating government policy because of the government participation.
  - Rebalancing of the short term (especially working capital) and long term focus (installation of real capital assets) of the loan portfolio of the banks to reflect a greater measure of the efficiencies demanded by the market.

- Freedom from undue and inappropriate political interference.

- A crucial lesson of the DFL experience is that international equity participation in the reformed development banks is highly desirable and should be encouraged by specific policy and regulatory initiatives. This should include equity from the large so-called developing countries, such as Brazil, China and India.
- To address the goal of boosting the prospects for competitive success, a special CARICOM Regional Technical Support Vehicle (CRTSV) to provide active and partially subsidised technical support for the target sectors and to develop suitable business models in collaboration with them. The vehicle should be required to operate profitably and should be linked actively to strengthened regional devices such as the CARICOM Regional Organisation for Standards and Quality (CROSQ) and to local counterparts such as the Standards Bureaus and other Research Institutions.
- One possibility is to reform the Caribbean Industrial Research Institute (CARIRI) for this purpose.
- In the context of some steps to privatisation, development banks should be required to operate according to specific standards and monitored and evaluated accordingly: These should include
  - Adequate attention to development of product lines and instruments to attract the new types of customers emerging from the development process, with a view to creating pressure on the private sector and the affiliated private Tier II institutions to do the same.
  - Development banks should be guided and evaluated by specific targets and measurable goals, including
    - Steady improvement in the viability of supply of credit flows to the priority sectors defined in terms of their orientation to employ high levels of domestic capital in economic activity.
    - Target rate of return on assets or asset turnover.
    - Steady improvement in the supply cost of credit over some target period.
    - Steady improvement in the timeliness of responses to loan request and loan-servicing requests from the key target sectors.
    - The success achieved by the beneficiaries of the services of development banks in the context of the support for development of viable business models.
- These baseline changes will be insufficient to address the problems inhibiting suitable targeting of credit to the priority sectors.
- **Agreements from stakeholder focus group**: This report adopts three propositions from the stakeholder consultations:
  - Tier I Development banks, including the CDB, should increase partnership with the credit unions, home mortgage banks and other similar institutions to provide Tier II services to the target sector. Over time, such private affiliated institutions should replace all Tier II institutions that are unable to demonstrate ability to meet clearly designated performance standards.
  - A **CARICOM Regional Collateralisation, Securitisation and Collection Vehicle** (CARICOL) should be established to provide a single regional channel for

  - ° Effective debt collection when default occurs, with adequate recovery opportunity provided in conjunction with the CRTSV.
  - ° Two types of securitisation and collateralisation supports to customers through Tier II institutions, on the other:
    1. Pooled International collateral and securitisation support for customers, similar to the support now provided by the USAID through Tier II institutions.
    2. Pooled government collateral and securitisation support for customers, with the support.
- – Increase the use of cash-flow lending by the commercial banking sector, with particular reference to the target sector. This should be introduced on a harmonised and phased basis by establishment of a regional financial sector task force to consider the merits and modalities of such a step, including all regulations and accounting standards that would attend the move. The mechanism should be linked to the CARICOL vehicle mentioned above.

- Posting of collateral is normally expensive and the ability to use public resources, especially public fixed assets, along with international development assistance will be a distinct advantage if properly administered and monitored.
- Regarding the securitisation mechanism, the CDB collaboration agreement is a good example of what should be done. Affiliated Tier II institutions, including those from the private sector, should benefit from the system on the basis of clearly indicated and regionally coordinated agreement on the extent of lowering of interest costs to the target sector.
- Phased Introduction of Credit Default Swaps – Another View - In addition, it is suggested that to provide a basket of supplementary protection for credit issues under the above schemes and to facilitate capital market development, a CARICOM initiative should be established to allow for introduction of a regional mechanism for insuring credit to the target sector. The process should start with a Phase I featuring introduction of credit insurance in the form of credit default swaps – to take advantage of simplicity and ease of administration.
- One of the more successful government-owned Tier II development banks in Jamaica and CARICOM, the National Export-Import Bank of Jamaica has long been providing export credit insurance as one of its primary services to the export-substitution sector. In the light of the downturn in such export activity, it has been actively considering the introduction of local credit insurance as a substitute service.
- **Swap Design**: CARICOL is proposed as the protection-selling counter party and can sell either single-name or multi-name swaps but the multi-name swaps are likely to be most relevant to the target beneficiaries. The single-name swaps would be an especially attractive way to deal with those customers who evolve rapidly into large private capitalists and drop out of the scheme. However, perhaps the more important device for the newly emerging or socially disadvantaged investors will be the multi-name credit default swap that groups customers into a basket such that the definition of default would vary in terms of defaults by individual customer or the portfolio as a whole.
- Reservation/Caveat: The main caveat to be considered in determining if CARICOL should be established is whether the cost of insurance will be prohibitive and lead to more expensive rather than cheaper credit. This was raised directly by the stakeholder group. However, CARICOL insurance would simultaneously strengthen the other forms of direct collateral support it provides with regional and international collaboration as described above and would also be reinforced by its collection activities. Since the price can be

subsidised and the risk coverage will be complemented by the other direct collateralisation and collection services offered by CARICOL, the overall effect should be to lower the cost of credit while encouraging the evolution of a market for another type of financial instrument.

- How should CARICOL be Owned? Lessons from Best Practice Cases: USA and UK: In addition to the regional governments and the international development partners, provision should be made for CARICOL to provide a capital investment opportunity for banks and insurance companies as well as securities houses to develop the desired institution. Moreover, notwithstanding the underlying programme of complementary securitisation with real assets, the goal should be to create a triple-A rated institution with falling public participation over time.
- **How Should CARICOL Services Be Delivered?** In each country, CARICOL services can be delivered through the Tier I development banks, reformed to include a strong credit collateralisation, insurance and collections unit.
- Urgent Strengthening of CariCRIS: To ensure adequate supporting credit-rating services, consideration should be given to an accelerated development programme for CariCRIS. One possible step is that part of development banking reform will be the requirement that development banks and affiliated Tier II institutions use its services.
- Standards: To function adequately, CARICOL would need to ensure that certain standards are established as early as possible so that its swaps can be marketed smoothly. These refer to a number of uncertainties related to interpretation of contract provisions that are inherent in a credit swap financial contract.
- Managing Measurement Risk: A risk measurement strategy has to be developed that is applicable to the circumstances of the Caribbean. It is recommended that a regional risk measurement initiative be established in the University of the West Indies, perhaps initially at the Mona School of Business to take advantage of the available local datasets on the one hand and the presence of a large pool of target beneficiaries on the other.
- Linked Budgetary Reform: A major source of volatility that affects risk and risk-pricing in CARICOM countries is the macroeconomic cash flow, in particular the GDP. Concern is especially with GDP growth and volatility. The public interest in achieving desired growth rates while reducing such volatility as a means of cutting the cost of credit should also be simultaneously pursued from a complementary budgetary perspective through a process of democratisation of the budgetary process to feature greater partnership between the state and non-state sectors in order to ensure clear signals and effective leadership to the private sector in defining national priorities.
- Regulatory Issues: Regulators should carefully consider how to treat the credit default swaps on the books of the banks. Should the derivative still be treated as a loan to the reference entity? This is precisely where reformed development banks can play a crucial role, along with the liberalisation of the financial markets to allow CARICOM-wide activity.

Follow-up analysis

Given resource limitations, the analysis was based a sample of development banks from across the Caribbean for which data were readily available. A follow-up analysis should be conducted that uses as its main method the design and fielding of a suitable instrument to obtaining primary data from all the development banks as well as from a reasonable sample of the other commercial entities in the CARICOM region. The study should address the core matters discussed in the stakeholder group meeting held in Jamaica and reported in Tables 28-30 as well as in the proposals for reform. These are mainly: (i) a regional approach to collateralisation and loan guarantees; and (i) the costs and benefits of introducing a related credit default swap instrument with initial support from the national and international development community.

Significant consideration should also be given to assembling a suitable CARICOM research team for this purpose, with particular regard to the establishment of a regional device such as the proposed CARICOL to underwrite the introduction of a credit default swap on a regional basis.

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