

Report



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Examining Canadian Payment Methods and Trends October 2012

Acknowledgments

A number of organizations assisted the CPA by providing data and information, guidance on assumptions, and feedback on draft document versions. The CPA would like to acknowledge the contributions provided by the following organizations:

Bank of Canada

TD

Symcor

Interac

PayPal

Technology Strategies International

Enstream

EuroMonitor

The views expressed in this report are those of the CPA, and should not be attributed to the organizations named above.

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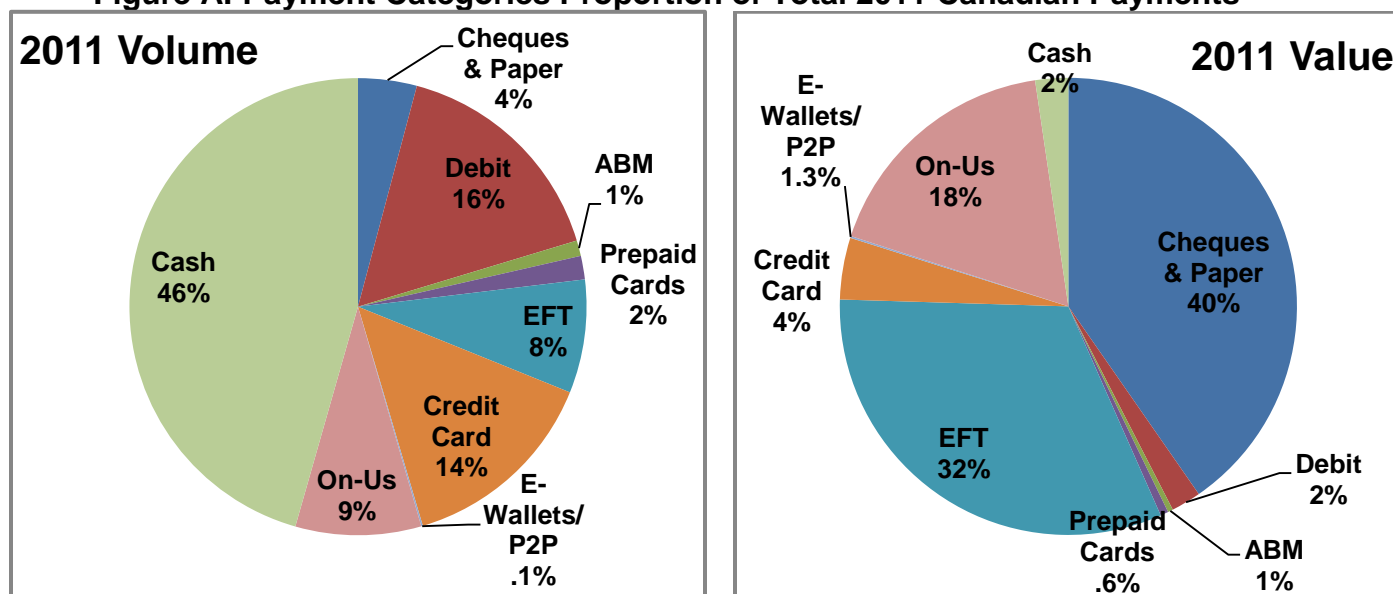
Executive Summary

In early 2012, the CPA gathered retail payments data from payment service providers, financial institutions, and payments researchers and consultants. The objective of this initiative was to assemble a complete picture of the 2011 retail payments landscape¹, identify the most common payment types, and gain insights on emerging payments.

Participant data and information provided revealed that in 2011:

- Cash was the most widely used method for making retail payments, accounting for almost half of retail transactions made in the year.
- Debit was the second most widely used payment method, being used for 16% of all retail payments in Canada.
- Emerging payments such as and E-wallets and electronic P2P, combined for a total value of nearly \$10 billion dollars, but still represent a small portion of overall Canadian payments.
- Cheques and Paper payments constituted 40% of the total value of retail payments made in Canada, the largest value payment category.
- “On-us” transactions², where the Payor and Payee use the same financial institution, accounted for about 20% of payments value in 2011.
- Credit cards accounted for just 4% of the value, but 14% of the volume of payments made in Canada.
- Prepaid card payment volume was about 2% of Canadian retail payments, a payment volume level equivalent to about half of the cheque and paper transactions made.

Figure A: Payment Categories Proportion of Total 2011 Canadian Payments



¹ With the focus on retail payments or payments other than wholesale payments, LVTS payments are excluded. Business cheques (under \$25 million), direct debit, credit card, etc. payments are included in the data .

² “On-us” cheque, debit and EFT transactions occur when both the payee and payor use the same financial institution. These transactions do not clear through the CPA.

To assess how payments have evolved in recent years, a comparison of the 2011 data was performed against data gathered from 2008. The comparison revealed several interesting Canadian retail payment trends.

When combined, the volumes and values of payments cleared by the CPA (cheque and paper, debit, ABM, and EFT payments) remained relatively stable over the 2008-2011 period, where CPA volumes represented about a quarter of the total volume and two-thirds of the total value of Canadian retail payments. About 60% of the volume growth and about 45% of the value growth observed during the period, occurred with CPA cleared electronic payments.

The research suggests that the only payment methods to decrease since 2008, have been paper-based forms of payments, including cash, ABM transactions (for cash withdrawals) and cheques – which have also impacted the On-Us payment category. Cheques and paper payment items represented the largest declining payment category, decreasing by over 14% in volume and 9% in value.

Credit and debit card payments have grown substantially over the period, and now account for a combined 30% of all Canadian payments volume. Credit card payments volume grew faster than debit payments, averaging over 7% annual growth.

Emerging payments such as prepaid cards, E-wallets and electronic P2P payments grew at the fastest rate over the period analyzed. Both emerging payment categories grew by over 100% in volume and had a compound annually growth rate (CAGR) at above 30%. Both also grew in value by around 45% on average each year.

Figure B: Canadian Payments Data Volume – 2008 through 2011

Payment Category*	2008 Volume (Millions)	2011 Volume (Millions)	% Change	CAGR
Cheques & Paper	1,027.1	881.1	-14.2%	-5.0%
Debit	2,937.0	3,435.6	17.0%	5.4%
ABM	265.3	233.4	-12.0%	-4.2%
Prepaid Cards	153.5	353.3	130.2%	32.0%
EFT	1,501.3	1,703.3	13.5%	4.3%
Credit Card	2,464.9	3,038.0	23.3%	7.2%
E-Wallets/P2P	8.8	24.0	172.7%	39.7%
On-Us	1,939.9	1,887.1	-2.7%	-0.9%
Cash	10,072.5	9,678.0	-3.9%	-1.3%
TOTAL	20,370.3	21,233.8	4.2%	1.4%

*CPA cleared payments indicated by bold font

1. Background

Innovations and developments in the payments industry have resulted in a greater variety of payment methods in regular use by Canadians. Industry trends suggest that Canadians are moving away from traditional methods of payments, such as cash and cheques, towards a variety of electronic payment methods. While the CPA seeks to address this evolution through its strategic initiatives, it conducts periodic payments landscape research to evaluate the depth of payment trends.

In the interest of gaining a fuller understanding of the Canadian payments market, the CPA approached Canada's payment service providers, financial institutions, and payments researchers and consultants with an opportunity to contribute in developing a complete retail payment data-set. The objective of this initiative was to create an accurate amalgamation of Canadian payments data, in order to discern the most common retail payment methods used in Canada and gain insights on emerging payment products.

To assess the current retail environment in Canada, the CPA compared the data provided from participants with data gathered from 2008. The three year observation span provides insights into the trends occurring in the payments industry today, and the impacts these trends have had on CPA payment volumes and streams. As the focus of the research was on retail payments, wholesale payments from the LVTS system were not included in the analysis.

For details on the methodology, definitions, and assumptions please see the **Appendix**.

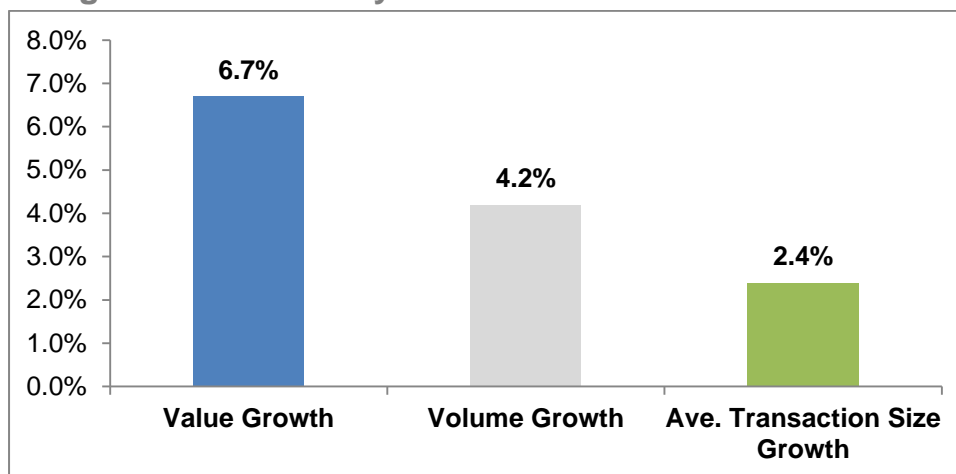
2. Research and Findings Overview

Most payment categories have grown during the period between 2008 and 2011 (the "period"), contributing to an overall growth in payments in Canada. CPA estimates that total payment activity has increased by about 4.2% in volume and 6.7% in value over the period. Over that time, the average transaction size has increased by about 2.4%. Figures which appear in *Section 3 - Data Tables and Figures* (below) outline the overall growth rates and Compound Annual Growth Rates (CAGR)³ of the payment categories analyzed in this report.

In general, paper payments have declined substantially, while electronic forms of payments, including EFT, debit and credit based payments, prepaid cards, and E-wallet payments, have experienced strong growth. A sizeable portion of the payments growth (40% of volume and 55% of value) has taken place with payments that do not clear through CPA systems. Overall CPA payments volume and values have remained stable since 2008, as CPA systems have experienced strong electronic payment growth, but paper payment declines have off-set much of the growth.

³ CAGR figures are used, since we are comparing two years of data (2008 and 2011), to show the general trends across the payment Categories during these years. CAGR assumes a steady growth rate.

Figure 1: Overall Payment Growth Between 2008-2011



2.1 Traditional Methods of Payment Continued to Decline

In 2011, cash was the most widely used method for making retail payments in Canada, accounting for 46% of all retail transactions. Cheques and paper item payments represented the largest share of retail payments value (40%), accounting for about as much payment value as EFT, credit card, debit card, and cash payment values combined.

Paper based forms of payment have decreased since 2008 though, including cash, cheques, and ABM transactions (for cash withdrawals)⁴. Cash use declined moderately, from 50% of retail transaction in 2008 to about 46% in 2011. ABM transactions also fell during the period along with the use of cash, where ABM transaction volume decreased by 12% and the value of ABM transactions decreased by 9% since 2008.

Cheques and paper item payments lead all other payment categories in their rate of decline since 2008. Cheques and paper payments total share of Canadian payments value fell by an estimated 7% between 2008 and 2011, while paper item volume fell by 14%. The total value of cheque payments declined by over \$300 million dollars, or about 9% during the period.

2.2 Credit and Debit Cards Continued to Make Gains

In 2011, debit and credit cards were the first and second (respectively) most commonly used non-cash retail payments. Debit and credit cards combined for about a third of total Canadian payments volume in the year (16% and 14% respectively).

Credit and debit cards were also the most widely used non-cash payments in 2008, and grew substantially in the period between 2008 and 2011. Credit card payment volume grew by about 7% annually, slightly outpacing debit card payment volume, which grew by about 5% on average. Credit and debit cards also grew in terms of the total value of payments they represent, growing by 2% and 4% respectively on average each year.

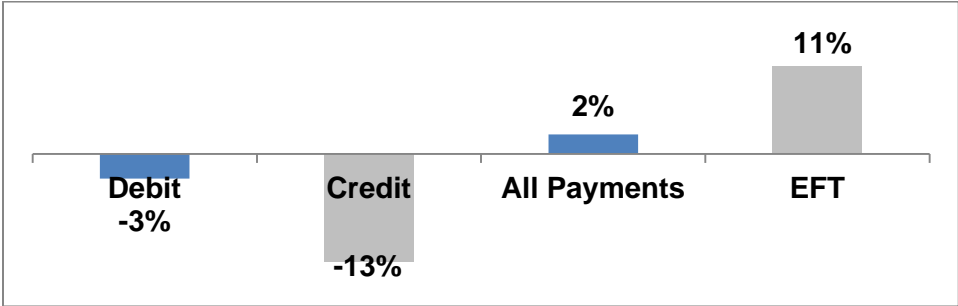
⁴ On-us payments have also decreased in volume due largely to diminishing paper payment types.

While all other payment categories saw their average transaction size grow since 2008, credit and debit cards' average transactions sizes moved lower by 13% and 3% respectively. The lower average transaction sizes reflect a retail payment trend of increased use of credit and debit cards for low value transactions, including contactless payments.

With card payments becoming more appealing for low value transactions, cards are impacting the use of cash, which has been typically used for lower value retail payments (the average cash transaction is estimated to be approximately \$18).

Proliferation of contactless payments for low value transactions is starting to become a factor as well. According to MasterCard, their contactless volumes are already approaching 10% of total credit card transactions in Canada, with contactless transaction sizes averaging below \$40 in value⁵.

Figure 2: Average Transaction Size Change Since 2008



2.3 Strong Growth in Emerging Payment Methods

In 2011, emerging payments, such as E-wallets and electronic P2P, combined for about \$10 billion worth of transactions, but still only represented about 1% of the total volume and value of payments made in Canada. Prepaid cards were widely used for payments in 2011, with the volume of transactions equating to almost half the volume of cheque and paper item payments made in the year.

Since 2008, prepaid cards (which includes both closed and open loop cards) and emerging E-Wallet/P2P payments have been the fastest growing payment categories, both in terms of value and volume. Both emerging payment categories grew by over 100% in volume and had CAGR at above 30%. Both also grew in value by around 45% on average annually.

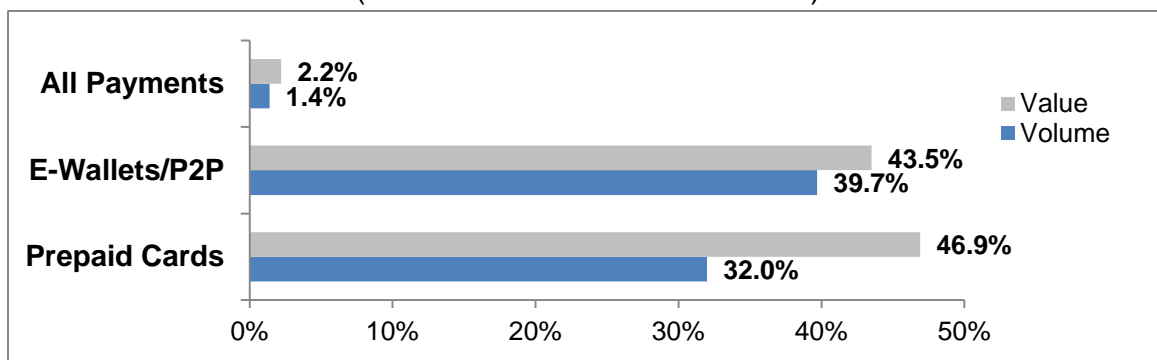
Prepaid cards exhibited the strongest overall average transaction size growth of all the payment categories in the analysis, growing by about 38% since 2008. Prepaid card average transaction size grew by about \$22 to \$116.57, surpassing both credit and debit card averages.

E-Wallets and electronic P2P payments have also experienced strong growth in Canada in recent years. This category covers non-card based, online and mobile payments, which use direct deposit or closed loop funds. Well known payments such as Zoompass, PayPal, and

⁵ Market News Canada, *Going Mobile- Getting Ready for the Mobile Wallet*, January 2012

Interac's E-Money Transfers are some of the major brands included in the category. The CPA estimates that there were 24 million E-Wallet/P2P transactions in 2011, worth nearly \$10 billion, up from about \$3 billion in 2008. All of the E-wallet transactions clear through systems outside of the CPA, so these payments are contributing to the growth of "non-CPA payments"⁶.

Figure 3: Growth in Emerging Payments
(CAGR between 2008 and 2011)



2.4 Share of CPA Cleared Payments Remained Stable

In 2011, the largest source of non-CPA payments, in terms of volume, was cash payments. For payments value, the largest source of non-CPA transactions were On-Ups payments. On-Ups payments do not involve a CPA inter-member exchange because the payor and payee have deposit accounts with the same financial institution. On-Ups accounted for an estimated 20% of all retail payments value in 2011.

The proportion of total Canadian payments volume that the CPA clears has grown slightly (by about 1%) since 2008, to about 30% (Figure 4). Despite overall payments value increasing by nearly 7%, the proportion of Canadian payments value cleared by the CPA declined by about 2% (Figure 5). The slight decline in CPA cleared payments can be explained by the growth of emerging payments and credit card payments which do not clear through the CPA, and shrinking cheque and paper item clearing (described in detail above).

In 2008, the CPA cleared over 1 billion cheque and paper items, while in 2011, the number dropped to 881 million (a 14% decline). Much of the volume and value appears to have shifted to EFT payments, which include pre-authorized debits, electronic bill payments, and electronic funds transfers via AFT credits (Figure 4).

About 60% of the volume growth and about 45% of the value growth observed during the period, occurred with CPA electronic payments. The growth in CPA cleared payments was led by debit volumes (at 17% during the period) and EFT payments, where EFT volume and value have grown strongly since 2008 (by 14% and 26% respectively). EFT payments also helped

⁶ "Non-CPA Payments" refers to payments that clear outside of CPA systems and rules. These include most prepaid, E-wallets, P2P, on-us, cash, and credit card transactions.

bolster a value increase observed for On-U.s transactions, which grew by about 18% during the period analyzed (Figure 5).

Figure 4: Volume of CPA Payments as a Percent of All Canadian Payments

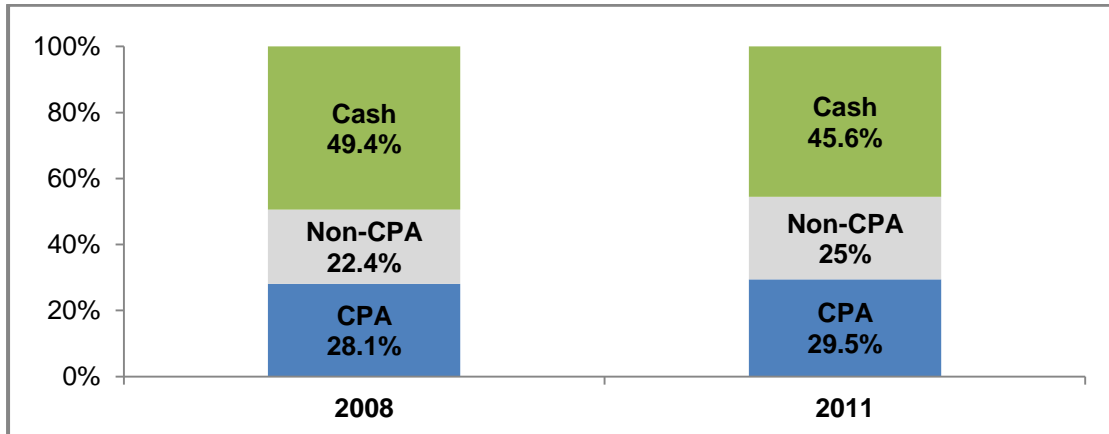
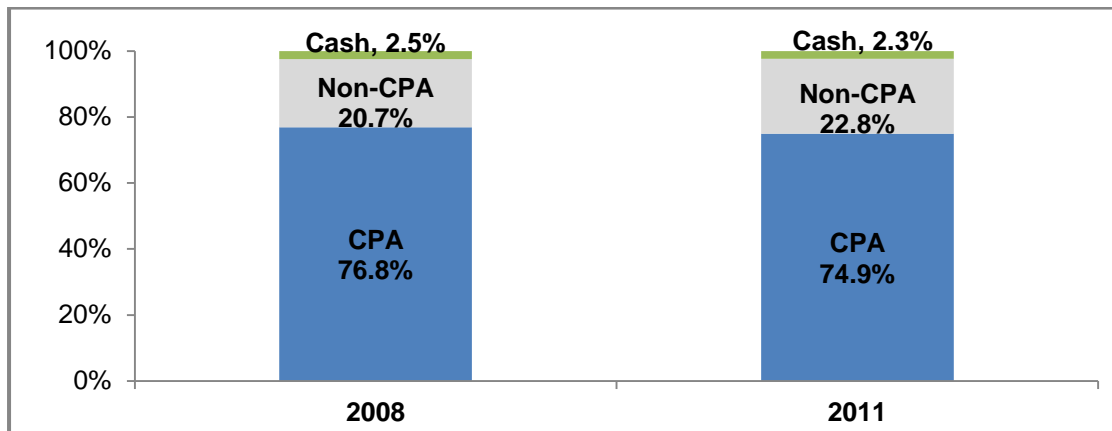


Figure 5: Value of CPA Payments as a Percent of All Canadian Payments



CPA Payments include cheques and paper, EFT, debit, and ABM items that clear through the ACSS. Non-CPA payments include credit card, prepaid card, On-U.s, E-wallets and electronic P2P payments.

3. Data Tables and Figures

Figure 6: Canadian Payments Data Volume – 2008 through 2011

	2008 Volume (Millions)	2011 Volume (Millions)	% Change	CAGR
Cheques & Paper	1,027.1	881.1	-14.2%	-5.0%
Debit	2,937.0	3,435.6	17.0%	5.4%
ABM	265.3	233.4	-12.0%	-4.2%
Prepaid Cards	153.5	353.3	130.2%	32.0%
EFT	1,501.3	1,703.3	13.5%	4.3%
Credit Card	2,464.9	3,038.0	23.3%	7.2%
E-Wallets/P2P	8.8	24.0	172.7%	39.7%
On-Ups	1,939.9	1,887.1	-2.7%	-0.9%
Cash	10,072.5	9,678.0	-3.9%	-1.3%
TOTAL	20,370.3	21,233.8	4.2%	1.4%

Figure 7: Canadian Payments Volume Share

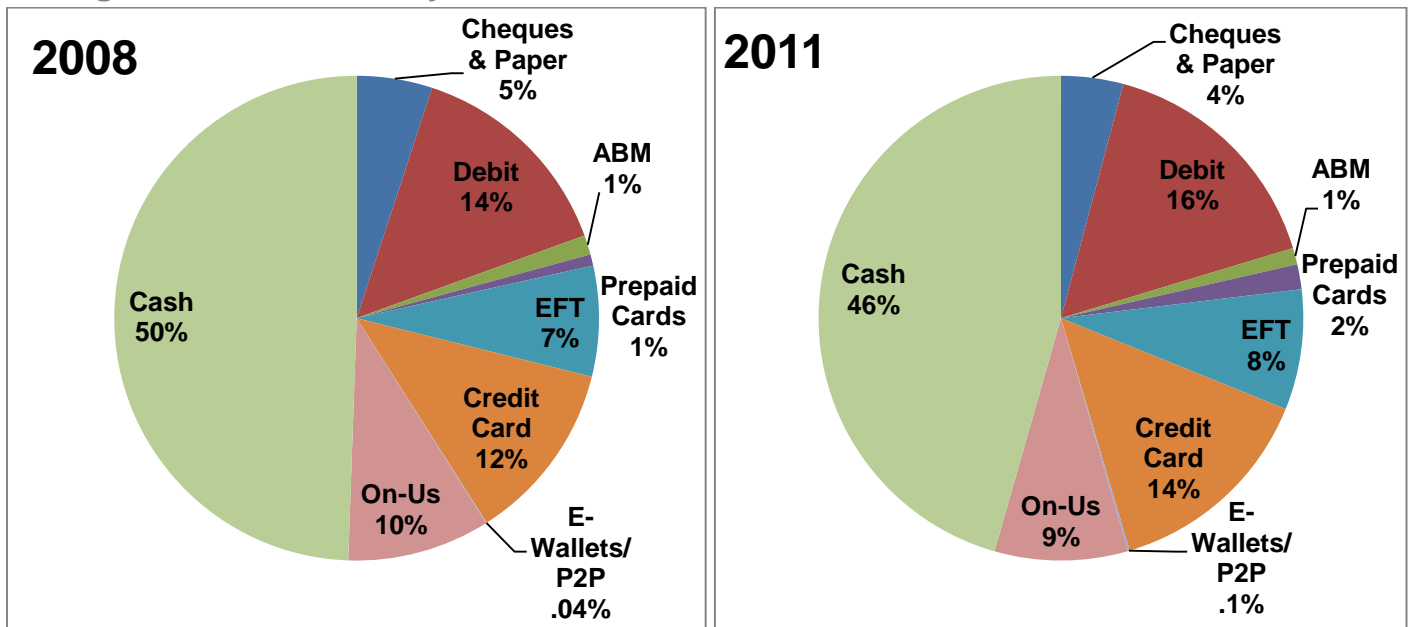


Figure 8: Canadian Payments Data Value – 2008 through 2011

	2008 Value (\$Millions)	2011 Value (\$millions)	% Change	CAGR
Cheques & Paper	3,225,254	2,944,671	-8.7%	-3.0%
Debit	136,097	154,357	13.4%	4.3%
ABM	29,076	26,685	-8.2%	-2.8%
Prepaid Cards	13,000	41,183	216.8%	46.9%
EFT	1,866,446	2,343,754	25.6%	7.9%
Credit Card	297,400	318,688	7.2%	2.3%
E-Wallets/P2P	3,266	9,659	195.7%	43.5%
On-Us	1,099,800	1,291,737	17.5%	5.5%
Cash	170,225	170,092	-0.1%	-0.03%
TOTAL	6,840,564	7,300,826	6.7%	2.2%

Figure 9: Canadian Payments Value Share

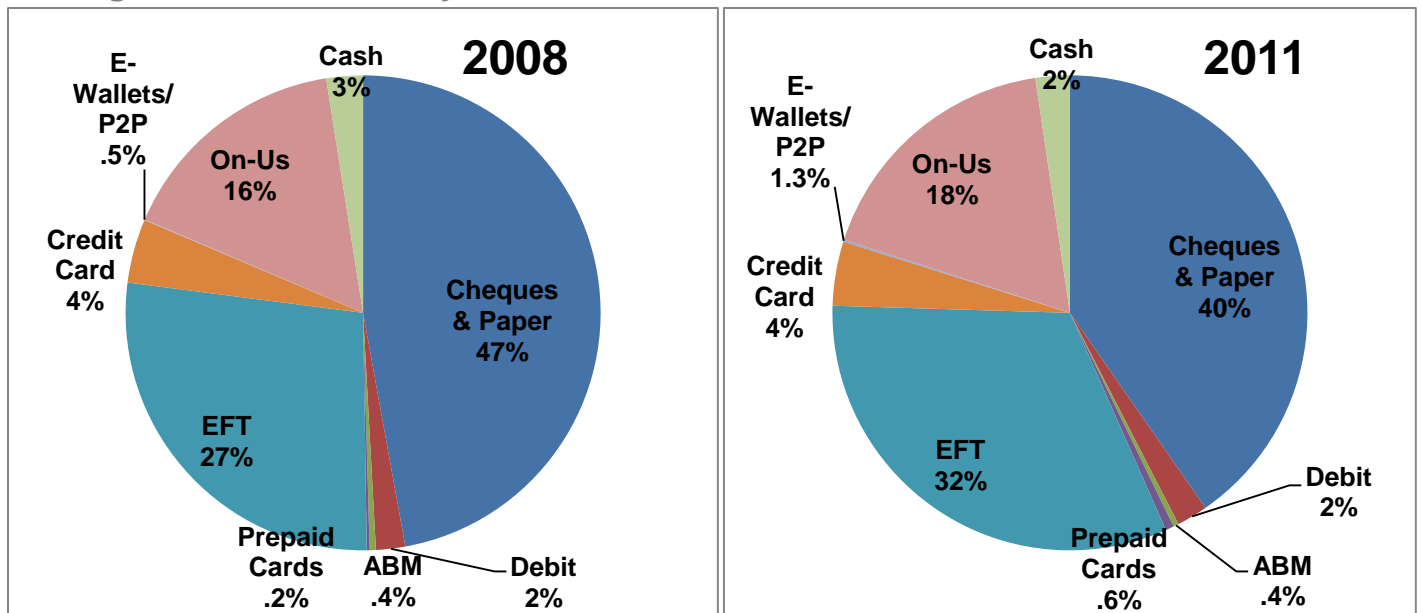


Figure 10: Average Transaction Size – 2008 through 2011

	2008 Average Transaction Size	2011 Average Transaction Size	% Change
Cheques & Paper	\$ 3,140.16	\$ 3,342.04	6.4%
Debit	\$ 46.34	\$ 44.93	-3.0%
ABM	\$ 109.60	\$ 114.33	4.3%
Prepaid Cards	\$ 84.69	\$ 116.57	37.6%
EFT	\$ 1,243.22	\$ 1,376.01	10.7%
Credit Card	\$ 120.65	\$ 104.90	-13.1%
E-Wallets/P2P	\$ 371.14	\$ 402.46	8.4%
On-Us	\$ 566.94	\$ 684.51	20.7%
Cash	\$ 16.90	\$ 17.58	4.0%
TOTALS	\$ 335.81	\$ 343.83	2.4%

Definitions and Assumptions

Where actual data could not be found, information from direct sources was leveraged to help create informed estimates. The data is a combination of CPA system data, payment service provider and scheme operator data, and estimates made in consultation with industry experts and financial institutions.

Participants contributed either by sharing their internal research and data, or by providing expertise that enhanced the data-set's accuracy. As was assured during the data collection, the CPA has made every effort to keep participant data non-discernable.

CAGR

Compound Annual Growth Rate calculates the annual average growth over multiple years, while taking into account the effects of average compounding growth experienced in each year.

Cash

Total cash was estimated based partially on the Bank of Canada's 2009 Methods-of-Payment Survey⁷. Estimates from the survey establish that on average Canadians made about one cash payment daily per person (.92), worth an average of \$16.90. We used these numbers to extrapolate to a larger Canadian population (29.4 million people between the ages of 10 and 80), to formulate cash payment estimates (value and volume) for 2009. An annual decline (of 1%) to account for estimated cash use reductions for the years 2010 and 2011 and an increase in transaction size of 2% to account for inflation for 2010 and 2011 was applied⁸.

On-Ups

Refers to transactions drawing upon direct deposit accounts (e.g. bank checking accounts or business accounts) where both the payor and payee reside at the same financial institution. A variety of payment types, normally associated with CPA cleared payments, are impacted by On-Ups items, including cheques, debit, EFT, and LVTS payments. On-Ups payments do not result in a CPA clearing entry (and do not appear in CPA system data), thus, On-Ups payments data must be determined from sources other than the CPA. On-Ups amounts were derived from participant data and estimates. The analysis determined On-Ups payments to amount to approximately 20% more transactions than can be found in the CPA data (On-Ups amounts differs by payment type, e.g. Cheques ~ 21%, Debit ~ 25%, EFT ~ 20%, etc.)

Paper/Cheques

Based on CPA ACSS data for small and large paper items, paper remittances, and unqualified paper items.

⁷ Arango and Welte (2012), *The Bank of Canada's 2009 Methods-of-Payment Survey: Methodology and Key Results*, Bank of Canada discussion paper No. 2012-6.

⁸TSI (2011), *Canadian Payments Forecast 2010*.

EFT

EFT was calculated using a combination of CPA AFT (debits and credits), electronic remittances, and EDI transactions.

Credit Card

Credit card data is a combination of consumer and business card payments found in proprietary published reports⁹.

Debit Payments

Debit payments include CPA POS debit and online debit transaction data and data provided by participants.

ABM Payments

ABM data is derived from data found in published proprietary reports⁹, and validated with published payment network and CBA data.

Prepaid

Credit card company and store branded prepaid product data (both open and closed-loop) is based on proprietary publication data⁹.

Digital Wallets & Electronic Person-to-Person Payments (E-Wallets/P2P)

Includes data and estimates for online and mobile transactions used to make electronic person-to-person payments and payments to merchants. This category includes transactions that are prefunded or use direct deposit accounts, transactions based on credit cards are counted in the *Credit Card* category. E-Wallets/P2P estimates include transactions from the most well known online and mobile payment providers used in Canada.

LVTS

LVTS payments were excluded from the analysis because the report is focused on retail payments.

⁹Euromonitor International (2011), *Passport: Financial Cards and Payments in Canada*, and TSI (2012), *Canadian Payments Forecast 2012*.