



# Canadian Payments Forecast, 2019



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# Executive Summary

## The Canadian Economy

- The Canadian economy recorded a sharply lower real GDP growth rate in 2018 compared with 2017, 1.9% over the year compared with 3.0% the previous year.
- In 2019, GDP growth is expected to limp in at 1.4% for the year and then hover between 1.7% and 1.9% p.a. for the remainder of the forecast period. The real average annual GDP growth rate projected for the period 2018 to 2023 is expected to be a humble 1.7% p.a. (CAGR).
- In 2018 Personal Consumption Expenditure on Goods and Services (PCE) amounted to \$1,258 bn in expenditure (in current dollars), approximately \$50 bn more than in 2017. Real growth in PCE was 2.1% over the last year.
- Canadian retail sector sales amounted to \$625.9 bn in 2018 growing by 3.9% in nominal terms over the year, a sharp reduction in growth compared with the previous year.
- Real growth in both PCE and retail sales will moderate over the next five years, with real growth in retail sales expected to be 1.9% p.a. (CAGR) vs. PCE's 1.8% p.a. (CAGR) over the period 2018 to 2023. The value of PCE will be \$1.51 trn by 2023, while the value of retail sales will reach \$732 bn.

# Introduction

# Objectives

**Canadian Payments Forecast, 2019**, is an in-depth assessment of how consumer payments in Canada fared over the past few years, and how the payments landscape is likely to evolve over the next five years. Subscribers will be in a unique position to make well-founded, research-based, strategic decisions about how best to steer their business in the rapidly evolving Canadian payments industry. The primary information objectives of the study were to:

- Provide a comprehensive review of consumer payments in Canada, including debit, credit, cheques, cash, P2P, remittances, gift card, prepaid cards, preauthorized, mobile, contactless, online payments, bill payments and transfers, and virtual currencies.
- Undertake an in-depth analysis of how the economy, Personal Consumption Expenditure on goods and services, and retail sales have evolved over the past few years, and how the economy is likely to influence payments over the next five years;
- Provide quantitative forecasts of payments (by channel), cards and terminals.

This study provides essential information for organizations interested in gaining an understanding of, and tracking developments in, the Canadian payments marketplace.

# Methodology

In assembling the information for this study, TSI drew on a wide range of information resources, including the following:

- **Desk Research:** TSI consultants carried out in-depth desk research into the payments industry, both in Canada and internationally. There is vast literature on payments available on the internet. Our skill lies in identifying credible sources, sifting through the information to extract the most valuable elements, and verifying facts that appear to be suspect, or that do not appear to be supported by any substantiated argument. In addition, TSI has, over the past twenty years, built up a comprehensive database on the payments industry in Canada based on past studies conducted in this area. Our database provides a rich source of information in this analysis, and in particular in providing the baselines for establishing the most important trends in the Canadian market.
- **Executive Interviews and Discussions:** While desk research can provide an important backdrop and some basic data for a project such as this, it was important for us to gain in-depth insights into the market directly from key players in the industry, both within Canada and globally. We did this through interviews, discussions, and participation in major conferences and seminars relevant to the Canadian payment marketplaces.

- **Consumer Research:** This year we have continued with our primary research initiative through the Canadian Consumer Payments Survey. We have found this to be an important source of supplementary information to obtain granularity on developments in the market, especially in areas relating to the adoption of new technologies. It has allowed us to ensure the availability of key data points, and to improve the accuracy of the research and forecasts.

The 2019 Canadian Consumer Payments Survey received responses from a nationally balanced sample of 2,006 Canadians and included consumer behaviour relating to all of the major payment modalities covered in Canadian Payments Forecast. The results of this primary research inform the forecasts and projections included in this publication. Detailed tables and findings of the Canadian Consumer Payments Survey (CCPS) are available to CCPS subscribers.

A number of time series have been revised as a result of the improved data quality from these studies. This is the sixth year in which we have used data from our own primary market research to inform our analysis and projections. As is the case with all such tracking studies, it takes a number of years for the time series to stabilize.

- **Analysis:** The information obtained through primary and secondary research was collated and analysed within TSI's strategic market analysis framework. This report embodies the analysis and findings of the research.

# Forecasts

An important aspect of this study is to provide subscribers with a well-founded look ahead to the prospects for the payments industry in Canada. Consequently, we have prepared a range of forecasts for different market segments. Forecasts in this report cover a **five-year time frame**, with the **base year being 2018**. For the most part we have been able to source key primary payment statistics for 2018, but where we were unable to do this due to, for example, statistical lag, we have provided our own estimates for that year. Projections are prepared for 2019 through to the end of 2023.

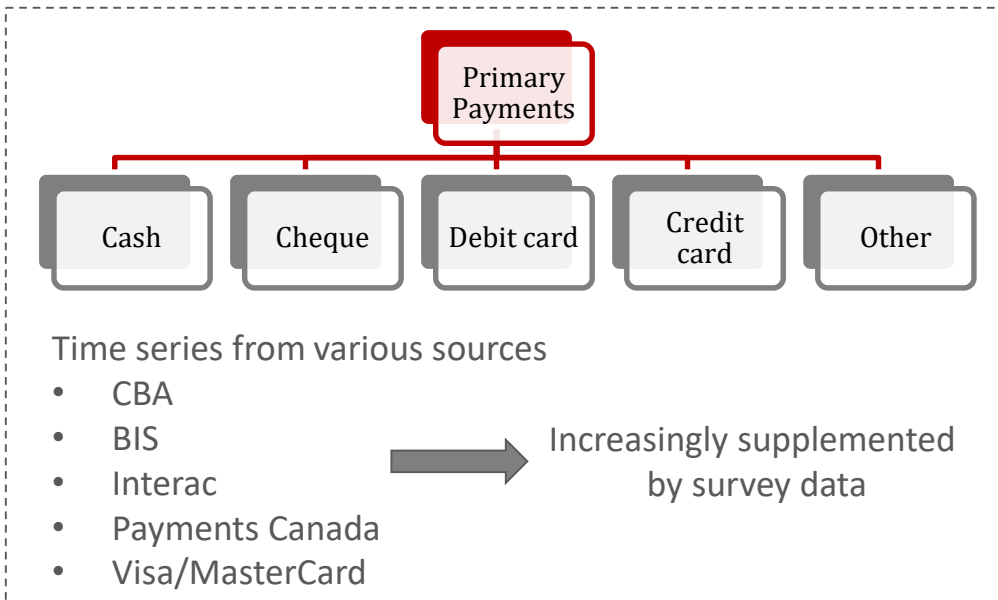
Our forecasts are based on our assessment of market trends, models that we have developed internally, as well as interviews with respondents and experts in the Canadian market. TSI consultants have extensive experience in technological substitution dynamics and forecasting and use their own experience and insight into the industry to refine forecasts.

Forecasting, by its very nature, cannot be an exact science. The forecasts presented in this document represent what we believe to be the best view available of prospects for Canadian payments. However, the market is highly dynamic and there is little certainty about the future in the payments industry in Canada or globally, especially in the light of developments that we are now witnessing in fintech. Furthermore, decisions can change overnight, and unpredictably so. While we believe that the information contained in this document to be as accurate as is possible for a review of this nature, TSI accepts no liability for any errors, inaccuracies or omissions.

Our approach to forecasting is shown on the next chart.

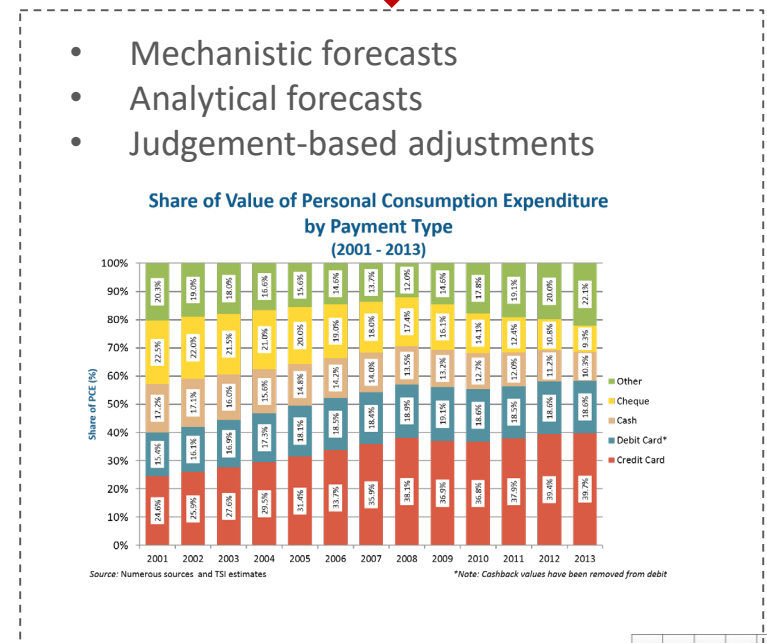
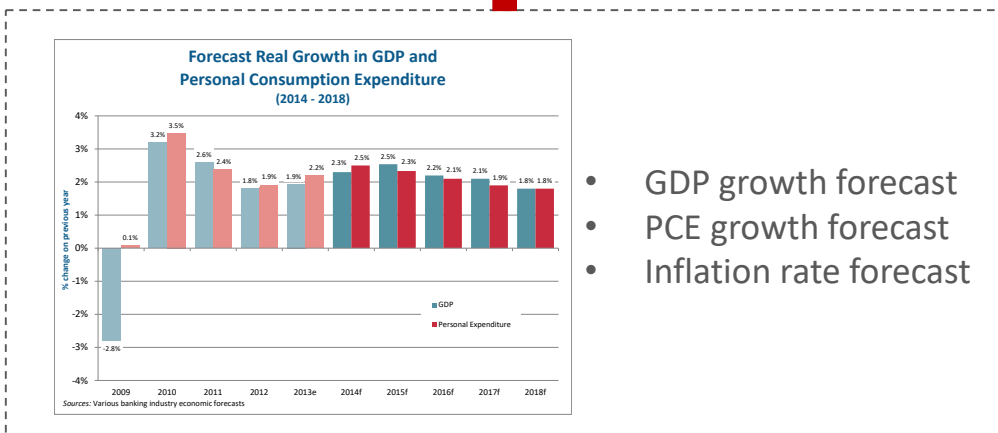


# Canadian Payments Forecast: Forecasting Approach



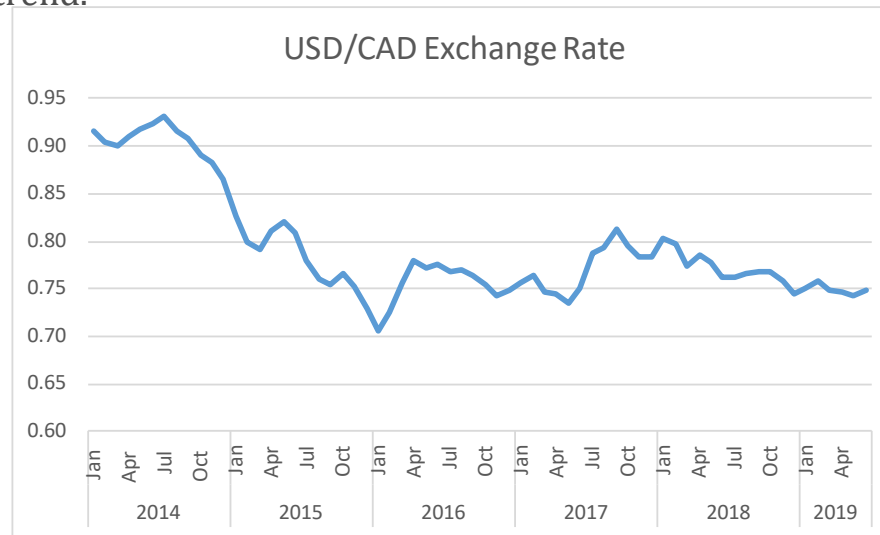
## Forecasting

- Time series analysis (turning points, trend, seasonal and cyclical variations)
- Survey data analysis
- Diffusion models
- Substitution models
- Multiple regression
- Judgement



# Currency

- All revenue and investment figures included in this report are presented in Canadian dollars (CAD), unless otherwise specified.
- At the time of publication of this report 1 Canadian dollar (CAD) was worth 0.7493 US dollars (USD), compared with 0.7790 at the time of publication in 2018. The average for exchange rate for 2018 was 0.7721. Since mid-2017 the CAD/USD exchange rate has been on a slow downward trend.



# Some Changes this Year

- In the past we have provided time series for credit card fraud statistics.
- Credit card fraud statistics for Canada have traditionally been sourced from the RCMP or the Canadian Bankers Association. The most recent statistics that have been made available are for the year 2015, which we covered in a previous report. This analysis will be reinstated when more recent data becomes available.
- We have included an assessment of the number of contactless terminals enabled once again this year, based on new information that we have received.

# Document Navigation

- The Table of Contents and List of Charts and Tables contain hyperlinks to the sections, charts and tables in the document.
- In order to make navigation easier within the document, we have included hyperlinks on each page as follows:



- Clicking on the 'Section' block will take the reader to the start of the current section. Clicking on the 'Contents' block will take the reader to the Table of Contents.
- These navigation blocks are included on the bottom of all pages.
- The 'List of Charts and Tables', which follows the 'Contents' section, serves as a detailed table of contents.

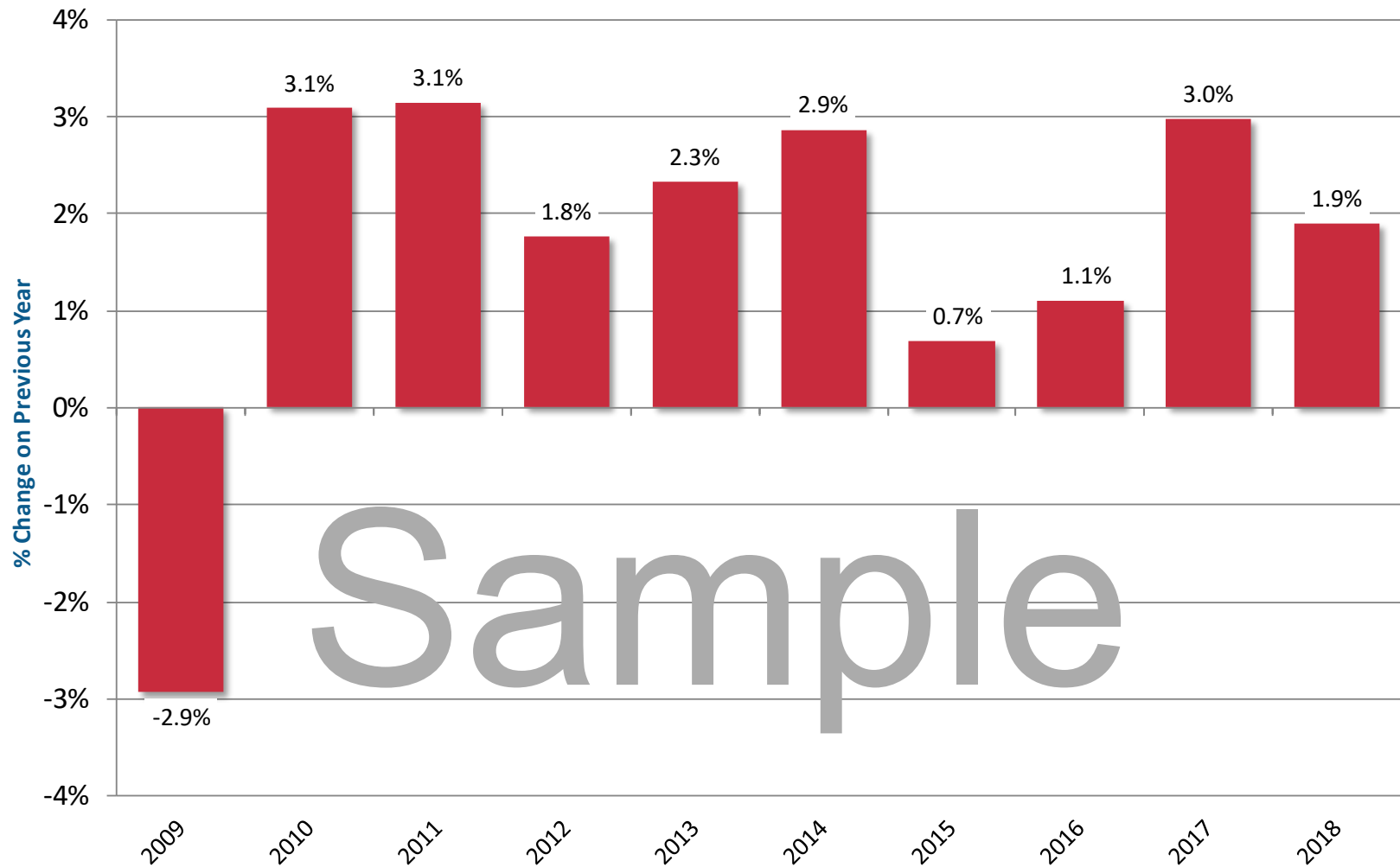
# Acknowledgements

- We would like to place on record our thanks to our subscribers to whom we are indebted for providing the financial backing for this project. We thank you for your input to the study—the information that you have provided as well as your unique insights and perspectives—and above all, for your continued financial support, which makes this study possible on a periodic basis.
- A continuing objective of ours this year was to obtain feedback from clients as to how we could improve the report. Our special thanks go to those subscribers who made the effort to engage with us in this process. We have used your valuable feedback to make modifications to the presentation, structure and content of the report.
- We would also like to record our thanks to all of those respondents that contributed to this study, for the time and effort that they took to answer our questions and provide us with information. This study would not have been possible without their contribution.

# The Canadian Economy

# Sample

## Annual Change in GDP (2009-2018)



Source: Statistics Canada



# Economic rebound of 2017 falters in 2018

The Canadian economy recorded a sharply lower real GDP growth rate in 2018 compared with 2017, 1.9% over the year compared with 3.0% the previous year. The rebound experienced in 2017 was a result of buoyant consumer spending and a booming housing market in an ultra-low interest rate environment. The regulatory measures introduced in 2018 to dampen the overheating housing market, coupled with higher interest rates, saw demand for housing decrease by 10% over the year. Growth in consumer expenditure, also affected by the housing market correction and higher interest rates, declined across a broad base, contributing to the halting performance of the economy towards the end of 2018.

Weak energy prices have plagued the Canadian economy since the meltdown of the industry in 2015, and still linger. The delays in the construction of pipelines has exacerbated the problem, causing continued depression of the sector which filters down proportionately through different regions of Canada.

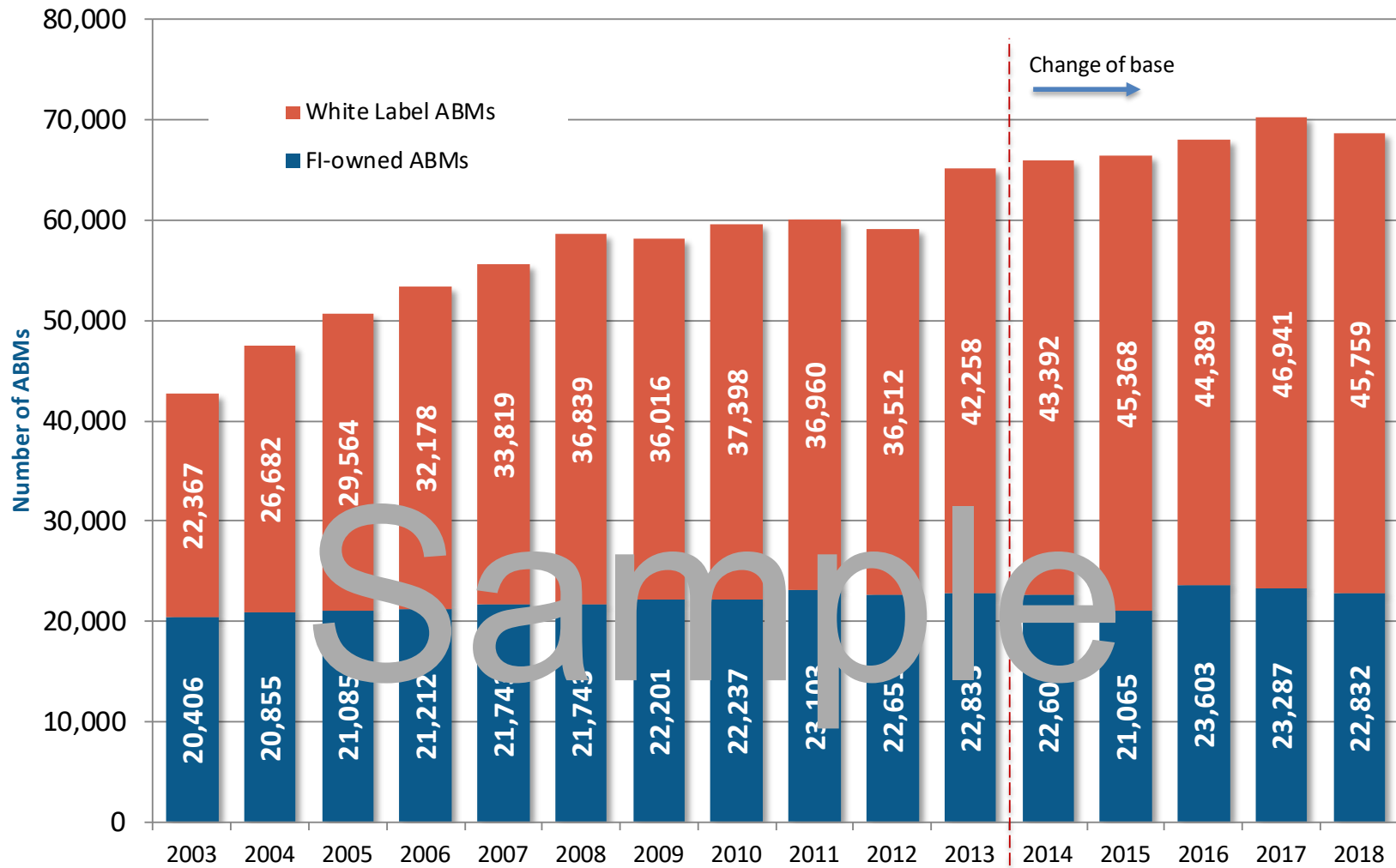
Job creation slowed in 2018 after a period of very strong growth in 2017, but nevertheless took Canada's unemployment rate to its lowest level in 40 years. Throughout 2018 growth in employment has not been accompanied by comparable wage growth, which has further contributed to lackluster consumer expenditure.

The ongoing US-inspired trade wars, which Canada has unwillingly been dragged into, started to bite in 2018. Increased government spending has not been sufficient to offset the negative forces weighing the economy down, even in the face of higher than trend performance of Canada's largest trading partner, the US.

Cash

Sample

## Number of ABM's in Canada by Ownership (2003 - 2018)

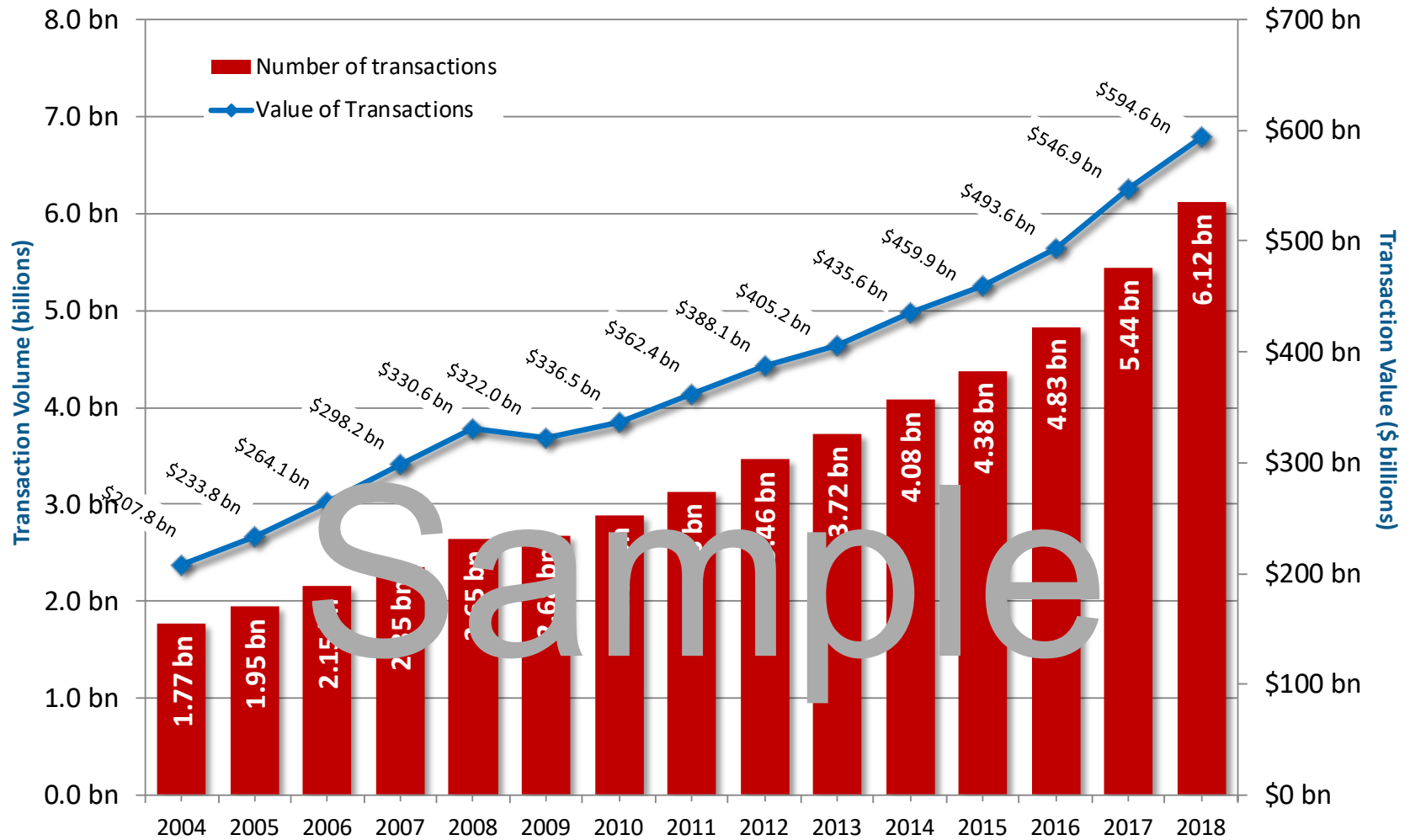


Source: Interac

# Credit Cards

# Sample

# Gross Volume and Value of Credit Card Transactions (2004 - 2018)



Source: Visa, MasterCard, TSI estimates

# Credit card payments surge again in 2018

Credit card gross dollar volume reached \$594.6 bn in 2018, an increase of almost \$50 bn, or 8.7%, over the past year. Gross dollar volume has grown in excess of 7% for all but three years since the end of the 2009 recession, indicating that credit card payment are making significant inroads into payments in Canada.

Approximately 6.12 bn credit card transactions processed in 2018, a surge of 12.5% over the previous year, marking the first time since 1996 that credit card transactions have exceeded debit card transactions in Canada. More than 650 m credit card transactions were added over the past year.

By the end of 2018, credit card transactions accounted for 47.3% of PCE by value and 30.4% by volume.

Growth in total transaction volumes has averaged 10.3% p.a. (CAGR) over the past five years (2013 to 2018), substantially higher than growth in gross dollar value, which averaged 8.0% p.a. (CAGR) over this period.

The average transaction value, based on gross value, declined to \$97.20 in 2018, 3.3% lower than in 2017. Average transaction values on a downward trend, having declined, on average, at an annual rate of 2.3% over the past five years.

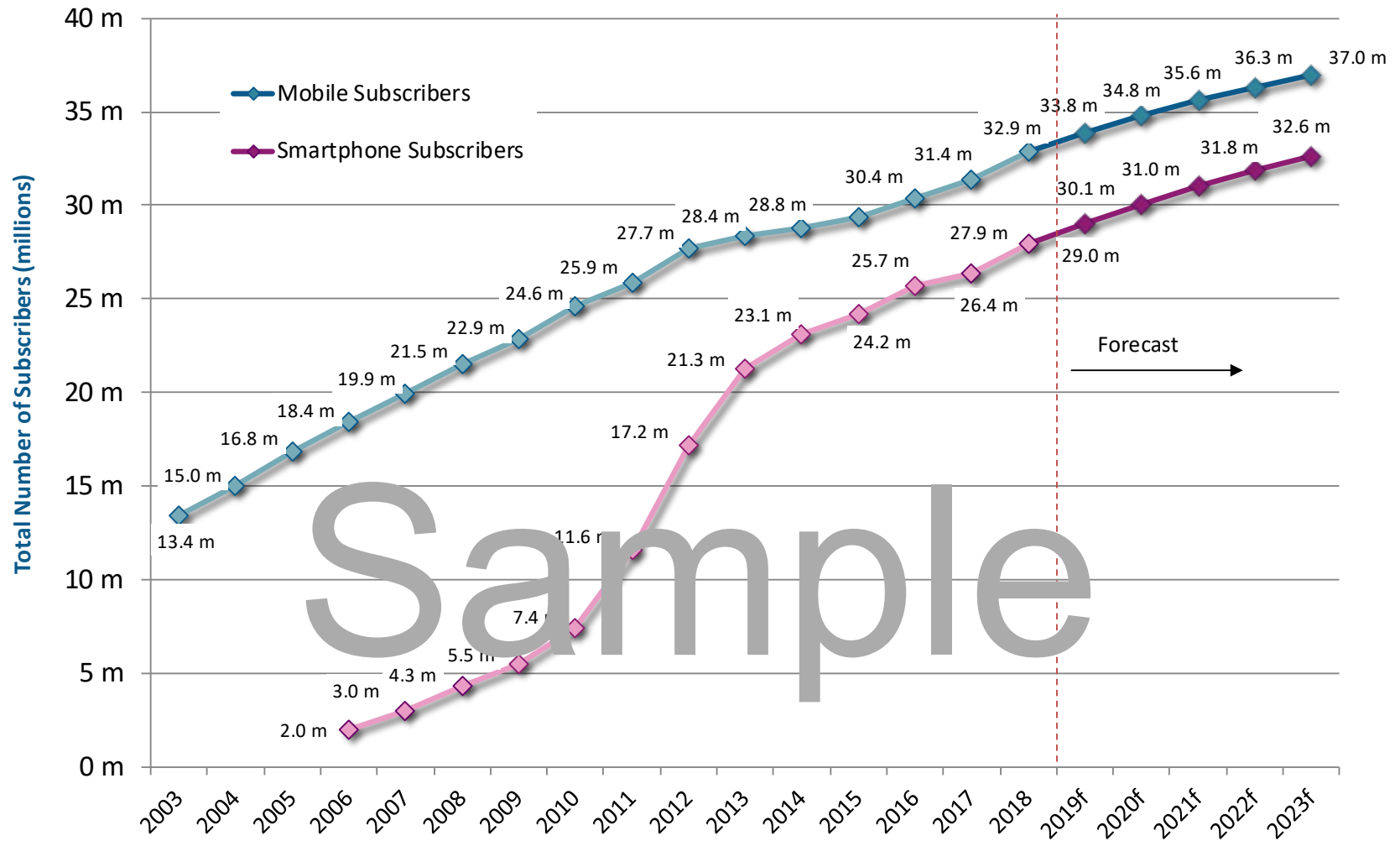
The annual average gross value per active card was \$13,041 in 2018 and has been increasing at an annual average rate of 3.6% p.a. (CAGR) since 2013.

**Mobile**

Sample



## Forecast Number of Mobile Subscribers in Canada (2018 - 2023)



Source: TSI Projections

# More than 32 m smart phone subscribers by 2023

At the end of 2018 there were 32.9 m mobile subscribers in Canada, up 4.7% over the year and corresponding to a mobile penetration rate of 88.7%. The mobile subscriber base has been growing at an annual average rate of 3.0% p.a. (CAGR) over the past five years but has accelerated slightly over the past three years. Mobile penetration is expected to reach 95.5% of the total population by 2023 representing some 37.0 m subscribers.

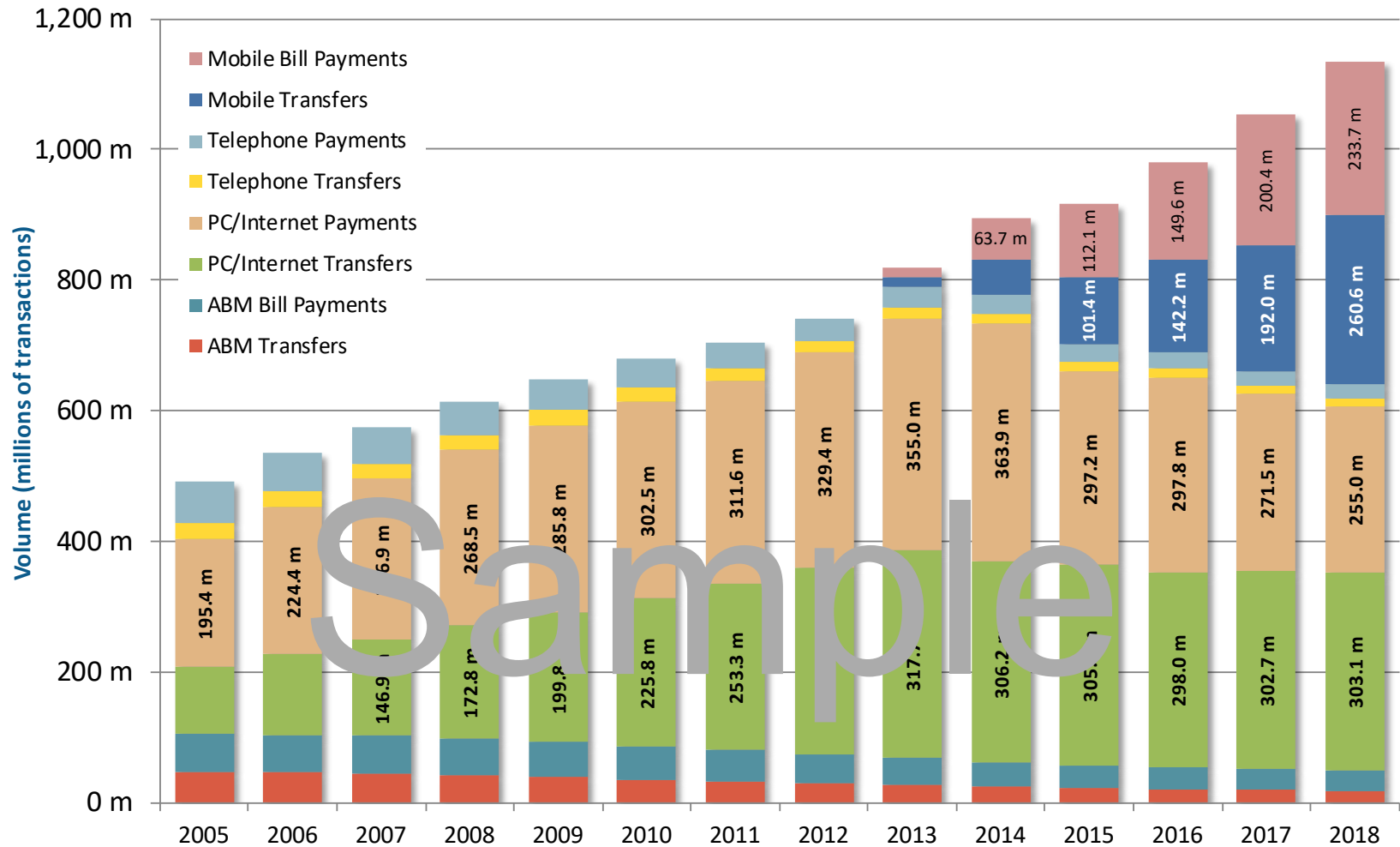
Smart phone penetration is increasing more rapidly than mobile penetration as smart phones gain ground as the mobile device of choice for the vast majority of the Canadian population. Smart phone penetration was 30.0% (7.4 m smart phone subscribers) in 2010. At the end of 2018 there were 27.9 m smart phone subscribers, representing a smart phone penetration rate (based on total mobile subscribers) of 85.0%. More than 1.5 m smart phone subscriptions were added in 2018.

By 2023 there are expected to be 32.6 m smart phone subscribers in Canada, corresponding to a penetration rate of 88.3%. The annual growth in smart phone subscribers is therefore expected to average 3.2% p.a. (CAGR) over the period 2018 to 2023, indicating that the growth has abated significantly as the market nears saturation.

# Bill Payments and Transfers

# Sample

# Transfers and Payments by Delivery Channel (2005 - 2018)



Source: CBA & TSI estimates

# Mobile bill payments and transfers surge

The total number of transfers and bill payments reached 1.13 bn in 2018, up by 7.7% over the last year. The average annual growth rate over the period 2013 to 2018 has been 7.5% p.a. (CAGR).

In 2018, an estimated 494.3 m mobile bill payments and transfers took place, an increase of more than 100 m transactions over the year. Mobile bill payments and transfers have skyrocketed over the past few years, largely at the expense of the non-mobile PC/Internet category, indicating that substitution is taking place at a rapid rate.

All other channels have experienced absolute declines in transaction numbers for both transfers and bill payments.

Transfer transactions have more than quadrupled over the past 15 years, reaching 591.4 m in 2018 and now exceeds the number of bill payments, which weighed in at 42.0 m transactions in 2018.

ABM bill payments declined by 4.0% in 2018, while ABM transfers declined by 7.0% over the year, indicating the declining role of the ABM in the areas of both bill payments and transfers. These roles of the ABM are increasingly being usurped by mobile online channels.

**Fraud**

Sample

# Fraud Highlights

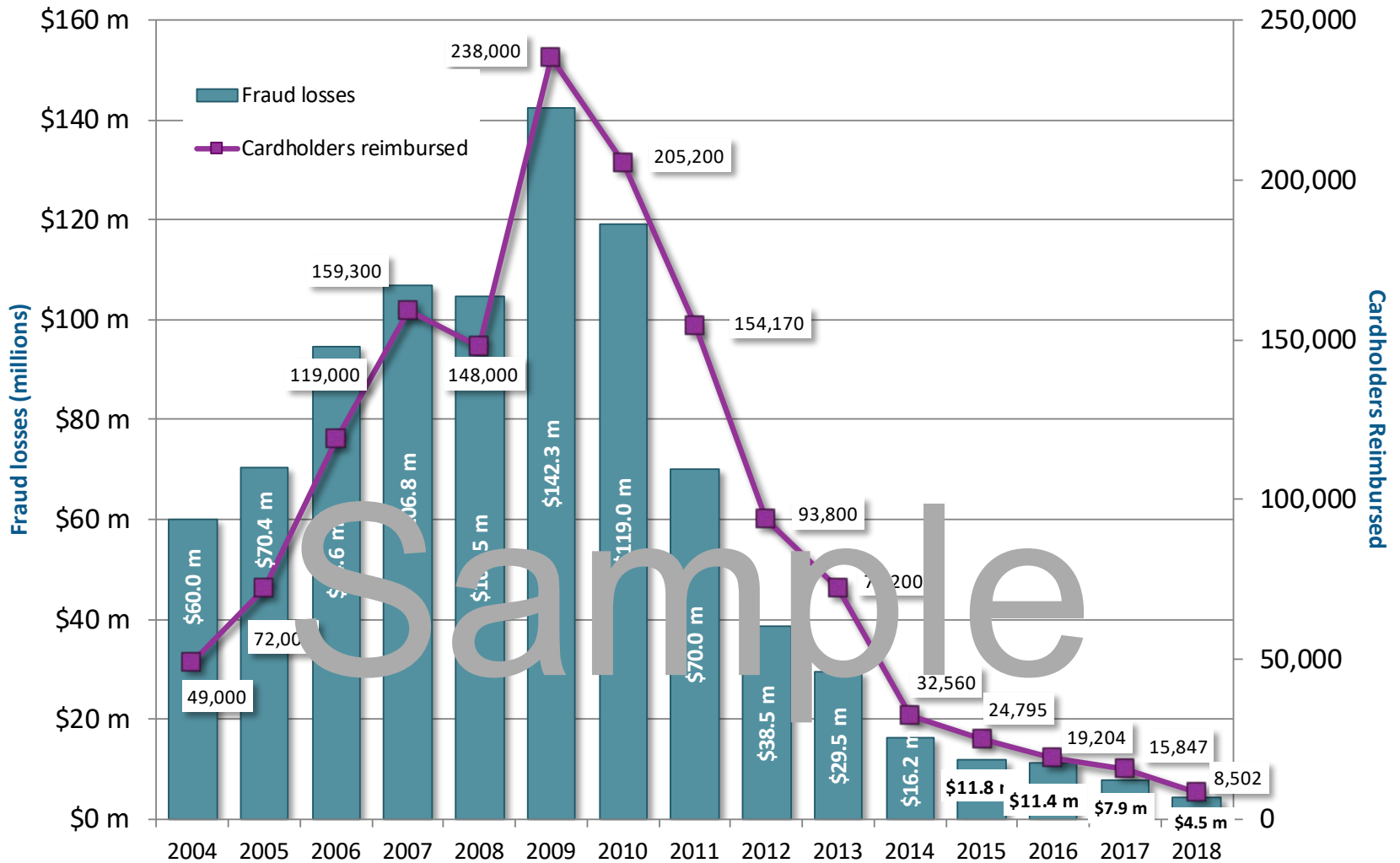
Indicator	2018	Growth (2017-2018)	CAGR (2013-2018)
Counterfeit Notes (Face Value)	\$1.9 m	53.5%	-0.5%
Debit Card Fraud			
<i>Value</i>	<i>\$4.5 m</i>	<i>-43.4%</i>	<i>-31.4%</i>
<i>Cardholders reimbursed</i>	<i>8,502</i>	<i>-46.3%</i>	<i>-34.8%</i>

# Sample

**NOTE:** The most recent published credit card fraud statistics are for 2015, and hence credit card fraud data has been omitted from this report. It will be included in future editions of the report, should more recent data become available.



## Debit Card Fraud in Canada (2004 - 2018)



Source: Interac

# Debit card fraud hits a new low

Debit card fraud losses have fallen consistently and dramatically over the past nine years, from a peak of \$142.3 m in 2009, to just \$4.5 m in 2018. This represents a massive decrease of almost 97% over the period, and an annual average rate of decline of 31.4% p.a. (CAGR) over the period 2013 to 2018. The decline in debit card fraud can be attributed to successful EMV implementation, coupled with improved fraud detection systems and vigilance.

At its peak, debit card fraud represented 0.0830% of all debit card transaction values. By 2018 this had decreased to 0.0018% of total debit card value.

The number of cardholders reimbursed as a result of debit card fraud has shrunk to 8,502 in 2018, compared with 238,000 in 2009.

Sample

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