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Please see our full contact details on the last page.

The Emergence of Electronic Payments in Trinidad and Tobago

Electronic payments, in a broad sense, refer to any non-cash, non-paper based means of making a payment. Globally, making electronic payments is rapidly becoming the norm today. This is because the public is seeking faster and more convenient ways of paying for goods and services, and modern technology is making it possible to satisfy this demand at reasonable costs. This worldwide trend is already evident in Trinidad and Tobago.



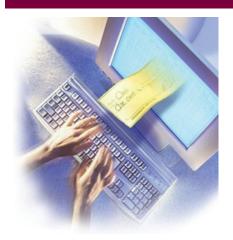


Prior to the 1990's, almost all domestic payments were made either by cash or cheques. While Automated Teller Machines (ATMs) were in existence they could only be utilised for proprietary transactions. In the 1990's, following global trends, there was a noticeable increase in the use of electronic payments. The number of payments made by debit cards rose dramatically following the introduction of the LINX system in 1995. This system allows customers electronic access to their bank accounts from point-of-sale terminals at a large number of merchants and from ATMs. The use of credit cards also increased as an alternative means of paying for goods and services. In the latter part of the 1990's commercial banks introduced telephone banking and more recently have offered their customers internet banking.

All means of making payments other than cash require some system for ensuring that value actually passes from the person or entity making the payment to the person or entity to be paid in a secure, timely and accurate manner. These clearance and settlement systems form the backbone of a payment system. The term *clearance* in a payment system refers to the process of verification that the payer has the money to make the payment and that the payment method by which the transaction is effected is valid. It always precedes the settlement process. *Settlement* refers to the actual exchange of value from the payer to the beneficiary.

The **Central Bank** plays a key role in the clearance and settlement of payments and has been at the center of recent efforts to modernise these systems. The Central Bank Act mandates that the Bank establish and maintain a clearinghouse in conjunction with the commercial banks. In the cash/cheque payment environment that prevailed previously, the Bank presided over a **cheque clearinghouse** and

The Emergence of Electronic Payments in Trinidad and Tobago (continued)



a "special clearings" facility for large value payments. With the emergence of electronic payments, the Bank has spearheaded the development of automated systems for clearance and settlement.

In 2004, the Bank introduced the Real Time Gross Settlement (RTGS) system for large value (TT\$500,000 and over) and time-critical payments. The Bank also partnered with commercial banks in the establishment of an Automated Clearinghouse (ACH) to improve the systems for payments of smaller value (2006). Instead of the 4 days on average that banks require for the clearance and settlement of cheques, the arrangements for electronic payments are both faster and safer. In the case of the RTGS system the process is completed in a couple of hours, while for the ACH it is the next day.

The modernisation of the payments system in Trinidad and Tobago, as elsewhere, extends beyond these infrastructure improvements to include reforms to the legal framework as well as the strengthening of oversight arrangements. Consequently, amendments were made to the Financial Institutions Act (the new bill passed in Parliament on 19th December 2008) to improve the regulatory framework for payments, while oversight of payments systems is now being explicitly undertaken. The Bank applies the international standards in the Basle Core Principles for Systemically Important Payment Systems as the benchmark for its oversight work.

The Bank also established a Payment System Council, comprising of major stakeholders in the payment system, to promote measures which will ensure that the country continues to have an appropriate payment system as its needs change over time¹.

The Government and Electronic Payments



One of the objectives identified in the Vision 2020 statement of the Government of the Republic of Trinidad and Tobago (GoTT) is the promotion of electronic business (e-Business) and electronic commerce (e-Commerce) in the local economy. A critical element of e-commerce is the ability to transfer funds or value from the buyer to the seller of goods and services by electronic means otherwise called Electronic Funds Transfers (EFTs).

2. The Treasury Division of the Ministry of Finance, which has responsibility for government receipts and payments, is working towards the adoption of electronic means for government payments and receipts. In order to facilitate the implementation of the EFT systems, legislative amendments are necessary to the Exchequer and Audit Act, Chapter 69:01 and the accompanying Financial Regulations. The changes are currently being pursued by the Ministry of Finance.

3. The under-mentioned financial systems will facilitate EFT's and thus enable government to improve its service delivery to the public:

a) The Integrated Global Payroll

The Integrated Global Payroll (IGP) system which was implemented in the Public Service in the year 2005 has the functionality of Electronic Funds Transfer (EFT). This is expected to facilitate the payment

¹ Further information on the payments system can be obtained from the Central Bank's website, www.central-bank.org.tt/financial_stability.

of salaries, wages and pensions directly into the bank accounts of over 85,000 persons currently on the IGP system. This will have the effect of increasing efficiency in making these kinds of payments.

b) Government Payment System

The current payment system in the Public Service, known as the Cheque Writing System (CWS), is being upgraded to include the additional functionalities of Electronic Funds Transfer and the automation of the reconciliation process. The implementation of the EFT module will facilitate payments directly into the bank accounts of suppliers/clients of the Government by the end of

November 2009.

c) Other Systems

- It is also proposed to use EFT systems to facilitate payments to and by the Government as follows:
- The introduction of Point of Sale Terminals for the collection of revenue via debit and credit cards used by consumers;
- A Government Agency website where consumers can access the system using passwords in order to pay for services via debit/credit cards;
- A Government portal that is a website for all Government Agencies where the mechanism for the transfer of funds from the consumer is managed;
- The use of debit and credit cards by Government Agencies for the

procurement of goods and services;

Benefits of Electronic Payments

- 3. There are potentially significant administrative and cost benefits to be derived by Government and the public from the use of electronic payments. Some of the more significant include:-
 - Certainty of payment in the collection of fees and taxes;
 - Reduction in cashiering and other transaction costs;
 - Improvement in the efficiency of processing Government's payments and receipts;
 - An efficient convenient and safe option for members of the public to make payments to Government.

Increased Activity on Secondary Bond Market in Trinidad and Tobago

In January 2008, the Trinidad and Tobago Stock Exchange (TTSE), in collaboration with the Central Bank, launched an electronic platform for the trading of Government of Trinidad and Tobago bonds on the secondary market. Previously, this was an overthe-counter market which had seen relatively few transactions. The Bank views the development of the secondary market for government bonds as an integral part of the overall development of the Trinidad and Tobago capital market which is important for the broader development of the economy.

Table 1 shows the increase in the volume and value of secondary bond market trades since January 2009 when compared with the corresponding period in 2008. There was a noticeable increase in trades from around mid-2009 which may be attributable to the high levels of liquidity in the domestic banking system which led to a significant decline in short term rates and encouraged institutional investors to seek out previously-issued higher return coupon bonds.



Table 1

TRINIDAD & TOBAGO STOCK EXCHANGE ACTIVITY FOR SECONDARY BOND MARKET 2008 - 2009

	2008		2009	
	VOLUME OF TRADES	VALUE OF TRADES	VOLUME OF TRADES	VALUE OF TRADES
Jan-Mar	4	\$ 7,601,020	9	\$ 37,999,763
Apr-Jun	5	\$ 24,890,365	18	\$ 91,517,180
Jul-Sept	20	\$126,746,195	24	\$ 172,955,425
Oct-Dec	17	\$188,165,560		

Payments Glossary

Here are 5 terms² applicable to the Payments System:

1	Broker	a firm that communicates bid and ask levels to potential principals and otherwise arranges
		transactions as agent for a fee, without acting as counterparty in the transactions.

2 Delivery versus	a link between a securities transfer system and a funds transfer system that ensures that delivery
Payment	occurs if, and only if, payment occurs.

3	Certificate	the piece of paper which evidences the undertakings of an issuer of a security or financial
		instrument.

4	Dematerialisation	the elimination of physical certificates or documents of title which represent ownership of
		securities so that securities exist only as accounting records.

5	Securities	the full set of institutional arrangements for confirmation, clearance and settlement of securities
	Settlement System	trades and safekeeping of securities.

² Source: A Glossary of Terms used in Payments and Settlement Systems, Committee on Payment and Settlement Systems, Bank of International Settlement March 2003.

Safe-tt, ACH and Cheques Volume Meter

Safe-tt, ACH and Cheques statistics 2006-2008

	2006	2007	2008
Safe-tt	26,924	34,222	43,062
ACH	190,431	987,318	2,028,636
Cheques	10,618,146	10,641,346	10,685,786
Total	10,835,501	11,662,886	12,757,484

Safe-tt and ACH statistics 2009

	Quarter I	Quarter II	Quarter III
	2009	2009	2009
Safe-tt	11,212	11,795	11,093
ACH	575,047	622,283	671,265
Total	586,259	634,078	682,358

