S E R I E

192

financiamiento del desarrollo

The dynamics of specialist development banking: the case of the agriculture development bank of Trinidad and Tobago

Anthony Birchwood

NACIONES UNIDAS

CEPAL

Development Studies Unit

Economic Development Division

Santiago, Chile, May 2007

gtz

This document was prepared by Anthony Birchwood, consultant of the Development Studies Unit of the Economic Development Division, at the Economic Commission for Latina America and the Caribbean (ECLAC), within the activities of the project “Strengthening the Role of Regional and National Financial Institutions for Sustainable Social Development” (GER/03/002)”, executed by ECLAC jointly with *Deutsche Gesellschaft für Technische Zusammenarbeit* (GTZ). The author would like to expressly thank Mrs Jacqueline Rawlins, the Chief Executive Office of the Agricultural Development Bank (CEO), for graciously granting interviews on the subject, and to Daniel Titelman for his valuable comments on a previous version. Of course, the study does not necessarily reflect the opinion of the bank or the CEO and all errors remain that of the author.

The views expressed in this document, which has been reproduced without formal editing, are those of the authors and do not necessarily reflect the views of the Organization.

United Nations Publication
ISSN printed version 1564-4197 ISSN online version 1680-8819

ISBN: 978-92-1-121643-1
LC/L.2731-P
Sales No.: E.07.II.G.69

Printed in United Nations, Santiago, Chile

Contents

Tables

Figures

Charts

Abstract

This document analizes the case of the Agricultural Development Bank (ADB) of Trinidad and Tobago. It argues that development banks thrive best when the targeted sector is expanding and sector demand is increasing. The continued operation of a specialist development bank such as the ADB requires strong political and institutional support to the sector to accompany it, if it is to be successful. There is also evidence that the marketing approach is essential for the success of development banks, as in the case of ADB where the bank found it necessary to reinvent itself, continuously thriving for innovations and continuously consulting the market for feedback in order to develop products to satisfy customer needs.

The study suggests that ADB can significantly improve its viability through non-lending methods of disbursing funds, since loans increased its expenses and did not contribute to its profitability given the maintenance of repressed interest rates. In addition, economies of scale mattered to the efficiency of the institution, suggesting that the bank needed to strive after asset expansion by writing more business.

Finally, the study contends that risk management techniques, inclusive of the quantification of risks, are essential to improving the viability of development banks such as ADB. These banks need to embark on non-traditional ideas such as outsourcing of non-core activities, particularly in light of increasing complexities and the demand for specialist skills associated with financial management.

1. Introduction

Internationally, development banks emerged as governments of many countries attempted to accelerate economic development by directing finance to achieve this objective. Accordingly, it was felt that development banks had a major role to play in steering resources appropriately, particularly where there is market failure. Thus, development banks were deemed as a critical ingredient to improving access to credit, allowing for the provisioning of long-term finance at a low price, and the financing of start-up activities. In addition, development banks were seen as essential to the financing of employment creating activities such as the development of the agricultural sector.[1]

Seibel (2000) examined the performances of agriculture development banks worldwide and found that they have suffered from political interference, have been largely unsupervised and therefore not subject to prudential regulations and strict monitoring. The author argued that in the majority of cases, these institutions became unsustainable, technically bankrupt, lacking the ability to diversify and attract customers and funding. The author further contended that successful reforms have encompassed operational autonomy, and have put in place legal provisions for prudential norms, focussing on financial viability. Seibel (2000) suggested that any successful reform on development banking needed to be done in a context of favourable demand conditions, and commitments to profitability and sustainability of operations.

1 See Sunita Pitamber (2003) for example.

The study proposes to follow on from Seibel (2000) through the conduct of a case study. Accordingly, the primary focus of the study would be on the specialist development bank, Agriculture Development Bank (ADB). An examination of this bank is useful as the bank remained largely government owned (97%) and survived for nearly 40 years, with its financial position turning around from extreme losses to reflecting profitability. However, at times its operations would be compared with the Development Finance Limited (DFL), formally Development Finance Corporation, so as to make inferences on the relative performance of ADB.

The next section examines the evolution and performance of development banking in Trinidad and Tobago, focussing in particular on ADB. It gives a brief sketch of the stylised facts, the broad financial system, the operational structure, the relevance of ADB, the scale of operations, the market penetration, the rebound of ADB and its relative performance to DFL. The study then goes on to explore the strategic focus of ADB in a bid to gain lessons on the way forward. Accordingly, the short and long-term focus of the institution are discussed, after which the institutional framework is highlighted and the governance and administrative scheme of the bank are closely examined. The issues regarding ADBs' ability to collect funds, and its autonomy are also explored. Following this, in the discussion preceding the conclusion, suggestions regarding the strengthening of financial intermediation by the bank and ways by which the specialist development banks can increase there viability are put forward.

2. Evolution and evaluation of development banking

2.1(a) Stylised facts on development banking in Trinidad and Tobago

Around the time of independence, the government of Trinidad and Tobago (GOTT) attempted to achieve targeted credit allocation through the creation of specialist lenders to industry and agriculture. Accordingly, four specialist institutions, the Agricultural Development Bank (ADB), the Trinidad and Tobago Mortgage Finance Company, the Industrial Development Corporation (IDC) and the Development Finance Corporation (DFC) emerged between the years 1959 and 1970. This in itself was an innovation to the financial structure in Trinidad and Tobago, as it broadened the financial landscape, since at the time of independence in 1962 capital markets were rudimentary and there was a limited range of finance companies and specialised financial institutions. It also represented Government's attempt to intervene directly in the Credit Market in a bid to steer credit to desired sectors, given the perception that commercial banks would not be motivated to lend to certain sectors where the expected financial rate of return was low.

By the 1980s, it was evident that most of these institutions were not self-sustaining and were in fact a drain on the treasury, given the severity of accumulated losses they suffered.[2] Bourne (1989) attributed the failure of these institutions to many shortcomings including (1) the fact that they were afflicted with high rates of loan delinquency and (2), their asset base was small and they were therefore unable to finance important market segments given their high dependence on funding from fiscal allocations.

Partly as a result of this, by the 1980s government retreated from the idea of development banks. Government was also motivated by the financial liberation arguments that were taking root worldwide. Consequently, the IDC was closed in 1988, the DFC began a process of divestment in 1984 to eventually become Development Finance Limited and the future of ADB was uncertain during the latter part of the 1980s as government had withdrawn its funding from the institution in 1985, forcing the bank to rely on funds from the Caribbean Development Bank and the Inter-American Development Bank.

At present, the number of recognised development banks in the database of the Central Bank of Trinidad and Tobago (CBTT) has been reduced to two, TTMF and ADB. The TTMF begun as the Trinidad Mortgage Agency in 1961 before it became the TTMF in 1965. Government was then a minority shareholder with 20 per cent share ownership. At present, government owns 49 per cent and the National Insurance Board owns 51 per cent of the company. The company holds a portfolio of loans in real estate, home ownership and construction, which have proven to be quite profitable for the company. For the sake of this study, direct comparisons between ADB and TTMF are not really feasible, since TTMF deals mainly in long-term instruments much beyond that of ADB, and they operate in totally different markets.

Useful comparisons can be drawn with DFL, however, as the companies are close in the terms of the type of customers they seek, that is, customers interested in entrepreneurship. DFL begun operations in 1970 with 95 per cent of its initial equity been provided by government. However, it was the intention of government to have the company operate as a privately controlled entity so that eventually the company was divested to become private sector controlled and the focus broadened to include international lending, investment in risk capital operations, foreign currency lending, export oriented manufacturing, industrial services and tourism. The major shareholders in DFL in 2002 were RBTT (29.7%), GOTT (28.1%), European Investment Bank (8.5%) and Inter-American Investment Corporation (8.5%). While profits are an essential objective of DFL, the company focuses on the disbursement of funds to emerging areas in the economy.

The role ascribed to ADB was to finance the sustained development of the agribusiness sector. The bank fell under the Ministry of Agriculture, Land and Marine Resources. It consisted of four main branches and four sub offices, the difference been that the sub offices opened only on Wednesdays while the main branches opened at least five days per week. The bank boasts of already providing just under US$500 million, or over 40 thousand loans since inception, to the agricultural sector. These loans have been targeted to primary production in livestock, agro processing, farm mechanisation and marine fishing. In addition, the bank has financed the broiler industry, commercial horticulture and has supported the construction of multipurpose fishing vessels. The scope and penetration ADB is, however, impacted on by the depth of the financial sector which is revealed through an examination of the broad financial system.

[2] See Bourne (1989).

2.1(b) The broad financial system

The financial sector in Trinidad and Tobago has become more sophisticated since independence, particularly with the emergence of capital markets, new types of financial intermediaries and new types of financial instruments. For example, the government pioneered the graduation from the informally organised call exchange to a stock market in 1981, thus formalising the formation of the equities market. Accompanying the creation of the stock exchange was the incorporation of the Trinidad and Tobago Unit Trust in that same year, kick-starting the mutual funds industry. Moreover the non-bank financial sector expanded with the formation of mortgage and finance companies.

Table 1
COMPOSITION OF THE FINANCIAL SECTOR
(Percentage)

Institutions	Percentage of assets in 1988	Percentage of assets in 2005
Central Bank	20.3	19.7
Commercial Banks	43.0	32.5
Finance Companies and Merchant Banks	3.0	7.8
Trust and Mortgage Finance Companies	8.6	5.6
Thrift Institutions	0.4	0.0
Development Finance Institutions	4.0	1.2
Unit Trust Corporation	0.3	9.3
Deposit Insurance Corporation	0.1	0.5
Home Mortgage Bank	0.6	1.1
Life Insurance Companies	11.5	14.9
National Insurance Board	8.2	7.3

Source: Tabulated from the Central Bank of Trinidad and Tobago: Annual Economic Survey, 1988 and 2005.

By 2005 commercial banks only accounted for just under 33 per cent of the assets in the financial sector, see Table 1. This is in contrast to 1988 when commercial banks accounted for 43 per cent of assets in the financial sector. At the same time the unit-trust corporation rose to significance as its share of assets in the financial sector rose from 0.3 per cent to 9.3 per cent in the seven year interval. The growth of development banks was not as spectacular as their share of the financial system slid from 4 per cent to 1.2 per cent.

2.2 Source of funds to ADB

Being a non-deposit taking institution, ADB has had to rely on external funding and returns from its operation, in order to fund its agricultural lending programme. Unlike other development banks in the Caribbean, ADB had not sourced funds from a plethora of international financial institutions.[3] Rather, since the 1990s the bank sourced funds for onlending from two development banks, from government and through direct financing from the market.[4]

3 Development banks in the region collectively accessed funds from the CDB, Multinational banks such as IDB, European Development Agencies and commercial banks in the region.
4 In addition the bank did take a mortgage with a commercial bank in order to purchase its headquarters.

ADB loanable funds were raised through the Inter American Development Bank (IADB) and the Caribbean Development Bank (CDB and directly from the market through the issue of fixed rate zero coupon bonds, See Table 2. In December 1988, a loan contract was signed between the IADB and the GOTT, with the ADB acting as the executing agency. The proceeds of this loan was to be realised through several draw-downs totalling US$ 26.9 million and to be repaid in a period of 23 years. By 1998, about 96 per cent of the loan was already drawn-down. The ADB also accessed a loan of US$ 10 million from the CDB with the first instalment paid in 1993. By 2004 the Bank had already repaid close to 80 per cent of the principal. The GOTT also raised over 20.2 million in loans from the IADB. The proceeds of the loan in turn was passed on to ADB through the purchase by the government of 8 per cent non-cumulative redeemable preference shares from the Bank in 1997. A portion of the loan was disbursed under the Bank's Global Agricultural Credit Programme.

Table 2
ADB LIABILITY PROFILE: PERCENTAGE OF CREDIT TO TOTAL LIABILITIES
(Percentage)

	1994	1995	2000	2001	2003	2004
IADB Loans	56.3	58.6	0	0	0	0
CDB Loans	27.9	22.7	18.1	16.2	2.8	2.0
First Citizens Loans	0.8	0.6	0	0	0	0
Redeemable Preference Shares	0	0	78.3	82.2	21.4	20.3
Fixed Rate Coupon Bond	0	0	0	0	74.7	76.5
Total Loans	82.7	79.9	18.1	16.2	77.5	78.5

Source: Calculated from ADB Annual Reports

Table 3
DFL PERCENTAGE OF CREDIT TO TOTAL LIABILITIES
(Percentage)

	2003	2004
Short-term Credit	3.9	5.8
Long-term Credit	80.7	78.4
Conditional Credit and Private Equity Funding	10.8	11.6
Total Credit	95.4	95.8

Source: Calculated from DFL Annual Reports.

An examination of Table 2 suggests that ADB liability profile changed from a concentration of credit from level one development banks, to bonds raised on the open market. The liability structure in 1994 and 1995 were over 80 per cent in favour of loans from the IADB and CDB, whereas, loans from these institutions declined fundamentally in 2003 to 2004, as the bank issued fixed rate coupon bonds which now accounted for about 75 per cent of its liabilities. The switch in portfolio was assisted by high liquidity in the Trinidad and Tobago economy and the resultant boom conditions. DFL, shared a similar liability structure in 2003-4 with 78 per cent of its liabilities been in terms of long-term credit, of which over 64 per cent were raised through floating rate bonds, some of which were due to mature by 2030, see Table 3. DFL also supplemented its credit by borrowing from the European Investment Bank (EIB) to fund its private equity products.

2.3 Importance of ADB as a credit provider

Prior to 2003, lending to the agriculture sector was dominated by commercial banks, see Table 4. It took a special event, the closing of the largest plantation in the country, to create conditions for ADB to overtake commercial banks in lending to the sector. This allowed ADB to make the leap to become the most significant lender to the agricultural sector by 2003.

Table 4
MARKET SHARE IN THE AGRICULTURE CREDIT MARKET
(Percentage)

	1995	2000	2001	2002	2003	2004
ADB Loans to Total Agricultural Loans	32.9	42.0	26.7	16.9	72.3	77.4
Commercial Bank Loans to total loans to agriculture	60.4	51.8	66.6	80.4	26.8	21.3

Source: Agricultural Development Bank: Annual Reports various years, Central Bank of Trinidad and Tobago: Annual Economic Survey, various years.

Commercial banks tended to fund the upstream segments pertaining to agriculture, rather than agriculture production. Thus, even though commercial banks dominated loans to the sector in the past, ADB played a greater role in funding production in primary agriculture. Most of the funding provided by the bank in 2004 (88%), went into sugarcane production in south and central Trinidad.

From Table 5, it is evident that commercial banks allocated a minimal percentage of their portfolio to the agriculture sector, no doubt in order to minimise their risk exposure to the sector. Moreover, in 2005, lending to agriculture declined in importance in the portfolio of commercial banks compared to the previous decade, while it rebounded in the ADB to account for 50 per cent of assets.

Table 5
IMPORTANCE OF LOANS TO AGRICULTURE IN THE ASSET PORTFOLIO OF INSTITUTIONS

	1994	1995	2000	2001	2002	2003	2004
ADB	54.1	48.0	46.3	33.2	27.4	58.5	58.3
Commercial Banks	2.6	2.8	0.9	1.2	0.8	0.9	0.5

Source: Agricultural Development Bank: Annual Reports various years, Central Bank of Trinidad and Tobago: Annual Economic Survey, various years.

2.4 Scale of operations

2.4(a) Target market

It is useful to examine the relative growth of sectors in order to have an idea of the demand conditions that the development banks faced. These target markets take their tone from economic cycles, and in turn, the financing and viability of development banks are impacted on by these cycles among other factors. For example, the demand for financial products and the ability of borrowers to repay depends on the success of businesses in the market place. Thus continuous growth of sectors suggests a favourable economic climate that promotes viable prospects for financial intermediation.

The economic cycles in the Trinidad and Tobago economy were largely driven by the performance of the energy sector. In the thirty years leading up to 2004, four periods may be identified: (1) an oil boom which occurred between 1974 and 1981; an economic recession which occurred between 1982 and 1989; a transition period which occurred between 1990 and 1993; and another economic boom which occurred from 1994 onwards. Table 6 captures the relative growth performance of selected sectors during the different economic cycles.

Table 6

PERCENTAGE GROWTH OF SECTORS AT THE END POINT OF ECONOMIC CYCLES OF THE TRINIDAD AND TOBAGO ECONOMY

(Percentage)

	Growth by 1981 over 1974	Growth by 1989 over 1982	Growth by 1993 over 1990	Growth by 2004 over 1994
Agriculture	126.9	-3.5	11.1	8.7
Manufacturing	202.8	75.0	19.3	143.6
Construction	837.3	-46.1	9.4	207.2
Transport, Storage and Communication	388.0	-16.4	30.2	122.7
Distribution	275.1	17.73	34.6	185.7
Finance, Insurance and Real Estate	609.6	-4.3	38.8	184.2
Other Services	277.5	-4.5	18.4	151.4

Source: Data are obtained from the Central Bank of Trinidad and Tobago data base.

Notes: Cycles are taken as 1974-1981; 1982-1989; 1990-1993; and 1994-2004.

Agriculture, the target market for ADB, exhibited a lethargic performance after 1981, with its growth declining during the economic recession and subsequently only showing moderate growth in nominal terms. In fact growth of the other sectors outpaced agriculture, so that the sector declined from 5 per cent of GDP to 1 per cent of GDP during the 30 year interval leading up to 2004, see Table 7.[5]

Table 7

PERCENTAGE CONTRIBUTION OF SECTOR TO GDP AT FACTOR COST (CURRENT PRICES)

(Percentage)

Sector	1952	1975	1985	1995	2004
Agriculture	18	4.6	2.4	2.3	1.0
Manufacturing	14	6.7	7.3	8.2	6.7
Construction	3	6.2	11.2	7.8	8.1
Transport, Storage and Communication		8	8.9	9.3	7.8
Distribution	10	12.4	12.2	14.0	13.8
Financial Services	2	6.2	12.1	12.3	12.7
Other Services		5.4	7.5	5.6	4.5

Source: 1952 and 1985 were extracted from the Trinidad and Tobago Central Statistical Office: National Income of Trinidad and Tobago, 1966-1982 and 1981-1990. the rest were obtained from the Central Bank of the Trinidad and Tobago Central Bank database in 2005.

In physical terms, the number of farmers declined by 37.4 per cent between 1982 and 2004 (See the Agriculture Census Survey). The performance of the sector was negatively impacted on by declining output levels, declining productivity, high implementation costs of government programs,

5 The importance of the agriculture sector in 2004 can be contrasted with 1952 when the sector accounted for as high as 18 per cent of GDP, the leading contributor to GDP in that year.

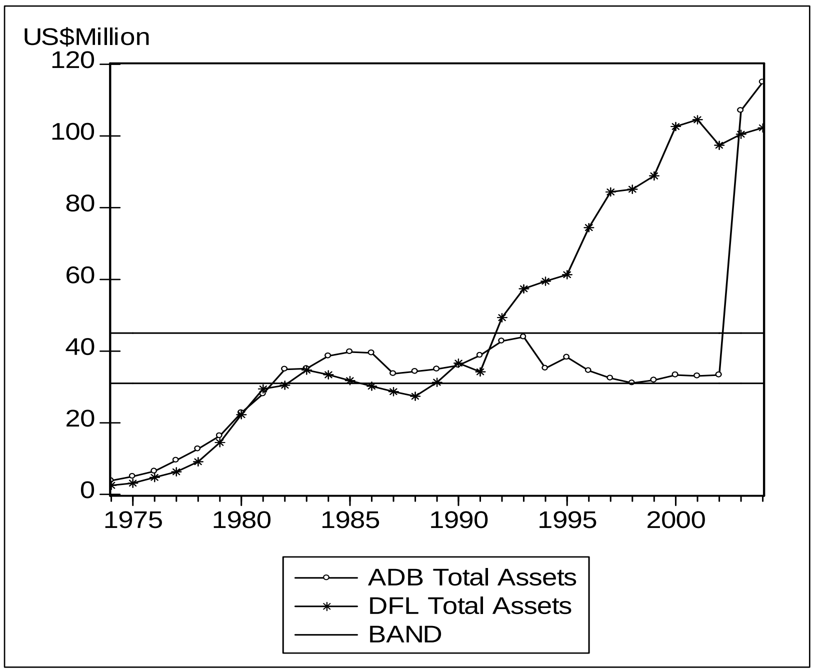
rising wages, declines in transfers to the sector, lack of adequate infrastructure and improper land use practices.[6]

2.4(b) Asset size

Both institutions reflected steady and similar growth rates leading up to 1980, see Figure 1. Following a decline in the economy in 1982, the steady growth in the assets of the institutions was interrupted. DFL recorded a continuous decline up to 1988 after which asset growth was largely positive. The assets of ADB fluctuated between US$31 million and US$45 million for 20 years preceding 2003. DFL showed faster recovery from the economic downturn as its growth picked up by 1988 and it remained positive ever since. It is instructive to note that DFL under private sector control went through the process of aggressively reinventing itself during the recession while ADB was slow in doing so. DFL adapted to the changing economic circumstances of the economy, offering more products and modified their method of disbursement of funds.

Figure 1

ADB AND DFL NOMINAL ASSETS BETWEEN 1974 AND 2004



Source: The graph is drawn on the basis of data extracted from the annual reports of ADB and DFL for various years.

Notes: The exchange rate used to convert to US$ was TT$6.29=US$1.00. This was used for the entire series in order to preserve the trend without introducing volatility arising from exchange rate movements.

The stagnation of ADB during the recession also point to the difficulties that are associated with a specialised bank when there is an economic downturn and the targeted sector declines. While DFL was able to jump to sectors that were relatively growing during the recession, ADB was not allowed to. This point presents a policy dilemma. How can a specialist bank adapt when its target market is declining?

6 See Bourne 1992.

2.5 Market penetration

Private or public sector ownership did not matter, as both entities remained liquid. ADB penetrated about 30 per cent of the market, in spite of the fact that the bank had excess lending capacity.[7] As a result the bank had a surplus of idle funds available for investments. Total liquid assets were over 35 per cent between 2001 and 2004 (See Table 8). In some cases the excess liquidity was due to the fact that funds were raised for specific loan programs and the program was underutilised by farmers. Instead, ADB invested the idle funds in mutual funds. The excess lending capacity was also a feature of Development Finance Limited as its liquidity was also over 35 per cent. Evidently effective demand for loans did not extend these institutions to their limit.

Table 8

PERCENTAGE OF LIQUID ASSETS TO TOTAL ASSETS

	1994	1995	2000	2001	2002	2003	2004
ADB Total Liquid Assets	6.1	13.3	27.8	43.6	51.5	35.8	36.6
ADB Total Investments	3.6	6.6	25.9	41.1	50.3	35.4	36.4
DFL Total Liquid Assets						37.7	41.2

Notes: Calculated from ADB and DFL Annual Reports.

In the face of a declining target market and high loan delinquencies, the government announced in 2001 that it will terminate the lending activities of ADB. Instead, a new organisation was to be incorporated, the Agriculture Development Corporation that would combine and exercise the business activities of both ADB and the National Agriculture Marketing and Development Corporation (NAMDEVCO).[8] This plan did not materialise, so that ADB continued in operation, but under the threat of closure.

2.6 The rebounding of ADB

Significant changes emerged in the organisation and management of the bank from 2001. There were changes in the Board of directors and in the executive management of the Bank by 2002. The new board was given the mandate to review and make recommendations on the report of the technical committee on the viable options for ADB. The board subsequently submitted its report to government.

The board explored other business options for ADB. One such option successfully led to a radical growth in loans of the bank in 2003. The bank sourced financing and engineered a new product to outgoing workers of CARONI 1975 limited. The closure of the CARONI Estate by government provided an opportunity for the Bank to engineer new loans and therefore write new business. The Bank formed a strategic alliance with the Unit Trust Corporation of Trinidad and Tobago (UTT), in order to develop a loan product where the Voluntary Separation Package granted to workers, was deposited in the UTT and used as collateral for a loan from the ADB to invest in agriculture. ADB was to receive returns on the loan through the capital gain on the growth of the collateral in the mutual funds scheme. The bank was able to attract 60 per cent of the recipients of VSEP in the loan program called the “CARONI VSEP Sweetner”.

[7] According to the Agriculture Census Survey in 2003, the market consisted of 19,143 enumerated farmers.

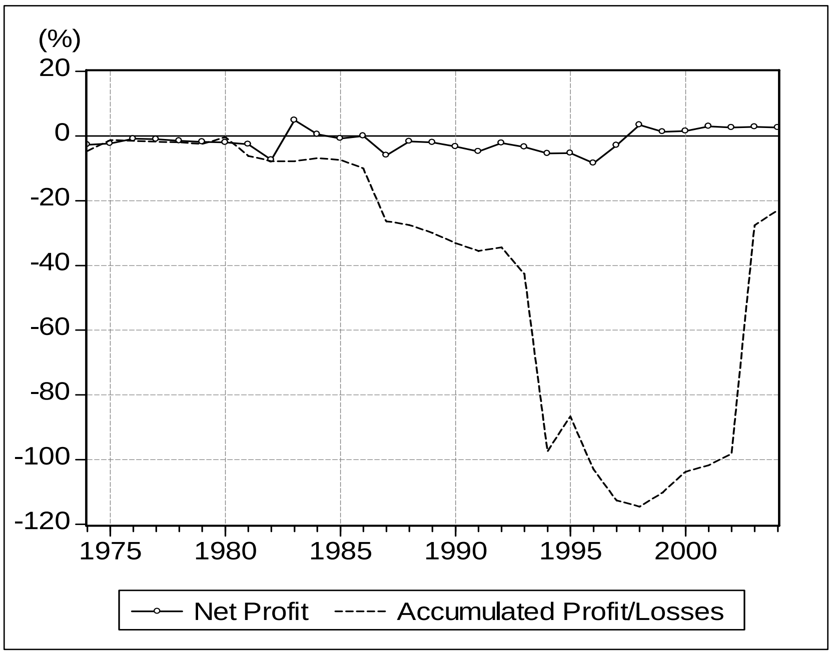
[8] NAMDEVCO was incorporated in 1991 and given the mandate to identify markets; conduct marketing research; maintain information on commodity prices; oversee agro-industrial investments; link buyers and sellers; manage wholesale markets and export infrastructure and conduct training.

2.7 The performance of ADB

2.7(a) Income

Not unlike most other agriculture development banks in the world, the profitability of ADB in Trinidad and Tobago, was not encouraging in years prior to 1998, see Figure 2. During these earlier years, ADB made losses with near consistency, with losses reaching as much as 8.4 per cent of assets in 1996. Profits were only recorded in 1983 and 1984. As a result of the losses suffered by the bank, its accumulated losses by 1998 climbed to 115 per cent of assets.

Figure 2
ADB INCOME AND ACCUMULATED INCOME/LOSSES AS A PERCENTAGE OF ASSETS

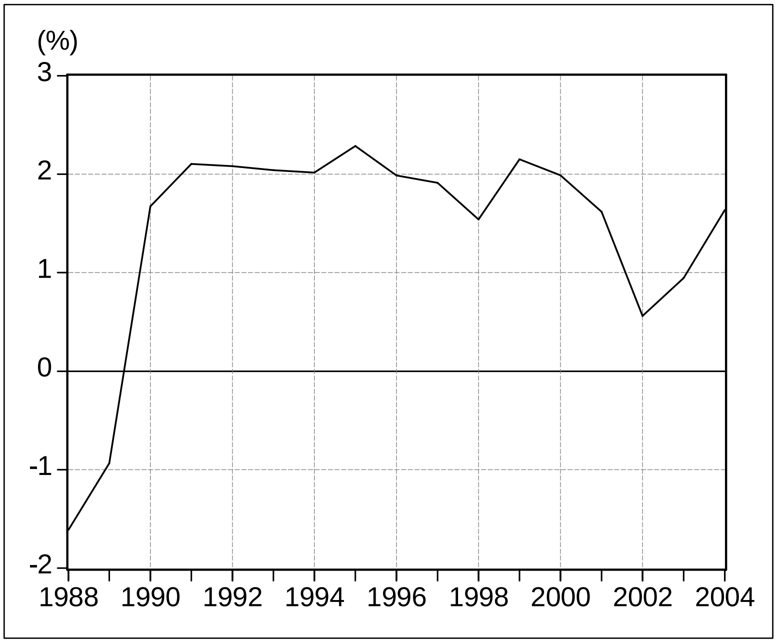


Source: Graph constructed from ADB Annual Report

ADB realised a recovery in its profitability from in 1998 when it made a profit of US$1.1million. Profits continued to expand, reaching US$3 million by 2004 and the bank made an average return on assets of 2.5 per cent during the period. As a result of the increases in the profit level and an expansion in assets, the accumulated losses lessened in intensity to reach 22.5 per cent of total assets by 2004.

DFL on the other hand, returned to profitability much earlier. Its losses were incurred from around the mid 1980s onto the end of that decade, see Figure 3. With the restructuring of the company, DFL was able to realise a turnaround, so that the company once again earned profits from 1990. Annual return on assets averaged 1.7 per cent between 1990 and 2004.

Figure 3
RETURN ON ASSETS OF DFL



Source: Constructed from data obtained from DFL annual reports, various issues

Interest income accounted for a significant portion of returns of the development banks, with ADB relying more heavily on interest income compared to DFL, see Table 9. Net interest income accounted for 93 per cent of total net income in 2004, with the rest of income been derived from loan processing fees, recovered bad debts, commissions, gain on the disposal of fixed assets and miscellaneous income. The rise in ADB interest income was due to the increase in the volume of loans in 2003, a point that emphasised the importance of the expansion in business for the viability of the institutions.

In the case of DFL, its income profile was more diversified. In 2004, for example, interest accounted for 43.5 per cent of its net income, followed by net income from investments which accounted for 28.7 per cent of its income. The rest of income included unlisted investments such as equity investments as well as other income including currency movements and income from leasing.

Table 9
INTEREST INCOME (%)

		2000	2001	2002	2003	2004
ADB	ADB*** interest income on loans to DFL interest income on loans	(US$3M)	(US$2.3m)	(US$1.8)	US$1.8	US$954m
		(55.9)	(55.2)	(44.2)	48.8	22.5
	Interest Income on loans to total loans	15.1	17.2	24.6	8.7	7.8
	Interest on Loans to Assets	7.0	5.7	6.8	5.1	4.5
	Interest on other Investments to assets	2.5	3.3	2.5	2.7	4.9
DFL	Interest Income on loans to total loans	10.9	11.3	9.0	8.9	8.3
	Interest on Loans to Assets	5	5.1	4.3	4	3.6
	Interest on other Investments to assets	5.1	5.0	3.2	2.8	3.0

Source: Calculated from ADB and DFL Annual Reports.

Notes: Percentage calculated as (ADB interest income minus DFL interest income)/DFL interest income. In dollar terms, DFL interest income was subtracted from ADB interest income.

Variations in activities did not make a difference to the importance of interest rates on loans, however, as neither institution consistently dominated the other with respect to interest income on loans. Thus ADB earned more interest income on loans between 2000 and 2003, but then DFL earned more in 2003 and 2004.

It is important to note also, that investment of idle funds outside of lending, contributed to the earning capacity of the institution. In some instances, interest from investments exceeded interest from lending for both institutions. This occurred in the case of ADB in 2004 and for DFL in 2000. These investments were mainly placed in mutual funds, reflecting the increased sophistication of the financial sector.

2.7(b) Efficiency

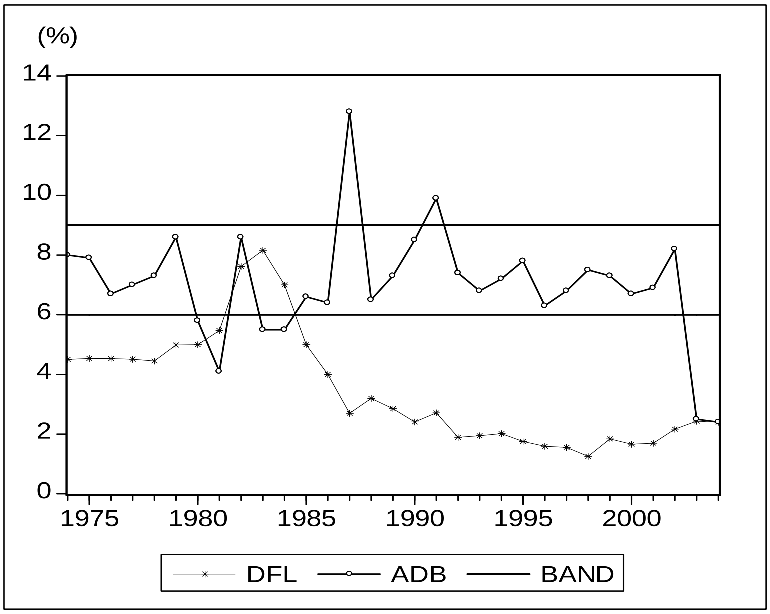
The composition of operating activities was generally similar for both ADB and DFL, but there was a wedge in the magnitude of overhead cost between the two institutions for most of the period.[9] Notwithstanding the similarity in the structure of overhead costs, ADB consistently incurred higher operating costs during the 30 years leading up to 2004, see Figure 4. For example, in 2004 ADB operating cost was 10 per cent over DFL in absolute terms. The higher operating cost of ADB was mainly due to the higher staff costs incurred by the bank. Figures for 2000-4 were unavailable, but in 1999 ADB staff cost was more than 86 per cent higher than that of DFL. Between 1994 and 1998 the magnitude of ADB staff cost ranged between 59 and 200 per cent over that of DFL, or in physical terms it was over US$600 thousand and US$1 million over that of DFL. This reflected higher levels of technical staff employed by the bank to perform duties inclusive of credit evaluation, project evaluation and monitoring, and the staffing of four branches and sub-offices in order to reach clients at strategic locations.

Partially as a result of larger operating costs, ADB exhibited higher levels of cost inefficiencies when efficiency is measured as the ratio of cost to assets. The cost to asset ratio fluctuated within the 6 and 9 per cent band for most of the 30 year period, see Figure 4. At the same time, DFL cost to asset ratio fell below the lower limit of that band for most of the period, moving between 1 and three per cent in the latter half of the period. Eventually, in 2003 ADB efficiency level

9 Generally, operating costs included fees for professional services such as auditors, consultants, directors, legal services and marketing. In addition, expenses entailed infrastructure expenses, repairs and maintenance, utilities and security.

caught up with DFL. This occurred because of the jump in loans generated by lending to former workers of CARONI 1975 Limited.

Figure 4
RELATIVE EFFICIENCY OF ADB AND DFL



Source: Annual Reports of DFL and ADB, various issues.

The higher level of cost to asset ratio in part reflected higher expenditure by ADB on personnel emoluments. Another reason for ADB higher level of cost inefficiency for most of the period was its lower level of loans per unit of cost compared to DFL, see Table 10. This reflected higher monitoring costs of customers as the bank is required to, among other things, check the suitability of land, make frequent site visits, and provide technical support. This can be illustrated by examining the level of lending generated per unit of cost. Up until 2002, ADB generated a lower level of loans for a unit of cost. DFL generated a larger volume of loans, perhaps assisted by the fact that it was financing a broader range of sectors.

Table 10
LOANS PER UNIT COST (FIGURES ARE IN $US)

	2004	2003	2002	1990	1980	1974
ADB	25.0	23.0	4.0	11.0	5.6	11.5
DFL	17.9	18.5	22.3	30.6	16.0	13.0

Source: Annual Reports of DFL and ADB, various issues.

What emerges from the evidence, is that even though a specialist bank can be expected to better accumulate knowledge of its targeted sector and therefore achieve cost economies, in reality, personnel cost become over burdening unless the target market expands. In the case of ADB, the volume of business remained constrained by the decline in agriculture production. The specialist bank still needed to be staffed in a certain way in order fulfil its mandate, so that it costed the bank more per unit of asset to operate.[10] ADB was only able to climb out of this situation when there was a large expansion in its scale of lending.

[10] These fixed overheads included the employment of specialist professionals in the agriculture sector and the staffing at various branches to reach farmers and monitor projects. DFL, on the other hand operated chiefly from its head office.

3. The strategic focus of ADB

3.1 Short and long-term focus

The bank undertook a strategic planning exercise for the period 2005 to 2007. In conducting a SWOT analysis, the bank noted that while it had developed knowledge of the sector over the period of its operation, it had imaging weaknesses, its systems were reactive and not proactive, and the cost of operations was high. The bank also noted that the moral of the staff was low and it was unable to satisfy the needs of farmers. ADB therefore sought to find ways by which it can address these issues so as to enhance its ability to meet the strategic targets of the government.

In its strategic plan, ADB established its goals in terms of the need to engage in "strategic management development; strategic alliance development and management; re-branding, re-imaging and repositioning; financial growth; sector growth; and corporate cultural realignment." Out of these, the bank identified the first two as needing immediate attention so as to lay the platform for the other policy goals.

The strategic plan outlined a number of short-term objectives through which these policy imperatives were to be achieved. For example, the bank articulated that financial growth can be achieved through increased profitability and through increased lending. Also, re-branding, re-imaging and repositioning were expected to be achieved through the encouragement of internal stakeholder and external stakeholder feedback, as well as through customer retention, see Appendix 1. Stakeholders included staff, clients and potential ones, and coordinating agencies, all of which the bank had collectively identified as internal and external stakeholders. In effect, the bank had taken a marketing view of its services recognising that the successful implementation of its plans revolved around its ability to achieve coordination with the stakeholders.

A limitation of the strategic plan is that it required an expansion in the agriculture sector to fuel demand, but the factors influencing the expansion were to a large extent outside the control of the bank. One of these factors was the political will to invest resources to expand the sector. Previously, the existence of preferential agreements for agriculture exports to Europe provided a natural source of motivation for member governments of the African Caribbean Pacific Countries (ACP) to meet export quotas. Now that preferential treatment has unravelled, the principal motivation for government seemed to stem from the continuous increase in the prices of imported food, and widespread public unease about rising food prices. For example, the Minister of Finance in his 2006-2007 budget speech in outlining the government's measures for agriculture in the fiscal year said: "The Government recognizes the pervasive impact of the increases in food prices on the cost of living and on the welfare of families who need to struggle to make ends meet."

The long-term focus of the bank was therefore handed down through government policies towards the agriculture sector. In the 2006 budget, government policies included the diversification of the sector through the enabling of private sector participation in order to equip the sector to broadly tackle food inflation while at the same time providing higher levels of employment in the sector. To assist the bank to move in this direction, government made a grant of just under US$5 million for credit disbursements. Unless the necessary investments take place to revamp the agriculture sector, there is the danger that the grant and other funding gestures to ADB, would only increase the liquidity of the bank, rather than reach the intended recipients. There are attempts by the government to expand demand in the sector through the establishment of 8 private sector operated large scale farms (at least 100 acres each), leasing of plots to farmers for agriculture production and the development of associated infrastructural work to facilitate the farmers.

The government had given priority to the production of certain food crops, which included sweet potato, cassava, yam, dasheen, tomato, ochro, cucumber, melongene, pumpkin, eddoes, cabbage, lettuce, green pigeon peas, carrots and string beans. To facilitate the production of these crops, farmers were to be awarded production contracts that would allow for a guarantee minimum price should prices fall below a certain level. The government proposed to give priority to youths graduating from agriculture training programs. It was envisaged that these measures would serve to expand the size of ADB target market and therefore would potentially widen the customer base of the bank with regards to primary production and possibly agro-processing in the medium to long-term. Thus these developments provided the bank with a new focus.

3.2 Institutional framework

Development banks in Trinidad and Tobago were audited by the Auditor General office in the Ministry of Finance, as opposed to the Central Bank of Trinidad and Tobago, as is the case with respect to licensed financial institutions. As such, ADB followed accounting standards prescribed by the central government for public companies. Nevertheless, the strategic plan for 2005-7 recognised the importance of developing and implementing appropriate organisational policies and procedures, and to improve the performance management system of the bank. Thus, the bank placed emphasis on the need for updating the internal auditing and updating policies of the organisation. Consistent with this, the bank hired a company to review its internal accounting system, in 2004.

3.3 Governance

The Agriculture Development Act of 1968 was amended by Act Number 8 of 1995. The amended Act prescribed a seven member board of directors appointed by the Minister. According to the Act, the members of the board were to be given renewable appointments for a term of three years. The Act granted certain powers to the board which included, the underwriting of loans for agriculture, commercial fishing and other related activities; powers to accept savings or time deposits from the public; powers to take any form of security it chooses; powers to undertake equity investments in companies; powers to engage in joint ventures with other companies; powers to raise money for the financing of its operations; powers to borrow money; powers to acquire, purchase, hold and enjoy personal and real property of every description; and powers to assist generally in the development of agriculture cooperative movements. In addition to this, the board was also empowered to set guidelines with respect to interest rate on loans.

Interestingly, the Chief Executive Officer (CEO) under the Act is an ex-officio member of the board and is not allowed to vote, but is required to attend Board meetings and is accountable to the Board. The Board decides on the appointment of the CEO and s/he oversees the day to day affairs of the bank and acts on behalf of the bank in matters that are not reserved by the Board. Directly under the CEO is the rest of the executive management team, consisting of the Chief Executive Officer, the Corporate Secretary, the Corporate Manager (Human Resources), the Corporate Manager (Credit) and the Corporate Manager (Finance and Information Technology).

ADB had been functioning at less than full strength following the voluntary retirement package that was offered by the bank to trim staff in 1995. For example, in 2003, the staff level stood at 95, leaving the bank short by 21 employees, even though the activities of the bank continued at the same scale. The bank noted that posts in finance, marketing, research, information technology, public relations and communications remained vacant. During the five year period 1997 to 2002, the bank also noted that there was a turn over of 4 different Board of Directors, 6 chief executive officers and staff was demoralised, partly as a result of their uncertainty over the future of the institution and the lack of stable leadership. The effects of this turbulent period led to shortcomings in terms of the monitoring of loans by the bank and the lengthening of processing times of loans. With some reorganisation, the bank eventually improved its efficiency levels.

3.4 Administration schemes and credit allocation

The Act allowed ADB to lend up to a maximum maturity of 30 years. However, most of ADB loans tended to cover a maturity period of up to 3 to 5 years. At the same time the bank also issued short-term loans, similar to overdrafts, to finance the working capital of clients. The bank made major strides with respect to the speed with which it can process loans and grant approvals. For some type of loans, the bank was now capable of granting approval within the same day the application is made.

ADB had not taken up its powers to accept savings deposits as the bank feared that this would carry them over into been a full fledged financial institution requiring the supervision and regulation of the central bank and strict enforcement of prudential standards. This would have also required the bank to hold a license to operate as a financial institution. The bank did not think it was ready to cross over to that stage, particularly as it was focussed primarily on expanding its outreach to farmers to raise the output of the agriculture sector.

ADB targeted its lending along the lines of government policies for the development of the agricultural sector. The bank worked closely with the Ministry of Agriculture, Land and Marine

Resources (MALMR) to coordinate its lending programmes, limiting its activities to the disbursement of loans. There was some level of diversification within the agriculture sector, as the bank lent to food, crops, livestock, fish, forestry and floriculture. However, based on the pattern of demand there was still concentrations within these segments.

Three quarters of the loan portfolio of borrowers were allocated to farmers in food crop production, with farmers in sugarcane accounting for the major share of these loans (69%), see Table 11. With sugarcane been a traditional crop that served the export market to Europe, this suggested that the bank portfolio was concentrated in favour of the traditional staple that was dedicated to meeting the export quota of the ACP countries exporting under the LOME IV Agreement. The next largest group of borrowers were in livestock production, accounting for about 10% of borrowers, some distance below sugarcane production demand. In this category, farmers in poultry and diary production accounted for a little over three quarters of the subgroup. Loans in favour of fishering formed the next category as they accounted for about 7 per cent of total borrowers in that subgroup.

Table 11
LOAN PROFILE OF ADB

	Loan Profile Database		Loan Profile for 2004	
	% of subgroup of borrowers to total borrowers in database	% of borrowers in subgroup in ADB Data base	% of loans in subgroup	% of loans in subgroup
Food Crops	75.7		57.3	
Sugarcane		68.7		87.6
Cocoa/Coffee		4.3		3.3
Vegetables		13.7		3.8
Roots & Starches		2.3		2.6
Fruits		3.8		2.7
Pulses & Nuts		0.1		
Herbs & Spices		0.1		
Other Crops		0.1		
Cereals		6.8		
Livestock	9.7		37.4	
Diary		47.7		18.1
Pigs		5.5		0.2
Poultry		38.8		67.9
Beef		0.8		
Small Ruminants		7.2		
Fish	6.5		5.3	
Marine Fish		94.3		100
Aquaculture		1.3		
Ornamental		4.4		
Apiculture	0.4			
Forestry	0.5			
Floriculture	0.5			
Agro Industry & Tourism	3.3			
Agricultural Services	3.4			
Landscaping		38.1		
Mechanical Services		44.0		
Plant Propogation		17.9		

Source: Calculated from ADB Marketing Plan 2005-7.

ADB has been making efforts to penetrate non-traditional markets as the government sought to achieve a more diversified agricultural sector. Consequently, there were concerted efforts to tap into floriculture, agro industry and tourism and agricultural services. Moreover, government sought to create incentives for former workers involved in traditional sugarcane production and trainee graduates, to lure them into diverse areas of agriculture production.

At the same time, ADB attempted to gain deeper market penetration through marketing effort and product innovation. Its marketing effort involved the staging of special events such as exhibitions, launching of new products and improving the timely delivery of services to meet customer satisfaction. The bank hoped that the branches strategically located throughout the country would assist in giving it nearness to the customer and therefore improve market penetration. In the case of product innovation, the bank has been directing its innovations at targeted market segments. The bank also targeted youth graduates from youth programmes in conjunction with the programmes of strategic partners such as MALMR, NAMDEVCO/ECIAF and so on.

3.5 Capability of collecting funds

In the past, the procedures with regard to the recovery of troubled loans were not well documented, so that collection procedures largely existed on the basis of institutional memory. ADB sought to correct this shortcoming by documenting its procedures. This included the classification and recovery of impaired loans. According to the collection procedure, the recovery department can begin to take action to recover loans when it is 90 days overdue. After the loan is 180 days overdue, interest is no longer added on, and the loan is considered impaired.

The Bank does not have the authority to write off loans, however, since this must be decided on by Cabinet. As a result, the loans must continue on the books of the bank. The result of this is that non-performing loans can assist in retarding the performance of the bank, even when there is no hope of recovery. According to the 2005-7 strategic report, this, along with increased operating costs, helped to undermine the profits of the bank. ADB got some relief when impaired loans that were not the subject of court action were sold to the state enterprise, Taurus, in 1995 at a third of their value. The loan portfolio consequently looked healthier, so that by 1999, for example, non performing loans accounted for 16.6 per cent of total loans.[11]

In principle, the bank has the freedom to monetise all forms of collateral. However, collections can be frustrated through informal connections by the borrowers with Government Ministers. This does open up the door for the timeliness of recoveries to be frustrated by political intervention. Government intervention has declined, however, as the government has a great desire to see the sector grow.

3.6 Autonomy in loan award decision-making

Like commercial banks, ADB has an approval process based on the size of the loan. Branch Managers can approve loans between US$7,949 and US$15,898, while the CEO can grant approval up to US$39,746. Beyond this level, the Board of Directors must approve the loan. There was an instance of political intervention into the loan approval process when the previous government required the bank to seek its approval for the granting of new loans where a customer would be indebted to the bank at US$79,491 or above. This practice is no longer continued so that the board exercises final authority over the loan approval process.

[11] See the 2001-5 Strategic Plan.

The bank also exercised full autonomy over the development and launch of new financial products. The ADB Act allowed the bank to provide financial products at its discretion. The Board had never exercised all its powers, however. For example, the bank had never offered fixed deposits because of the fear that this would now mean that the bank is fully a financial institution and it may now need to be licensed and fall under the supervision of the Central Bank of Trinidad and Tobago whose prudential standards the bank must now meet, something the Board felt the Bank was not yet ready for. Nevertheless, the bank continued to introduce new financial products in terms of loans.

The revisions to the ADB Act in 1995 allowed the Board to exercise full autonomy over the interest rate it can set on loans to customers. The Board elected to maintain a prime rate of 6 per cent. After borrower risk is added on, the rate can go up to 10 or 11 percent. However, repayment is on an amortised basis, so that the effective rate turns out to be 4.3 per cent, substantially below market rates.[12] The sustainability of this rate is questionable, however, as the expenses of the bank are increasing, it incurs risks, and it is unable to pass this on to the customers.

A limitation of the autonomy of ADB, as in other state enterprises, is that the Board of Directors are not truly free from political interference, and the viability of the bank can be sacrificed for political expediency, or the goals of the directors may be diverted from looking after the viability of the institution in favour of their political interests. Another limitation to the autonomy of the institution is that it cannot go outside of the agriculture sector to lend, even when demand in the sector dampens. Thus where the sector is not expanding the bank is unable to avoid systematic risks since it is constrained by legislation to do so.

12 For example, the prime lending rate of commercial banks for October 23, 2006 was 11.75 per cent. See the Central Bank of Trinidad and Tobago web site (http://www.central-bank.org.tt).

4. Strengthening financial intermediation

4.1 Wholesale lending

In the 1950s and early 1960s, the predecessor to ADB, the Agriculture Credit Bank, lent mainly to agriculture corporative societies. Since then, the number of corporative societies has reduced substantially. ADB tried to continue lending to corporative societies, but the results were not very encouraging. These cooperatives were granted an 18 month instrument of credit in writing, and they in turn issued the same instrument to onlend to their membership. Unfortunately, where the loan was non-performing, collections became very difficult. The bank therefore exercised greater preference for the retailing of funds.

4.2 The process of financial deepening

ADB strategic report for 2005-7 has emphasized the importance of strategic alliances in the quest to effectively launch new products and therefore deepen and penetrate the market. These strategic alliances can potentially allow the bank to leverage resources from other organisations, and therefore augment its manpower resources to implement its programs for the development of the sector in a cost effective manner. Accordingly, the bank has been making alliances with a number of supporting agencies, most of which stem from agricultural associations, government ministries and scientific groups. These agencies include:

- MALMR for the National Credit Pilot Project;
- The National Marketing and Development Corporation (NAMDEVCO), and the Business Development Company (BDC) for the Certified Farms Credit Pilot Project;
- Caribbean Industrial Research Institute for product development and technical support;
- The University of the West Indies for training and support, as well as the Anthurium Industry;
- Caribbean Agricultural Research and Development Institute for Training/Seminar;
- Agriculture Society of Trinidad and Tobago for Promotions/Industry Commodities;
- Youth Groups including Eastern Caribbean Institute of Agriculture and Forestry with respect to the youth agribusiness development fund;
- Tobago House of Assembly/ADB for the Tobago Credit Pilot project; and
- Hope Foundation with respect to the Microcredit Empowerment Fund.

Alongside these strategic alliances, the bank also targeted the development of products as a deliberate strategy. The bank in its strategic report (2005-7) did set an annual target for launching three new products each year in the certified farm credit pilot project, youth agribusiness development fund and national credit pilot project. In order to facilitate this, the bank had developed a "cross functional team to manage product development and marketing from ideas generation to commercialization".[13] Products were tailor-made for segments in rural communities and niche markets, as well as for high growth markets.

Thus, the bank engaged in active product development through strategic alliances to ensure that the products are viable and suitable for farmers. Product development contained elements of credit differentiation. Differentiation included:

- loan packages based on collateral. Farmers with 100 per cent collateral are able to obtain instant loan package for 100 per cent of their funding;
- targeted farm activities; and
- tailor-making of arrangements according to contractual arrangements that farmers have in place for product distribution.

4.3 Ways to improve profitability and efficiency

ADB did not receive subsidies, and have been able to operate without taking new loans from international lenders and the CDB since 1998. The bank was able to hold its own as it consistently made profits since then. Nevertheless, the operating cost of the bank is higher than that of its private sector counterpart, DFL.

Regressions were conducted with regards to profitability and efficiency to examine how financial instruments and the asset outlay relative to sector demand impact on the viability of ADB, see Table 12.[14] The results suggest that asset expansion can play a vital role in improving the viability of the bank, by increasing cost efficiency and raising profitability. As such, a unit increase in assets as a ratio of the contribution of the agricultural sector to GDP (ASY) can reduce operating cost to assets (OCAS) by 0.4 times and raise the return on assets (ROA) by 0.5 times. Put another way, the results suggest that the bank needs to write more business, given the sector demand, if it is to improve its viability. There is

13 See the Marketing Plan 2005-7.
14 Full estimation details are available in Appendix II.

already some evidence of this, when there was a jump in assets in 2003 as new loans were written to the former workers of CARONI. This led to a drastic improvement in the efficiency ratio for the bank, so that the efficiency ratio narrowed to reach that of DFL. It did indeed demonstrate the importance of **economies of scale** to the viability of the bank.

Table 12
PROFITABILITY AND EFFICIENCY REGRESSIONS

	ROA	OCAS
C	-0.11	0.07
ASYt	0.47***	-0.36***
LASt	0.05	0.03**
OCASt-1		0.03
LIQAS	0.16***	
Adjusted R squared	0.04	0.20

Notes: The regression results are based on GMM estimation. *** is significant at a 1 per cent level; ** is significant at a 5 per cent level.

The results also suggests that the investments made by the bank in liquid assets added significantly to the profitability of the bank, while the loans to assets ratio (LAS) did not add significantly to the returns on assets, but added significantly to the operating cost to assets of the bank. It is important to note that these investments do not form part of the core business of the bank, but in light of the results it can be tempting to reduce lending and favour liquid investments. Undoubtedly, however, the feasibility of investments would have been greatly assisted by the development and increasing financial sophistication of the financial sector and the emergence of new financial instruments, such as mutual funds that can offer higher net returns compared to when the bank begun in 1968. Thus, idle funds of the bank have contributed significantly to the viability the bank.

The results also show that the intensity of loans in the asset portfolio may significantly increase expenses. The result suggests that an increase in the loans to asset ratio raises operating cost to assets by 0.03 times. without the costs been properly passed on to the customers, because of the policy of the bank of maintaining low interest rates. The result is not surprising as it is typical for ADB to grant large numbers of micro loans to farmers, thus duplicating the costs of screening, monitoring and transactions costs by several times, compared to those institutions that lend a much larger volume of funds per customer. In the case of ADB, given the total customer base of 2,477 in 2004, the loans averaged US$27 thousand per customer.

Given that the bank is constrained in raising interest rates to pass on costs, it is in the interest of ADB to improve its viability by keeping costs down. This would suggest that the type of innovations to the disbursement of funds that may give higher monetary returns to the bank, are non-credit instruments, once the cost associated with risks do not exceed that of loans. The bank has been reluctant with regards to equity participation, presumably because of the high risk involved in participating in the agriculture sector through equities. There are other possibilities, however. For example, the bank can examine the possibility of disbursing funds through leasing. This can perhaps be useful, where it assists farmers and fishermen to purchase equipment.

An alternative is for the bank to find ways of lowering screening costs. The collaboration between the bank and strategic partners can be productive in terms of assisting to lowering screening costs of clients and reduce the cost outlay with regards to monitoring. For example, the scientifically oriented strategic partners can incur the expenses of technical monitoring, while the bank concentrates on the financial aspect of the business.

4.4 Prudential measures

The bank has recently begun to pay attention to risk management, with a risk manager been employed to perform risk analysis and to examine the quality of collateral. Operational risk continued to be examined by the branches and the recovery department. Exchange rate risk presented a real problem, as this risk was outside the control of the bank, and the effect of large depreciations in the rate on debt was itself not budgeted for.[15]

The bank had also invested in the training of staff since 2000, in order to improve on credit appraisal, financial management and other aspects of business development. This supported the CAMEL Standards that the bank had adopted to improve on its prudential measures.[16] In addition, the bank invested in technology to improve its loan management system as well as assist in the management of other functions.

There need, however, to be a more aggressive approach to risk management both at the technocratic level and with the strong support of the Board, if ADB is to get fully on top of its risk management. Clearly, risk pervades all aspects of the economic activities of ADB, but the strategic planning exercise did not seem to go far enough in addressing the issue of risk. Where possible, risks should be quantified and there should be some level of risk sharing with clients through judicious pricing of products. Some of these risks include risks associated with credit,[17] investments, liquidity[18] and these risks should be made part of the annual reporting exercise of the bank. A development bank cannot avoid risks, but the treatment of these risks is critical to the sustainability of activities.

In contrast to ADB, DFL has been able to successfully integrate risk into its accounting and managerial frameworks. A risk culture pervades the organisation at every strata including its corporate culture, accounting standards and staff recruitment. With the support of the Board of Directors and filtering down to the operational staff, the company seeks to identify the major risks faced by each segment of its operation, recruit staff that are suitable for risk mitigation, give assignments to staff with risk mitigation strategies in mind and continuously try to develop methods to grapple with risks. Indeed, DFL has put in place a risk management policy across all its operations, referred to as “Enterprise Risk Management System”.

The impetus to DFL risk management was reinforced by the adoption of one of the latest accounting standards, the International Reporting Standards 7 (RFS 7). This standard has the advantage of integrating the critical elements of the company with regards to accounting, strategic planning and risk management, thus allowing the company to gain synergies. As a result the company was able to improve its information on risk management analysis and quantitative and qualitative risk disclosures to both its management and shareholders through its annual reports.

DFL risk disclosures included information on risk concentration, the significance of financial instruments to the performance of the entity; the level of risk exposure arising from financial instruments including credit risks, liquidity risks and marketing risks; and a description of management policies with regards to risk, including objectives and processes for the management of risk. A better description of the risk measures are given in Chart 1 below.

15 To date, government had not compensated the bank, as promised, for previous depreciations in the exchange rate.

16 The CAMEL standards are Capital Adequacy, Asset Quality, Management Efficiency, Earnings and Liquidity.

17 Credit risks include risks associated with individual borrowers, borrower groups, geographic risks, risk associated with market segments, client product risks, ADB product risks and wider economic risks.

18 The liquidity risks include the matching of the projected debt repayments of the bank with the projected income and other expenses of the bank, the ability of the bank to raise loans, and in the short-term issues related to the timing of cash flows.

Chart 1
EXCERPTS OF IFRS 7 STANDARDS

Qualitative Disclosure

* Risk exposures for each type of financial instrument.

* Management's objectives, policies and processes for managing those risks.

* Changes from the prior period.

Quantitative Disclosures

Provide information about the extent to which the entity is exposed to risk, based on information provided internally to the entity key management personnel. These disclosures include:

* Summary quantitative data about exposure to each risk at the reporting date.

* Disclosures about credit risk, liquidity risk, and market risk.

* Concentration risk

Given the limited range of economic sectors in the Caribbean markets, the major category of risk focussed on by DFL has been with respect to risk concentration, see Chart 2. In response to risks the company has (1) set limits on its exposure where there are exceptional credit risks; (2) increase its capital requirements to back the risks; (3) engage in risk sharing with other entities; and (4) embarked on geographical and product diversification. Moreover, DFL has sought to develop tools to improve risk mitigation, including the development of a credit scoring model and an internal risk rating model.

Chart 2
EXCERPTS FROM THE 2005 ANNUAL REPORT OF DFL CARIBBEAN

Credit Concentration of Risk

* Identification of likely areas of concentration and assessment of the joint probabilities of default using suitable methodologies and data where available and appropriate judgement based on reasonableness in the light of experience.

* The Board approves aggregate credit limits, in terms of capital and reserves based on objective criteria and analysis.

* Establishment of appropriate capital structures and risk-sharing arrangements to carry on lending and investment operations in national economies that have vulnerabilities of resource constraints.

* A risk management framework identifies the types of risk and sets out internal procedures for the origination and management, … including the segregation of duties.

Credit risk

The probability that an enterprise might fail and not be able to meet its obligations because of poor management, poor judgement or inadequate execution plans. The company has sited the importance of:

* Reviewing systems and procedures

* Periodically retraining senior staff.

In addition to risks arising directly out of the operations of ADB there are also investment risks incurred by ADB. Investment risks arise especially as the institution seeks to deepen its incorporation into a more sophisticated financial sector. The bank has incurred greater investment exposure than before, particularly with respect to mutual funds. Risks associated with adverse movements in the market including movements in the stock markets now impact upon the bank, depending on their level of exposure. There needs to be deliberate measures by the bank to address this type of risk.

Once the bank engages in investments in financial products, then its risk exposure on investments can become significant. The treatment of investment risk requires technical human resources to engage in portfolio management, to fully monitor markets and to shift around and diversify funds. Accordingly the bank can find itself in need of specialist financial functionaries and not only agriculture specialist, and the Board of Directors need to have a full appreciation of finance. In the case of the latter, the ADB Act required that at least four members of the Board must have qualifications in agriculture, fisheries, finance, economics, accounting, industry, law or administration. But the Act left the skill complement of the appointees to the discretion of the government. Given that the bank is a financial institution, there is a case **for it to be mandatory that the qualification of a proportion of the appointees to be skilled in areas related to economics and finance.**

5. The way forward

5.1 ADB performance in brief

Prior to 1998, ADB predominantly made losses which worsened during the economic recession between 1982 and 1989. Moreover, the bank suffered adverse market demand in the recession which seemed to have triggered stagnation of its assets over a period of about 20 years. The bank also suffered as agriculture was given a low priority politically. During this period the low volume of business written by the bank as well as high rates of default led to severe accumulated losses and cost inefficiencies. The difficult period also uncovered weaknesses in the credit technology and management capacity of the bank. Weaknesses in the credit technology included poor documentation, poor attention to risk management, lack of attention paid to prudential measures, insufficient experience with regards to dealing with the market, and these problems were worsened by staff shortages and lack of autonomy in certain critical areas. The management problems occurred owing to limited knowledge at the time with regards to the management of a specialist development bank. Nevertheless, the ADB had been the main supplier of credit to production agriculture and new entrepreneurs in the sector as commercial banks mainly lent to the upstream elements in the sector.

ADB emerged as the leading credit supplier to agriculture by 2003, as agriculture dwindled in the portfolio of commercial banks and lending by ADB to the agriculture sector picked up. The rebounding of the institution was ably assisted by the resurgence of the market as government had taken initiatives to develop and diversify the sector. At the same time the bank had benefited from its past experiences and had found better ways of managing its operations. For example, the bank placed emphasis on strategic management, taking on board strategic partners, obtaining feed back from the market and product innovation. Moreover, it implemented risk management and prudential standards.

In addition, the process of increased financial sophistication of the domestic market benefited the bank, so that it had been able to raise funds directly off the market. As a result, the bank did not borrow from tier 1 banks in the last decade, and in 2003 it raised financing through government guaranteed bond issues.

Challenges to the smooth operations of development banks such as ADB remain, however. The bank still cannot write off loans either as this must be approved by cabinet. The end result of this is that impaired loans from the past can undermine the profitability of the bank in the current period. Secondly, the nature of operations of the bank lends itself to high staff costs, but the bank has not passed this on to the customers since it was interested in maintaining low interest rates to encourage participation in the agricultural sector. Thirdly, the operations of the bank are not robust to economic cycles. Downturns in the sector presents difficulties as the high cost of the requisite human resources remains, especially as the bank engages in holistic lending to the sector where feasibility, monitoring, and technical and financial advice complemented by financing activities are among the services undertaken by the bank.

5.2 Lessons to be learnt

There are some important lessons that can be gathered from ADBs experience that are instructive to a discussion on specialist development banking. One such lesson to be noted is that even if development banks may be necessary for the attainment of dedicated finance to a sector, it would not by itself lead to sustained sector expansion. A supply leading relationship does not naturally occur, regardless of the incentive mechanisms offered by the bank to lure customers. Such an attempt must be followed up with continuous supporting activities both politically and institutionally. On the political side, government must prioritise incentive mechanisms to expand and draw resources into the sector. It is through expansions of the targeted sector that demand expands and the development can grow and become viable.

The institutional side is also very important. ADB benefited immensely from the strategic partnerships it was able to cultivate. The partnerships acted as a support network, allowing the bank to leverage resources from other institutions for the mutual benefit of the bank and the strategic partners. This benefited the bank in terms of been able to access resources at minimum cost and it potentially reduced screening costs in some cases. A lesson to be drawn here, is that there ought to be supporting mechanisms for the specialist bank, especially since it is lending to sectors where the risk of market failure is high. The experience of ADB suggests that supporting mechanisms through strategic alliances can be most useful in providing a critical support group to assist the bank to ride over its multiple challenges.

Another lesson to be learnt, is with respect to the need to continuously strive for innovation in financial products for the disbursement of funds. This allows the financial institution to continually reinvent itself and in so doing, to potentially deepen its market penetration by been better able to meet the needs of clients. Along with this, is the continuous need for dialogue with the clients in the target market.

5.3 Some recommendations

The findings emerging from the regression estimations suggest that ADB needs to actively work on finding non-loan methods of disbursing funds, while actively seeking to expand assets. In addition, there appears to be a minimal size of assets that must be reached, given the outlay of human resources the bank must incur, in order to effectively fulfil its mission to its clients. Accordingly the viability of the institution depended on the magnitude of business the bank was able to write in proportion to the scale of resource inputs the bank operated with, and as such **economies of scale appeared to be extremely important to improving the efficiency of the bank.**

Development banks such as ADB need to make a concerted effort to improve their level of risk management, which includes quantifying risks where possible, in order to improve its long-term viability. This can be immensely assisted with the use of appropriate accounting standards as is the case with DFL, as well as the use of software tailor-made for the financial institution to improve its risk management and it can help to reduce the long-term cost of risk management. The focus on risks also requires a bit of a paradigm shift, since it can suggest that these financial institutions should at least share some of the risk with their clients, at least through risk pricing. Moreover, risk-based management improves the sustainability of the institution and the strategic management decisions over time. For example, due attention to investment risks and adjusted risk-based returns can be of immense value to guiding investment decisions of the financial institution.

In addition, where advantageous, structures should be established to allow the bank to outsource some functions that take the bank away from its core business activities.[19] This can include financial management services particularly with regards to risk management. The advantage of this is that it allows the bank to concentrate on its core activities, and at the same time minimise its expenditure on the ancillary services, thus potentially improving cost efficiency. Areas that have the potential for outsourcing include risk management and investment portfolio management. The alternative of hiring financial managers, as part of the full time staff of the institution, can in fact be a more costly proposition.

The bank should also actively attempt to cross-sell products to increase its revenue stream. Experience in the banking industry suggests that cross-selling is cost effective where products are complementary, where there is adequate customer demand and the development bank is able to beat the competition from regular financial intermediaries.[20] Cross-selling can be useful in diversifying the income streams of the bank. Possibilities exist, such as the sale of crop insurance to farmers or acting as an intermediary for group insurance for fishermen. The success of cross-selling depends on the attitude of farmers, whether they would be willing to buy more than one product from the development bank and also on the level of usage by clients. Bundling products is also possible but price competitiveness of the bundled products is critical to the success of this idea, given the field of competitors in the financial sector. Another important possibility is the tying of lending and fixed deposits, so that the bank can combine the acceptance of deposits with loans and offer a package to clients at special rates. With the increased financial sophistication of the market, these deposits can be invested and provide a return to both the clients and the bank.

As the financial sector becomes more complex and as the bank increases its exposure to investment risks through financial investments, the understanding of the risks and return becomes a priority. The Board of Directors need to have a total appreciation of what is involved in making these investments. Moreover, the development of new products involves an evaluation of the interplay between returns and risk. As such, the composition of the Board of Directors need to be carefully address, since the sustainability of the bank largely depends on the understanding of the board about financial matters. A portion of the Board should therefore have an adequate background in economics and finance in order to guide the financial decisions of the bank.

19 See Birchwood (2003) for a fuller discussion on cross-selling and tied products.
20 Op. cit.

6. Conclusion

It is evident from the study that development banks thrive best when the targeted sector is expanding and sector demand is increasing. As a result, the continued operation of a specialist development bank requires strong political and institutional support to the sector to accompany it, if it is to be successful. ADB also found that strategic alliances were helpful to improving its ability to penetrate the market and to develop customised products. This suggests that a plethora of supporting agencies around the specialist bank can be critical to the sustainability of the development bank in the market, especially since the holistic wellbeing of the clients must be taken care of. There is evidence also that the marketing approach is essential for the success of development banks, as in the case of ADB where the bank found it necessary to reinvent itself, continuously thriving for innovations and continuously consulting the market for feedback in order to develop products to satisfy customer needs.

The study suggests that ADB can significantly improve its viability through non-lending methods of disbursing funds, since loans increased its expenses and did not contribute to its profitability given the maintenance of repressed interest rates. In addition, economies of scale mattered to the efficiency of the institution, suggesting that the bank needed to strive after asset expansion by writing more business.

The study contends that risk management techniques, inclusive of the quantification of risks, are essential to improving the viability of development banks such as ADB. Moreover, these banks need to embark on non-traditional ideas such as outsourcing of non-core activities, particularly in light of increasing complexities and the demand for specialist skills associated with financial management. It is further suggested that they should seek to develop products for cross-selling to augment their revenue stream.

Bibliography

Agricultural Development Bank of Trinidad and Tobago, (various years) "Annual Reports".

___, (2001-5) "Strategic Plan".

___, (2005-7) "Strategic Plan".

___, (2005-7) "Marketing Plan".

Birchwood, Anthony, (2003) "Banking in Small States: The Case of Caribbean Commercial Banks". Trinidad and Tobago: Caribbean Centre for Monetary Studies.

Bourne, Compton, (1989) "The role of Development Finance Corporation in the Commonwealth Caribbean", paper presented at the Conference on Finance Development in the Caribbean, Barbados. December 4-8.

Central Bank of Trinidad and Tobago, (various years), "Annual Economic Survey".

Central Statistical Office, (2004) "Preliminary Report of the 2004 Agricultural Census". Central Statistical Office.

Development Finance Corporation, (Various years) "Annual Reports", Development Finance Limited.

DFL Caribbean, (Various years) "Annual Reports", DFL Caribbean.

Pitamber, Sunita, (2003) "Factors impeding the poverty reduction capacity of micro-credit: some field observations from Malawi and Ethiopia". African Development Bank, Economic Research Papers No. 74.

Seibel, Dieter, Hans (2000), "Agricultural development banks: close them or reform them?", International Monetary Fund, Finance and Development, June.

Apendix I

Imperatives identified by ADB Strategic Plan 2005-7

(1) Strategic imperative

Strategic Management Development.

Key indicator

Holistic View; Staff Motivation and Leadership philosophy.

Indices

- Timely Development Implementation of Strategic Plans – achievement of financial and economic indicator targets.
- Development and implementation of optimal organizational structure – internal stakeholder feedback.
- Development and implementation of staff development programmes.
- Development and implementation of an effective Performance Management System – Internal Stakeholder feedback.
- Development and implementation of appropriate organizational policies and procedures – internal stakeholder and external stakeholder feedback.
- Implementation of appropriate technology – internal stakeholder and external stakeholder feedback.
- Implementation of Leadership Philosophy – internal stakeholder feedback.

(2) Strategic imperative

Strategic Alliance Development.

Key indicators

Focus on advisory and facilitation roles in sector.

Indices

Advisory and facilitation role enhanced – external stakeholder feedback; achievement of financial and economic indicator targets.

Product development – external stakeholder feedback; achievement of financial and economic indicator targets;

Effectiveness of lobby – external stakeholder feedback achievement of financial and economic indicator targets;

Level of market intelligence – external stakeholder feedback; achievement of financial and economic indicator targets.

(3) Strategic Imperative

Sector growth.

Key Indicators

Growth & development of the sector.

Indices

- Reduction in food imports.
- Increase in food exports.
- Increased domestic food production.
- Increased acreages/size of food productive units.
- Increased sector employment.
- Greater contribution to GDP.
- Increase in the number of new entrants to sector.
- Younger entrants to sector.
- New activities in sector.
- Enhancement of the standard of living.

(4) Strategic Imperative

Culture realignment.

Key Indicators

Quality & timeliness of delivery of services; technology; customer focus; competency and technical support.

Indices

Internal stakeholder and external stakeholder feedback.

Customer retention.

Level of productivity.

Staffing retention.

(5) Strategic Imperative

Re-branding/reimaging/repositioning.

Key Indicators

Image; internal and external communication.

Indices

- Internal stakeholder and external stakeholder feedback.
- Customer retention.

Strategic Imperative

Financial growth.

Key Indicators

Profitability.

Indices

Increased profitability.

Increased lending levels.

Appendix II

Regressions estimating profitability and efficiency of ADB using generalized method of moments

Dependent Variable: ROA
Method: Generalized Method of Moments
Date: 10/26/06 Time: 11:54
Sample (adjusted): 1975 2004
Included observations: 30 after adjustments
Kernel: Bartlett, Bandwidth: Fixed (3), No prewhitening
Simultaneous weighting matrix & coefficient iteration
Convergence achieved after: 4 weight matrices, 5 total coef iterations
Instrument list: AGRISH(-1) LAS(-1) LIQAS(-1) AGRI

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ASY	0.467360	0.140533	3.325627	0.0026
LAS	0.047727	0.074977	0.636552	0.5300
LIQAS	0.164337	0.079192	2.075163	0.0480
C	-0.106288	0.075585	-1.406199	0.1715
R-squared	0.136194	Mean dependent var	-0.014433	
Adjusted R-squared	0.036524	S.D. dependent var	0.033044	
S.E. of regression	0.032435	Sum squared resid	0.027353	
Durbin-Watson stat	1.682711	J-statistic	0.001684	

Notes: ROA is the return of assets of ADB; ASY is the ratio of Assets to GDP; LAS is the Ratio of Loans to Assets; LIQAS is the ratio of Liquid Assets to Total Assets; C is the constant.

Dependent Variable: OCAS
Method: Generalized Method of Moments
Date: 10/25/06 Time: 23:28
Sample (adjusted): 1975 2004
Included observations: 30 after adjustments
Kernel: Bartlett, Bandwidth: Fixed (3), No prewhitening
Simultaneous weighting matrix & coefficient iteration
Convergence achieved after: 26 weight matrices, 27 total coef Iterations
Instrument list: AGRISH(-1) LAS(-1) LIQAS(-1) AGRI

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ASY	-0.362378	0.155919	-2.324142	0.0282
LAS	0.033625	0.015847	2.121930	0.0435
OCAS(-1)	0.032994	0.640519	0.051511	0.9593
C	0.066966	0.049513	1.352488	0.1879
R-squared	0.282208	Mean dependent var	0.069600	
Adjusted R-squared	0.199386	S.D. dependent var	0.019500	
S.E. of regression	0.017448	Sum squared resid	0.007915	
Durbin-Watson stat	2.042801	J-statistic	0.077180	

Notes: OCAS is the ratio of the Operating Cost to Assets.

NACIONES UNIDAS

Serie
CEPAL Financiamiento del desarrollo

Issues Published:

A complete list of the papers included in this collection and the articles in pdf format are available on our website at: www.eclac.org/publicaciones

192. The dynamics of specialist development banking: the case of the agriculture development bank of Trinidad and Tobago, Anthony Birchwood, (LC/L.2731-P), Sales N° E.07.II.G.69 (US$10.00), 2007.

191. Perspectivas del fondo latinoamericano de reservas, Miguel Urrutia Montoya, (LC/L.2730-P), N° de venta S.07.II.G.68 (US$10.00), 2007.

190 La banca de desarrollo en México, Miguel Luis Anaya Mora, (LC/L.2729-P), N° de venta S.07.II.G.67 (US$10.00), 2007.

189. Estudio sobre las buenas prácticas de las IFIS en función a la normativa de suficiencia patrimonial de Basilea I, Roberto Keil, (LC/L. 2720-P), N° de venta S.07.II.G.61 (US$10.00), 2007.

188. Access to credit in Argentina, Ricardo N. Bebczuk, (LC/L. 2703-P), Sales N° E.07.II.G.52 (US$10.00), 2007.

187. Análisis de la evolución y perspectivas de la banca de desarrollo en Chile, Ricardo Pulgar Parada, (LC/L.2631-P), N° de venta S.06.II.G.156 (US$10.00), 2006.

186. Insurance underwriter or financial development fund: what role for reserve pooling in Latin America?, Barry Eichengreen, (LC/L.2621-P), Sales Number S.06.II.G.145 (US$10.00), 2006.

185. Análisis de situación y estado de los sistemas de salud de países del Caribe, James Cercone, (LC/L.2620-P) N° de venta: S.06.II.G.144 (US$15.00), 2006.

184. Pensiones para todos: análisis de alternativas para extender la cobertura del sistema chileno de previsión social, Eduardo Fajnzylber, (LC/L.2607-P), N° de venta S.06.II.G.129 (US$10.00), 2006.

183. Sistemas contributivos, densidad de cotizaciones y cobertura de pensiones, Eduardo Fajnzylber, , (LC/L.2606-P), N° de venta S.06.II.G.128 (US$10.00), 2006.

182. Risk-Adjusted Poverty in Argentina: measurement and determinants, Guillermo Cruces and Quentin Wodon, (LC/L.2589-P), Sales Number E.06.II.G.118 (US$10.00), 2006.

181. Fertility and female labor supply in Latin America: new causal evidence, Guillermo Cruces and Sebastian Galiani, (LC/L.2587-P) Sales Nº E.06.II.G.117 (US$10.00), 2006.

180. El acceso a la jubilación o pensión en Uruguay: ¿cuántos y quiénes lo lograrían?, Marisa Bucheli, Natalia Ferreira-Coimbra, Álvaro Corteza, Ianina Rossi, (LC/L.2563-P), N° de venta S.06.II.G.91 (US$10.00), 2006.

179. Public policy for pensions, health and sickness insurance. Potential lessons from Sweden for Latin America, Edward Palmer, (LC/L.2562-P), Sales Number E.06.II.G.90 (US$10.00), 2006.

178. Social Security in the English-speaking Caribbean, Oliver Paddison, (LC/L.2561-P), Sales Number E.06.II.G.89 (US$10.00), 2006.

177. Reformas recientes en el sector salud en Centroamérica, Ricardo Bitrán, (LC/L.2554-P), N° de venta S.06.II.G.81 (US$10.00), 2006.

176. Ciclo económico y programas de compensación social: el caso del sistema Chile Solidario, Américo Ibarra Lara y Gonzalo Martner Fanta, (LC/L.2553-P), N° de venta: S.06.II.G.80 (US$10.00). 2006.

175. La reforma de salud en Nicaragua, Adolfo Rodríguez Herrera, (LC/L.2552-P). N° de ventas S.06.II.G.79 (US$10.00). 2006.

174. La reforma de salud en Honduras, Adolfo Rodríguez Herrera, (LC/L.2541-P). N° de ventas S.06.II.G.69 (US$10.00). 2006.

173. La reforma de salud en Costa Rica, Adolfo Rodríguez Herrera, (LC/L.2540-P) N° de venta: S.06.II.G.68 (US$10.00), 2006.

172. Protección social efectiva, calidad de la cobertura, equidad y efectos distributivos del sistema de pensiones en Chile, Alberto Arenas de Mesa, María Claudia Llanes y Fidel Miranda, (LC/L.2555-P). N° de venta S.06.II.G.83 (US$10.00), 2006.

171. Reformas de salud y nuevos modelos de atención primaria en América Central, Adolfo Rodríguez Herrera, (LC/L.2524-P). N° de venta S.06.II.G.51 (US$10.00). 2006.

170. Inserción laboral, mercados de trabajo y protección social, Víctor Tokman, (LC/L.2507-P). N° de venta S.06.II.G. 39 (US$10.00). 2006.

169. Relación de dependencia del trabajo formal y brechas de protección social en América Latina y el Caribe, Andras Uthoff, Cecilia Vera y Nora Ruedi , (LC/L.2497-P). N° de venta S.06.II.G.29 (US$10.00). 2006.

168. Inclusion of the European "Nordic Model" in the debate concerning reform of social protection: the long-term development of nordic welfare systems 1890-2005 and their transferability to Latin America of the 21st century, Eero Carroll and Joakim Palme, (LC/L.2493-P). Sales Number: E.06.II.G.24 (US$10.00). 2006.

167. Non-contributory pensions: Bolivia and Antigua in an international context, Larry Willmore, (LC/L2481-P). Sales Number: E.06.II.G.12 (US$10.00).2006.

166. La protección frente al desempleo en América Latina, Mario D. Velásquez Pinto, (LC/L.2470-P). N° de venta S.05.II.G.217 (US$10.00). 2005.

165. Ejemplos de uso de tecnologías de información y comunicación en programas de protección social en América Latina y el Caribe, Alvaro Vásquez V., (LC/L.2427-P). N° de venta S.05.II.G.174 (US$10.00). 2005.

164. Regional exchange rate arrangements: the european experience, Charles Wyplosz, retirada.

163. Regional development banks: a comparative perspective, Francisco Sagasti and Fernando Prada, retirada.

162. Reforming the global financial architecture: the potential of regional institutions, Roy Culpeper, retirada.

161. European financial institutions: a useful inspiration for developing countries?, Stephany Griffith-Jones, Alfred Steinherr, Ana Teresa Fuzzo de Lima, retirada.

160. The Arab experience, Georges Corm, retirada.

159. An analysis of the experiences of financial and monetary cooperation in Africa, Ernest Aryeetey, retirada.

158. Asian bond market development: rationale and strategy, Yung Chul Park, Jae Ha Park, Julia Leung, Kanit Sangsubhan, retirada.

157. La banca de desarrollo en América Latina y el Caribe, Romy Calderón Alcas, (LC/L.2330-P) N° de venta: S.05.II.G.81 (US$10.00). 2005.

156. Regional financial integration in east Asia: challenges and prospect, Yung Chul Park, retirada.

155. A experiência brasileira com instituições financeiras de desenvolvimento, Carlos Eduardo de Freitas, (LC/L.2328-P), N° de venta P.04.II.G.115 (US$10.00), 2005.

154. Evolución, perspectivas y diseño de políticas sobre la banca de desarrollo en el Perú, Marco Castillo Torres, (LC/L.2274-P), N° de venta S.04.II.G.25 (US$10.00), 2005.

153. La evolución y perspectivas de la banca de desarrollo en latinoamérica frente al caso colombiano, Beatriz Marulanda y Mariana Paredes, (LC/L.2248-P), N° de venta S.05.II.G.6 (US$10.00), 2004.

152. Alternativas para reducir la discriminación y la segmentación por riesgo en el sistema de salud chileno, Stephen Blackburn, Consuelo Espinosa y Marcelo Tokman (LC/L.2221-P), N° de venta S.04.II.G.143 (US$10.00), 2004.

151. Sistema previsional Argentino: crisis, reforma y crisis de la reforma, Oscar Cetrángolo y Carlos Grushka, (LC/L.2219-P), N° de venta S.04.II.G.139 (US$10.00), 2004.

- Readers wishing to obtain the listed issues can do so by writing to: Distribution Unit, ECLAC, Casilla 179-D, Santiago, Chile, Fax (562) 210 2069, E-mail: publications@cepal.org.

Name: ....

Activity:...

Address:...

Postal code, city, country: ....

Tel.: .... Fax: .... E.mail: ....