

STATISTICAL REPORT ON PAYMENT SYSTEMS IN TRINIDAD AND TOBAGO 2000-2010



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ISSN: 2226-423X

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### **EXECUTIVE SUMMARY**

In 2000, the Central Bank began to take a number of initiatives to improve and modernize the domestic payments system. These measures included the:

- 1. Introduction of automated payment clearance and settlement systems.
- 2. Strengthening of the governing legislation.
- 3. Establishment of a Payment Oversight function.
- 4. Promotion of electronic payments.
- 5. Establishment of a Payments System Council.
- 6. Collection of payments system statistics on a regular basis.

This Payment Systems Statistical Report provides a consolidation of data collected by the Bank on transaction volumes and values between 2000 and 2010. In the earlier part of this period, the data were less robust and some estimation was necessary. In the last three years the data were more comprehensive as the Bank began to receive more detailed information from both participants and operators of payment systems on a consistent basis such as the Trinidad and Tobago Interbank Payment System, InfoLink Services

Limited, the Central Bank and the commercial banks. The Bank has also begun to collect statistics on the use of various payment channels such as the telephone, internet and the Automatic Teller Machines (ATMs) as well as on payments made through bill payment service providers.

The data showed that the use of cash and cheques was still significant but that electronic means of making payments have been utilized increasingly since 2005. Among the various non-cash means of payment, the debit card showed the highest volumes while the Real Time Gross Settlement (RTGS) system accounted for the highest value of payments. The data also showed significant growth in the use of payment channels such as the ATM network, with a slower increase in the use of internet and telephone banking facilities.

Part I of the Report describes the growth trends in individual payment instruments and Part II treats with the use of electronic payment channels and bill payment services. An Appendix of statistical tables is attached at the end of the report.

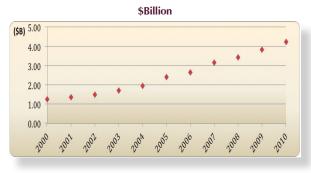
## PART 1

# GROWTH TRENDS IN THE USE OF PAYMENT INSTRUMENTS

### CASH PAYMENTS

The collection of statistics with respect to the use of cash as a form of payment presents challenges and the industry generally uses the growth in currency in active circulation as a proxy. The data showed that the value of currency in active circulation grew at an average annual rate of 12.9 per cent over the period 2000 to 2010, with a faster growth in the period between 2005 and 2010 (13.9 per cent) compared with 11.5 per cent in the period 2000 – 2004. (Chart 1 shows the increases in dollar terms over the period.)

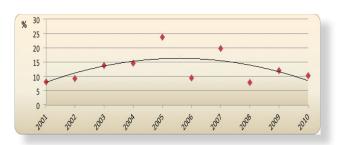
Chart 1 Growth in Currency in Active Circulation, 2000-2010



Source: Central Bank of Trinidad and Tobago.

The year-on-year growth rate increased steadily up to 2005, fluctuated between 2005 and 2009 and slowed in 2010. (Chart 2)

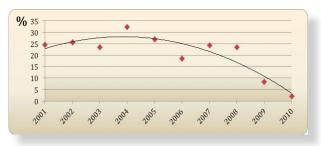
Chart 2 Year-on-Year Growth in Currency in Active Circulation, 2001-2010



Source: Central Bank of Trinidad and Tobago.

This broad trend was also evident in the withdrawals of cash using the local debit card, except that a more distinct downward trend in the growth rate was evident since 2005. (Chart 3)

Chart 3 Year-on-Year Growth in Local Debit Card ATM Withdrawal, 2001-2010



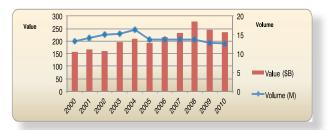
Source: Central Bank of Trinidad and Tobago.

Since 2008, data have also been collected on the use of credit cards for ATM cash withdrawals (cash advances) and this has shown declines of 5.88 per cent in 2009 and 2.38 per cent in 2010.

# PAPER-BASED PAYMENTS - CHEQUES

The volume of cheques utilized increased between 2000 and 2004 and thereafter declined steadily. In 2000, the total number of cheques negotiated amounted to just over 13 million. This climbed to 16.4 million in 2004 and fell back to 12.7 million in 2010. Even as the volume of cheques declined, their value continued to increase reaching a high of \$278 billion in 2008 before trending down to \$235 billion in 2010. (Chart 4)

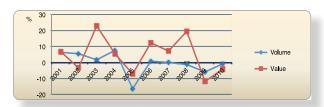
Chart 4
Cheque Volume and Value, 2000-2010



Source: Central Bank of Trinidad and Tobago.

The year-on-year growth rates in cheque values showed a great deal of fluctuation over the period 2000 to 2010 whereas the year-on-year volumes reflected a steadier decline. (Chart 5)

Chart 5 Year-on-Year Growth in Cheque Volume and Value, 2001-2010



Source: Central Bank of Trinidad and Tobago.

### **ELECTRONIC PAYMENTS**

Electronic payments are made through (1) Electronic Funds Transfer at Point-of-Sales Terminals (EFTPOS) using debit and credit cards, (2) the Automated Clearing House (ACH) and (3) the RTGS systems.

### **EFTPOS**

#### **Debit Cards**

Since 1996, the local debit card system has facilitated EFTPOS transactions by customers of participating banks. The volume of EFTPOS transactions processed over this network has grown from 5 million in 2000 to over 30 million in 2010, representing an increase in value from \$1 billion to about \$8 billion over the same period. (Chart 6)

Chart 6 Local Debit Card EFTPOS Volume and Value, 2000-2010



Source: Central Bank of Trinidad and Tobago.

Although the volume and value have increased steadily over the period, there has been a slowdown in the growth rates. The rise in volumes slowed from 47 per cent in 2001 to 7 per cent in 2010, while the growth in value declined from 40 per cent to 7 per cent in the same period. (Chart 7)

Chart 7 Year-on-Year Growth in Local Debit Card EFTPOS Volume and Value, 2001-2010

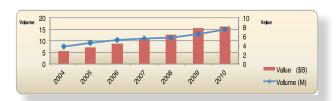


Source: Central Bank of Trinidad and Tobago.

#### Credit Cards

Since the late 1980s, internationally-branded credit cards, such as VISA and MasterCard, have been issued by commercial banks in Trinidad and Tobago. However, statistics on EFTPOS via credit cards were only available from 2004. The data showed that the volume and value of these EFTPOS transactions grew steadily from 8 million with a value of \$3.0 billion in 2004 to over 15 million with a value of \$8.0 billion in 2010. (Chart 8)

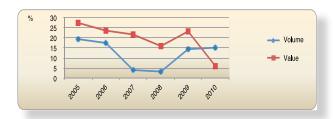
Chart 8
Credit Card EFTPOS Volume and Value,
2004-2010



Source: Central Bank of Trinidad and Tobago.

However, the volume and value growth rates have trended downwards except in the year 2009, with the decline in the value outpacing that in the volume. The rate of increase in volume fell from 19 per cent in 2005 to 15 per cent in 2010 whereas the change in year-on-year value was from 27 per cent to 6 per cent. (Chart 9)

Chart 9 Year-on-Year Growth in Credit Card EFTPOS Volume and Value, 2005-2010

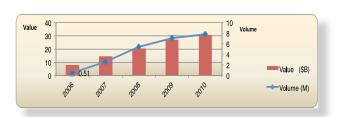


Source: Central Bank of Trinidad and Tobago.

### **ACH**

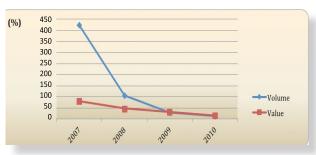
The local ACH was launched by the Trinidad and Tobago Interbank Payment System (TTIPS) Limited in 2005. This is an electronic funds transfer (EFT) system for the batch processing of recurrent credit and debit transactions such as salaries and insurance payments. ACH transfer volumes increased from under 1 million in 2006, the first whole year of operation, to over 7 million in 2010 representing an increase in values from \$8 billion to \$31 billion over the period. (Chart 10)

Chart 10 ACH Volume and Value, 2006-2010



Not unexpectedly, after the initial period, the year-on-year growth rates in the volume and value of ACH transactions have stabilized. The slowdown has been sharper in terms of volume than value, suggesting that the average size of these transfers has increased. Whereas in 2007, volumes grew at a rate of 400 per cent with a corresponding growth in value of 50 per cent, in 2010, the annual rate of growth declined to 12 per cent in the volume of ACH transfers accompanied by a 13 per cent growth in value. (Chart 11)

Chart 11 Year on Year Growth in ACH Transfer Volume and Value, 2007-2010

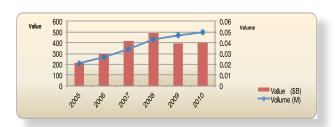


Source: Central Bank of Trinidad and Tobago.

### **RTGS**

The RTGS system was introduced in 2004 and processes interbank large value and time-critical payments. Transactions processed through to RTGS increased from 20,000 with a value of \$211 billion in 2005, the first whole year of operation, to just under 50,000 with a value of \$400 billion in 2010. (Chart 12)

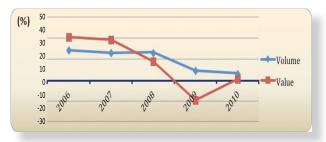
Chart 12 RTGS Volume and Value, 2005-2010



Source: Central Bank of Trinidad and Tobago.

As with the ACH, the year-on-year growth in RTGS volumes and values has slowed as the system matured. However, unlike the ACH, the slowdown in value has been much sharper than in volume. The year-on-year growth in RTGS value slowed from 40 per cent in 2006 to a negative 18 per cent in 2009 before recovering to an increase of 1.0 per cent in 2010, while in volume terms the rate slowed from 29 per cent in 2006 to 0.5 per cent in 2010. (Chart 13)

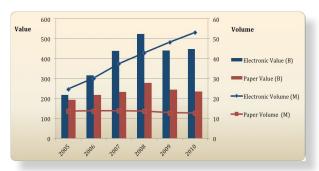
Chart 13 Year-on-Year Growth in RTGS Transfer Volume and Value, 2006-2010



# PAPER vs ELECTRONIC 2000-2010

An important statistic that is monitored to evaluate the efficiency of the payments system is the trend in the growth of paper (cheques) versus electronic payments.<sup>1</sup> Electronic payments grew from 24 million with a value of \$218 billion in 2006 to 53 million with a value of \$448 billion in 2010. By comparison, cheque volumes have remained relatively unchanged. In 2005, 13.7 million cheques with a total value of \$194.1 billion were negotiated compared with 12.7 million with a total value of \$235 billion in 2010. (Chart 14)

Chart 14 Growth in Paper vs. Electronic Payments, 2005-2010

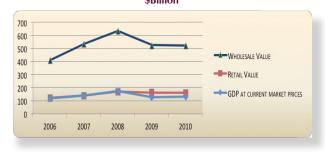


Source: Central Bank of Trinidad and Tobago.

# RETAIL vs WHOLESALE PAYMENTS

Another useful statistic is the trend in retail (small value) compared to wholesale (large value) payments<sup>2</sup>. Retail payments are generally made via cheques, ACH transfers and EFTPOS (by credit and debit cards), while wholesale payments are largely made by RTGS transfer. However, a relatively small number of large value payments continued to be made by cheques. Contributing to this was the fact that until the necessary amendments are made to the Exchequer and Audit Act, the Government is required to make and receive payment by cash or cheque. There has been a relatively steady increase in both retail and wholesale payments since 2006, except for the year 2009 when there was a marked decline in GDP (Chart 15). The sharper fall in wholesale values relative to retail suggests that wholesale payments were more significantly impacted by the slowdown in GDP growth than retail payments.

Chart 15 Growth in Retail and Wholesale Value Relative to GDP, 2006-2010 \$Billion



<sup>&</sup>lt;sup>1</sup> Electronic payments in Trinidad and Tobago comprise electronic funds transfer through point-of-sale (EFTPOS), the Automated Clearing House (ACH) and the Real Time Gross Settlement System (RTGS).

<sup>&</sup>lt;sup>2</sup> In Trinidad and Tobago, wholesale payments are defined as any payment which is valued \$500,000.00 and over.

# PART 2

### ELECTRONIC PAYMENT CHANNELS AND BILL PAYMENT SERVICES

This section presents statistics on volumes and values of payments made via the various commercial bank channels (ATMs, telephone and internet banking) as well as through bill payment service providers (BPSPs³) for the period 2008-2010. These have been disaggregated into credit transfers and utility bill payments. (Table 1).

Table 1
Payment Channel Activity 2008-2010

	Те	le Banking		Inte	rnet Banki	ing		ATM	
	Credit	Utility		Credit	Utility		Credit	Utility	
	Transfers	Payments	Total	Transfers	Payments	Total	Transfers	Payments	Total
	VOLUME (Thousands)								
2008	291	98	389	283	155	438	N/A	N/A	N/A
2009	296	83	379	321	21	342	193	44	237
2010	312	76	388	366	266	632	183	40	223
	VALUE (Billions)								
2008	0.94	0.0440	0.984	4.12	1.3440	5.467	N/A	N/A	N/A
2009	0.97	0.029	0.996	5.99	1.420	7.410	1.24	0.056	1.294
2010	1.032	0.028	1.060	7.600	1.200	8.800	0.347	0.056	0.403

Source: Central Bank of Trinidad and Tobago.

<sup>3</sup> The major BPSPs are TTPOST (Bill Pay), Illuminat (SurePay), G-tech (Via) and Grace (Bill Express).

The data showed that among these payment channels, while the largest values were transferred through internet banking, bill service providers were the most utilized for utility payments. This reflected the fact that the majority of BPSP payments were small sums, made in cash. (Table 2).

Table 2
BPSP PAYMENT VOLUMES AND VALUES
BY PAYMENT MODE, 2010

January-December	Volume	Value
2010	(M)	(\$B)
Cash	1.440	0.428
Cheque	0.0004	0.001
Credit Card  Debit Card (LINX)	0.185 0.211	0.085
Total	1.836	0.589

Source: Central Bank of Trinidad and Tobago.

ATM utility bill and internal credit transfer transaction volumes have declined modestly from 237,000 in 2007 to 223,000 in 2010, but there has been a significant fall-off in values from \$1.29 billion in 2009 to \$0.40 billion in 2010. Telephone banking, which remains largely a proprietary channel allowing customers to transact business within the commercial bank's own network, has shown little change between 2008 and 2009, while the use of internet banking has grown. Internet payment activity increased from 438,000 with a value of \$5.5 billion in 2008 to 632,000 with a value of \$8.8 billion in 2010.

# PART 3

### APPENDIX LIST OF TABLES

#### **CASH Series A**

A. I Currency in Active Circulation

A. II Local Debit Card ATM Withdrawals, 2000-2010

A. III Credit Card ATM Cash advances Volumes and Values, 2008-2010

#### **PAPER Series B**

B. I Cheque Volumes and Values, 2000-2010

#### **ELECTRONIC Series C**

C. I ACH Volumes and Values, 2006-2010

C. II Local Debit Card (EFTPOS) Volumes and Values, 2000-2010

C. III Credit Card (EFTPOS) Volumes and Values, 2004-2010

C. IV RTGS Volumes and Values, 2005-2010

#### **Notes to Tables**

### **CASH**

A. I CURRENCY IN ACTIVE CIRCULATION, 2000-2010

Year	Currency in Active Circulation (\$B)	Growth (%)
2000	1,270	-
2001	1,373	8.11
2002	1,501	9.32
2003	1,708	13.79
2004	1,957	14.58
2005	2,425	23.91
2006	2,654	9.44
2007	3,182	19.89
2008	3,433	7.89
2009	3,850	12.15
2010	4,242	10.18

Source: Central Bank of Trinidad and Tobago.

A. II Local Debit Card ATM WITHDRAWAL VOLUMES AND VALUES, 2000-2010

Year	Volume (M)	Growth (%)	Value (\$B)	Growth (%)
2000	9.92	-	2.70	-
2001	11.92	20.16	3.36	24.44
2002	13.02	9.23	4.22	25.60
2003	14.89	14.36	5.21	23.46
2004	18.09	21.49	6.89	32.25
2005	21.43	18.46	8.74	26.85
2006	22.96	7.14	10.35	18.42
2007	26.69	16.25	12.87	24.35
2008	29.60	10.90	15.90	23.54
2009	30.80	4.05	17.22	8.30
2010	31.07	0.88	17.56	1.97

A. III Local Debit Card ATM WITHDRAWAL VOLUMES AND VALUES, 2008-2010

Year	Volume (M)	Growth (%)	Value (\$B)	Growth (%)
2008	1.52	-	1.19	-
2009	1.77	16.45	1.26	5.88
2010	1.75	-1.13	1.23	-2.38

Source: Central Bank of Trinidad and Tobago.

### **PAPER**

B. I CHEQUE VOLUMES AND VALUES, 2000-2010

Year	Volume (M)	Growth (%)	Value (\$B)	Growth (%)
2000	13.30	-	155.76	-
2001	14.14	6.34	166.06	6.61
2002	14.95	5.70	160.80	-3.17
2003	15.19	1.64	197.59	22.88
2004	16.36	7.70	208.85	5.70
2005	13.69	-16.32	194.12	-7.05
2006	13.80	0.80	217.58	12.09
2007	13.83	0.22	232.85	7.02
2008	13.66	-1.23	278.02	19.40
2009	12.86	-5.86	244.93	-11.90
2010	12.74	-0.93	234.98	-4.06

### **ELECTRONIC**

C. I ACH VOLUMES AND VALUES, 2006-2010

Year	Volume (M)	Growth (%)	Value (\$B)	Growth (%)
2006	0.51		8.02	
2007	2.67	423.53	14.34	78.80
2008	5.48	105.24	20.86	45.47
2009	7.01	27.92	27.30	30.87
2010	7.89	12.55	30.96	13.41

Source: Central Bank of Trinidad and Tobago.

C. II Local Debit Card (EFTPOS) VOLUMES AND VALUES, 2000-2010

Year	Volume (M)	Growth (%)	Value (\$B)	Growth (%)
2000	4.88	-	0.88	-
2001	7.16	46.69	1.24	40.41
2002	8.61	20.32	1.72	38.80
2003	10.60	23.13	2.22	29.41
2004	13.02	22.77	3.01	35.28
2005	15.72	20.78	3.56	18.40
2006	19.15	21.82	4.68	31.58
2007	22.83	19.20	5.96	27.25
2008	26.14	14.49	7.21	20.98
2009	28.30	8.26	7.73	7.19
2010	30.31	7.13	8.26	6.92

C. III CREDIT CARD (EFTPOS) VOLUMES AND VALUES, 2004-2010

Year	Volume (M)	Growth (%)	Value (\$B)	Growth (%)
2004	7.54	-	2.82	-
2005	9.00	19.36	3.59	27.30
2006	10.58	17.56	4.44	23.68
2007	11.98	13.23	5.40	21.62
2008	11.34	-5.34	6.27	16.11
2009	12.97	14.37	7.73	23.29
2010	14.95	15.27	8.20	6.08

Source: Central Bank of Trinidad and Tobago.

C. IV RTGS VOLUMES AND VALUES, 2005-2010

Year	Volume (M)	Growth (%)	Value (\$B)	Growth (%)
2005	0.02	-	211.61	-
2006	0.03	50.00	299.00	41.30
2007	0.03	0.00	414.44	38.61
2008	0.04	33.33	490.24	18.29
2009	0.05	25.00	397.42	-18.93
2010	0.05	0.00	401.30	0.98

### **NOTES TO TABLES**

Data prior to 2007 were estimated based on actual data provided by system operators and commercial banks.

Data in 2008 and 2010 were derived from CB70 and 71 returns submitted by system operators and commercial banks with some adjustments.

Data for Credit Card POS operations were not available before 2004.

Data for Credit Card ATM transactions were not available prior to 2008 with the introduction of the CB70 return.

ACH began operations in 2005, however whole year data are available from 2006 only.

RTGS began operations in 2004, however whole year data are available from 2005 only.

