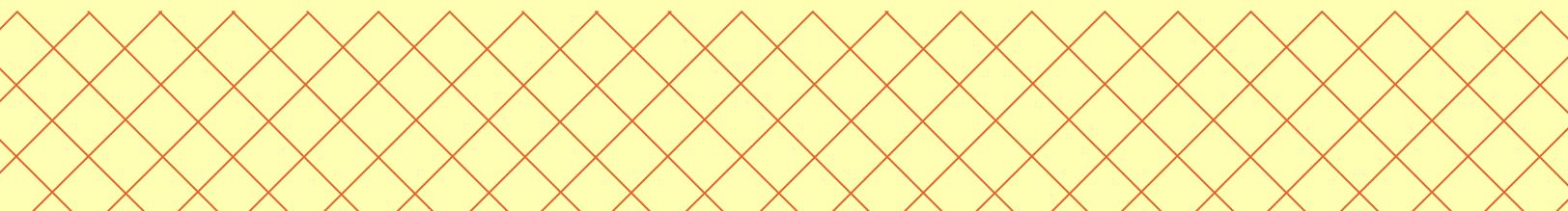


WESTERN HEMISPHERE PAYMENTS AND SECURITIES SETTLEMENT FORUM  
CENTRE FOR LATIN AMERICAN MONETARY STUDIES  
THE WORLD BANK

**PAYMENTS AND SECURITIES  
CLEARANCE AND  
SETTLEMENT SYSTEMS IN THE EASTERN  
CARIBBEAN CURRENCY UNION**

DECEMBER 2003



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## Foreword

Following a request from the Western Hemisphere Finance Ministers, the World Bank launched in January 1999 the *Western Hemisphere Payments and Securities Clearance and Settlement Initiative*. The World Bank in partnership with the Centre for Latin American Monetary Studies (CEMLA) first led this Initiative, which, over the years, has evolved, into a permanent Forum as a result of the capacity already created throughout the Region. The *Western Hemisphere Payments and Securities Settlement Forum* represents the new set of organizational arrangements to give continuity to the efforts initiated under the Initiative and was launched formally in June 2003.

The objective of the Forum is to describe and assess the payments systems of the Western Hemisphere with a view to identifying possible improvement measures in their safety, efficiency and integrity. To carry out this mandate an International Advisory Council (IAC) was established in March 1999 comprised of experts in the field from several institutions. In addition to representatives from the WB and CEMLA this Council includes members from the: Bank for International Settlements, Bank of Italy, Bank of Portugal, Bank of Spain, Council of Securities Regulators of the Americas (COSRA), De Nederlandsche Bank, European Central Bank, Federal Reserve Board, Federal Reserve Bank of New York, Inter-American Development Bank, International Monetary Fund, International Organization of Securities Regulators (IOSCO), Securities Commission of Spain, Swiss National Bank and U.S. Securities Commission (SEC).

To assure quality and effectiveness, the Forum includes two important components. First, all studies are conducted with the active participation of country officials and the project builds on the existing work being undertaken in the respective countries. Second, the Forum draws on international and national expertise on the subject, through the IAC, to provide guidance, advice and alternatives to current practices.

The Forum has undertaken a number of activities in order to respond to the Western Hemisphere Finance Ministers' request. These include: the preparation of public reports containing a systematic in-depth description of each country's payments clearance and settlement systems; the delivery of recommendations reports to country authorities on a confidential basis; the organization of IAC meetings to review country studies and provide input for future work; the organization of workshops focusing on issues of particular interest; the creation of a web-page ([www.ipho-whpi.org](http://www.ipho-whpi.org)) to present the outputs of the Forum and other information of interest in the payments systems area; and the promotion of working groups to ensure a continuation of the project activity.

CEMLA has been acting as the Technical Secretariat and is playing a major role in making the process sustainable and capable of extension to all the countries in the Hemisphere. To this end, the Forum has helped strengthen CEMLA's in-house expertise. Additionally, practitioners in payments and securities clearance and settlement in some countries in the Region have participated in the studies under the Initiative and at present under the Forum, through CEMLA coordination, and this has contributed to the broadening of knowledge and the transfer of know-how within the Region. The endeavors of the working groups in coordination with CEMLA already provide this permanent Forum for the countries in the Region to discuss, coordinate, and add a collective impetus to the work in the area of payments and securities clearance and settlement systems.

This Report "Payments and Securities Clearance and Settlement Systems in the Eastern Caribbean Currency Union" is one of the public reports in the series and was prepared by the WHF Core Team and the Eastern Caribbean Central Bank, in coordination with CEMLA and the World Bank.

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*A Western Hemisphere Payments and Securities Clearance and Settlement Initiative (WHI) mission visited the Eastern Caribbean Central Bank (ECCB) in St. Kitts from April 10th to April 17th, 2000. This team comprised Massimo Cirasino (World Bank), Veronica Fucile (Banca d'Italia), Charlie Garrigues (World Bank), Daniel Heller (Swiss National Bank), and Ruthmilda Vos (Bank van de Nederlandse Antillen). Massimo Cirasino (World Bank) was the overall leader of the mission.*

*During the mission, the international team worked in close coordination with several officials from the ECCB. Interviews were conducted with several central bank officers from different departments as well as with some commercial banks and other payment services providers. In addition, the international team assisted the ECCB in organizing a workshop on "Why and How to Reform the National Payments and Securities Clearance and Settlement Systems". The workshop was attended by several central bank officers, commercial bank representatives, and other stakeholders in the payment system. During the workshop, the team was able to conduct informal interviews with representatives from other commercial banks of the currency area.*

*Mr. Emanuel di Stefano B. Freire (WHI Team), working in close collaboration with the ECCB's Payment System Project Team (Messieurs Henry Hazel and Alex Straun), coordinated the preparation of this report. The ECCB's Payment System Project Team provided the vital effort of ensuring that the information reflects the current state of affairs regarding the payment and securities clearance and settlement systems of the Eastern Caribbean Currency Union (ECCU). The report benefited also from the comments of Massimo Cirasino, Jose Antonio Garcia (CEMLA and WGPS-LAC\*), Baljit Vohra (Eastern Caribbean Securities Exchange) and the staff of the ECCB.*

*The WHI wants to express its appreciation to the Governor, Deputy Governor, the Payment System Project Team, other staff of the ECCB, and all the representatives of institutions visited and/or consulted for the full and enthusiastic support to the WHI activities and objectives.*

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\* Working Group on Payment System Issues of Latin America and the Caribbean.

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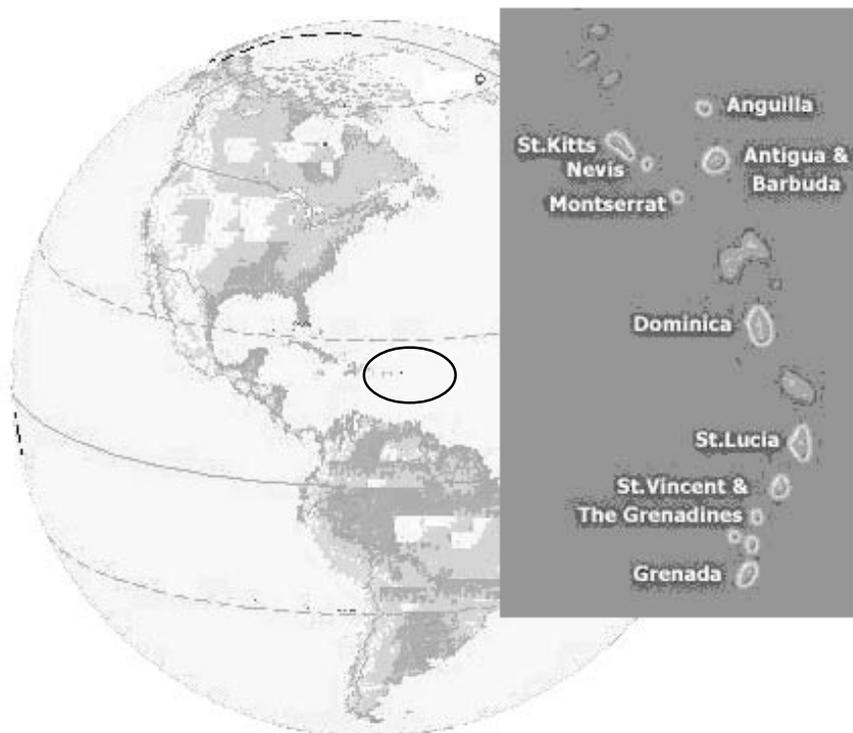
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# 1 ECONOMIC AND FINANCIAL MARKET OVERVIEW

## 1.1 THE EASTERN CARIBBEAN CURRENCY UNION

The Eastern Caribbean Currency Union (ECCU) is made up by eight countries sharing a common currency under the aegis of the Eastern Caribbean Central Bank (ECCB). The currency is the EC dollar (1 USD = EC\$ 2.70).<sup>1</sup> The countries — Anguilla, Antigua and Barbuda, the Commonwealth of Dominica, Grenada, Montserrat, St. Lucia, St. Kitts and Nevis, and St. Vincent and the Grenadines — are several islands which are not too close to each other. Together with the British Virgin Islands, the member countries of the ECCU form the Organization of Eastern Caribbean States (OECS).

Chart 1: ECCU in the World



<sup>1</sup> The symbols “USD” and “EC\$” are used all throughout this Report to represent the United States dollar and the Eastern Caribbean dollar, respectively.

**Table 1: ECCU Member States**

<i>State</i>	<i>Population</i>	<i>Capital City</i>	<i>Date of OECS Membership</i>
Anguilla	13,627	The Valley	1995
Antigua and Barbuda	71,796	St. John's	1981
Commonwealth of Dominica	76,141	Roseau	1981
Grenada	101,400	St. George's	1981
Montserrat	4,938	Plymouth <sup>(a)</sup>	1981
St Kitts and Nevis	44,503	Basseterre	1981
St Lucia	155,032	Castries	1981
St Vincent and the Grenadines	111,988	Kingstown	1981

*Source: ECCB.*

<sup>(a)</sup> Plymouth was abandoned in 1995 due to volcanic activity; the new unofficial capital is St John's.

## 1.2 OVERVIEW OF RECENT REFORMS

One of the ECCB's important goals has been the development, integration and regulation of a single financial space within the region. The member countries are small, open, and vulnerable economies which have entered into treaty arrangements with each other to facilitate their economic development and to fulfill their obligations to the international community. The Treaty of Basseterre (1981) created the OECS, which is the main decision-making body in the integration arrangement. The treaty sets out in Article 3, a number of areas of cooperation, including central banking, which they considered to be critical to their social and economic development.

The currency union's economy has undergone significant structural changes since 1977. A common feature for all countries across the ECCU is the growth in contribution of services to total output growth. For the ECCU as a whole, services amounted to 83 per cent of total output in 2002. For all countries except Anguilla, the government sector is the largest contributor to total services. The other major contributors to total services are transport, distribution and hotels and restaurants sectors.

## 1.3 MACROECONOMIC BACKGROUND

### 1.3.1 Gross Domestic Product

The economy is heavily dependent on agriculture and tourism. The nominal gross domestic product (GDP) for 2002, at market prices, was EC\$ 7.9 billion, equivalent to USD 2.9 billion.

Robust GDP growth was experienced in the decade of the 1980s. This was primarily due to the expansion of production in bananas and the tourism industry. Growth slowed sharply in the period 1991 to 2001. In the first half of this period, 1991 to 1996, the growth slowdown was primarily the result of uncertainty with regard to market access for bananas in the European Union (EU), lower prices of banana exports and natural disasters. In the 1997 to 2001 period, the effects of natural

disasters, external shocks like the recession in the United States of America (USA) and unfavorable weather conditions contributed to continued slow growth relative to the 1980s.

In 2002 the currency union continued to be adversely affected by international developments. Overall economic activity was sluggish although some improvement was evident, as real GDP grew on average by an estimated 0.2 percent following the 1.3 percent contraction in 2001. The outturn in 2002 was influenced in part by strong growth in the agricultural sector, partly on account of favorable weather, that was almost offset by contractions in output in most of the other sectors. Among the member countries of the currency union economic performance differed widely. Growth rates in real GDP exceeded the currency union's average in four of the countries – Montserrat (4.6 percent), Antigua and Barbuda (2.1 percent), St Vincent and the Grenadines (1.4 percent) and St Kitts and Nevis (0.8 percent). In St Lucia real GDP grew by 0.1 percent, while contractions in economic activity were seen in the other three – Dominica (4.7 per cent), Anguilla (3.2 per cent) and Grenada (1.1 per cent).

Value added in the agricultural sector, which accounted for 7.5 per cent of GDP, grew by 6.6 per cent in 2002. The increase in this sector was largely as a result of an expansion in the production of traditional export crops, in particular bananas. Output of bananas for the four banana-producing territories – Dominica, Grenada, St. Lucia and St Vincent and the Grenadines – amounted to 98,894 tonnes in 2002, an expansion of 19.6 per cent when compared with the total in 2001.

Construction activity fell for the second year in succession, reflecting the completion of some major public and private sector projects and a weak investment climate because of international developments. Value added in the construction sector contracted by 2.2 per cent, following a 1.8 per cent decline in 2001. Five of the member countries – Anguilla, Dominica, St Kitts and Nevis, St Lucia and St Vincent and the Grenadines – recorded declines in value added from this sector. During 2002 construction activity in the currency union focused on improving the economic and social infrastructure. Projects undertaken during 2002 included road upgrading and maintenance, rehabilitation of hospitals, schools, air and seaports, and the construction of fisheries complexes. Private sector activity was driven by expansion and upgrading of the hotel plant and the construction of commercial and residential properties. Commercial bank data showed that the growth in lending for home construction and renovation was 5.8 per cent, substantially above the 2.0 per cent rate of increase in the first quarter of 2002.

Tourism activity continued to weaken in 2002, reflective of the global economic slowdown as well as reduced airlift services and increased competition from other tourist destinations. Activity in tourism, as measured by value added in the hotel and restaurant sector, fell for the third year in succession, by an estimated 0.9 percent in 2002 following declines of 5.2 percent and 1.2 percent in 2001 and 2000 respectively. In 2002, stay over visitors to the currency union rose by 1.9 percent to 869,931; however the number of visitors staying in paid accommodation was estimated to have contracted. In the rest of the tourism industry the number of cruise ship passengers fell by 24.0 percent to 1,203,105 compared with the total in 2001, reflecting a decrease in cruise calls.

Manufacturing activity remained depressed in 2002 as the sector continued to experience lower demand for some products as a result of increased competition in the domestic and export markets. Value added in that sector fell by 0.8 per cent in 2002 following the 1.6 percent decline in 2001.

In the other sectors, performance was mixed. There were increases in value added in the banking and insurance sector (4.5 percent) and the government services sector (2.7 percent). By contrast, value added in the transportation sector contracted by 1.9 percent, partly as a result of the decline in cruise ship traffic and construction activity, both of which debilitated the road transport sub-sector. Value added in the communications sector fell by 2.9 percent, attributable to lower profits realized by the telecommunications sub-sector as a result of increased competition.

### **1.3.2 Prices**

Data on consumer price movements in the member countries (excluding Antigua and Barbuda for which information was not available) indicate that inflation in the currency union was low in 2002. Consumer prices increased on average by 0.6 percent compared with 1.8 percent in 2001. Increases in the consumer price indices ranged from 0.5 percent in Dominica to 3.5 percent in Montserrat. These increases were partly offset by decreases ranging from 0.1 percent in St Vincent and the Grenadines to 1.5 percent in Anguilla.

Despite the latter, upward movements in the fuel and electricity sub-index were observed for a number of countries. This reflected the impact of the increase in fuel prices during the quarter as a result of the USA/Iraq conflict.

During October 2001, a new consumer price index was rolled out, which, for the first time in the history of the region, was compiled on the basis of a common methodology and using the same base year. A regional approach to the computation of the Consumer Price Index allows for the price comparisons across regional barriers.

### **1.3.3 Central Government Fiscal Operations**

The fiscal situation of the combined central governments deteriorated in 2002 as evidenced by a widening of the overall deficit to 6.8 percent of GDP from 6.4 percent in the previous year. This performance was attributed in part to an increase in capital expenditure and net lending, coupled with an increase in the current account deficit.

Total tax revenue rose by 7.0 percent to EC\$1,756.5 million (22.3 percent of GDP) in 2002, reflecting increases in all its components with the exception of taxes on income and profits. The growth in tax revenue resulted in part from an improvement in tax administration and from new budgetary measures introduced by some member governments in 2002. Receipts from taxes on international trade and transactions expanded by 8.3 percent to EC\$937.4 million, in contrast to the decline of 2.4 percent in 2001. The growth in revenue was largely reflected in higher collections from the consumption tax, associated in part with a rate increase in St Vincent and the Grenadines and enhanced efficiency at the customs departments in some of the member countries. Revenue from taxes on domestic goods and services grew by 10.8 percent, more than doubling the rate of growth in the previous year. This improved outturn was attributed to increased collection of stamp duties, particularly in St Lucia. Proceeds from the property tax went up by 51.6 percent to EC\$43.8 million, partly attributable to higher receipts in Grenada as a result of improved administration and a property revaluation

exercise. Receipts from taxes on income and profits fell by 1.7 percent to \$414.8 million, largely reflecting a contraction in proceeds from the company tax.

On the expenditure side, increases were recorded in all categories. Spending on wages and salaries, which accounted for 48.1 percent of current expenditure, increased by 1.8 percent to EC\$1,041.4 million, equivalent to 13.2 percent of GDP. Outlays on the procurement of goods and services rose by 11.3 percent to EC\$508.4 million. The increase in 2002 was primarily influenced by higher spending on supplies and other equipment for the new office complex in Antigua and Barbuda. Interest payments in 2002 were 17.9 percent above the amount in 2001, reflecting higher external payments, particularly in Grenada and St Kitts and Nevis, due to new debt. Expenditure on transfers and subsidies rose by 13.2 percent to EC\$330.2 million, influenced by higher transport subsidies in Montserrat.<sup>2</sup>

During 2002, capital expenditure and net lending increased by 9.0 percent to EC\$661.6 million (equivalent to 8.4 percent of GDP), largely influenced by developments in Grenada and St Kitts and Nevis. Capital revenue and grants together amounted to EC\$247.9 million in 2002, roughly 17.3 percent above the total for 2001.

### **1.3.4 Money and Credit**

During 2002, the broad money supply (M2) of the currency union expanded at a rate above that recorded in 2001, largely influenced by an increase in net foreign assets. M2 rose by 6.2 percent to EC\$6,711.5 million. The growth in 2002 partly reflected an increase of 5.9 percent in the narrow money supply (M1). Of the components of M1, currency with the public grew by 5.3 percent in contrast to the 3.5 percent decline in 2001, while the rate of growth in private sector demand deposits increased to 6.1 percent from 5.8 percent in 2001. Quasi money, which includes private sector savings, time and foreign currency deposits, went up by 6.3 percent. Savings deposits, the largest component of quasi money, grew by 9.1 percent, while deposits denominated in foreign currency rose by 11.8 percent. Time deposits contracted by 0.7 percent.

During 2002, growth in domestic credit decelerated to 1.1 percent from 4.4 percent in the previous year. This slowdown was influenced by a reduced rate of growth in outstanding credit to the private sector and a decline in net lending to the combined central governments. The distribution of credit by economic activity showed relatively strong increases in lending for tourism (9.2 percent), agriculture (11.5 percent), manufacturing (7.5 percent) and construction (5.1 percent). Personal credit expanded by 3.4 percent.

The net foreign assets of the banking system rose by 28.0 percent to EC\$1,847.8 million in 2002, reflecting increases in the net foreign assets of both the ECCB and the commercial banks. The net foreign assets of the commercial banking system almost doubled to EC\$492.7 million, while the net international reserves of the ECCB rose by 13.7 percent to EC\$1,355.1 million, largely reflecting an expansion in foreign assets.

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<sup>2</sup> In 2002, responsibility for the operations of the ferry and helicopter services in Montserrat was transferred to the central government.

In September 2002, the ECCB eased its monetary policy stance in an effort to induce lower interest rates for lending and stimulate economic activity. The minimum rate offered on savings deposits was reduced by 1.0 percentage point to 3.0 percent. As a consequence, prime lending rates fell to a range of 8.5 percent to 12.0 percent at the end of September 2002 from a range of 9.0 percent to 12.5 percent at the end of June 2002, and remained at that range at the end of 2002.

### **1.3.5 Balance of Payments**

The current account deficit was estimated to have widened to EC\$1,299.6 million in 2002 from EC\$1,136.0 million in 2001. As a percentage of GDP, the deficit rose to 16.5 percent in 2002 from 14.8 percent in 2001. This outcome reflected lower inflows from services and higher net outflows for merchandise trade and investment income.

The overall balance of payments position of the ECCU improved in 2002 as reflected by the growth in the overall surplus. An overall surplus of EC\$225.1 million was realized compared with one of EC\$173.6 million in 2001. As a percentage of GDP, the surplus moved to 2.9 percent, up from 2.3 per cent in 2001.

Net inflows of private direct investment were estimated to have declined by 6.3 percent to EC\$669.6 million in 2002, largely reflecting lower inflows associated with hotel development, as work on a major hotel project in St Kitts and Nevis neared completion. The surplus on the capital account fell to EC\$315 million (4.0 percent of GDP) from EC\$339.6 million in 2001. This outcome was mainly attributed to a 10.5 percent decrease in inflows of grants to EC\$224.1 million.

### **1.3.6 External Debt**

Preliminary data indicated that at the end of December 2002 the total public sector external debt including arrears for the currency union was EC\$4,933.0 million, representing a 21.9 percent increase relative to the balance at the end of 2001. As a percentage of GDP, the public sector external debt rose to 62.7 percent from 52.7 percent in 2001. The performance in 2002 reflected a 23.8 percent increase in the combined central government debt, which rose to an equivalent of 52.4 percent of GDP in 2002 from 43.2 percent of GDP in 2001. Increases were observed in the outstanding public sector debt of all the member countries with the exception of Montserrat, St Vincent and the Grenadines and Anguilla. The outstanding debt of statutory bodies was 13.3 per cent above the level recorded for the previous year and reflected increases in Grenada, Dominica, Antigua and Barbuda and St Kitts and Nevis.

For the combined member countries, 71.4 percent of the debt was denominated in USD. Of the other currencies, 10.4 percent was denominated in Euro, 4.8 percent in special drawing rights and 4.1 percent in Kuwaiti dinars.

During 2002, external debt service payments (including interest, principal and other payments) rose by 13.4 percent to EC\$372.9 million, reflecting the increase in the outstanding debt of the currency union. As a percentage of current revenue, external debt service payments increased to 18.4 percent in 2002 from 18.3 percent in 2001. As a component of total debt service

payments, principal repayments accounted for 52.2 percent of the total, while interest payments represented 47.2 percent.

### **1.3.7 Estimates for 2003**

Economic activity in the ECCU is projected to have expanded in 2003, influenced largely by the economic recovery in the USA. Estimates are that activity in the tourism and construction sectors increased, with positive spillovers in wholesale and retail trade as well as transportation. In the agricultural sector, activity is estimated to have contracted, largely on account of developments in the banana industry, particularly the drought experienced by the countries in the first half of the year.

Meanwhile, the fiscal accounts of the combined central governments improved substantially and showed an overall deficit of approximately EC\$446.6M (5.4 percent of the GDP).

Developments in the banking system were characterized by an increase in liquidity, acceleration in the rate of growth of monetary liabilities and an expansion in net foreign assets. Interest rates remained fairly stable.

## **1.4 FINANCIAL SECTOR**

The system comprises domestic banks, offshore institutions, credit unions, insurance companies and development finance institutions. With the development of the money and capital markets, other entities are emerging such as broker/dealers. The movement towards a single financial space has engendered the development of harmonization of the regulatory and supervisory functions across the region.

In the domestic banking sub-sector, the number of banking units was reduced to 39 following the combination of the operations of Barclays Bank PLC and CIBC Caribbean Ltd in the Caribbean in 2002. The sub-sector currently comprises 19 locally incorporated banks and 20 branches or subsidiaries of foreign banks.

The regulation and supervision of the offshore financial services sub-sector continues to be enhanced. Following enhanced investigations and scrutiny, the number of offshore banks in the ECCU has declined by 23 to 76. Member states have enacted several pieces of legislation to improve the regulation and supervision of this sector.

The insurance industry is the largest sub-sector in the non-bank financial sub-sector in the ECCU and is characterized by intense competition, a heavy reliance on international reinsurance markets, with up to 85 percent of risk reinsured internationally, mainly with European re-insurers, and proliferation of small insurance companies. There are 65 active companies in operation, of which only 25 were incorporated in the sub-region. The majority of foreign-based companies are incorporated in other member states of the Caribbean Common Market (CARICOM), such as Barbados, Trinidad and Tobago and Guyana. The 65 companies were represented by a total of 149 branches and agencies operating within the ECCU.

Credit Unions are active in every territory and by the end of December 2002 there were 71 of them. Over the past decade, most credit unions diversified their services and introduced new products. Some have started offering products such as checking accounts, investment products and term and fixed deposits, which were traditionally offered only by commercial banks.

**Table 2: Insurance Firms and Credit Unions in the ECCU Member Countries<sup>(a)</sup>**  
(as of year-end 2002)

	<i>Insurance Firms</i>	<i>Credit Unions</i>
Anguilla	20	1
Antigua & Barbuda	22	5
Dominica	19	17
Grenada	31	20
Montserrat	7	1
St Kitts & Nevis	12	3
St Lucia	25	16
St Vincent & the Grenadines	27	8
<b>ECCU Total</b>	<b>162</b>	<b>71</b>

Source: ECCB.

<sup>(a)</sup> The figures for insurance firms are for registered entities, while the figures for credit unions represent active credit unions in the ECCB member states.

### 1.4.1 Regulatory and Supervisory Issues

There are two projects currently being coordinated by the ECCB, the objectives of which are to enhance financial sector soundness in the ECCU and lead to a more transparent financial system. These are: Integrated Regulatory and Supervisory Framework and the International Monetary Fund-World Bank Financial Sector Assessment Program (FSAP).

To date there has been mixed success in developments relating to the implementation of the proposed integrated regulatory and supervisory framework. The Caribbean Regional Technical Assistance Centre (CARTAC) and the ECCB continue to record progress in their collaborative efforts to strengthen the supervision of the financial system in the ECCU.

In the area of banking supervision, the major policy issues arising from the proposed amendments to the Banking Act were presented to the Monetary Council, the highest decision-making body for the Central Bank, at its 47th meeting on 28 February 2003. It was agreed that certain changes represented significant shifts in the licensing regime, and in view of this it was decided that a special session of the Monetary Council would be convened to enable a more in depth discussion of those policy issues and the mechanism for putting into operation the proposed integrated regulatory framework.

Regulation and supervision of insurance companies in the ECCU continue to lag far behind that of the banking sector. There are plans to further enhance insurance legislation by reviewing and

revising the harmonized insurance legislation to be fully compliant with the International Association of Insurance Supervisors (IAIS) Core Principles, General Agreement on Trade in Services (GATS) and CARICOM Single Market and Economy (CSME) commitments. CARTAC has agreed to assist with a review of the Insurance Act and the drafting of the necessary amendments. Letters were drafted to the Financial Secretaries seeking their assistance in ascertaining the status of the assessment of the Insurance Sector that is being conducted by the various Inspectors of Insurance. Terms of reference have been drafted for the work to be performed by the consultants on the Insurance project.

Credit Unions are not subject to the Banking Act nor to banking supervision. A Credit Union Modernization Project is being undertaken and credit unions will be forced to modernize and operate with more efficiency to meet international standards. The ECCB has agreed to the proposals put forward by the Credit Union Sector. The Chief Executive Officer of the Caribbean Confederation of Credit Unions (CCCU) was advised of the ECCB's decision and was requested to forward the relevant documents to the ECCB. The documents are expected to detail the supervisory framework envisaged by the CCCU's Business Centre.

## **1.5 CAPITAL MARKETS**

The genesis of the current capital market development program could be traced back to the early 1990's, when the Monetary Council of the ECCB mandated the latter to proceed with the activation of Article 4(3) of the Agreement, which states that the purposes of the ECCB are "to promote credit and exchange conditions and a sound financial structure conducive to the balanced growth and development of the economies of the territories of the participating Governments". This was interpreted to mean, in practical terms, the development of money and capital markets. Accordingly, the latter part of the 1990's heralded the onset of a new era of financial sector development in the region.

Despite the existence of a currency union with a common currency and a common central bank, as well as the rudimentary issuance of shares by public firms and treasury bills and bonds by ECCB Member Governments, the financial system was fragmented, with eight separate markets. In this regard, the ECCB has established the goal for the development and integration of these markets into a single financial space within the Currency Union. The ECCB began by launching the creation of both markets and institutions to achieve this goal. A special unit was established to carry out this mandate, which after a number of changes has now become the Financial and Enterprise Development Department.

Arising out of a series of consultative meetings, held throughout the Currency Union, the ECCB identified five institutions to be established at the regional level. These include: the Eastern Caribbean Home Mortgage Bank, the Eastern Caribbean Securities Market, the Regional Government Securities Market, the Eastern Caribbean Unit Trust, and the Eastern Caribbean Enterprise Fund.

The Eastern Caribbean Home Mortgage Bank (ECHMB), which came into being in 1996, develops and maintains a secondary mortgage market in the ECCU thereby increasing the availability of mortgage credit and the liquidity and flexibility of institutions using its services. The ECHMB also seeks to harmonize a system of mortgage financing and allocation of long-term savings for housing

investments. The ECHMB has to date raised approximately EC\$92 million in seven issues of tax-free bonds, providing an average yield of 6.75 percent, and has acquired EC\$66.7 million in mortgages.

A major component of the ECCB's Money and Capital Market Development initiative came to fruition in October 2001, with the launch of the Eastern Caribbean Securities Market (ECSM). The market is a modern, state-of-the-art construct that embodies some of the most technologically advanced securities market features available anywhere. It is the first fully electronic regional securities market in the entire Western Hemisphere. It also operates in a fully dematerialized environment, in which trades are settled on a T + 1 cycle. Currently, there are 7 licensed firms operating as certified broker-dealers on the exchange. With the addition of a new broker-dealer incorporated in Grenada, there will be intermediary presence in 6 out of the 8 countries of the currency union.

The opening of the ECSM was made possible by the enactment of the Securities Bill in the Parliaments of 7 Member Countries. The eighth Member State, Anguilla, has since enacted the legislation.

The ECSM comprises the following institutions:

- The Eastern Caribbean Securities Regulatory Commission (ECSRC)
- Eastern Caribbean Securities Exchange Ltd (ECSE);
- Eastern Caribbean Central Securities Depository Ltd (ECCSD); and
- Eastern Caribbean Central Securities Registry Ltd (ECCSR).

Currently, five corporate securities are listed on the ECSE with a total market capitalization of EC\$320.4 million by the end of September 2003. After less than two years in existence, the ECSE has recorded in excess of EC\$6 million in trading activities in relation to corporate securities. Additional companies are expected to become listed over the next few months.

In November of 2002, the Regional Government Securities Market (RGSM) was launched providing primary and secondary market facilities for government securities from the ECCU member states. The initiative seeks to strengthen the existing primary market for treasury bills and bonds, and to promote the development of a secondary market for these securities. Currently, St Kitts-Nevis, St Vincent and the Grenadines and Grenada have issued securities on the RGSM. The total value of government securities listed on the secondary market as of September 2003 totaled \$148 million.

The two other initiatives are the Eastern Caribbean Unit Trust (ECUT) and the Eastern Caribbean Enterprise Fund (ECEP), which are a venture capital fund and a collective investment vehicle, respectively. Both initiatives are currently in the conceptualization stage.

On the other hand, in October 2001 the ECCB introduced changes in the arrangements governing the interbank market. Under the new arrangement, a Bulletin Board Service, facilitated by the ECCB, replaced the latter's brokerage service. This service can be used by the commercial banks on

a daily basis to advertise funds available for lending and to source funds for borrowing. Commercial banks now have to trade on a bilateral basis for the use of excess funds in the banking system and the terms and conditions of each loan without the intervention of the ECCB. In the conduct of interbank transactions commercial banks can either enter into informal unsecured agreements, or can choose to enter into secured arrangements by offering collateral.

The new arrangements are expected to lead to the market determination of the interbank funds rate and contribute to the removal of the rigidity of interest rates in the Union.

## **1.6 MAJOR TRENDS IN PAYMENT SYSTEMS**

Cash and cheques are the major forms of making payments in the ECCU region. Debit and credit cards have recently been introduced, and are increasing rapidly, but are not yet widely used within the region. In addition, there is no shared automated teller machine (ATM) network between commercial banks on any of the islands. In 1994, a private company, the Caribbean Credit Card Corporation, owned by 13 indigenous banks, was established to issue, process and settle credit card transactions on behalf of those banks. This company now issues its own credit card and is actively pursuing rolling out an internationally branded debit card before the end of 2003.

The Central Bank operates a cheque clearing house on a deferred net settlement basis. The Central Bank has an agency in all the territories, which operates the local clearinghouse under the guidance of the ECCB Clearing House rules. Net positions are settled on the books of the ECCB, under normal circumstances, on the day following the presentation of the instrument by a bank's customer. Availability of funds to banks' customers occurs between 3 days to 2 weeks, depending on where the cheque is presented (intra-island or inter-island cheques). With respect to extra-regional cheques (USD-denominated cheque drawn on USA banks), this can take up to 6 weeks. Consideration is being given by the present payment system improvement project to migrate to an automated clearinghouse that will also settle electronic retail payments.

At the commercial bank's discretion, large value transactions, defined normally as cheques with a value above EC\$50,000 are settled within a "special clearings" system. In this mechanism, the payor bank, upon presentation of the cheque, will send a SWIFT message to the ECCB asking to debit its account in favor of the payee's bank. Bilateral interbank obligations can also be discharged by sending a SWIFT message to the central bank. All the large value payments submitted to the ECCB under the current system, are settled promptly on a gross basis during the day of value.

Recognizing that a safe, reliable and efficient payment system is indispensable to the stability of the financial system, and convinced that safety and efficiency in systemically important payment systems should be objectives of public policy, the ECCB embarked on a process of modernizing the payment systems of the Union. Upon the invitation of the monetary authorities, the Commonwealth Secretariat undertook a diagnostic assessment in 1997/1999. This was followed by another assessment in April 2000 by a team of experts under the auspices of the Western Hemisphere Payments and Securities Clearance and Settlement Initiative (WHI). The formation of working groups between the Central Bank and the commercial banks under the umbrella of a Payments Council was completed in 2000.

The aim of the modernization project is to develop/implement a payment system architecture to facilitate the realization of the ECCU Single Financial Space. This includes interoperability at ATMs and at electronic funds transfer at the point of sale (EFTPOS) systems across the ECCU, more efficiency in the clearance and settlement of retail payments, and straight through processing (STP) for all payments (including cross-border) in the Central Bank's electronic funds transfer system.

The improved system seeks to meet international standards, *i.e.* the Core Principles for Systemically Important Payment Systems issued by the Committee on Payment and Settlement Systems (CPSS), and at least strike parity with global best practices in payments and settlements. It will allow a seamless transfer of financial value into, out of, and across all jurisdictions of the currency union.

The ongoing payment system improvement project is emphasizing the use of the ECCB's Globus Financial Application as the main means of electronic payment by commercial banks, governments and statutory agencies, and other non-financial banking institutions including the Eastern Caribbean Central Securities Depository, the Eastern Caribbean Home Mortgage Bank and the Eastern Caribbean Institute of Banking. The scope entails upgrading the Central Bank's gross settlement for institutional transfers to real time functionality; pursuing a legislative reform agenda to ensure a proper legal basis for regulation of and participation in the payment system; a common approach for card payment schemes and the feasibility of an automated clearing house; establishing a cost efficient mechanism for the processing and settlement of inter-island cheques.

Chapter 4 of this Report expands on the payment system reform.

## **1.7 MAJOR TRENDS IN SECURITIES CLEARANCE AND SETTLEMENT SYSTEMS**

The ECSE is the region's first market of its kind in terms of both order confirmation and order execution transcending across national boundaries. The trading system allows for automated processing of buy and sell orders from brokers located remotely in any of the 8 countries that form part of the market. On ECSE's trading platform, market participants can enter their orders and gain confirmation in a matter of seconds. And when it comes to order execution, the ECSE provides an efficient trading mechanism where prices are determined by supply and demand.

Initially, a daily Call Auction process has been set up that matches all submitted bids and offers, and strikes a single price for each security at which the maximum volume of shares are traded. With increase in market activity and liquidity, the ECSE intends to migrate to a continuous order-driven system. ECSE has matched the capacity of any emerging securities market and is sized to routinely handle large share volumes daily.

Unlike traditional exchanges that only provide a secondary-trading platform, the ECSE offers both primary and secondary trading platforms, creating a single focal point for all securities activities.

The Eastern Caribbean Central Securities Depository (ECCSD) is owned by the ECSE. Its major function is to provide clearance and settlement of trades transacted on the ECSE. The main participants on the ECCSD are broker/dealers, limited service brokers and custodians. The ECCSD provides services

to participant intermediaries and processes transactions for trades reported by the exchange or other markets. Custody services are also being provided to those entities that wish to hold securities at the ECCSD on behalf of their customers, for example custodian banks for foreign investors.

The main function of the Eastern Caribbean Central Securities Registry (ECCSR) is to maintain records of securities (stocks and bonds) on behalf of issuers in the ECSM. The market operates in a dematerialized environment, which means that shareholders' records are maintained electronically. By keeping these records electronically the operational costs, related to printing and handling paper certificates, are reduced. The system also encourages and facilitates efficient secondary market activity. The Registry's services are available to public companies listed on the ECSE, non-listed public companies, government related entities, private companies and individual security holders in the region. All of the companies listed on the Exchange are required to become a member of the Registry.

## 2 INSTITUTIONAL ASPECTS

### 2.1 GENERAL LEGAL FRAMEWORK

The legal framework in the ECCU is heavily affected by the multi-territorial structure of the organization where eight independent jurisdictions co-exist. In order to have uniform legislation in the eight territories, international treaties may be resorted to - which shall then be transposed in each domestic legal system - as well as domestic 'fully uniform' legislation. The latter is the case with the Uniform Banking Act.

Banking activity is regulated by two main pieces of legislation: the ECCB Agreement and the Uniform Banking Act. The regulatory powers conferred upon the ECCB by the Agreement that established it in 1983 were never used (*i.e.* the regulations were actually issued informally and were never published in the Gazette, thus not acquiring the legal strength envisaged by the Agreement). The outlined difficulties in adopting laws and regulations have raised the importance of agreements among payment system participants.

On the other hand, over the period 1988 to 1992, new banking legislation, common to all of the member states, was enacted in each of the member states. These Acts, collectively referred to as "the Uniform Banking Act", are uniform across the currency area, and their adoption set the stage for the harmonization of banking business within the ECCB area. The Uniform Banking Act recognizes the ECCB as the region's Central Bank with responsibility for the supervision of the financial system. Regulatory orders drawn under the Uniform Banking Act also have the force of law and provide a significant degree of flexibility to the Monetary Authorities. Orders have been issued to extend the provisions.

Another regulatory tool used by the ECCB is the issuance of prudential guidelines. The ECCB has tended to use prudential guidelines fairly extensively and these guidelines, while not having the force of law, are quite effective in promoting sound and prudent behavior in the financial system.

#### 2.1.1 Payments

The current legal framework for the payment system in the ECCU is not to be found in a specific payments act, but references are made in several laws, regulations and guidelines.

The Bills of Exchange Act (1987) regulates cheques and deals with the legal rules applicable to bills of exchange such as negotiability, the effect of forgery, delivery, acceptance, endorsements, dishonor, alteration and cancellation, presentment, conflict of laws, liability of acceptor drawer or endorser, definition and presentment of cheques, promissory notes, signature and other matters pertaining thereto.

The Uniform Banking Act (article 2) defines banks as financial institutions whose operations include the acceptance of deposits subject to the transfer by the depositor by cheque. The definitions in this article show that the feature that characterizes banks with respect to financial institutions is represented by their exclusive competence in the issuing and settlement of cheques.

The legal framework for the clearance and settlement of (intra-island) cheques is to be sought in the Clearing House Rules. These were issued in 1990 by the ECCB; however, the rules were not published in the Official Gazettes of the territories and may not have acquired the legal strength and validity envisaged by the ECCB Agreement. As a consequence, they have a contractual nature. At the moment, there are no legally binding rules and procedures for the operation of the gross settlement system for interbank transfers. Consequently, there is no clear statement of the responsibilities of the participating banks to each other, nor to their customers, for the funds transfers and other transactions that they make or receive through the system.

The Clearing House Rules establish the ECCB Clearing House in accordance with the ECCB Agreement. The Clearing House, which is managed and generally supervised by the ECCB, is engaged in “the exchange of cheques, drafts, money orders, clearing vouchers or acceptances (referred to in these Rules as “instruments”) drawn upon any member”. These set out the rules and procedures that operate in the clearings system and deals with management of the system, clearing arrangements, settlement, returned items, missing instruments and general provisions such as endorsement of cheques. The Clearing House rules include a template that banks that want to participate in a clearinghouse must sign, thus accepting the application of the rules to them.

The “Procedural Guidelines for Operations between the Commercial Banks and the ECCB”, inter alia, explain the procedures and time schedules that should be followed to request and utilize the banking services the ECCB avails to the commercial banks. On the other hand, the “Procedural Guidelines for Operations between Participating Governments and the ECCB” explain the procedures and time schedules the ECCB uses (in its Government and Other Institutions Unit) in effecting its role as banker to the member governments in the provision of investment services, the offer of credit extension facilities and settlement services.

The Bankruptcy Legislations deal with the rules and procedures as regards the bankruptcy of a person/debtor including, disqualifications of bankrupt, administration of property, appointment of official receivers, constitution, procedure and powers of the court.

Finally, the Evidence Acts deal with the admissibility of documents into evidence in courts of law.

The Financial Sector Reform and Strengthening Initiative (FIRST Initiative) is presently assisting the ECCU to, among other things, craft a legal framework to support a modern payments system. A draft Payments Code and General Banking and Payments Rules were completed in September 2003 and a process of consultation is currently underway. It is anticipated that the new Payments Act will come into force in 2005.

### **2.1.2 Securities**

A thorough regulatory framework for the trade and settlement of securities was implemented in 2001. This new law provides for the establishment of a Securities Commission, as the supervisor of activities of securities markets, and of the providers of services for the clearing and settlement of securities transactions. The functioning rules of the central securities depository and of the Securities Exchange will also be provided.

The Securities Act provides for the protection of investors by regulating the securities market, exchanges and persons engaged in securities business, and by regulating the public issue of securities and to provide for related matters. Part III (Sections 22-45) deals with clearing agencies, this is, companies whose business is the provision of services or the clearing and settlement of transactions in securities.

To carry out securities business, a license delivered by the Securities Commission is needed; capital adequacy is evaluated before a license is given. The Securities Commission can also suspend or revoke licenses, but this would not affect any agreement, transaction or arrangement related to dealing in securities nor any right, obligation or liability stemming from such agreements, transactions and arrangements. Licensees shall comply with the rules of conduct listed in the Act and with those contained in the regulations issued for this purpose by the Minister of Finance.

Moreover, the Securities Act regulates the establishment and management of securities markets: the latter may be run only by a company, established under the Companies Act, who satisfies the Securities Commission with regard to the company's equipment, functioning rules of the market, internal audit, and risk control measures. Securities markets shall operate in the interest of investors and ensure that such interest prevails over any other interest that the managing company is required to serve under any other law. The functioning rules of a securities market must be approved by the Commission who can issue directions to it if it is not fully satisfied with the regulations submitted or if it deems it necessary to protect investors. Members of securities markets are subject to the disciplinary powers of both the ECSE and the Commission.

The functioning rules for the Eastern Caribbean Securities Exchange and the Eastern Caribbean Central Securities Depository were developed in 2001 and have been in effect since then. These rules are posted on the ECSE's website, [www.ecseonline.com](http://www.ecseonline.com).

### **2.1.3 Derivatives**

Derivative instruments are not traded in the ECCU.

### **2.1.4 Specific Legal Issues Related to Clearance and Settlement**

#### **2.1.4.1 Netting**

There is no legal definition regarding the validity of multilateral netting of participants' liabilities and claims in the cheque clearings, in the ECSE settlement, and in any future automated clearinghouse (ACH) or other relevant system which now settles, or will in the future settle, through the gross settlement system for interbank transfers. This is being addressed under the FIRST Initiative technical assistance project and is expected to be regularized in 2004.

#### **2.1.4.2 Payment Finality**

There is no clear definition of intra-day finality of all accounting entries in the ECCB's books or in the books of the banks that initiate transfers for their own account or for the account of their customers. This is also being addressed under the FIRST Initiative technical assistance project.

### **2.1.4.3 Electronic Signatures and Documents**

There is no specific legal framework regarding the acceptability of electronic signatures for transfer instructions from banks and other account-holders to be given effect through Globus (the ECCB's banking and accounting application), through individual banks' and through any future ACH or other relevant system. There is neither any mention of the acceptability of bank computer records as evidence in a court of law. This is also being addressed under the FIRST Initiative technical assistance project.

## **2.2 THE ROLE OF FINANCIAL INSTITUTIONS: PAYMENTS**

### **2.2.1 The Banking Sector**

The ECCU financial system is heavily affected by the geography of the region: the eight territories are composed of several islands which are not too close to each other. Therefore the financial entities are mainly involved with the local population and the payment sector is rather segmented.

Banks play the key role in the ECCU payments system. Given the cheque-based nature of the payment system and the fact that only banks can both issue and settle cheques, no other financial entity plays a significant role in the payments sector. However there is no explicit restriction for non-banks to provide payment services and instruments, even though until now none of them has applied for this to the ECCB.

A main distinction can be made between foreign banks and locally incorporated banks. The former consists of 5 and only one has a branch in each of the eight territories; of the remaining 4, one operates in just one territory and the others respectively in 3, 5 and 6 territories. The activity of foreign banks is strongly affected by their regional head offices that control and coordinate them.

The locally incorporated banks are 15, two of them have branches in four different territories; they are locally owned and five of them are owned by the local Government. Governments that do not own locally incorporated banks hold accounts at different locally incorporated banks which operate in the respective territory. There is an Association of locally incorporated banks where strategies and cooperation plans are discussed. The Association will represent locally incorporated banks within the Payments Council. To facilitate cooperation and the exchange of information among banks, the ECCB meets monthly - through its Resident Representative - with all the licensed banks of that territory; issues discussed include those arising from the payment system.

Banks provide a number of payment services to their customers, apart from the opening of checking accounts, both in EC\$ and USD. They issue payment cards and supply a direct debiting service for public utility bills as well as direct crediting services, but these two latter facilities are in the start-up phase and are not widespread. As to cross-border payments, traditional channels such as correspondent banking or SWIFT messages can be resorted to.

### 2.2.1.1 Domestic Banking System

During 2002, total assets of commercial banks increased by 8.8 percent to EC\$12.3 billion. The growth in assets was funded mainly by an increase of 7.9 percent in deposits.

Total loans and advances at commercial banks amounted to EC\$7.6 billion or 61.8 percent of total aggregate assets. Over 2002, there was some slippage in the quality of these assets due to economic sluggishness and uncertainty both domestically and internationally. The unsatisfactory assets moved from 13.7 percent at December 2001 to 15.2 percent at December 2002, compared with an international ratio of 4 percent.

**Table 3: Assets by Territory**  
(in EC\$ million)

Territory	Dec. 2002	Dec. 2001	Dec. 2002/ Dec. 2001		Dec. 2001/ Dec. 2000		Dec. 2000/ Dec. 1999	
	value	value	value	% change	value	% change	value	% change
Anguilla	970.4	863.8	106.6	12.3	75.8	9.6	118.7	17.7
Antigua and Barbuda	2,818.2	2,517.8	300.4	11.9	67.0	2.7	216.8	9.7
Dominica	905.0	803.0	102.0	12.7	33.8	4.4	(7.8)	(1.0)
Grenada	1,725.6	1,566.5	159.1	10.2	179.4	12.9	150.4	12.2
Montserrat	183.4	166.9	16.5	9.9	3.6	2.2	(1.6)	(1.0)
St Kitts and Nevis	1,957.2	1,775.7	181.5	10.2	93.3	5.5	272.5	19.3
St Lucia	2,401.4	2,328.1	73.3	3.1	270.3	13.1	86.8	4.4
St Vincent and The Grenadines	1,295.1	1,238.7	56.4	4.6	50.9	4.3	125.0	11.8
ECCB AREA	12,256.4	11,260.5	995.8	8.8	774.0	7.4	960.8	10.1

Source: ECCB.

At December 2002, the locally incorporated banks held total qualifying capital of EC\$767 million, an increase of 15 percent over the calendar year. The increase came primarily from the issue of additional share capital. The ratio of capital to deposits averaged 1:8, well within the statutory requirement of 1:20. The ratio of capital to risk-weighted assets for the ECCU moved from 18.6 percent to 19.9 percent against an international benchmark of 8 percent. The high capital adequacy ratios should be interpreted within the context of the relatively high levels of delinquency and declining earnings.

### 2.2.2 Other Institutions that Provide Payment Services

The Caribbean Credit Card Corporation (4Cs), which processes credit card transactions for its members is owned by 13 locally incorporated banks and takes no independent initiative. It now issues its credit card and is in the process of rolling out an internationally branded debit card before the end of 2003.

The Post Office does not play a significant role within the payment system, as the only service supplied is money orders.

Credit Unions provide checking accounts and ATMs. However, they need to rely on the banking system to supply these facilities as they cannot participate in the clearinghouse (cheques issued by Credit Unions are drawn on a bank). Credit unions are not yet subject to the Banking Act nor to banking supervision; as a consequence, the costs they bear are lower and the conditions they apply to customers are convenient.

## **2.3 THE ROLE OF FINANCIAL INSTITUTIONS: SECURITIES**

### **2.3.1 Securities Market Participants**

Until recently, financial institutions carrying out banking business were the only relevant agents in the market which, however, was not very active. The Securities Act does not give any definition of securities firm; it rather gives a definition of securities business. According to article 35 of the Act, securities business means “engaging, by way of business, in one or more of the following activities:

- buying, selling, exchanging, subscribing for or underwriting securities, or offering or agreeing to do so as an agent (*i.e.*, brokering);
- buying, selling, exchanging, subscribing for or underwriting securities, or offering or agreeing to do so on its own account (*i.e.*, dealer);
- managing or offering or agreeing to manage securities belonging to another person, on terms under which the manager may hold property of the other person, whether or not at the discretion of the manager (*i.e.*, investment management);
- giving or offering or agreeing to give its investors or potential investors advice on the merits of the purchasing, selling, subscribing for or underwriting securities (*i.e.*, investment advice);
- establishing or managing a collective investment scheme (*i.e.*, fund management);
- providing services for the clearing and settlement of securities transactions;
- providing securities depository, custodian or registration services and;
- any other activity that the Commission deems to constitute securities business for the purpose of this Act”.

The license delivered by the Eastern Caribbean Securities Regulatory Commission (ECSRC) shall specify which types of activity within those that are considered to be securities business, the licensed company will be allowed to carry out, and the company will be restricted to those specific activities. The Act specifies the requirements that companies need to meet to carry out each of the activities described: these are mainly capital adequacy and financial requirements.

There are currently seven full broker dealers licensed by the ECSRC with full membership at the ECSE. They are all commercial banks or subsidiaries of commercial banks. Minimum capital and

other requirements of the ECSRC and the ECSE have limited participation to institutions that have the capability, infrastructure and necessary capital to engage in this business.

There are no branches or subsidiaries of foreign brokerage firms operating as members of the ECSE. However, the ECSRC may have licensed some primarily for underwriting purposes. The same will have to be ascertained from the ECSRC.

### **2.3.2 Exchanges**

Established on 19th October 2001, the ECSE is a regional electronic securities exchange designed to facilitate the buying and selling of financial products, including corporate stocks and bonds and government securities, for the eight member territories. The ECSE is a self-regulatory organization and has developed a set of by-laws that together with its operational rules govern and monitor exchange-related activities. The majority of its shares will always be owned by the private sector.

The ECSE is designed to facilitate the buying and selling of financial products, including corporate stocks and bonds and government securities for the ECCU Member Countries in the first instance.

Two other market institutions, the Eastern Caribbean Central Securities Depository Ltd (ECCSD) and the Eastern Caribbean Central Securities Registry Ltd (ECCSR), are wholly owned subsidiaries of the ECSE.

#### **2.3.2.1 Regional Government Securities Market**

The Regional Government Securities Market (RGSM) leverages the technological platform that has been developed for the ECSM. The basic objective for the RGSM development initiative is the establishment of a fully functional and efficient regional market to meet the financing needs of the Member Governments of the Currency Union as they pursue their development objectives.

Prior to the development of the Regional Government Securities Markets, the markets for government securities in Member States were characterized as rudimentary and segmented, with little or no cross-border participation. They were largely primary markets, with limited opportunity for secondary trading beyond the ECCB-operated secondary Treasury Bill Market, accessible only to clearing banks. Rates were fixed and were not market-determined, hence did not reflect information regarding risk.

The RGSM seeks to integrate these fragmented markets, creating a single regional market to facilitate the cross-border issue and secondary trading of government securities. The removal of the existing impediments should result in a shift in the holder base, which mainly comprise institutional investors.

The ECCB acts as fiscal agent to the RGSM. As such, the ECCB advises governments participating in the RGSM on the type, timing and terms and conditions for the issuance of securities, within the context of sound debt management policies. The ECCB also undertakes administrative duties associated with the issuance of securities on the ECSE. However, each Government is fully responsible for the securities that it issues.

Providing oversight to the RGSM is the Regional Debt Coordinating Committee (RDCC). The RDCC is comprised of the head of the Ministry of Finance (Financial Secretaries/Directors of Finance) from each of the eight countries. The RDCC is responsible for formulating rules to direct the conduct of all Member Governments operating in the RGSM. This oversight body has been set up to ensure that the RGSM operates efficiently, and within the context of harmonized policies and procedures.

The RDCC requires that before going to market for each primary issue, Government must provide investors with relevant, timely, accurate and adequate information about the securities that are being issued to the public, as well as information about the issuing Government. These disclosure requirements have been put in place to ensure that prospective investors have access to the information required for making informed investment decisions.

To ensure cohesion and standardization in the regulatory structure as well as market integrity, an agreement between the RDCC and the Commission has been formalized that allows for coordination of regulatory matters as they pertain to the RGSM.

### **2.3.2.2 Eastern Caribbean Enterprise Fund**

The ECCB has proposed the establishment of the Eastern Caribbean Enterprise Fund (ECEP) as a regional investment/venture capital fund, which will access domestic and international capital for private sector development. It is proposed that the ECEP would provide both equity and loan capital, directly or indirectly through other institutions, for all aspects of private sector enterprise development. The fund would also focus on the critical area of entrepreneurship development, including training initiatives, business advisory services, and other areas of technical assistance and support. One of the objectives would be to nurture new and existing companies in order to facilitate their graduation to a public listing on the ECSE.

The full participation of the domestic, regional and international financial institutions and development agencies, in providing capital resources is also envisaged.

### **2.3.2.3 Eastern Caribbean Unit Trust**

In general, the Eastern Caribbean Unit Trust (ECUT) will allow the smaller investor to acquire an interest in a large pool of assets, which would normally be unavailable, given the size of their investment funds. It would provide a greater degree of diversification to reduce the overall risk. The benefits of the pooling arrangements and professional management should also result in higher returns that might otherwise be possible.

The ECCB sees the ECUT as an important element of its market initiatives, both in terms of the inclusion of all of the peoples in the region, as well as the efficient mobilization of resources and

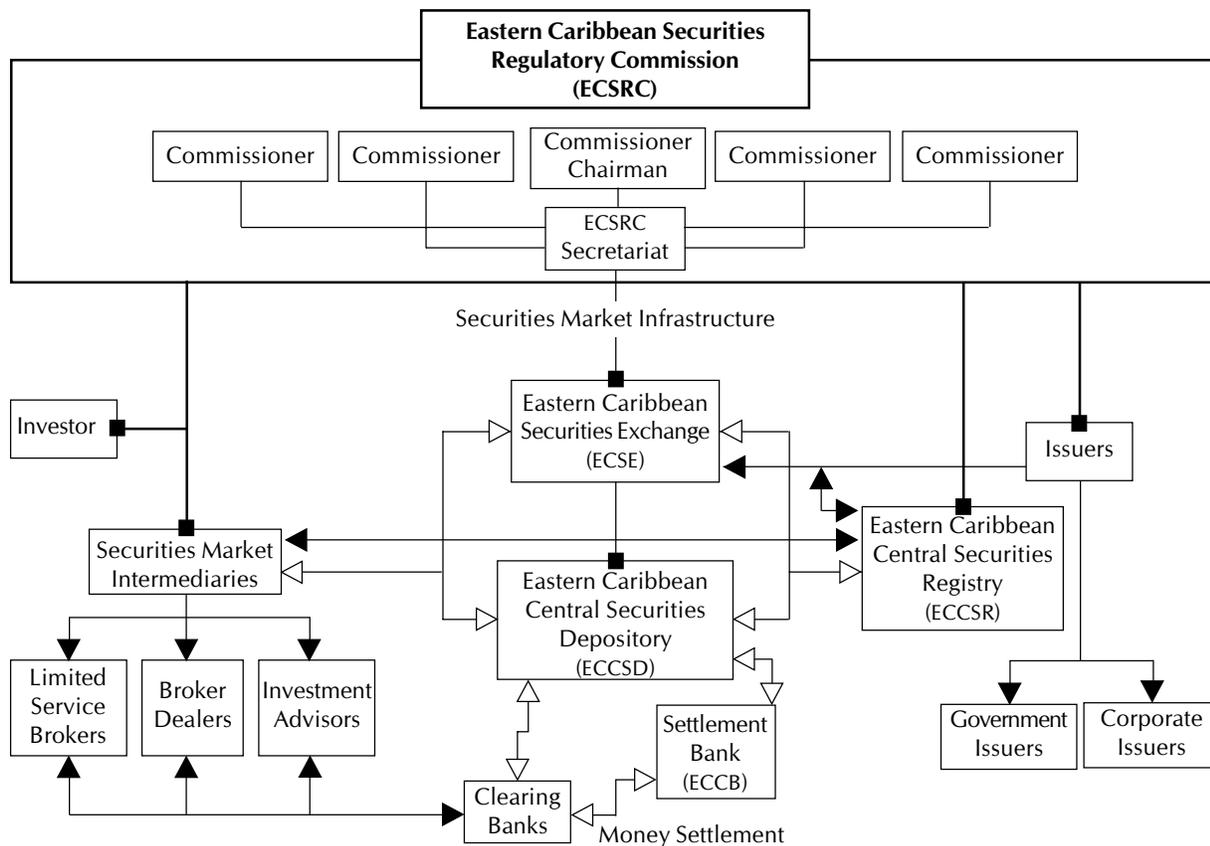
their allocation to productive purposes. The development of this institution is to be sequenced at the most appropriate stage of the market development to assure its viability.

### 2.3.3 Clearance and Settlement Institutions

The Eastern Caribbean Central Securities Depository (ECCSD) is owned by the ECSE. Its major function is to provide clearance and settlement of trades transacted on the ECSE. The main participants on the ECCSD are broker/dealers, limited service brokers and custodians. The ECCSD provides services to participant intermediaries and processes transactions for trades reported by the Exchange or other markets. Custody services are also being provided to those entities that wish to hold securities at the ECCSD on behalf of their customers, for example custodian banks for foreign investors.

## 2.4 MARKET STRUCTURE AND REGULATION

**Chart 2: Securities Market Structure**  
**Eastern Caribbean Securities Market Structure**  
**Functional Chart**



## 2.5 THE ROLE OF THE CENTRAL BANK

### 2.5.1 Monetary Policy and Other Functions

The 1983 ECCB Agreement establishes the Eastern Caribbean Central Bank, which generally has powers to issue and manage the common currency of the member territories (EC Dollar), to safeguard its international value, to promote monetary stability and a sound financial structure, and to further the economic development of the member territories. The Agreement has the force of law in each of the eight member territories. Article 36 of the Agreement Act states that the ECCB may at a suitable time in conjunction with other banks organize clearing houses in such places as may be desirable.

The most relevant articles of the 1983 ECCB Agreement are the following:

- Article 3 paragraph 2 (e) gives the ECCB the power to “regulate banking business on behalf of and in collaboration with Participating Governments”.
- Article 4 paragraph 4 states one of the purposes of the ECCB is “to promote credit and exchange conditions and a sound financial structure conducive to the balanced growth and development of the economies of the territories of the Participating Governments”.
- Article 5 also gives the ECCB special emergency powers to take such action as it deems necessary to protect the depositors and creditors of a financial institution, including the assumption of control, the acquisition and sale of assets, and restructuring of financial institutions.
- Article 36 states that “the ECCB may at a suitable time in conjunction with other banks organize clearinghouses in such places as may be desirable”.
- Article 41 paragraph 2 empowers The ECCB to monitor the operations of offshore financial institutions in accordance with the laws or regulations under which such financial institutions have been licensed to operate.

The Agreement also empowers the ECCB to require financial institutions to maintain non-interest bearing reserve requirements. The current reserve requirement is six per cent, calculated on a weekly averaging basis. In order to meet their reserve requirement, banks can borrow from the ECCB at a penal rate (five percentage points above the Central Bank’s discount rate). The Act also empowers the ECCB to prescribe a range of selective controls such as interest rates and credit ceilings and to impose a reporting requirement on financial institutions.

More specifically, article 4 of the ECCB Agreement states that “The purposes of the ECCB are: to regulate the availability of money and credit, to promote and maintain monetary stability, to promote credit and exchange conditions and a sound financial structure conducive to the balanced growth and development of the economies of the territories; and to actively promote through means

consistent with its other objectives the economic development of the territories of the Participating Governments”.

To maintain the stability of the EC\$, the ECCB keeps an External Reserve in an amount not less than sixty per cent of the value of the currency issued and in circulation and other demand liabilities.

Within the framework established by the ECCB Agreement, the Central Bank provides lending to commercial banks through the Unlisted Treasury Bills discount facility, redeeming these instruments that it had previously sold to them on the secondary market for unlisted treasury bills, as well as collateralized advances for periods up to ninety-one days. Regarding advances to Participating Governments, the Agreement sets specific guidelines within which the Central Bank can acquire notes, bills, securities or other evidence of credit issued or guaranteed by any Participating Government.

The ECCB continues to play a minor facilitating role in the interbank money market it formerly operated. It also plays a key role in the secondary market for unlisted treasury bills, selling to banks bills it has previously acquired from the issuing Governments; the Central Bank stands ready to re-buy the bills from banks through the Unlisted Treasury Bill discount facility and to re-sell them to other banks.

As regards the foreign exchange market, the Central Bank deals with licensed banks buying and selling EC\$ against USD with no limit and at a spread around the fixed rate of EC\$2.70. There are also dealings in a wide range of other regional and international currencies, including the Great Britain Pound Sterling, the Canadian Dollar, the Barbados Dollar, the Guyanese Dollar and the Euro.

### **2.5.2 Payments System Oversight**

In most cases, the ECCB Agreement does not give explicit powers to the ECCB with respect to oversight and control of the payments system.

Given the simple structure of the ECCU payment system, the ECCB has not felt the need to oversee it until now, not even through its Supervision Department. In the future, with the development of the financial system and the payments system, it is understood that forms of control specifically addressing payment systems will be necessary.

The ECCB will seek to provide payment system oversight and regulations in order to develop effective, efficient, reliable, accessible and secure payment systems that serve the needs of the ECCU and support a competitive private sector environment. Some degree of oversight implementation is expected to take place in 2004 as part of the FIRST Initiative technical assistance project.

## **2.6 THE ROLE OF THE BANKING SUPERVISION AUTHORITY**

The most powerful instrument under the Uniform Banking Act is the authority to grant a license to a financial institution to conduct banking business and to withdraw such a license. In order to

qualify for and retain the banking license, the financial institution must observe certain prudential requirements.

The Act includes provisions for the audit of the annual financial statements of a licensed financial institution, the provision and publication of audited financial statements and of other banking information. Matters relating to the conduct of the owners, management, officers and staff, and others concerned with the management of a financial institution are clearly spelt out. It also covers management's relationship with the Central Bank and compliance with the requirements of the Act.

The Banking Act sets out procedures for the liquidation, receivership or reorganization of a financial institution. The rights of depositors and creditors in the event of liquidation, receivership or reorganization are protected by the Act. The financial institution also retains the right to petition the High Court to revoke any proceedings related to liquidation, receivership or reorganization of the institution. The Act makes provisions for the classification of abandoned property and the handling of all such properties.

Finally, the Act sets out the condition, which may lead to the revocation of a license to carry on banking business and the procedures to initiate such revocation. Apart from the authority to revoke a license the Act specifies a range of sanctions and penalties related to breaches of the requirements of the Act. These sanctions and penalties include fines, confinements and disqualification from carrying on banking business.

An important feature of the Banking Act is the flexibility provided by the ability to introduce regulations and orders as exigencies arise. Section 33 gives the Minister of Finance the power to make such regulations as may be required from time to time for giving effect to the provisions of the Act, upon the recommendation of the Central Bank. Although the ECCB recognizes that regulations are very effective tools given that they have the force of law, these have been used sparingly (to date) in the ECCB Area.

The Act also empowers the Ministers of Finance, acting in consultation with and on the recommendation of the Central Bank, to issue orders to amend or extend certain provisions of the Act. For example, orders could be issued to change the requirements for licensing, the capital adequacy provisions, the terms and conditions for involvement in restricted activities, maintenance of specified assets, the requirement for audit and publication of financial information and the institutions to which the Banking Act applies.

### **2.6.1 Supervision of Financial Entities**

According to the Banking Act, the ECCB is responsible for the supervision of the financial system. The Act applies to banks, financial institutions and finance companies.<sup>3</sup> The ultimate authority in the application of the Act is the Minister of Finance who can resort to regulations and orders to give

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<sup>3</sup> The scope of application of the Banking Act was extended to finance companies through an order of the Minister of Finance. The minimum capital level a finance company should maintain is one million EC\$.

effect to the provisions of the Act. Both regulations and orders have the force of law, but while regulations are issued upon recommendation of the central bank, the latter is also consulted before an order is issued.

In carrying out banking supervision the ECCB pursues the soundness, solvency, safety and reliability of financial institutions as well as the maintenance of confidence in the financial system. A hybrid approach is adopted in performing the function i.e., off-site surveillance and on-site examination techniques are combined and may be followed by supervisory action.

The Central Bank adopts a consultative and cooperative approach to banking supervision. While ensuring soundness and stability, it also takes into account the interests and aspirations of the industry. Such an approach can be taken to avoid regulation. A clear example of this is the frequent recourse to prudential guidelines in lieu of issuing regulations: prudential guidelines, though not having the force of law, have been extensively and successfully used by the central bank and they are adhered to by institutions as it is understood that they could be transposed into regulations in case of need. Compliance with prudential guidelines is also to be ascribed to the fact that, before they are brought into force, they are circulated to the industry for comments and discussion.<sup>4</sup> In recent years, the ECCB has also introduced a system of prudential meetings with the management of the commercial banks. At these meetings, which are convened quarterly, issues relating to the performance of the subject institution, management strategy and other pertinent areas are discussed in a frank and open manner in a non-threatening setting. A major Annual Conference of Commercial Banks is also convened. Each year a theme consistent with the Bank's major policy objectives is chosen, and the conference proceedings are focused around this theme. This has proved to be a very effective mechanism to promote the "buy-in" by the industry to these policies.

The Bank Performance Report is an analytical tool produced by the ECCB for supervisory purposes, including on-site examinations and inspections, off-site surveillance and monitoring, and analyses performed in connection with applications filed with the ECCB regarding mergers, acquisitions, and other matters. The bank performance reports are designed to assist analysts and examiners in determining a bank's financial condition and performance based on financial statements, comparative ratios, trend analyses, and percentile ranks relative to its peers.

The supervisory process may be completed by supervisory actions to correct specific problems that have been identified during the on-site examination of a financial institution. Such actions may be the following:

- Commitment Letter: used when the problems do not represent an immediate threat to the institution, which is drafted by the ECCB and signed by the Board of Directors of the institution concerned and enumerates the problems and lays down a remedy plan.
- Memorandum of Understanding: the problem is not an immediate threat to the institution which is deemed to be willing to cooperate, which details the institution's agreement to

<sup>4</sup> Guidelines have been issued to regulate aspects of financial institutions' operations related to, *inter alia*, risk-based capital adequacy requirements, large credit exposures, loan loss provisioning, and suspension of interest accrual.

take certain actions within specific time periods to correct violations of law or unsound practices.

- **Formal Agreement:** signed when problems are not too severe and the management wants to cooperate.<sup>5</sup>
- **Cease and Desist Order:** through which the ECCB brings the problem (which should be severe) to the attention of the Board of the institution and specifies the corrective actions to be taken.<sup>6</sup>
- **Capital Directive:** which establishes higher capital requirements for the single institution who is required to achieve these levels; removal and suspension of a director or officer in case of a particularly serious violation of law, unsafe or unsound practice, violation of a cease and desist order, or other breach of duty.

The ECCB may initiate action to remove and, if necessary to protect the institution, may suspend a director or officer for a particularly serious violation of law, unsafe and unsound practice, violation of a cease and desist order, or other breach of duty. A suspension is an interim procedure that maybe used by the ECCB while removal proceedings are underway to protect the institution and its depositors from an immediate threat. To remove an individual, the ECCB must show that an improper act was committed and that the institution has suffered or probably will suffer financial loss or other damage, that the person has received financial gain, or that the depositors' interest could be prejudiced, and that the act involved personal dishonesty or demonstrated willful or continuing disregard for the safety and soundness of the institution.

### **2.6.2 Anti-Money Laundering Measures**

The preliminary assessment of the compliance of member territories with Anti-Money Laundering and Combating the Financing of Terrorism showed that the legal framework in Antigua and Barbuda met most of the standards for compliance. Significant effort needs to be expended by the other territories to bring about compliance.

Antigua and Barbuda has been accepted as a member of the Egmont Group of Financial Intelligence Units. The Financial Intelligence Unit Act 2003 was passed in Grenada to provide for the establishment of a Financial Intelligence Unit to handle suspicious activity reports, a function which was previously performed by the Supervisory Authority appointed under the Money Laundering (Prevention) Act. The Financial Intelligence Unit in St Lucia has not yet been established following the passage of the enabling legislation.

The ECCB recognizes that money laundering is a very serious issue that can pose a number of risks to financial institutions. The inability of a financial institution to deal effectively with money

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<sup>5</sup> The formal agreement differs from the Memorandum of Understanding because the central bank may impose money penalties for any violation of the agreement.

<sup>6</sup> The central bank will ask consent of the Board to the order and once it has been given, members of the Board are responsible for compliance.

laundering due to the absence of internal policies to detect and report potential money laundering transactions (including compliance with legal requirements to combat the problem) can have a negative impact on a financial institution's reputation and, consequently, on its ability to carry on business.

Financial institutions that fail to implement adequate measures (policies and procedures) in relation to the prevention of money laundering are exposed to potentially serious regulatory intervention initiatives.

Procedures used daily to prevent errors and violation, identify suspicious activity, ensure data integrity and maintain record-keeping requirements should include, but not limited to:

- Comprehensive, sound, and fully implemented policies and procedures.
- Monitoring and detection procedure to identify and report suspicious activity.
- Comprehensive requirements for obtaining and verifying identification and documentation when opening accounts and establishing other customer relationships.
- Comprehensive monitoring of activity in high-risk accounts, products and services.
- Comprehensive monitoring of accounts and transactions involving money laundering haven countries or jurisdictions.

## **2.7 THE ROLE OF THE SECURITIES REGULATOR**

The Eastern Caribbean Securities Regulatory Commission (ECSRC) is the regulatory authority, charged under the Securities Act, with full and ultimate responsibility for the safe and sound operation of the market and for investor protection. It has the following objectives:

- to license persons engaged in securities business and to monitor and supervise the conduct of such business by a licensee;
- to ensure investor protection through promotion of the highest standards of professional and other activity within the securities market;
- to maintain effective compliance and enforcement programs supported by adequate statutory powers; and
- to promote the growth and development of the capital market.

All public companies within the region have to re-register with the ECSRC. Similarly, all new companies wishing to raise capital through a public offering will also need to register with the ECSRC. The corporate securities market is regulated by the ECSRC. The RDCC regulates the RGSM with support from the ECSRC.

The ECCB is providing technical and administrative support to the Commission, which has been formalized under the terms of a Memorandum of Understanding. Under this arrangement, the ECCB provides a technical secretariat within its Bank Supervision Department, to handle the day-to-day operations of the ECSRC and to assist the Commissioners in carrying out their mandate.

The Commission is now fully functional and has appointed the Senior Director of the Bank Supervision Department as its Secretary. The ECCB has established the capacity within that Department to provide the support to the Commission through the creation of a separate Securities Regulatory Unit, headed by a Deputy Director, in the Bank Supervision Department.

## **2.8 THE ROLE OF OTHER PRIVATE AND PUBLIC SECTOR ENTITIES**

Apart from the ECCB and the ECSRC, no other public body plays an important role in payments and securities services. The Ministries of Finance of the participating governments may affect the organization and functioning of these sectors through the powers conferred upon them by the relevant legislation, but are neither directly involved as providers nor as users in the systems.

With regard to private sector bodies, bankers' associations are not yet very active. In recent times, however, steps have been taken to establish an ECCU Bankers' Association that will be locally incorporated in all member countries. It is expected that ECCU Bankers' Association will be formed in 2004, representing all banks on the ECCU Payment Council. Meanwhile, locally incorporated banks are members of a wider Caribbean Association of Indigenous Banks.

### **3 PAYMENT MEDIA USED BY NON-FINANCIAL ENTITIES**

Cash and cheques are the major forms of making payments in the ECCU. Debit and credit cards have recently been introduced but are not yet widely used within the region.

#### **3.1 CASH**

The ECCU is a unique arrangement of eight countries that have agreed to have a single economic covenant, but still retain some degree of autonomy on a number of other matters that affect the payment system. The currency used is the Eastern Caribbean Dollar (EC\$). Coin and bill issuance is an exclusive right of the ECCB. None of the participating countries or any other legal or natural person can issue payment instruments circulating as legal tender. The EC Dollar is divided into one hundred cents. At present, the monetary issuance consists of bills ranging in denomination from five to one hundred dollars and coins from one cent to one dollar.

Generally, cash is used for low value transactions and cheques for larger value transactions. As of 31 December 2002, total currency in the hands of the public amounted to EC\$6.7 billion, equivalent to 84.8 per cent of GDP.

The only foreign currency frequently circulating in the ECCU is the US Dollar (USD). Although not a general practice throughout the currency union, some commercial establishments, especially those related to tourism activities, accept transactions directly in this currency at a rate that ranges between 2.65 and 2.70. The ECCB foreign reserves are mostly denominated in USD. At 31 December 2002, these foreign reserves amounted to USD 0.5 billion.

#### **3.2 PAYMENT MEANS AND INSTRUMENTS OTHER THAN CASH**

While banks in the ECCU are making progress using technology to contain some of their operating costs and exploit local services, there is no infrastructure that allows transparency between the merchant, the bank and the retail customer. In addition, there is no interbank multilateral settlement arrangement for electronic transactions involving EC dollars. A merchant is unable to accept any bank debit or credit card and be confident that his account will be credited shortly after authorization of the transaction, regardless of which bank issued the card. However, collaborative work is being undertaken by the Central Bank and the banking community in the context of the Payment Council framework, in an effort to address this situation.

Further, there exist high Visa or MasterCard fees for international settlement when the transaction involves only EC dollars. Although there is not yet a publicly stated goal to reduce reliance on currency through an effective non-cash electronic payment system, the Central Bank and the retail payment system stakeholders are actively pursuing the implementation of a regional debit switch. The aim is to achieve greater efficiencies in cost and clearance and settlement time for retail payments, particularly inter-island items.

Besides cash, cheques, credit and debit cards are generally used as payment means in the ECCU. In spite of the growing popularity of the debit card there is very little statistical data about usage.

### **3.2.1 Cheques**

It is unclear whether the debit card or the cheque is the most widely used non-cash instrument. However, very few POS transactions for the debit card were reported to be occurring as the greatest use for the debit card is for cash withdrawals from ATMs. Thus, the cheque is probably the most commonly used non-cash payment instrument. Most cheques are drawn and cleared locally.

There are over 500,000 cheques cleared between banks on a monthly basis (averaging 25,000 per day) among the eight countries. Less than one tenth of one percent of cheques are for inter-country payments since they are cleared through the postal system, which may take up to four weeks to assure availability of funds. The foreign banks operating in the country clear cheques among their branches in a matter of a day or two because of their more advanced integrated operational systems, but the indigenous banks do not have the interconnection with each other for expedited clearing and settlement.

### **3.2.2 Direct Credit/Debits**

There is no interbank arrangement for the direct deposit of payrolls. Some companies require their employees to maintain accounts at the banks where the company does business. Some banks will provide other banks with a listing of payroll credits and a cheque to facilitate the process for interbank direct deposit of payroll, but often this takes an extra day for the customer to receive the payroll funds. Some banks refuse to accept the payroll entries for other banks and then the company must create a payroll cheque for those employees who maintain accounts at banks other than where the company maintains an account. There are certain employees that banks do not wish to accommodate because there is little profitability in maintaining these types of accounts.

There is no electronic interbank direct debit capability. The ATM debit and POS debit transactions go to the bank where both the customer and merchant have an account. Utilities are beginning to accept debit cards as payment for services. This approach requires the utility to maintain an account with each bank in the country where they provide service to obtain timely credit. They would welcome the opportunity to have an interbank direct debit authorization service or to make a monthly charge to a customer's account without having to maintain an account with each bank or process and deposit paper cheques. Use of an electronic direct debit approach would require bilateral agreements between the user, banks and the utility.

### **3.2.3 Payment Cards**

Most banks have been installing ATMs over the past few years. Since there has been no coordination, they have been developing proprietary networks and processes to operate their ATMs. As a result, users of ATM services are generally restricted to the bank where they maintain an account. However, the foreign banks allow their customers in one country to have access to the bank's ATMs in another

country where they are located and also throughout the world. The indigenous banks have limited inter-operability among the ATMs of the different banks in the other ECCU countries unless there are special arrangements in place. More recently, this interoperability arrangement is beginning to move forward through the use of internationally branded (e.g., Visa, MasterCard, etc.) debit cards to acquire cash from ATMs or pay for goods using EFTPOS terminals. However, the costs are unduly high because of the settlement fees.

The trend in the ECCU is toward debit cards to facilitate the reduction of banking floor traffic for the withdrawal of funds through ATMs rather than using cheques. Some companies that have moved forward with direct deposit of payroll funds encourage their employees to obtain a debit card for withdrawals of cash to reduce the time away from work. However, some customers are restricted to the services of one bank unless they have a card that allows for inter-operability. One foreign bank is moving in that direction and will assess a modest fee for a withdrawal of local currency from an ATM for the customer of another bank with an international branded debit card. It was reported that one bank is encouraging its customers to use ATMs by offering a rebate of EC50 cents per transaction with a monthly maximum of EC\$5 to reduce banking floor traffic. During discussions with banks it was noted that, on average, debit cards are used one or two times per month. Most bankers estimated about 75 to 85 percent of their account holders had the availability of a debit card.

With regard to credit cards, some bankers suggested the number was quite low and that there was a high use for international Internet purchases rather than for local ATM transactions or EFTPOS purchases.

### **3.3 NON-CASH GOVERNMENT PAYMENTS**

There is no interbank arrangement for the direct deposit of pension payments. Some governments participate in direct deposit of payrolls and send listings to each of the banks where employees have accounts. They would welcome an electronic distribution system for payroll and pension payments.

## **4 PAYMENTS: INTERBANK EXCHANGE AND SETTLEMENT CIRCUITS**

### **4.1 THE REGULATORY FRAMEWORK FOR CLEARINGHOUSES**

Article 36 of the ECCB Agreement states that “The ECCB may at a suitable time in conjunction with other banks organize clearinghouses in such places as may be desirable”. In accordance with this provision, the ECCB established a clearinghouse in each of the eight territories for the clearance of cheques, drafts, money orders, clearing vouchers and acceptances and in which only the Central Bank and commercial banks are allowed to participate.

### **4.2 LOW VALUE PAYMENT TRANSFER SYSTEMS**

#### **4.2.1 Cheque Clearance and Settlement**

The retail banking payment activity in the ECCU is based mainly on cheques. Approximately 7 million items are exchanged per year.

A clearinghouse, operated by the ECCB and in which only banks participate, is established in each territory; through the management of the clearing houses the Central Bank provides for the clearing of intra-island cheques. The Central Bank provides settlement services: it manages banks’ current accounts through which interbank payments and clearinghouse “due-from” and “due-to” positions are settled. Currently, settlement takes place in ‘near real time’ (settlement lag of up to 45 minutes) through a recently installed banking and accounting application called GLOBUS. Current accounts are combined with reserve accounts from which banks can, under article 33 (3) (iv) of the ECCB Agreement, temporarily withdraw funds “for the clearance of cheques and the settlement of balances among financial institutions”.

Representatives of banks must attend the clearing which starts at 9.30 a.m. (except in St Vincent and the Grenadines where it starts at 8:30 a.m.). If a representative arrives more than 10 minutes late, the Superintendent of the Clearinghouse reserves the right to fine the bank, and the bank may not be allowed to present instruments drawn on other banks but is obliged to take delivery of all the instruments presented by other banks.

Banks are required to prepare a list of all the instruments they are presenting for clearing (due-from form); the accuracy of such list is under the responsibility of the presenting bank. Errors are settled between the banks concerned upon the advice of the ECCB. Instruments are then exchanged and a “due-to form” is compiled by each bank; the difference between the due-from and the due-to forms represents the net balance which is debited or credited on the accounts held by banks at the Central Bank. These accounts should not be overdrawn and should always guarantee the settlement of the clearing balances.

Instruments that are for any reason unpaid can be returned, but the reason for return must be specified. A distinction is made between instruments that are returned to a collecting town bank

and instruments returned to a collecting out-of-town bank. In the former case instruments must be returned by 11.00 a.m. of the working day following presentation at the clearings; in the case of latter, not later than 11.00 a.m. four working days after presentation.

The clearing of “intra-territory” cheques by the Clearinghouse seems to be satisfactory, with the settlement taking place, under normal circumstances, on the day following the presentation of the instrument by the customer to the bank. On the contrary, the situation of inter-island cheques is not satisfactory due to the long delays and high costs involved.

Instruments for an amount of \$50,000 or more can be presented directly to the drawee bank for settlement on its account at the ECCB. This is referred to as a “Special Clearing” which is settled near real time on the gross settlement system; a migration to real time is expected in 2004 (see Section 4.3 below).

#### **4.2.2 Payment Cards**

A Credit card company, “4C’s”, owned by 13 indigenous banks, is processing Credit Cards transactions (Visa and MasterCard) for its members. Approximately 16,000 cards have been issued for 10,000 clients. Around 120,000 cardholders’ transactions were processed in 1999, 80 percent of which were foreign transactions.

Around 43 ATMs and 850 merchants accept international cards for a total of 150,000 transactions per year, a large share of which corresponds to foreign cardholders’ transactions. Card transactions in EC\$ are based mainly on paper-slip processing and not on electronic procedures due to technical specifications and financial arrangements between 4Cs and the commercial banks. Local ATM cards’ use is restricted to the network of the issuing bank. A scheme for the installation by 4Cs of an inter-island common network for debit cards is envisaged but no decision has been taken yet. Some large local banks have projects to launch soon their own proprietary debit card scheme.

Direct debit for bill payments and direct credits are in the start-up phase and do not represent a significant share of payment activity.

### **4.3 LARGE VALUE PAYMENT TRANSFER SYSTEMS**

The ECCB operates a gross settlement system with real-time capability. However, there is settlement lag of up to 45 minutes due to the ECCB’s current processing arrangements. The technological platform is provided by Globus, a banking and accounting application developed by Temenos USA, Inc. In addition to supporting the ECCB accounting operations, Globus processes and records commercial bank transactions in an “on-line, real-time” mode. Transactions, when manually authorized by ECCB staff, are posted directly to the bank’s current account. ECCB staff considers the transactions final and irrevocable when posted. Authorized users, using dial up access at their expense, are able to view their balances and recent transactions (for up to two days) on demand. The Globus system also provides support for the multilateral net settlement of the cheque clearing operation that occurs in each of the eight ECCU countries and the Securities Exchange. In total there are, on average, 125 payment transactions per day processed by Globus.

The Globus system became operational in June 2000. In 2001, a modification was installed to deliver advice and confirmation information, upon request, from the Globus software system straight through to the commercial banks. Globus interfaces directly with the SWIFT system as a delivery mechanism for those advices. Currently an upgrade program is underway, to reduce settlement lag in the system, thus achieving full real time functionality. The target date for the upgrade to this capability is September 2004. In this new arrangement, all payments/transfers including cross-border, will move seamlessly through the system.

#### **4.4 CROSS-BORDER PAYMENT SETTLEMENT SYSTEMS**

As the ECCU consists of 8 territories, cross border in this case means transactions with banks outside of the Currency Union. These transactions are managed mainly through correspondent banks. It may take up to 6 weeks to clear a foreign currency denominated cheque drawn on a foreign bank.

Regarding the transfer of currency balances, settlement at the accounts at the ECCB currently takes place "near real-time".

#### **4.5 MAJOR PROJECTS AND POLICIES BEING IMPLEMENTED**

The ECCB is currently improving the payment system as a whole. Immediate attention is being given to the large/gross settlement system with a view to:

- Automating inward delivery of all messages into the integrated accounting/banking module.
- Straight through processing for all gross settlement instructions within the region.
- Straight through processing for cross-border payments both regionally and internationally generated.
- Straight through processing for the settlement of securities (T + 1) by integrating functionalities between systems.

Additionally, the ECCB in collaboration with the commercial banks is developing an integrated banking/payment system with functionalities including interoperability at ATMs and POS systems, and an ACH to handle electronic payment instruments as well as the clearance and settlement of cheques.

##### **4.5.1 Upgrading the Capability of the Gross Settlement System**

This system is systemically important to the whole economy of the ECCU. In terms of settlement efficiency, it already meets the minimum standard stipulated by the Core Principles for Systemically Important Payment Systems.

At a meeting of Senior Management (December 2002), a decision was taken for the gross system to deliver straight through processing (STP) on all payments/transfers. This is to be achieved on a

staged implementation basis, starting with commercial banks' transfers (2004). Afterwards (in 2005), member governments and foreign counterparties will be brought online. Apart from the settlement efficiency, a key benefit of the implementation of STP is the minimization of operational risk to the extent that the processes are fully automated.

The technical solutions will be provided through the maximization of technologies currently owned by the ECCB, Globus and SWIFT. These solutions are: implementation of a SWIFT/Globus interface to facilitate automated message delivery into and out of Globus and an expanded usage of the Globus Banking Application at the client level, vis-à-vis remote input and authorization of clients' own payments/transfers.

Based on the key business requirements of the proposed real time gross settlement (RTGS) system outlined below, the proposed architecture is as follows:

- SWIFT/Globus interface for automated inward delivery of payment instructions from commercial banks and foreign counterparties. In the short term, this option would serve as the primary RTGS solution for commercial banks but in the future would play a back-up role for RTGS resiliency. Discussions with IT consultants have begun, and implementation is targeted for the end of 2004.
- Globus remote access across the virtual private network (VPN) is the broader based RTGS solution to be implemented over a longer term on a phased implementation basis (governments and statutory bodies, ECCSD, ECHMB and then commercial banks). Regarding commercial banks' primary access to the Central Bank operated gross settlement system, analysis shows that the business objectives of the payment system improvement project are best met with the implementation of Globus Remote Access via the VPN.
- The project proposes the implementation of both RTGS options. First, the SWIFT/Globus interface to bring commercial banks online within the context of STP. Secondly, Globus Remote Access via the VPN to integrate the entire ECCU payment system in a STP context. When the Globus Remote Access across the VPN is implemented, the SWIFT/Globus Interface solution would provide redundancy in the system for the processing of commercial banks' payments and transfers.

The key business factors/requirements of the proposed RTGS system, determined by the Banking and Monetary Operations Department of the ECCB, are as follows:

- The highest level of settlement efficiency in the RTGS should be aimed for through the implementation of STP for incoming payment/transfer instructions.
- Business continuity guarantee offered to clients. The ECCB should aim to offer a 100 percent guarantee to clients regarding the reliability of the RTGS.
- Business resumption guarantee offered to clients. It has been agreed that the performance level for full system recovery should be 1 hour.

- It was agreed that the robustness and integrity of the RTGS should be demonstrated by a zero tolerance for loss of payment instructions as a result of technical failure.
- Regarding settlement finality, it has been agreed that payment finality and irrevocability is defined or deemed to have occurred when transfer of value has been recorded on the ECCB's books.
- Regarding access, it has been agreed that consideration should be given to the inclusion of all of the ECCB's clients (*i.e.*, commercial banks, governments, statutory bodies, ECSE, ECHMB). The inclusion should be implemented on a phased basis, starting with the commercial banks.
- As for foreign currency transactions, it has been agreed that the RTGS should be designed to facilitate STP for foreign currency payments/transfers; the technical capability should be built in concurrently with the other enhancements to the system. However, the timing for operational implementation (going live) for the processing of foreign currency payments/transfers on a STP basis should be phased/delayed until careful analysis of the exchange rate guarantee arrangement for the GBP and CAD is undertaken.
- The RTGS should be open/available to clients from 8:00 a.m. to 3:00 p.m. to effect payments/transfers.
- Regarding the inclusion of some type of queuing arrangement for the RTGS, it has been agreed that a decentralized queuing arrangement be adopted; banks would be responsible for managing their own payments from own their available funds.
- The RTGS should provide real time information on the payments processed and settlement account balances or positions and also settlement (debit and credit) confirmation. All this information is key not only to efficient liquidity management by clients but also to the desired decentralized payment queuing arrangement,
- It has been agreed that consideration should be given to adopting a cost recovery approach at least for operational costs in the first instance. Recovery of capital costs should be a future/longer term objective.
- Regarding settlement conditions and payment rejection, it has been agreed that the RTGS should be configured to automatically reject payment/transfer requests if any of the following conditions are present: not sufficient funds, backdated local currency transactions, or non-legit account numbers. The timeframe for informing the participant of a rejected payment instruction should be real time.

#### **4.5.1.1 Options for Straight Through Processing**

The ECCB wants to provide banks with the capability to input their transactions directly to the GLOBUS system for processing. Currently, the ECCB receives transfer requests by fax or SWIFT from the banks. The proposed concept would allow for STP by the ECCB.

There are two approaches being considered to receive transfer requests from the banks. One is to receive transfer requests over the SWIFT system with a direct interface to Globus for processing the data and the other is to develop an internet-based VPN, which would be application independent. Both have distinct capabilities.

The first concept would have the Globus system receiving the request from the SWIFT network. Globus would automatically read and verify the authenticity of an incoming transaction. It would then take the contents of the message and process the data as if it was a transaction entered by ECCB staff. The system would then advise the receiving bank about the credit to its account and related beneficiary data. While the interface to SWIFT currently exists for sending advices and payments/transfers, to achieve the STP mode of operation would require modifications to the Globus software to receive and authenticate the validity of incoming messages from the SWIFT network, select the appropriate data elements from the SWIFT message for processing, and to post a transfer of balances between sender and receiver accounts.

The second approach is to use a VPN to allow banks remote access to their accounts for entering, authorizing and reprioritizing transactions in addition to the features currently available under a dial up capability. The clerks at the banks, and other authorized users, would input transaction information directly into the Globus system similar to the data entry, verification and authorization process used at present by ECCB staff. The primary difference is that authorized users would only be able to access their respective account while ECCB staff currently accesses any account. Users entering data would be fully responsible for accuracy of the data and any errors would require resolution on a bilateral basis between the sender and the receiver of the disputed transaction. Banks would enjoy a lower access charge since the Internet connection would not involve a long distance call from seven countries in the ECCU outside of St. Kitts. This access charge is also considerably lower than the SWIFT usage fee.

In January 2003, the ECCB issued a "Request for Proposal" (RFP) to enhance the capabilities of the Globus software system which would allow commercial banks and other authorized users to directly access their respective accounts at the ECCB.<sup>7</sup> No decision has been reached by the ECCB in selecting a vendor to meet the needs as outlined in the RFP.

On the other hand, in June 2003, the ECCB installed the hardware and software for a VPN with the appropriate security safeguards and unauthorized intrusion detection capabilities. The system was developed by IBM using CISCO hardware for encryption, firewalls and other security safeguards. It is application independent. The ECCB funded the project.

Costs of acquiring either of the previously discussed enhancements (SWIFT inward processing or remote access using the VPN) and installing interfaces to the existing software range from EC\$200,000 to EC\$450,000 in addition to the costs already expensed for the VPN. However, after discussions with the users and based on the volume currently being processed, the ECCB may initially provide

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<sup>7</sup> Some of these features are already available under dial-up arrangements which allow banks to "read only" information for their respective account (i.e., account balances, processed transactions for verification and reconciliation purposes), but does not allow initiation, authorization or reprioritization of transactions.

only one option for accessing GLOBUS by authorized users. It is noted that some authorized users (governments and other statutory bodies) do not have direct access to the SWIFT network.

The amounts for the software installation seem rather high when the current volume of transactions (an average of 50 bank to bank transactions per day) is considered. It is hoped that remote access, at a modest connection cost, will be highly reliable and support an increase in the number of inter-country bank-to-bank transactions. The end result should reduce the time to move funds between countries and improve the availability of funds for customer accounts to facilitate ECCU inter-country business. It should also provide for improved efficiencies with government and other authorized user transactions. The ECCB should accrue some offsetting savings for this software expense through possible staff reductions for internal procedures associated with the need for data entry, verification and assuring data is entered correctly by ECCB staff.

#### **4.5.1.2 Cost Recovery and Pricing**

The ECCB is planning to initiate a study to investigate the feasibility of a pricing scheme; the aim is to reduce the subsidization of payment services and obtain a level of cost recovery. The objective of full cost recovery will be a longer-term development that may occur over several years before it is fully achieved. This is because the ECCB has a goal of implementing a superior payments system for the ECCU and concurrently developing processes that will assure observance of all Core Principles, of which cost recovery is reflected in Core Principle VIII. Once the ECCB agrees (using the Payments Council as an advisory group) on an approach for cost recovery, it intends to disclose its objective through some form of public notification.

The ECCB has already made some substantial investments with the installation of the Globus on line real time accounting software package that is providing the infrastructure for the RTGS system. In addition, enhancements have been implemented and since these costs may be more accounting related than payments related, the ECCB will have to make a decision as to how much should be allocated to the payments arena. Similarly the costs of installing a VPN already funded will need to be reviewed in a similar manner. Analysis of the planned enhancements should be reviewed as a service to banks with consideration as to how implementation costs might be recovered by the payment system. Charges to users could be based on type of access, especially if there are different options, basic services (e.g. account balance, inquiries, etc.) plus a usage (transaction) charge depending on the number of transactions.

The current ECCB volume does not lend itself to rapid cost recovery and effort will be needed to make sure the authorized users understand the value of the payment system and the prices assessed. This will require an extensive educational process to assure bankers understand how they may provide increased value to their customers through improved availability of funds. Moving from a free service to a priced service often increases cost to all parties.

#### **4.5.1.3 Business Continuation Planning**

The ECCB is taking a very positive role in addressing business continuation planning. It has established a Business Continuity Committee headed by the Managing Director. The objectives of this Committee

are to ensure that the ECCB is fully prepared to cope with disasters, oversee the ECCB's return to business in the event of a disaster or other disruption, and develop, review and continually update the ECCB's Business Continuity Plan. This latter objective should also include testing and enhancing the plan from time to time to assure all the components are in place and can function should there be a need to use the plan in an emergency situation.

The ECCB has made good progress in providing for reliability of payment services for the current payment system. They have redundant processors and power back up equipment that allow the ECCB to maintain operations in case of temporary disruption of services and short term (less than one day) emergencies. The major threat to operations is hurricanes, which can interrupt services for a lengthy period. In addition, the ECCB has provided for the off-site storage of computer tapes containing databases and accounting information on a weekly basis.<sup>8</sup> However, any business continuation plan always assumes two major elements; the availability of people with the proper set of skills and the availability of reliable telecommunication services.

The Telecom Company recently installed fiber optic cable in St. Kitts which is underground and quite well protected from water seepage in the public thoroughfare. It has been installed as a ring configuration around the business area near the ECCB. Even the copper lines are said to be protected from such outages because of underground installation. Telecom service has lately been satisfactory.

The ECCB recognizes that it must move forward and expand its current reliability capability into an effective business continuation plan to provide services should its headquarters become unavailable for some time. ECCB staff is looking at a variety of alternatives. One alternative is a separate site on St. Kitts that would be able to process the workload. Another alternative is expanding one of their Representative Offices in another ECCU country to function as an alternative site for processing and providing minimal services during periods of extended outages. Either approach would require additional equipment in the selected office along with some additional personnel skills to assure the operation would function when needed. Also, data would have to be forwarded on a timely basis so the alternate site could become operational within a short period of time.

Since hurricanes are the major threat, it is doubtful that the ECCB would be able to relocate people on a timely basis to assure continuing operations. The remote location would need some minimal level of skills to support hardware as well as normal operating procedures of the Banking and Monetary Operations Department and other areas.

Whatever approach the ECCB follows, it will require an investment of resources to provide for continuing operations. Depending on how they might structure the approach, it would be best that the resources are used on a continuing basis and not just tested periodically. Understanding procedures for daily operations and performing those procedures periodically facilitates the alternative operation in a cost effective manner and may assure the most effective use of the assigned

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<sup>8</sup> Backup data is stored on site in a secure vault each day.

resources. Part of the resources for business continuation will necessarily need to be included in the cost recovery for payment services, previously discussed.

#### **4.5.1.4 Telecommunications Capabilities**

Telecommunications capabilities to support the payment system infrastructure need to be reliable and have alternatives available in case of severe, or lengthy, outages. At present, outages of less than 15 minutes can be tolerated from time to time. However, as users gain confidence in the RTGS operation and become more dependent on interbank electronic payments, the reliability of the telecommunications infrastructure becomes more critical.

In St. Kitts, as in all the ECCU countries, the most vulnerable service point is from the customer premises to the local telephone office where the switching is accomplished. This office may be the same office that services both the banks and the other authorized users because of the small populations, small economies and limited infrastructure services available. Alternate routing capabilities (*i.e.*, having a separate access point to the bank and following a separate route through the telecom conduits and even accessing a different telephone office) are generally not available. However, on St. Kitts, the telecom company has recently installed a fiber optic cable in a ring configuration through the business district and the switching office. This will provide for an improved level of service for those who use the service. The vulnerable point then becomes the central switching office as the small economies make it difficult to support more than one switching office.

Any solutions for business continuation under a variety of scenarios will involve telecom planning to assure adequate resources are available for payment system services and are able to function when needed. There is no one best solution, but periodic testing and continuing to improve the business continuation plan will help the ECCB meet the overall intent of Core Principle VII.

#### **4.5.1.5 Liquidity Management – Intraday**

With the introduction of Globus and its real time posting to commercial bank accounts, the process has required banks to be more aware of continuous changing positions in their ECCB current accounts throughout the day. To this end, the ECCB recognized that banks might, at times, have difficulty maintaining a balance in their account during the day. The ECCB developed an intra day liquidity facility which became available in October 2001.

The facility is based on rediscounting secondary market unlisted treasury bills, where the ECCB will buy back those bills that the bank originally purchased from the ECCB. The second approach is for the banks to provide collateral for an intra day loan. Lastly, there is interbank market where banks borrow and lend between themselves based on their credit worthiness among their peers.

ECCB's procedures require that an intraday collateralized loan must be set up in advance and the collateral pledged to ECCB for this purpose. The arrangement is good for 90 days and the bank may

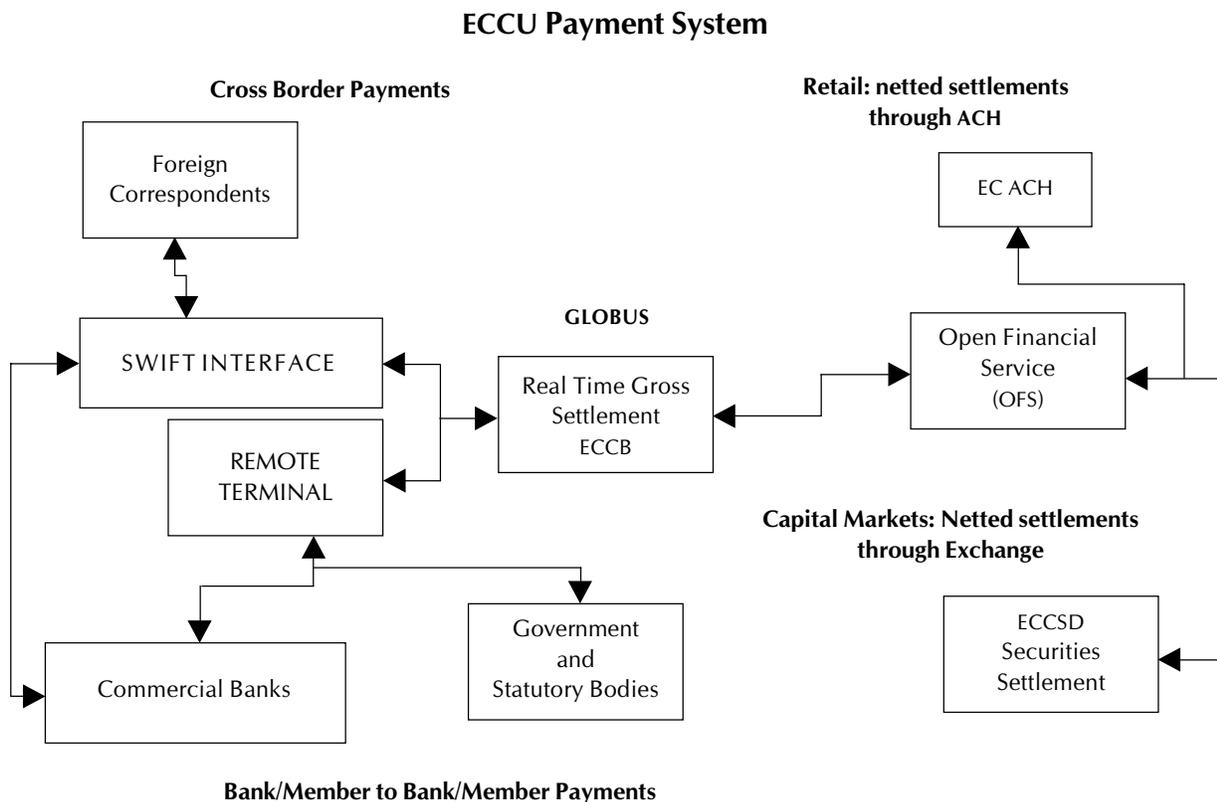
borrow against this availability of credit during that time. Once the 90 days has expired, the credit must be renewed for another period of time up to 90 days. The ECCB's gross settlement system is already technically capable to accommodate the process of managing intraday liquidity as set up by ECCB.

In addition to the above arrangements, banks may sell foreign currency to the ECCB. ECCB will act upon a notice to receive foreign currency after receipt of confirmation from the correspondent bank that funds are in the ECCB's bank account. These ECCB accounts are maintained at the Bank of England, Bank of Canada, or the Federal Reserve Bank of New York. The funds must be available on value date.

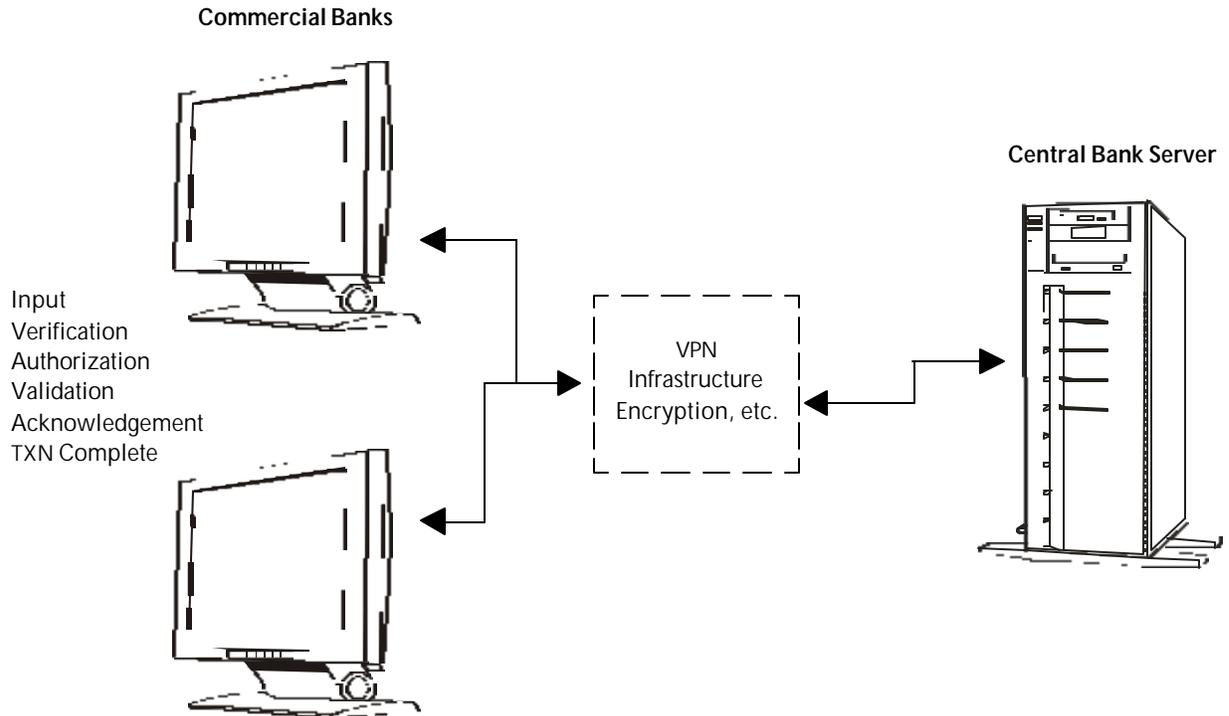
There has been little usage of the intraday liquidity facility because of the ample supply of liquidity in the banking community and the low volume of transactions. As the Globus system remote access enhancements become available to allow users to initiate transactions directly and to improve ECCU inter country flows of funds, it remains to be seen whether there will be usage of this facility.

#### 4.5.2 Envisioned Architecture of the Payment System

**Chart 3: Proposed Architecture for the New Payments System**



**Chart 4: RTGS Payment and Settlement Configuration Remote Access/Direct Input Across VPN**



Input  
Verification  
Authorization  
Validation  
Acknowledgement  
TXN Complete

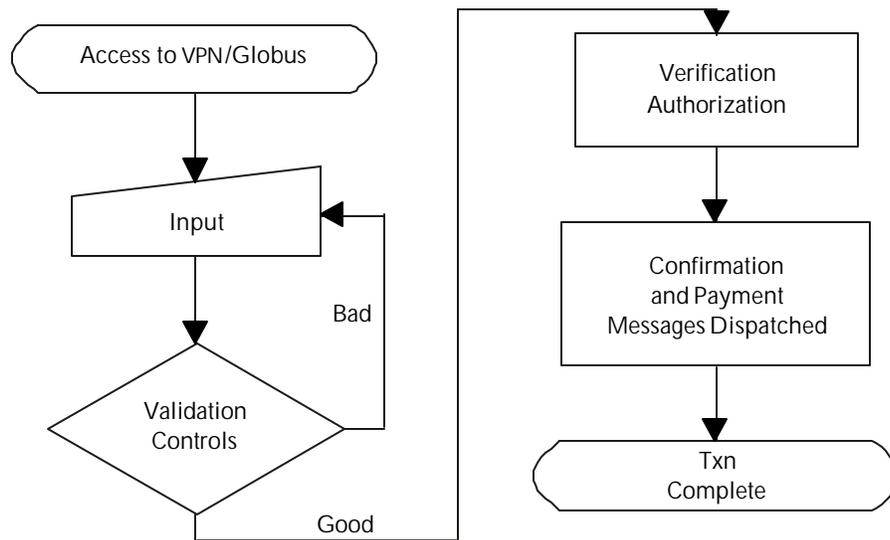
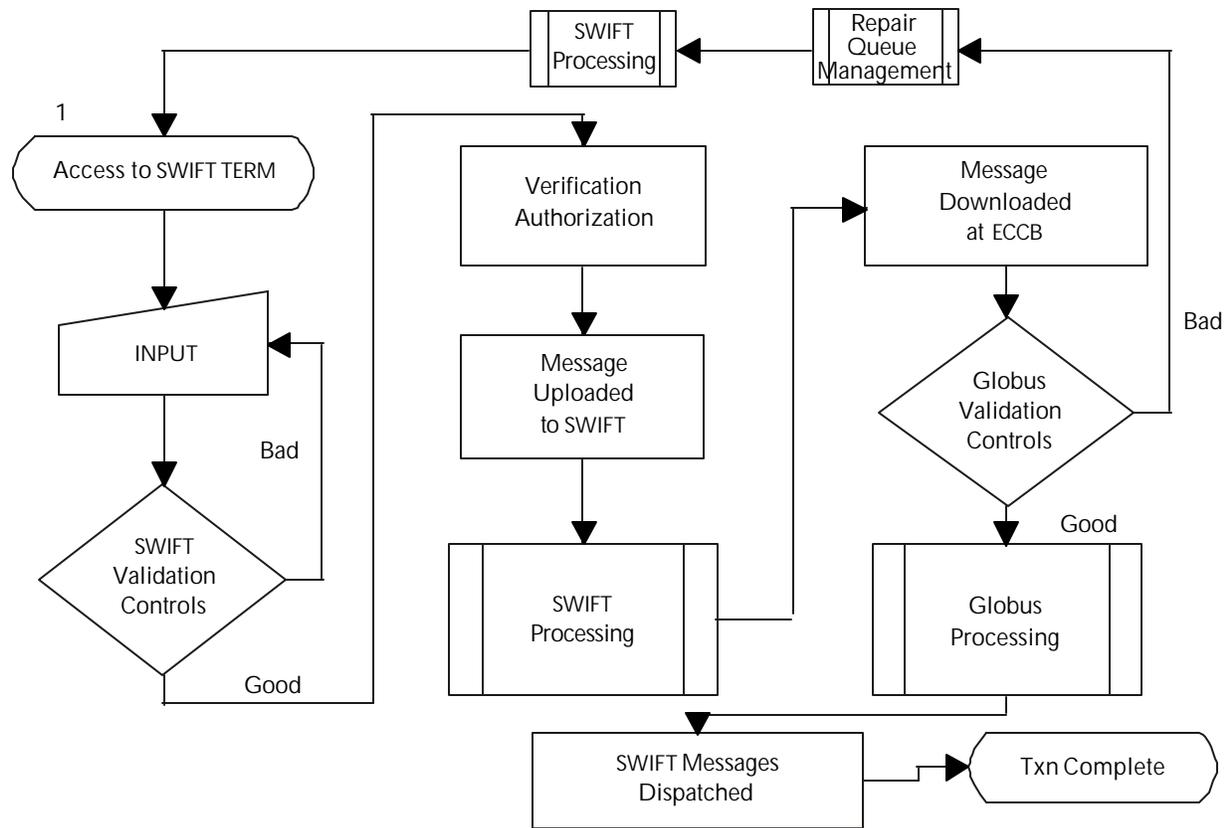
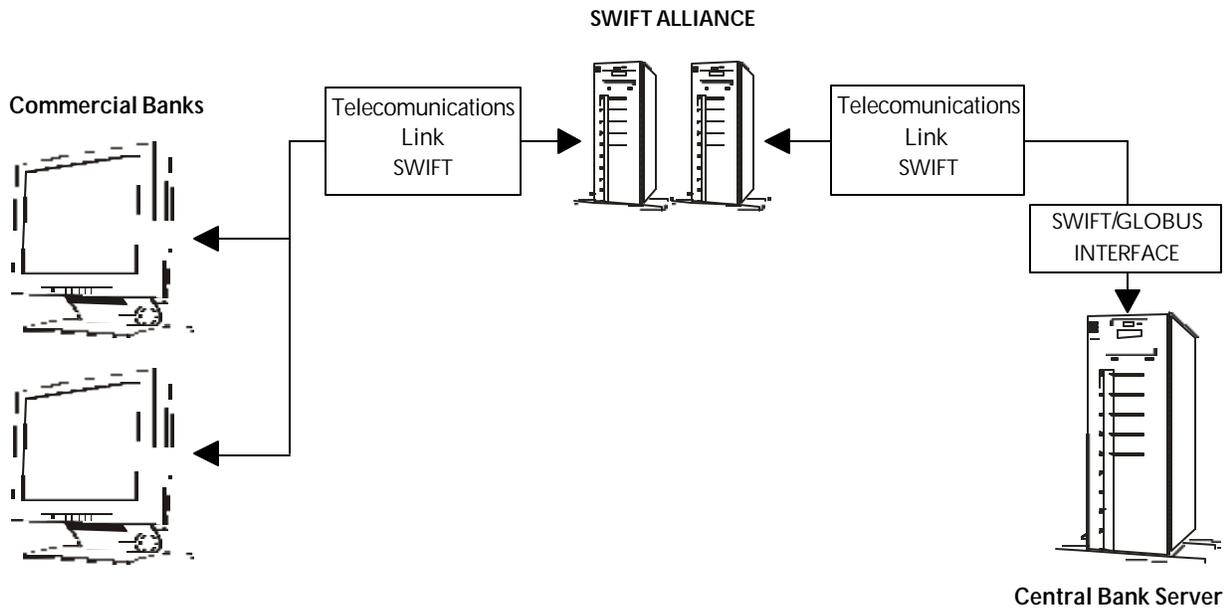
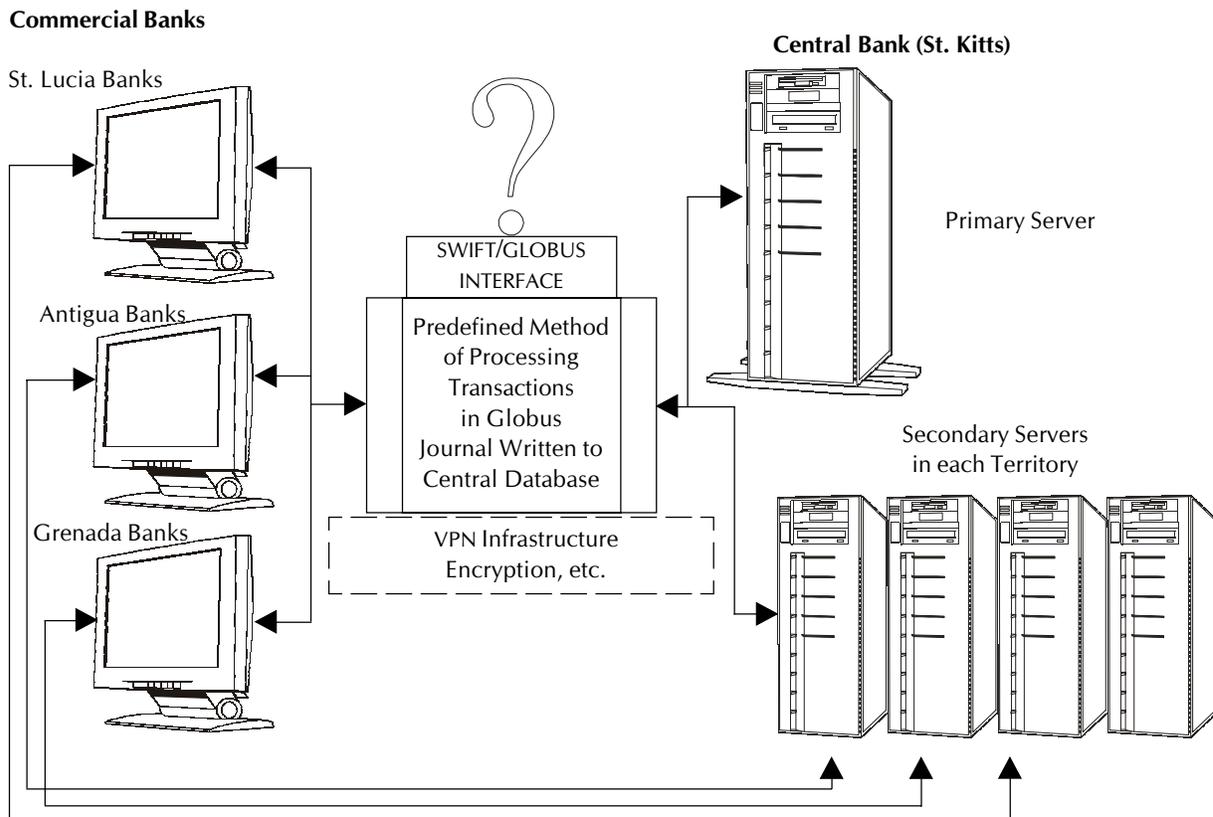


Chart 5: RTGS Payment and Settlement Configuration SWIFT/GLOBUS Interface



**Chart 6: Decentralized Branch Server Arrangement for High Level RTGS Business Continuation**



#### **4.5.2.1 Addressing all Governance Issues including Payment System Oversight**

The governance arrangements are important for all private and public sector institutions and organizations. The ECCB is therefore putting a lot of emphasis on the quality of the governance arrangements for its payment systems, and is requesting assistance in this area. The ECCB will seek to have risk management and audit functions independent of those responsible for day to day operations of the payment system. The risks that should be covered include the legal, financial, operational and security risks. The resources and the level of oversight/control devoted to the activities should be appropriate to the importance and complexity of the payment system and its market. External auditors can also play a role not only by auditing existing systems, but also by reviewing the internal auditing arrangements.

Governance arrangements should also include a mechanism for ensuring objective and independent oversight/control over management. Such arrangements should ensure that management has the proper incentives to act in the interests of stakeholders and should include appropriate checks and

balances for decision-making such as a system of internal controls, risk management, and audit reviews.

Indicators that will be used to ensure that the ECCU payment system governance arrangements are effective, accountable and transparent include:

- Readily available, complete and up-to-date relevant information on the system and its operations.
- A process where major decisions are made only after consultation with all relevant users and due deliberation, for example, in a Payment Council.
- A high level decision making process that is prompt and that communicates clearly and without delay to relevant users of the system.
- Consistency in the attainment of projected financial results and explanations of any differences from those plans.
- The delivery of payment services that satisfy the needs of participants and their customers.
- Compliance with all the Core Principles for Systemically Important Payment Systems.

Toward ensuring that governance and payment system oversight issues are adequately addressed, technical assistance was procured from FIRST Initiative. A comprehensive report with detailed recommendations was prepared and discussed with Senior Management of the ECCB. A process of internal discussion is ongoing to determine how to maximize the benefit of the recommendations made. The implementation of an improved arrangement is likely to take some time given the impact on the wider organizational structure of the Central Bank. Notwithstanding, it is anticipated that oversight implementation, in particular, and improved governance arrangements would be effected before the end of the 2003/2004 financial year.

### **4.5.3 Addressing Inefficiencies in the Retail Payments System**

The thrust of the ECCB's efforts regarding the development of the retail payment system has been to guide a process geared at improving the efficiency of cheques clearance and settlement across the Currency Union, and to achieve interoperability of ATMs and POS systems. The aim regarding cheques clearance and settlement is to migrate from a typically 14-day to a same day cycle.

Following the WHI assessment in April 2000, the ECCB established a Payments Council to serve as an advisory body to the ECCB on retail payment issues. Subsequently, two committees – the National Technical Operating Committee (NTOC) and the Regional Technical Operating Committee (RTOC) were formed to work on the small value payments project. The NTOC, which comprises operations personnel in each country, is to focus on details of the retail payment system at the national level. Its main functions are to determine the strengths and weaknesses of the retail

payment system in each country and to identify areas for improvement. The RTOC comprises representatives from each NTOC who meet to discuss national issues in a regional context.

The ECCB is playing a very important role in the whole institutional arrangement to develop the retail payments system. It is a focal point where coordination is accomplished to achieve common objectives in the financial system. Although the expectation was for the ECCB to encourage, coordinate and facilitate, it is determining a more precise role in accelerating the pace of development in the retail payments system. Fostering an arrangement for the use of non-cash retail payment instruments among the indigenous banks and the foreign banks is becoming increasingly important. While this may be a normal role for the private sector in many countries, there are no other regions in the world where eight countries have come together to form a single federation for economic purposes with each country surrounded by water. To facilitate the development of a non-cash electronic payment clearing and settlement arrangement, the ECCB's active involvement is very appropriate because of the importance of the retail payment system to the currency union at large and also to commercial banks in particular.

## 5 SECURITIES: MARKET STRUCTURE AND TRADING

### INSTRUMENTS

#### 5.1 FORMS OF SECURITIES

The market was designed to operate in a dematerialized environment from day one. Shareholders of public companies are notified prior to the listing that their share certificates are deemed as null and void at the time of the transfer of these records from the company to the ECCSR in preparation of listing. A letter of notification received from the ECCSR before the commencement of the listing provides confirmation of ownership at that time. Once listed, shareholders receive periodic advices regarding their shareholdings from the ECCSR as well as a registry notification statement each time that there is a movement/transfer in their securities position at the ECCSR.

Prior to transferring of the records to the ECCSR, the company verifies all shareholder records and holds itself legally responsible for the authenticity of the records it turns over to the ECCSR at that time.

#### 5.2 TYPES OF SECURITIES

Presently, there are 10 securities listed on the ECSE. These include 5 corporate (equities) and 5 government securities (T-bills and bonds), as follows:

##### Equities:

- Bank of Nevis, St. Kitts and Nevis.
- East Caribbean Financial Holding Company, St. Lucia.
- St. Lucia Electricity Services, St. Lucia.
- St. Kitts-Nevis-Anguilla Trading and Development Company, St. Kitts and Nevis.
- Dominica Electricity Services Ltd., Dominica.

##### Government Securities:

- St. Kitts-Nevis 10-year bond.
- St. Vincent and the Grenadines 91-day Treasury Bills (three different issuances).
- Grenada 365-day Treasury Bill.

The ECSE is in discussion with 8 other companies regarding their listing. These include the St. Kitts Nevis Anguilla National Bank, the National Commercial Bank Grenada, the Carib Breweries (St. Kitts and Nevis), the East Caribbean Home Mortgage Bank, the Grenada Breweries, the RBTT Grenada, the SL Horsfords and Company Ltd, and St. Kitts and Nevis Electricity Company.

### **5.2.1 Listing of Foreign Securities and Admitting of Foreign Members**

The ECSE is working closely with the Eastern Caribbean Securities Regulatory Commission (ECSRC) to formalize a regime for listing foreign securities for trading and accepting foreign brokers as ECSE intermediaries. The same is likely to commence in the beginning of 2004. The listing of foreign securities and admitting of foreign members is part of the ECSE's efforts to expand its scope beyond the ECCU borders.

### **5.3 SECURITIES IDENTIFICATION CODE**

The Eastern Caribbean Central Securities Depository (ECCSD) applies the Eastern Caribbean Security Numbering System (ECSNS). This system follows the international securities industry numbering (ISIN) convention (12 characters).

### **5.4 TRANSFER OF OWNERSHIP**

All securities are dematerialized. Therefore, transfer of ownership is done via book entries at the ECCSD, that is, a transfer from one account to another.

### **5.5 PLEDGE OF SECURITIES AS COLLATERAL**

There is uncertainty about the enforceability of security interests provided under collateral arrangements and of any repurchase agreements. The validity of an interest held by a creditor (including a creditor that is not a regulated financial institution) in securities pledged or charged as collateral (including securities held in the ECCSD, and any other collateral pledged across national boundaries), is disputable under the current laws. So too are the rights and the ability of the creditor to realize that collateral quickly in the event of a default by the debtor.

Pledging of securities as collateral is presently been looked at as part of the payment system improvement project. The enabling laws are been drafted under the FIRST Initiative technical assistance project and the administrative arrangements are being developed by the ECCB for the use of securities pledging in the areas of credit and liquidity management in the payment system. Implementation is expected in 2004.

### **5.6 TREATMENT OF LOST, STOLEN OR DESTROYED SECURITIES**

Does not apply. All securities are dematerialized.

## 5.7 PUBLIC OFFERING OF SECURITIES

The Exchange provides four tiers in which securities may be listed. The listing tiers are as follows:

- (i) Entry Level Equity Tier for equity securities.
- (ii) Large Capitalization Tier for equity securities.
- (iii) Corporate Debt Lower Tier for Corporate Debt issues.
- (iv) Corporate Debt Upper Tier for Corporate Debt issues.

The following are requirements for the Large Capitalization Equity Securities Tier:

- a) The issuer must be a going concern with net capital and paid-up capital of at least ten million Eastern Caribbean dollars (EC\$10 million).
- b) The issuer must have been in operation for at least five years.
- c) The issuer must have shown a net profit in two of the last three financial years.
- d) The issuer must provide a certified copy of the resolution of the directors authorizing the application for listing the security at the Exchange.
- e) The issuer must provide a certified copy of the resolution of the directors authorizing the application for using the services of the ECCSR.

A single registration with the ECSRC of the prospectus and registration statement allows the company to automatically market and place shares in all the 8 countries of the currency union. Investors wishing to participate in an issue offered on the ECSE primary market platform can place orders through the network of licensed broker-dealers which are members of the ECSE. The primary market platform gives the issuers the option of offering shares on a non-competitive fixed price auction or a competitive auction basis.

## MARKET STRUCTURE AND TRADING SYSTEMS

### 5.8 PRIMARY MARKET

In November 2002, the ECCB and the 8 host-country governments used the ECSE to create an integrated regional market for issuance and trading of government securities in the ECCB area. The Regional Government Securities Market (RGSM) made a successful start with the Government of St. Kitts and Nevis being the first to issue a EC\$75 million 10-year bond offering through the ECSE's primary market platform.

The ECSE primary market platform allows the government to issue debt using a non-competitive fixed price auction or a competitive uniform price auction and the minimum investment for either auction is EC\$5,000. Since the RGSM was launched in November 2002, there have been eight auctions; namely one non-competitive auction and seven competitive auctions. Several new issues of T-bills and bonds are planned by participating governments in the coming months.

The first issuance of new shares was in September 2003 when 6,600,000 shares valued at EC\$16,500,000 was sold to the public using the ECSE primary market platform by the electricity company in Anguilla. The issue was oversubscribed by 30 percent. This capital raising exercise was orchestrated by a syndicate of ECSE member firms led by the Bank of St. Lucia Ltd.

The cost of new issues to the investor is a transaction fee of EC\$12 (including settlement fee) plus a commission that cannot exceed 5 percent of the price paid for acquisition of securities. Examples of costs according to the amounts planned to be raised are shown in Table 4.

**Table 4: The Cost of Issuing Securities Using the Primary Market**

<i>Amounts Raised</i>	<i>Costs<sup>(a)</sup></i>	<i>Description</i>
Up to \$5 million	\$7,500	Costs are on per issue basis. Fees include: a) the reviewing and establishing of auction parameters; b) configuring the auction parameters on the trading engine as well as establishing registry and depository accounts; c) dissemination of prospectus and other issuer information to ECSE intermediaries; d) press releases to OECS media; e) posting of the offering on the ECSE web site; f) administering and managing the live-auction environment; g) completing the settlement obligations upon the completion of the auction; h) recording allocations on the registry and other ECSE systems and i) mailing of confirmation statements to all successful participants in the auction.
\$6 million to \$15 million	\$9,000	
\$15 million to \$20 million	\$11,000	
\$20 million to \$50 million	\$15,000	
Above \$50 million	\$20,000	

Source: ECSE.

<sup>(a)</sup> These costs are in EC\$ and do not include costs for maintenance and servicing of shareholder records after the issuance as well as the listing of the securities on the secondary market platform.

## 5.9 SECONDARY MARKET

The ECSE provides an electronic call auction market for listed securities. Licensed broker dealers accept orders to buy and sell securities from investors and post these orders on the ECSE trading platform. Orders are accumulated and ranked by price and orders at the same price are ranked by time received. The call auction is run at 2:00 p.m. every business day and orders are matched. Successful trades are then transmitted to the ECCSD for processing and settlement the next business day. With increase in market activity and liquidity, the ECSE will migrate to a continuous-order driven system in the future. The ECSE's trading system already has that capability.

The cost of trading on the secondary market for investors is a transaction fee of EC\$12 (including settlement fee) plus a commission not to exceed 5 percent of traded value payable to the broker dealer. There are no ECCU companies listed abroad.

## 5.10 STOCK EXCHANGE TRADING

Trading is currently done as a periodic single price call auction, where bids to buy and offers to sell are matched in a single auction and the price that maximizes the volume traded will be the trading price for a particular security. Securities eligible for trading in the Exchange are government securities (bills, notes and bonds) and corporate securities, shares and bonds of listed public companies.

Investors will access the market through securities market intermediaries in particular, limited service brokers and broker/dealers; the latter will set up and maintain customer accounts, provide advice, hold securities and customers' funds, receive orders to buy and sell securities.

A total of EC\$212 Million has now been successfully raised by governments on the RGSM since its launch on the ECSE market platform. The bond market opened in November 2002 with the Government of St. Kitts and Nevis offering a 10-year fixed coupon bond on the primary market platform. The Treasury-Bills market opened in March 2003 with a 91-day EC\$16 million issue by the Government of St. Vincent and the Grenadines. For both the bonds and t-bill market, secondary market trading has been minimal, thereby making it difficult to gauge price disparities, if any.

**Table 5: Government Securities Listed on the ECSE at September 2003**

<i>Government</i>	<i>Security</i>	<i>Number</i>	<i>Total Nominal Value</i>	<i>Total Market Value</i>
Grenada	1-year Treasury Bill	1	EC\$25 Million	EC\$23,500,000
St Vincent and The Grenadines	91-day Treasury Bill	3	EC\$48 Million	EC\$47,317,076
St Kitts and Nevis	10-year Bond	1	EC\$75 Million	EC\$75,000,000

*Source: ECSE.*

The equity market, established for the trading of shares in the public companies from the ECCU opened in October 2001 and annual secondary market turnover for the year to 31st July 2003 has been over 1.1 million shares valued at around EC\$6.9 million.

Prices for equities have tended to trade within the broad bands laid out in the initial research report of the issuer. Of the two equities listed from day one of the market opening their share price has shown a downward trend, in line with equity markets worldwide. The other two equities have been listed on the ECSE for too short a period of time and trading has been too infrequent for any price disparities to be identified.

Investors give limit orders and as such specify the most they are willing to pay or the least amount they are willing to receive. With this information the broker will access the market and place the order in accordance with the investor's wishes. All brokers are required to time stamp customer orders. Table 8 provides an explanation of the call exchange auction process in place for price discovery in the secondary market.

**Table 6: Equities Listed on the ECSE at July 31, 2003**

	2001	2002	2003	Total
Number of listed	2	2	4	
Total Market	EC\$109,264,924	EC\$103,316,009	EC\$296,948,140	
Number of Shares	40,636	1,051,347	28,119	1,120,102

Source: ECSE.

Note: the ECSE was started in October of 2001.

**Table 7: Total Volume and Value of Shares Traded  
To date (Aug-2003)**

	2001	2002	2003
Share Volume	10,253	1,031,586	10,490
Share Value	EC\$72,740	EC\$6,472,650	EC\$67,832

Source: ECCB.

**Table 8: Price Discovery through the Call Auction Process on the ECSE System  
for a Listed Equity Security**

<i>Sell (Ask Offers)</i>			<i>Buy (Bid Offers)</i>			<i>Price versus Volume Analysis</i>			
<i>Ask Qty.</i>	<i>Ask Price</i>	<i>Ask Time</i>	<i>Bid Qty.</i>	<i>Bid Price</i>	<i>Bid Time</i>	<i>Price</i>	<i>Selling Volume</i>	<i>Buying Volume</i>	<i>Traded Volume</i>
1,000	10.00	1	500	12.00	2	12.00	13,500	500	500
1,200	10.25	3	800	11.75	4	11.75	12,200	1,300	1,300
1,300	10.25	5	900	11.50	6	11.50	11,000	2,200	2,200
900	10.50	7	1,200	11.25	8	11.25	9,900	3,400	3,400
2,000	10.75	9	1,100	11.00	10	11.00	6,900	4,500	4,500
500	11.00	11	1,000	10.75	12	<b>10.75</b>	<b>6,400</b>	<b>5,500</b>	<b>5,500</b>
3,000	11.25	13	1,500	10.50	14	10.50	4,400	7,000	4,400
1,100	11.50	15	2,000	10.25	16	10.25	3,500	9,000	3,500
1,200	11.75	17	3,000	10.00	18	10.00	1,000	12,400	1,000
1,300	12.00	19	400	10.00	20				

As sell orders (ask offers) are gathered throughout the day, the ECSE trading system ranks these orders from the lowest sell price to the highest sell price. If two investors submit the same sell order price, the system will rank the order received first as higher in priority to be matched. The best sell order will be the one in which the investor is willing to sell their shares at the lowest price. In the

example above in Table 8, the best sell order is 10.00. The selling investor will never receive less money than their sell order; however, based on the auction price calculated, the investor may receive more money.

As buy orders (bid offers) are gathered throughout the day, the ECSE trading system ranks these orders from the highest buy price to the lowest buy price. If two investors submit the same buy order price, the system will rank the order received first as higher in priority to be matched. The best buy order will be the one in which the investor is willing to buy their shares at the highest price. In the example above, the best buy order is 12.00. The buying investor will never pay more money than their buy order; however, based on the auction price calculated, the investor may pay less money.

The auction system will match the best sell orders (ranked lowest price to highest) versus the best buy orders (ranked highest price to lowest). Trades will be executed until offered volume exhausts, or all acceptable bids are satisfied. 900 shares will remain on the sell side. Lower priced bids will be matched first; therefore, the 5th ask bid will be partially filled.

Orders that are unfilled at the end of the auction can either be dropped from the system if the customer only wanted their order to be good for one day or the system can carry forward this open order to the next business. These open orders will remain open until either matched against another order or until cancelled by the customer.

All orders placed on the secondary market can be accessed and viewed by any one of the licensed broker dealers located throughout the currency union. Customers can walk into any of the broker-dealer locations to view all bid- and ask- orders on the system at any give time during market hours. The average trading volumes on the whole have been very small and there are no specific rules for delayed publication of block trades.

Post trade information can be accessed from the ECSE website at [www.ecseonline.com](http://www.ecseonline.com). Daily and weekly trading activity reports continue to be e-mailed to all media houses in the region, and posted on the ECSE web site. Additionally, the ECSE voices a summary of trading and other related activities on the regional OECS "News Link" program- which covers nine radio stations in the currency union. Finally, in 2003 the ECSE reached an agreement with Bloomberg News through which the latter will carry end-of-day market information on ECSE trading activity on its worldwide terminals. The ECSE continues to explore such possibilities with other global media houses.

## **5.11 OVER THE COUNTER MARKET (OTC)**

There is no organized OTC market. Companies with shares not listed on the ECSE usually provide a limited resale facility to investors through their registrar or company secretary. There is no organized OTC market for government debt either. The RGSM uses the ECSE as a preferred venue for primary market issuance and secondary trading of such securities.

## 6 CLEARANCE AND SETTLEMENT CIRCUITS FOR GOVERNMENT AND CORPORATE SECURITIES

### 6.1 ORGANIZATIONS AND INSTITUTIONS

#### 6.1.1 Eastern Caribbean Securities Exchange Ltd (ECSE)

Established on 19th October 2001, the ECSE is a regional electronic securities exchange designed to facilitate the buying and selling of financial products. The ECSE is a self-regulatory organization (SRO) and has developed a set of by-laws that together with its operational rules govern and monitor exchange-related activities. The majority of its shares will always be owned by the private sector.

##### 6.1.1.1 *Development of Intermediaries*

The ECSE is playing an important role in promoting investment banking capability within its member firms. It positioned its intermediaries to take on the role of underwriters for governments and corporate issuers. Working under the auspices of a syndicate relationship championed by the ECSE, the intermediaries collectively began offering a full array of services leading up to the successful placement of debt- and equity- offerings for issuers. The ECSE also began assisting its intermediaries to develop the capability to put together effective packages and investment/research reports for governments and corporate issuers.

The ECSE is presently engaged with 3 additional institutions in Anguilla, St. Lucia and St. Kitts and Nevis to facilitate their inclusion as intermediaries. The ECSE expects to have intermediary presence in 7 countries of the currency union at the end of its financial year in March 2004.

##### 6.1.1.2 *Improvement in Telecommunications Infrastructure*

The ECSE, in a joint undertaking with the ECCB, installed a self-managed IP/Virtual Private Network (VPN) that now provides low-cost connectivity to all its intermediaries and issuers over the internet. Connectivity to these systems is also available via- a direct dial up networking connection using a dedicated telephone line.

##### 6.1.1.3 *Marketing, Education and Awareness Program*

The ECSE's Investor Marketing, Education and Awareness Programs are being implemented in a strategic partnership with its intermediaries and the regional media to apprise the public of the workings of our market. ECSE's creative communication tools outlining the workings of the ECSE, investing in stocks and bonds, the process of buying and selling of shares, dematerialization, etc. are being used by the intermediary and media to reach the broader investor audience.

Initiatives include targeted infomercials on TV and radio and newspaper advertisements in prominent papers within the region. Daily- and weekly- trading activity is reported by prominent media-

houses in the region. The ECSE web site ([www.ecseonline.com](http://www.ecseonline.com)) continues to see increase in viewership. Additionally, the ECSE began voicing a summary of trading and other related activities each Friday on the OECS "NewsLink" program which covers 9 radio stations in the region.

### **6.1.2 Eastern Caribbean Central Securities Depository (ECCSD)**

The principal function of the Depository is to provide clearance and settlement of trades transacted on the ECSE. The main participants on the ECCSD are broker/dealers, limited service brokers and custodians. The ECCSD provides services to participant intermediaries and processes transactions for trades reported by the Exchange or other markets. Custody services are also being provided to those entities that wish to hold securities at the ECCSD on behalf of their customers, for example custodian banks for foreign investors.

### **6.1.3 Eastern Caribbean Central Securities Registry (ECCSR)**

The Eastern Caribbean Central Securities Registry (ECCSR) is also subsidiary of the ECSE. Its main function is to maintain records of securities on behalf of issuers in the ECSM. The market operates in a dematerialized environment. The Registry's services are available to public companies listed on the ECSE, non-listed public companies, government related entities, private companies and individual security holders in the region. All of the companies listed on the ECSE are required to use the Registry for maintaining and servicing their securities holders' records.

So far the ECCSR has been working seamlessly to maintain and service security holder records for 10 securities. It has processed interest payments for 3 issues of government securities to the tune of EC\$4,674,900 and maturity payments of EC\$30,137,600. It has processed over 7,000 initial investor ID letters and semi-annual summary position statements to security holders of all ECSE listed securities that have been dispatched throughout the OECS region and beyond. The ECCSR has also successfully handled over 8,000 shareholder updates that have ranged from name and address changes, joint ownership positions, inheritance, trust, death and probate related issues.

In championing the causes of corporate governance and investor protection in the region, the ECCSR has single-handedly taken on the role of apprising issuers and shareholders in the region of implications of joint ownership as well as ownership of shares in conjunction with minors. In processing corporate action it has endeavored to apprise company management of their fiduciary responsibilities and obligations towards their shareholders.

## **6.2 SECURITIES CLEARANCE AND SETTLEMENT PROCESS**

Settlement occurs one day after trading day (T + 1). While the securities are settled on a trade-by-trade (gross) basis, the cash leg is netted (DVP Model 2 of the BIS).<sup>9</sup> If clearing and settlement runs smoothly, finality will be achieved around 1:30 p.m. on T + 1. Government securities are settled together with private securities at the ECCSD, under the same clearance and settlement arrangements.

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<sup>9</sup> "Delivery-versus-Payment in Securities Settlement Systems", Committee on Payment and Settlement Systems of the Central Banks of the Group of Ten Countries, Bank for International Settlements, September 1992.

During the trade-by-trade settlement process the purchased securities are moved from the sellers (free) account to the buyers (free) account. In order to eliminate credit risk, ownership is transferred if and only if the cash leg has been settled with finality.

### **6.3 GUARANTEE SCHEMES**

The system has several built-in risk controls. First, an investor has to provide the broker/dealer with proof of good funds in case of a purchase, or with proof of ownership in case of a sale, before a bid is submitted to the Exchange. Second, the ECCSD settles trades using a trade-for-trade system, which means that a trade can be reversed in the unlikely event of a default. The ECCSD is exploring the establishment of a guarantee scheme in the future.

### **6.4 SECURITIES LENDING**

There is no securities lending mechanism in the ECSE.

### **6.5 INTERNATIONAL LINKS AMONG CLEARANCE AND SETTLEMENT INSTITUTIONS**

There is not as yet any direct link between the ECCSD and other international central securities depositories.

## **7 THE ROLE OF THE CENTRAL BANK IN THE CLEARANCE AND SETTLEMENT SYSTEMS**

### **7.1 SETTLEMENT**

The ECCB currently operates a gross settlement system for interbank transfers. It is based on the Globus software package that was acquired for the ECCB's accounting operations. In addition to supporting the ECCB's accounting operations, Globus processes and records commercial bank transactions in an "on-line real-time" mode. Transactions, when authorized, are posted directly to the bank's current account by ECCB staff. The current payment system improvement project is aiming to upgrade the settlement capability to real-time through the implementation of STP for all externally generated payments and transfers through the system in 2004.

In addition, the ECCB manages settlement risks in the interbank settlement system and administers the Eastern Caribbean Clearing House. It also provides the infrastructure for institutional funds transfers in respect of governments and statutory bodies, the ECCSD, the Eastern Caribbean Home Mortgage Bank and the Institute of Banking.

The ECCB is taking a lead role in the payment system improvement project.

### **7.2 THE RISK CONTROL POLICY**

#### **7.2.1 Financial Risks**

The ECCB has a credit exposure towards any clearing bank that has failed to cover its clearings obligations during the day when the batching is made, and needs to resort to the unauthorized daylight overdraft. Given that such overdraft is uncollateralized, the central bank has no guarantee of being paid back. To mitigate this risk, intraday liquidity facilities are provided, which include the Central Bank Discount Window (Lombard Facility) and the interbank money market, through which liquidity can be accessed same day. The interbank money market in particular, is an efficient market arrangement for the distribution of liquidity throughout the system.

Regarding clearing banks, the clearinghouse rules require clearing banks to put up collateral with the Central Bank to guarantee compliance with their payment obligations. However, no specific indication is given neither as to the amount of collateral that shall be provided nor how the amount should be calculated. These weaknesses are currently being addressed.

Credit risk in the gross settlement system for interbank transfers was eliminated with the migration from deferred net settlement in June 2000. In the gross settlement system, commercial banks are not allowed to overdraw their accounts.

### 7.2.2 Functional Risks

The establishment of intraday liquidity support obviates the likelihood for banks to fail to meet their 6 percent minimum reserve requirements. This level of liquidity support assists banks in honoring their reserve duties.

### 7.2.3 Legal Risks

The daily cheque clearing in each territory is settled in the books of the ECCB by a single payment to or from each single clearing member, *i.e.* its multilateral net position with all the other members of the clearinghouse. However, multilateral netting is yet not legally enforceable under all the relevant jurisdictions; in this case, only mutual obligations arising between participants may be off-set and a liquidator - in case of a bank's failure after cheques have been exchanged in the clearing house but before they are irrevocably settled during the day - could successfully ask the court to overturn the multilateral netting and apply set-off through bilateral netting. The liquidator could then ask to receive payment in full from those banks with net amounts owed to the failed bank and tell the remaining banks to claim in the liquidation to receive the funds owed to them by the failed bank. In case of a bank failure, therefore, there could emerge the need for the ECCB to intervene as lender of last resort to avoid the systemic repercussions that the situation would cause.

The Central Bank, being very cognizant of this potential vulnerability, is ensuring that the legal validity of multilateral netting is established, under the FIRST Initiative technical assistance project. A uniform Payments Code and General Banking and Payments Rules are expected to be in force before the end of 2004.

## 7.3 MONETARY POLICY AND PAYMENT SYSTEMS

The formulation of monetary policy is the primary responsibility of the Monetary Council. Article 7(2) of the ECCB Agreement imposes a duty on the Governor of the Central Bank to report to the Monetary Council on monetary and credit conditions and to receive from the Council directives and guidelines on matters of monetary and credit policy to the Central Bank.

### 7.3.1 Monetary Stability

This concerns the delivery of low and stable inflation. Implicit in this is the Central bank's mandate to safeguard the value of the currency in terms of what it will purchase domestically and abroad. The fixed exchange rate parity with the USD is the instrument that has been used to deliver monetary policy.

### 7.3.2 Regulation of Money and Credit

The ECCB's objective in its regulation of the availability of money and credit is to be able to:

- influence interest rates in order to ensure that investors can source funds at reasonable costs and that savers receive reasonable returns;

- ensure that liquidity is available and efficiently allocated within countries and across the Currency Union;
- encourage increased savings and investments.

The instrument available to the ECCB for regulating the availability of money and credit is the development of money and capital market institutions and instruments, and a robust and efficient payment system.

The ECCB's ability to influence interest rates is limited by institutional and other factors. In principle, interest rates in the Currency Union are set at the discretion of commercial banks, except that there is a regulated minimum rate payable on savings deposits. In general, interest rates tend to be relatively inflexible, with the result that there are often significant deviations between local rates and those in the USA. Apart from the regulated rate on savings, the deviations tend to reflect the banks' monopolistic structure and the relatively high operating costs due to their small size.

### **7.3.3 Operations Between the ECCB and Commercial Banks**

There are two kinds of banks; the indigenous banks of which there are 15 private banks and four foreign banks with 25 independent banking units among the eight countries. Since the banks are separate entities in the various countries (although they may open branches within a country) they must maintain separate current accounts at the ECCB. Thus, a foreign bank with offices in five countries would have five separate current accounts at the ECCB and would need to maintain reserves separately for those five countries.

The ECCB can lend to banks only through secured loans and overdrafts; unsecured advances to banks prohibited. There are yet no standing facilities for banks, nor authorized overnight or intraday overdraft facilities on their settlement accounts, but the ECCB may lend to banks at a relatively penal rate for reserve management purposes. The ECCB also plays a key role in the Secondary Market for Unlisted Treasury Bills, selling to banks bills it had previously acquired from the issuing Governments. The ECCB stands ready to re-buy the bills from banks through the Treasury Bill Discount Facility and to re-sell them to other banks.

As regards the foreign exchange market, the ECCB deals with licensed banks buying and selling EC\$ against US\$ with no limit and at a spread around the fixed rate of EC\$ 2.70; it also deals with the major international banks in US\$ and in the major currencies against the EC\$. The EC\$ leg of the FX transactions carried out with commercial banks is settled through the accounts they hold at the Central Bank. Finally, the ECCB buys foreign notes from commercial banks for their repatriation to the central bank of issue.

### **7.3.4 Realizing the ECCU Single Financial Space through Payment System Reform**

The aim of the current payment system improvement project is to develop/implement a payment system architecture to facilitate the realization of the ECCU Single Financial Space. A very efficient

and robust payment system is critical to the achievement of the policy objectives of the ECCB. This architecture includes interoperability at ATMs and POS systems across the entire Currency Union, more efficiency in the clearance and settlement of retail payments, and STP for all payments (including cross-border) in the ECCB's electronic funds transfer system.

The modernization project, in its peculiar context, takes cognizance of a number of factors relevant to the development thrust of the currency union. It is against this backdrop of circumstances that serious thought, backed up by an intense implementation program, is being applied to the conceptualization/realization of a financial system infrastructure that can address the needs of domestic economic activity on one hand, and strategic integration into the CARICOM Single Market and Economy (CSME) and the wider international financial system on the other.

#### **7.4 THE ROLE OF THE CENTRAL BANK IN CROSS-BORDER PAYMENTS**

Presently, the Central Bank facilitates cross-border payments and transfers for commercial banks in the ECCU. These payment are settled across the ECCB's own account at its correspondent banks. Though not a typical central bank function, the ECCB offers this service to its client banks to lend efficiency to the whole process of foreign currency payments. Though not obligated to do so, commercial banks trade foreign currency balances with the ECCB as part of their foreign exchange position management. The ECCB's electronic payments system provides a connection with the international arena through the SWIFT messaging network.

#### **7.5 PRICING POLICIES**

The ECCB only charges a fee for advising a bank of posting a credit transaction. The advice, when requested, is forwarded over the SWIFT network and the charge to the receiving bank is EC\$5. This fee has been in place for some time. There are no other charges for payment services provided by the ECCB.

The pricing policy of the ECCB is aimed at encouraging payment system participants to use the services it provides, and tends to disregard cost recovery. In the Clearinghouse rules pricing issues are not dealt with and the upcoming RTGS will be used by financial institutions for free, at least in the short to medium term.

## 8 SUPERVISION OF SECURITIES CLEARANCE AND SETTLEMENT SYSTEMS

### 8.1 SECURITIES REGULATOR SUPERVISORY AND STATUTORY RESPONSIBILITIES

The powers and responsibilities of the Securities Commission are stated in Articles 4 through 6 of the Agreement and enumerated in detail in the Securities Act with regard to licensing, approval of rules, suspension and revocation, the ability to issue directions, the ability to call for information, inspection and investigation, and dispute settlement.

The Commission is accountable to the Monetary Council of the ECCB under Articles 12 and 16 of the Agreement, which set out the procedures for appointment, remuneration, and removal. Publication of appointment is to be carried out by publication in the Gazette, and notice of removal is given to the Participating Government or public body that nominated the Commissioner. By virtue of the common law system judicial review of the decisions of bodies such as the Commission exists. Amendments have been drafted to allow for appeal of Commission decisions to a Disciplinary Committee, and those amendments explicitly provide for judicial review of that tribunal. These amendments have already been enacted in St Kitts-Nevis and Grenada.

The technical work of the Commission is carried out by the ECCB. There is a general obligation on the ECCB in the Letter of Agreement to make adequate provisions for confidentiality and use of information. The staff is comprised of professionals who (1) are bound by the oath of secrecy taken upon entering the ECCB, and (2) understand and practice the requirements for confidentiality in the absence of documented guidelines. The staff is guided by the provisions of the legislation regarding procedural fairness, and take a very consultative approach in dealings with market participants. Article 23 requires each employee of the Commission to take an oath of secrecy but the Commission has no employees as they are provided by the ECCB.

The Commissioners themselves are bound by Articles 21 and 23 which deal with disclosures of interest and confidentiality. Each Commissioner takes an oath of secrecy at the beginning of his or her term.

Regulators should:

- conduct direct supervision of clearing and settlement systems and their operators<sup>10</sup>
- require a framework that permits them to ensure the accountability of such systems, to monitor and, if possible, predict and prevent problems associated with clearing and settlement through: (a) review of system mechanisms and establishment of operating

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<sup>10</sup> Securities Act sections 23-25, 27-32, 133. A right of inspection is not explicitly stated, however these agencies have a duty under section 32 to assist the Commission as required from time to time for the performance of its functions.

standards;<sup>11</sup> (b) the power to issue mandatory directions;<sup>12</sup> (c) inspection and periodic review.<sup>13</sup>

Also, the clearing agency has a duty to assist the Commission. There is some element of periodic review under sections 27,28 and 29 of the Securities Act, which provide for mandatory review of proposed amendments to rules by the Commission; mandatory reporting of proposed alteration to or, the occurrence of any event which affects or may affect in a material respect, information supplied to the Commission or any matter in respect of which the clearing agency was required to supply information to the Commission.

Clearing and settlement organizations should be required to make reports to the regulator and may be required to submit to periodic and, if necessary, special audits and examinations.<sup>14</sup> Securities Act section 150 can be used for commissioning special audits or examinations.

## **8.2 SELF-REGULATORY ORGANIZATIONS SUPERVISORY AND STATUTORY RESPONSIBILITIES**

The ECSE is the sole self-regulatory organization (SRO) in the ECCU securities market. Membership criteria is established and assessed by the ECSE, which also define rules of conduct its members shall comply with in the relationship with their customers, in order to ensure transparency and fairness in the performance of their activity. To this end, communication of Securities Exchange members with the public is based on the principles of fairness and good faith.

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<sup>11</sup> Securities Act section 26, which prescribes the contents of clearing agency rules provides operating standards.

<sup>12</sup> Securities Act section 31.

<sup>13</sup> Securities Act section 150.

<sup>14</sup> Securities Act section 32 requires the furnishing of returns and the provision of information as the Commission may require.

## APPENDIX: STATISTICAL TABLES

The first series (A) are payment and securities clearance and settlement statistics in the Eastern Caribbean Currency Union. These tables have been prepared following the Standard Methodology for Country Tables developed by the WHF's Core Team. This Methodology is available at the WHF's web site: [www.whpaymentsforum.org](http://www.whpaymentsforum.org).

The second series (B) are more general statistics of the financial system.

Starting 2002, the Working Group on Payment System Issues of Latin America and the Caribbean (WGPS-LAC), has been working on a document on Comparative Statistical Tables on Payments and Securities Clearance and Settlement Systems for the Region's countries. For this document, the statistical tables of individual countries are being updated periodically and may be reviewed at the WHF's web site.

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**Table A1: Basic Statistical Data\***

	1998	1999	2000	2001	2002
Population (thousands)	560	565	569	578	582
GDP (USD million)	1,721	1,792	1,835	1,808	1,822
GDP per capita (USD)	3,070	3,170	3,230	3,130	3,100
Interbank Exchange Rate vs. USD	2.70	2.70	2.70	2.70	2.70

Source: ECCB.

**Table A2: Settlement Media Used by Non-banks**

(USD thousands)

	1998	1999	2000	2001	2002
Bank notes and coins issued	176,173	212,128	198,530	199,074	206,908
<i>held by the public</i>	127,587	144,049	143,308	138,312	145,639
Transferable deposits in local currency	275,567	297,046	305,468	323,175	342,941
<i>Households</i>	144,676	156,787	160,726	163,970	166,871
<i>Business sector</i>	130,892	140,258	144,742	159,205	176,070
Narrow money supply M1	403,154	441,095	448,775	461,487	488,579
Transferable deposits in foreign currency	1,403,937	1,557,715	1,761,834	1,879,123	2,005,672
Monetary aggregate M4	1,807,091	1,998,810	2,210,609	2,340,609	2,494,251

Source: ECCB.

\* The following conventions for notation are used throughout the Statistical Appendix: "n.a." indicates data that are not available; "..." stands for data that are not applicable; "neg" indicates where data are very small relative to other relevant data in the table concerned.

**Table A3: Settlement Media Used by Deposit-Taking Institutions**  
(USD million)

	1998	1999	2000	2001	2002
Required reserves at the Central Bank	151.7	167.6	186.3	200.5	216.6
<i>local currency</i>	151.7	167.6	186.3	200.5	216.6
<i>foreign currency</i>	...	...	...	...	...
of which, usable for settlement:	151.7	167.6	186.3	200.5	216.6
<i>local currency</i>	151.7	167.6	186.3	200.5	216.6
<i>foreign currency</i>	...	...	...	...	...
Excess reserves at the Central Bank:	46.9	31.1	18.4	66.9	63.2
<i>local currency</i>	46.9	31.1	18.4	66.9	63.2
<i>foreign currency</i>	...	...	...	...	...
Loans granted to financial institutions by the Central Bank	0.0	0.0	5.6	3.3	0.0
Transferable deposits at other entities	n.a.	n.a.	n.a.	n.a.	n.a.

Source: ECCB.

**Table A4: Institutional Framework**  
(year-end 2002)

	Number of institutions	Number of branches	Number of accounts	Value of accounts (USD million)
Central Bank	1	0	n.a.	n.a.
Commercial banks	42	n.a.	n.a.	509.96
<i>State-owned banks</i>	12	n.a.	n.a.	n.a.
<i>Private banks</i>	8	n.a.	n.a.	n.a.
<i>Subsidiaries of foreign banks</i>	22	n.a.	n.a.	n.a.
Non-banking financial institutions	10	n.a.	n.a.	n.a.
Postal Office	n.a.	n.a.	n.a.	n.a.

Source: ECCB.

**Table A5: Bank Notes and Coins**  
(USD million)

	1998	1998	2000	2001	2002
Total bank notes and coins issued	176.2	212.1	198.5	199.1	206.9
Total banknotes issued	162.4	197.1	182.5	182.4	189.5
Total coins issued	13.8	15.0	16.0	16.7	17.4
Bank notes and coins held by banks	48.6	68.1	55.2	60.8	61.3
Bank notes and coins held outside banks	127.6	144.0	143.3	138.3	145.6

Source: ECCB.

**Table A6: Cash Dispensers, ATMs and EFTPOS Terminals**

The information was not available in this format for the indicated years.

**Table A7: Number of Payment Cards in Circulation**

The information was not available in this format for the indicated years.

**Table A8: Indicators of Use of Various Cashless Payment Instruments**  
(volume of transactions)

The information was not available in this format for the indicated years.

**Table A9: Indicators of Use of Various Cashless Payment Instruments**  
(value of transactions)

The information was not available in this format for the indicated years.

**Table A10: Payment Instructions Handled by Selected Interbank Transfer Systems**  
(volume of transactions)

The information was not available in this format for the indicated years.

**Table A11: Payment Instructions Handled by Selected Interbank Transfer Systems**

(value of transactions, in USD million)

	1998	1999	2000	2001	2002
<i>Clearing house for small value cheques</i>	8,747.9	12,293.0	18,244.2	16,793.3	n.a.
<i>in local currency</i>	6,383.6	8,970.6	13,313.4	12,254.6	14,028.9
<i>in foreign currency</i>	2,364.3	3,322.4	4,930.9	4,538.7	n.a.
<i>Clearing house for large value cheques</i>	2,794.9	3,600.1	4,177.0	6,263.1	8,349.2
<i>in local currency</i>	1,035.2	1,333.4	n.a.	n.a.	n.a.
<i>in foreign currency</i>	1,759.7	2,266.7	n.a.	n.a.	n.a.

Source: ECCB.

**Table A12: Securities and Accounts Registered in the Central Securities Depository**

	2001	2002
<i>Eastern Caribbean Central Securities Depository</i> <sup>(a)</sup>		
Number of registered securities	2	3
Number of participants	4	7
Number of accounts	4	7
Number of foreign investors <sup>(b)</sup>	0	0

Source: Eastern Caribbean Securities Exchange.

<sup>(a)</sup> Market activity began in year 2001.

<sup>(b)</sup> Investors outside the ECCU region.

**Table A13: Securities Holdings in the Central Securities Depository  
(USD thousands)**

	2001	2002
<i>Eastern Caribbean Central Securities Depository</i> <sup>(a)</sup>		
Government bonds	...	96
Corporate bonds	...	...
Equities	94	228
Other	...	...
<i>Memo: Market Capitalization</i>		
Government bonds	...	27,778
Corporate bonds	...	...
Equities	40,468	38,265
Other	...	...

Source: Eastern Caribbean Securities Exchange.

<sup>(a)</sup> Market activity began in year 2001.

**Table A14: Transfer Instructions Handled by Securities Settlement Systems  
(volume of transactions)**

	2001	2002
<i>Eastern Caribbean Central Securities Depository</i> <sup>(a)</sup>		
Government securities	...	28
Corporate Debt	...	...
Equities	15	389
Other	...	...

Source: Eastern Caribbean Securities Exchange.

<sup>(a)</sup> Market activity began in year 2001.

**Table A15: Transfer Instructions Handled by Securities Settlement Systems**  
(value of transactions, in USD thousands)

	2001	2002
<i>Eastern Caribbean Central Securities Depository</i> <sup>(a)</sup>	79	2,455
Government securities	...	28
Corporate Debt	...	...
Equities	79	2,427
Other	...	...

Source: Eastern Caribbean Securities Exchange.

<sup>(a)</sup> Market activity began in year 2001.

**Table A16: Participation in SWIFT by Domestic Institutions**

	1998	1999	2000	2001	2002
Domestic SWIFT users	33	38	44	44	49
Members	15	11	11	10	11
Sub-members	14	14	21	21	26
Participants	4	13	12	13	12
Memo: SWIFT users worldwide	6,557	6,797	7,125	7,199	7,601
Members	2,980	2,214	2,288	2,241	2,217
Sub-members	2,720	2,763	2,978	3,027	3,130
Participants	857	1,820	1,859	1,931	2,254

Source: SWIFT.

**Table A17: SWIFT Message Flows To/From Domestic Users**

	1998	1999	2000	2001	2002
Total messages sent	92,416	149,533	190,747	260,764	295,235
of which:					
Category I	49,887	91,912	118,851	155,663	175,781
Category II	12,534	17,360	21,570	38,791	37,629
Total messages received	87,912	140,539	196,293	266,827	300,657
of which:					
Category I	32,541	55,682	79,285	122,763	135,825
Category II	12,099	16,347	20,624	24,241	22,694
Domestic traffic	848	2,015	4,451	7,247	7,012
Memo: Global SWIFT traffic	812,117,556	937,039,995	1,058,836,425	1,273,912,754	1,533,906,047

Source: SWIFT.

**Table B1: Number of Financial Institutions**

	1998	1999	2000	2001	2002
Deposit-taker institutions, from which:					
<i>Commercial Banks</i> <sup>3</sup>	44	44	43	43	42
<i>Off-Shore Banks</i>	107	125	100	94	88
<i>Credit cooperatives</i>	80	80	80	81	81
Non-bank financial institutions, from which:					
<i>Development Banks</i>	7	7	7	6	6
<i>Consumer finance and mortgage companies</i>	14	14	14	13	13
<i>National Development Foundations</i>	7	7	7	7	7
<i>Building and Loan Associations</i>	4	4	4	4	4
<i>Insurance Companies/Agencies</i>	157	149	149	154	146
Other financial intermediaries, from which:					
<i>Brokers/dealers</i>	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Mutual investment funds</i>	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Leasing companies</i>	n.a.	n.a.	n.a.	n.a.	n.a.

Source: ECCB.

**Table B2: Assets**  
(year-end, in EC\$ million)

Date	1998	1999	2000	2001	2002
Deposit money banks – Total assets	8,448.5	9,525.6	10,486.5	11,260.5	12,256.4
Deposit money banks - Foreign assets	914.8	1,183.0	1,140.1	1,480.3	1,824.6
Other banking institutions - Total assets	n.a.	n.a.	n.a.	n.a.	n.a.
Other banking institutions - Foreign assets	n.a.	n.a.	n.a.	n.a.	n.a.
Non-banking financial institutions - Total assets	529.1	594.1	626.6	1,014.0	1,056.7
Non-banking financial institutions - Foreign assets	0.0	0.0	0.0	neg	0.6

Source: ECCB.

**Table B3: Deposits**  
(year-end, in EC\$ million)

	1998	1999	2000	2001	2002
Demand deposits	1,072.6	1,139.7	1,136.3	1,254.2	1,376.9
Time deposits	2,726.5	2,827.5	2,949.7	3,129.0	3,434.5
Savings deposits	2,325.5	2,659.9	2,996.3	3,264.2	3,391.9
<i>Foreign Currency Deposits</i>	732.5	1,074.8	1,315.0	1,352.4	1,530.4

Source: ECCB.

**Table B4: Loans**  
(year-end, in EC\$ million)

	1998	1999	2000	2001	2002
Total credit to businesses	2,209.9	2,395.9	2,637.1	2,635.7	2,726.7
Total credit to natural persons	2,587.8	2,893.3	3,173.4	3,313.7	3,324.2
<b>Total credit</b>	<b>4,797.7</b>	<b>5,289.2</b>	<b>5,810.5</b>	<b>5,949.4</b>	<b>6,050.9</b>

Source: ECCB.

**Table B5: List of Active Insurance Companies in the ECCU**

<i>LIFE/LONG-TERM:</i>	<i>COUNTRY OF INCORPORATION</i>
American Bankers Life	United States of America
American Life Insurance Company Limited	Trinidad & Tobago
Capital Life Insurance Company Limited	Barbados
CLICO International Life Insurance Limited	Barbados
Colonial Life Insurance Company (TnT) Limited	Trinidad & Tobago
Demara Mutual Life Assurance Society Limited	Guyana
Global Life Insurance Company Limited	Cayman Islands
Guyana & Trinidad Mutual Life Insurance Company Limited	Guyana
Life of Barbados	Barbados
Occidental Life Insurance Company	United States of America
The Barbados Mutual Life Assurance Society	Barbados
<i>COMPOSITE:</i>	
Atlantic Southern Insurance Company	Puerto Rico
British American Insurance Company Limited	Trinidad & Tobago
National Caribbean Insurance Company Limited	St Kitts & Nevis
St Kitts Nevis Insurance Company (SNIC)	St Kitts & Nevis
State Insurance Corporation	Antigua & Barbuda
<i>GENERAL/SHORT-TERM:</i>	
ABI Insurance Company Limited	Antigua & Barbuda
Alliance Assurance Company Limited	England
American Home Assurance Company Limited	Puerto Rico
Anguilla Mutual Life Assurance Company Limited	Anguilla
ANJO Insurance (United Insurance Company Limited)	Antigua & Barbuda
Antigua Insurance. Company Limited (ANICOL)	Antigua & Barbuda
Barbados Fire & Commercial Insurance Company Limited	Barbados
Capital Insurance	Trinidad & Tobago
Caribbean Alliance Insurance Company Limited	Antigua & Barbuda
Caribbean General Insurance Company Limited	Foreign (G'da)
Caribbean Home Insurance Company Limited	Trinidad & Tobago
CLICO International General Insurance Ltd	Barbados

**Table B5: List of Active Insurance Companies in the ECCU**  
(cont..)

<i>GENERAL/SHORT-TERM:</i>	<i>COUNTRY OF INCORPORATION</i>
East Caribbean Reinsurance Company Limited	Anguilla
Eastern Caribbean Insurance Limited	St Lucia
First Domestic Industry & Commerce Insurance Company	Dominica
First Domestic Life Insurance	Dominica
General Insurance Company Limited	Antigua & Barbuda
Great Northern Insurance Company (SVG) Limited	St Vincent & the Grenadines
Great Northern Insurance Company Limited	Trinidad & Tobago
Grenada Motor & General Insurance Company Ltd	Grenada
Grenadian General Insurance Company Limited	Grenada
Grensure Fire & General Insurance Limited	Foreign (G'da)
Groupement Francaise D'assurance Caraibes	Martinique
GULF Insurance Limited	Trinidad & Tobago
Guyana & Trinidad Mutual Fire Insurance Company Limited	Guyana
Heritage Insurance Company Limited	Tortola, BVI
I.Q. Reinsurance Company Limited	St Maarten
Island Heritage Insurance Company Limited	Cayman Islands
Lloyds Underwriters	England
Malliouhana - Anico Insurance Company Limited	Anguilla
Midland National Life Insurance Company	United States of America
Metrocint General Insurance	St Vincent & the Grenadines
National General Insurance Company (NAGICO)	St Maarten
National Guarantee Insurance Company Limited	Foreign (G'da)
NEM (West Indies) Insurance Limited	Trinidad & Tobago
Netherlands Insurance Company (WI) Limited	Grenada
New West Indian Mutual & General Assurance Company Limited	Foreign (G'da)
PIC Insurance Company Limited	Antigua & Barbuda
Physicians Excess Insurance Company Ltd	United States of America
St Hill Insurance Company Limited	St Vincent & the Grenadines
St Lucia Motor & General Insurance Company Limited	St Lucia
St Vincent Insurances Company Limited	St Vincent & the Grenadines
The Beacon Insurance Company Limited	Trinidad & Tobago
The New India Assurance (TnT) Company Limited	Trinidad & Tobago
Trans-Nemwil Insurance (Grenada) Limited	Foreign (G'da)
Trinidad & Tobago Insurance Company	Trinidad & Tobago
United Insurance Company Limited	Barbados
West Indian Insurances (SVG) Company Limited	St Vincent & the Grenadines
West Indies General Insurance Company Limited	St Lucia

## LIST OF ABBREVIATIONS

ACH	Automated Clearing House
ATM	Automated Teller Machine
BIS	Bank for International Settlements
BPR	Bank Performance Report
CARICOM	Caribbean Common Market
CARTAC	Caribbean Regional Technical Assistance Centre
CCCU	Caribbean Confederation of Credit Unions
CPI	Consumer Price Index
CPSIPS	Core Principles for Systemically Important Payment Systems
CPSS	Committee on Payment and Settlement Systems
CSD	Central Securities Depository
CSME	CARICOM Single Market and Economy
DVP	Delivery versus Payment
ECCB	Eastern Caribbean Central Bank
ECCSD	Eastern Caribbean Central Securities Depository
ECCU	Eastern Caribbean Currency Union
ECEF	The Eastern Caribbean Enterprise Fund
ECHMB	The Eastern Caribbean Home Mortgage Bank
ECIB	Eastern Caribbean Institute of Banking and Financial Services
ECPC	Eastern Caribbean Payments Council
ECSE	Eastern Caribbean Securities Exchange
ECSM	Eastern Caribbean Securities Market
ECSNS	Eastern Caribbean Securities Numbering System
ECSR	Eastern Caribbean Securities Registry
ECSRC	Eastern Caribbean Securities Regulatory Commission
ECUT	The Eastern Caribbean Unit Trust
EFTPOS	Electronic Funds Transfer at the Point of Sale
EU	European Union
FATF	Financial Action Task Force
FDI	Foreign Direct Investment
FSAP	Financial Sector Assessment Program
GATS	General Agreement on Trade in Services

GDP	Gross Domestic Product
IAIS	International Association of Insurance Supervisors
IAS	International Accounting Standards
ISIN	International Securities Industry Numbering
NACHA	National Automated Clearing House Association
NTOC	National Technical Operating Committee
OECS	Organization of Eastern Caribbean States
OMOs	Open Market Operations
OTC	Over-the-Counter
POS	Point of Sale
PVP	Payment versus Payment
RDCC	Regional Debt Coordinating Committee
RGSM	Regional Government Securities Market
RSM	Regional Securities Market
RTGS	Real Time Gross Settlement
RTOC	Regional Technical Operating Committee
SML	Securities Market Law
STP	Straight Through Processing
SWIFT	Society for Worldwide Interbank Financial Telecommunications
USA	United States of America
VPN	Virtual Private Network
WHI	Western Hemisphere Payments and Securities Clearance and Settlement Initiative
WIDBECO	Windward Islands Banana Development and Exporting Company
4Cs	Caribbean Credit Card Corporation

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