



Australian
Payments
Clearing
Association

AUSTRALIAN PAYMENTS FRAUD

DETAILS AND DATA




2015

Australian Payments Clearing
Association Limited
ABN 12 055 136 519

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Overview

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2. Australian payment cards
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OVERVIEW

Total \$ fraud in 2014
\$393,144,971
0.02%

\$1,885,832,223,556

Total \$ spent in 2014
on cards and cheques

The Australian Payments Clearing Association has been publishing industry-wide card and cheque fraud statistics since 2006 as part of the industry's commitment to counter payments fraud and to help the public in understanding payments fraud issues.

APCA collects these fraud statistics from Australia's financial institutions and from the major card schemes operating in Australia. The aggregated data helps inform consumers and businesses on how fraud occurs on cards and cheques. Furthermore, the data assists financial institutions in monitoring fraud trends and developing targeted mitigation strategies.

Australia's payments landscape has changed markedly since 2006 as technological advances impact on the way we pay. Today, the majority of cards are issued with the more secure chip technology as well as the traditional magnetic stripe; many cards also offer contactless functionality. PINs are being used more widely for all cards with the phasing out of signatures from August 2014, more purchases are taking place online and the use of mobile phones for face-to-face purchases continues to increase. Meanwhile, Reserve Bank of Australia figures show that cheque use has declined by nearly 70 per cent in the last decade.

This publication, the second in the annual series Australian Payments Fraud Details and Data, complements the statistical tables for payments fraud in 2014 published on the APCA website. In addition to the latest data, it provides a graphical overview of payments fraud trends from 2009 to 2014 and provides information on effective measures and practices to help combat fraud.

Some 2013 figures have been revised since publication last year. Full details available on www.apca.com.au.



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Snapshot of trends, issues and challenges

Payments industry data for 2014 show that fraud on Australian payment cards continues to increase in the card-not-present space, reflecting a global trend both in online card fraud and in cybercrime in general.

Card fraud rates over the last year have grown from 46.6 to 58.8 cents for every \$1000 spent. As a comparison, the UK's card fraud rate is now 75 pence in every £1000 spent¹.

The majority of this increase is due to the rise in card-not-present fraud which on Australian cards has risen 42 per cent to \$299.5 million, with two thirds of this (\$200.6 million) occurring overseas.

This can be partly understood by the continued, and growing popularity of the use of payment cards in the card-not-present environment. According to a study of consumer payments by the Reserve Bank of Australia, the proportion of card purchases made online, by telephone or mail order represent nearly 25 per cent of the total value of debit card purchases and about 40 per cent for credit cards.

¹ Financial Fraud Action UK

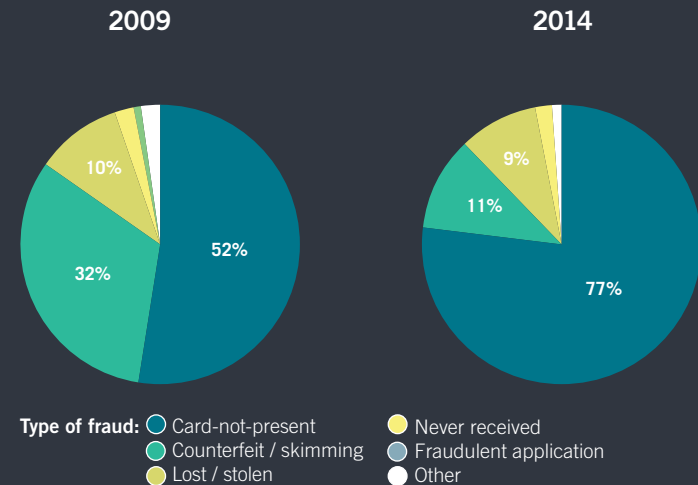
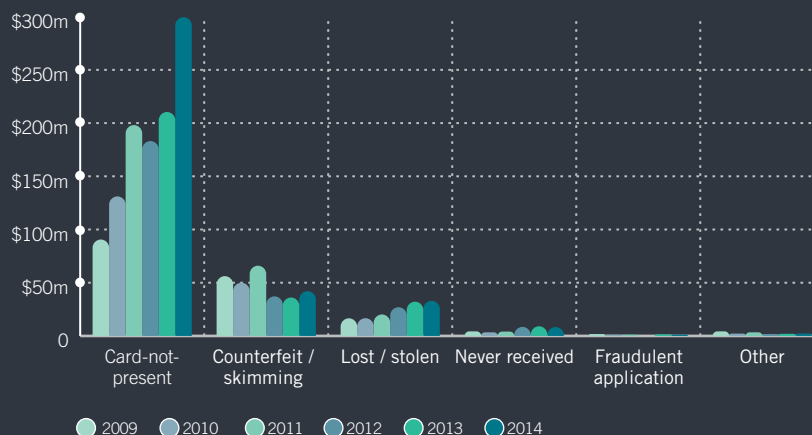
There are essentially two other factors at play here. As industry measures to reduce payments fraud in one area take effect (through, for example, the widespread adoption of chip technology in cards and terminals) criminals focus more on frauds that are easier to perpetrate in other areas, such as online.

In addition, the online space is being targeted more widely by criminals in general. Card-not-present fraud is just one manifestation of the growing threat from cyber criminals experienced by governments, businesses and individuals worldwide.

Migration of fraud types

The switch from fraud in the face-to-face environment can be illustrated by the changing proportion of the different types of card fraud. In 2009 card-not-present fraud made up 52 per cent of the total Australian card fraud compared to 77 per cent in 2014. Counterfeit / skimming fraud, on the other hand has dropped from 32 per cent to represent just 11 per cent of card fraud in the same period.

Total Australian card fraud – type of fraud



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In the six years since the beginning of 2009, counterfeit / skimming fraud has dropped by 25 per cent, largely due to the widespread rollout of chip technology on cards and at merchants as well as the removal of the signature as an authentication option for most cards. In 2014, however, it increased by 17 per cent to \$42.1 million, largely due to the targeting of ATMs by criminal gangs. The industry is actively moving Australian ATMs from magnetic stripe to chip which is expected to significantly reduce fraud from these types of attacks.

In the UK, card-not-present fraud in 2014 accounted for 69 per cent of total card fraud compared to 10 per cent for counterfeit / skimming fraud.

Online fraud and cybercrime

The capture of card data resulting in card-not-present fraud is one instance of the growing challenge of cybercrime in general.

Financial institutions, retailers, the healthcare and education sectors, government bodies and computer software providers are all high targets for attack. Industry figures show that there was a 23 per cent increase in the number of data breaches in 2014² while a spate of high-profile security attacks on companies such as Sony, eBay and Target in the United States illustrate the fraud challenges faced across the globe.

The growing importance of protecting against cyber attacks is illustrated by the increased focus of the Australian government on its own cyber security through the establishment of the Australian Cyber Security Centre and the Serious Financial Crime Taskforce.

The Australian government provides advice on protecting personal and financial information online such as Stay Smart Online and ScamWatch, and law enforcement has set up the Australian Cybercrime Online Reporting Network (ACORN) for people to securely report instances of cyber crime.

A new measure the payments industry is adopting to reduce its vulnerability to cyber attacks is Tokenisation. This technique replaces sensitive information, such as a card number, with a non-sensitive replacement value making it much more difficult for criminals to steal card details to use fraudulently.

This extra security layer is on top of existing measures to limit card-not-present fraud, including enforcing standards to protect card data, stronger cardholder authentication techniques and enhancing real-time fraud detection tools.

In addition, APCA and law enforcement agencies have established the Fraud in Banking Forum to encourage closer collaboration between the financial services and law enforcement communities to combat the growing threat of fraud. The intention is to share information at a strategic level on current and emerging banking fraud issues and trends including new methods used by fraudsters.

Merchants also have an important role to play in protecting themselves and their customers from online card fraud using simple techniques such as a fully hosted payments gateway to accept card payments securely and watching out for unusual or suspicious transactions.

Importantly Australian consumers should be confident in knowing that they are protected from personal loss – if fraudulent transactions are made on their cards they will be reimbursed as long as they have taken due care. However, preventing payments fraud continues to require effort at every level – from financial institutions and card schemes through to merchants and consumers.

Consumer Awareness

Merchant Awareness

² Symantec Corporation, Internet Security Threat Report 2015



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SECTION 1

FRAUD RATES

Fraud rates are the measure most commonly used by the payments industry to monitor movements in fraud and to measure the effectiveness of prevention initiatives. As this measure calculates the actual amount of fraud as a proportion of the overall transactions, it allows for comparisons to be made across different time periods and, where available, other jurisdictions.

APCA's fraud rates measure the amount of fraud occurring for every \$1,000 spent in a given 12 month period.



Overview

1. Fraud rates

3. Overseas payment cards in Australia

4. Cheques

1. Fraud rates

The total rate of fraud on Australian payment cards and cheques increased from 16.2 cents per \$1,000 transacted in 2013 to 20.8 cents per \$1,000 transacted in 2014.

- The rate of fraud on all Australian-issued payment cards rose from 46.6 cents to 58.8 cents in every \$1,000 transacted.
The overall amount of fraud on payment cards increased by 33 per cent to \$387 million. This is against an increase of 5 per cent to \$657 billion on the total amount spent by Australians on their cards.
- The rate of cheque fraud fell from 0.6 cents to 0.5 cents in every \$1,000 transacted.
The overall amount of cheque fraud fell by 9 per cent to \$6.5 million. This is against a 1 per cent increase to \$1,229 billion in the total amount transacted on cheques.

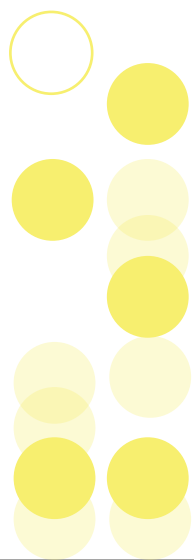
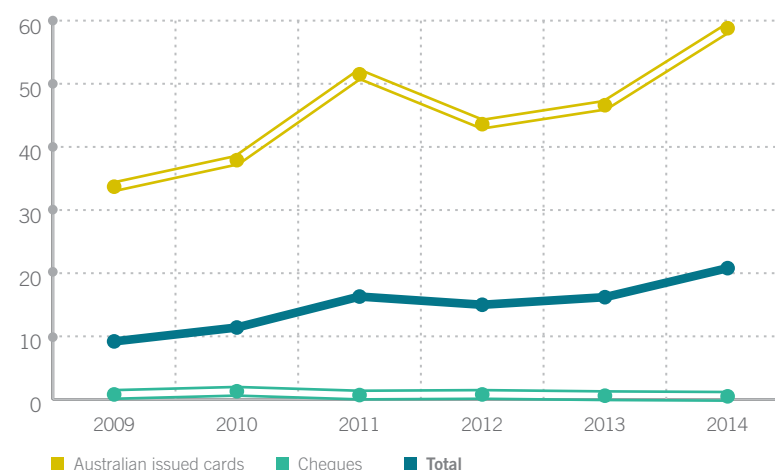
More details on the fraud data are provided in the following sections.

Fraud rates – cents per \$1,000 transacted

	Payment cards	Cheques	Total
2009	33.7	0.8	9.2
2010	37.9	1.3	11.4
2011	51.5	0.7	16.3
2012	43.6	0.8	15.0
2013	46.6	0.6	16.2
2014	58.8	0.5	20.8

Source: APCA – www.apca.com.au and the Reserve Bank of Australia – www.rba.gov.au

Australian cards and cheques – fraud rates (cents per \$1,000)



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SECTION 2

AUSTRALIAN PAYMENT CARDS

Payment cards are the most common non-cash payment method used by Australian consumers. Cards are used for in-store purchases, withdrawals at ATMs, and increasingly, online shopping and mobile payments.

In Australia, financial institutions issue credit cards, debit cards and charge cards to consumers.

Credit and charge cards are operated by international card schemes (MasterCard, Visa, American Express and Diners).

There are two types of debit cards: proprietary or domestic debit cards (operated by eftpos Payments Australia Limited) and debit cards operated by international card schemes.

In this section we present the data for fraud on all Australian payment cards used both in Australia and overseas with a further breakdown by scheme, credit, debit and charge cards and by proprietary debit cards which includes the majority of fraud on Australian ATM transactions.

ALL

All Australian
cards

CDC

Scheme credit,
debit & charge cards

PDC

Proprietary debit
cards



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2.1 OVERVIEW

ALL Australian cards

According to figures published by the Reserve Bank of Australia, there were an estimated 40 million debit card accounts and 16 million credit card accounts in Australia as of December 2014. In 2014, there were more than \$650 billion worth of transactions made on Australian payments cards; of these 0.06 per cent were fraudulent.

The rate of fraud on all Australian cards increased from 46.6 cents per \$1000 in 2013 to 58.8 cents per \$1000 in 2014.

The total value of card fraud increased by 33 per cent to \$387 million. This is against an increase of 5 per cent to \$657 billion on the total amount spent by Australians on their cards in 2014.

Over the six years since 2009, the fraud rate has risen from 33.7 to 58.8 cents for every \$1000 spent.

ALL Australian cards – fraud rates and totals

Year	2009	2010	2011	2012	2013	2014
Value (\$ millions):						
All card transactions	\$514,735	\$539,138	\$568,754	\$598,823	\$624,953	\$657,206
Fraudulent transactions	\$174	\$204	\$293	\$261	\$291	\$387
Fraud rate (cents per \$1,000)	33.7	37.9	51.5	43.6	46.6	58.8
Number:						
All card transactions	4,354m	4,704m	5,142m	5,644m	6,141m	6,670m
Fraudulent transactions	667,801	827,936	1,150,942	1,243,106	1,415,487	1,728,790
Fraud rate (as % of total no. of card transactions)	0.015%	0.018%	0.022%	0.022%	0.023%	0.026%
Average value of fraudulent transactions	\$260	\$247	\$254	\$210	\$206	\$224

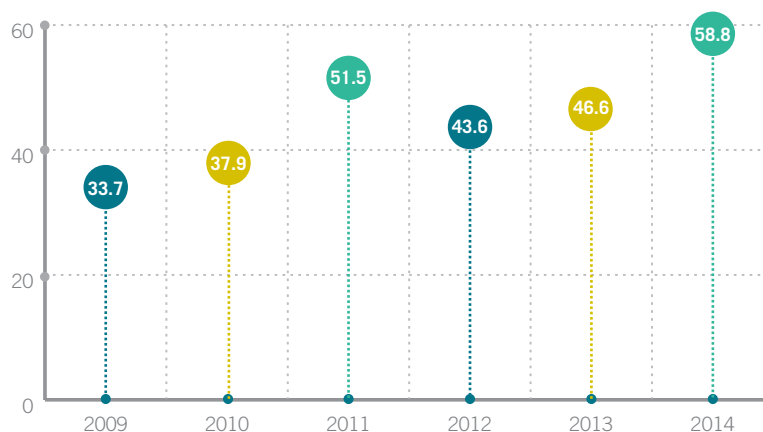
Source: APCA – www.apca.com.au, and the Reserve Bank of Australia – www.rba.gov.au



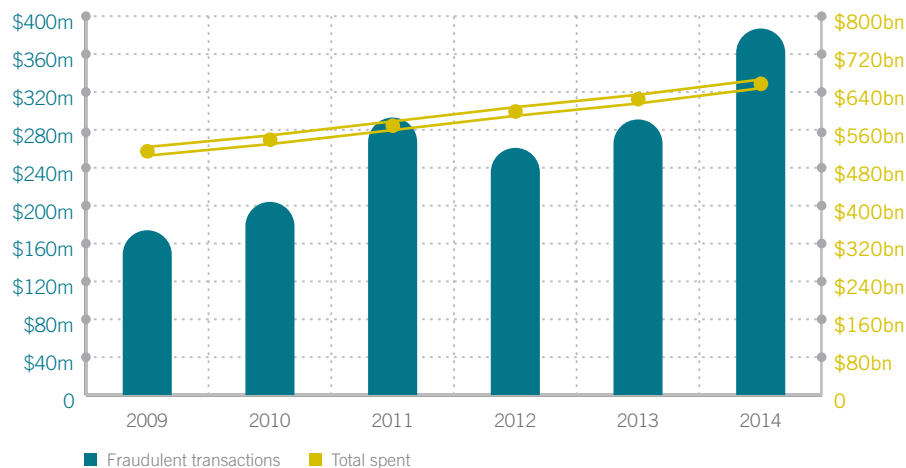
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ALL Australian cards – fraud rate (cents per \$1,000)



ALL Australian cards – total fraud and total spent



2.2 TYPES OF FRAUD OCCURRING ON AUSTRALIAN CARDS

The common fraud types on Australian cards are explained below:

- *Card-not-present* – unauthorised use of a consumer’s card details to purchase products or services in a non face-to-face setting, for example shopping online, by mail, or by phone, or where the merchant has chosen to accept the transaction based on the card number alone.
- *Counterfeit / skimming* – transactions made with an altered or illegally reproduced card using details that have been obtained from an existing valid card; this includes where the information is copied or skimmed directly from a valid card’s magnetic stripe.
- *Lost / stolen* – transactions made on a card that has been lost by or stolen from the rightful owner.
- *Never received* – transactions made on a card that was stolen before it was received by the rightful owner.
- *Fraudulent application* – transactions made on a card where the account was established using someone else’s identity or other false information.
- *Other* – covers other fraudulent transactions that cannot be categorised under any of the common fraud types above, for example identity takeover.

Financial institutions report card fraud data as gross actual losses.

For further explanation of the types of card fraud visit www.apca.com.au.



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Trends

Fraud on Australian payment cards occurs mainly offshore, rather than domestically. In 2014, 60 per cent of the total fraud value on Australian cards occurred overseas.

The table below shows that the most prevalent types of fraud occurring on Australian cards are card-not-present, counterfeit / skimming and lost and stolen. This is consistent with trends seen in other jurisdictions such as the United Kingdom.

ALL Australian cards – fraud by type

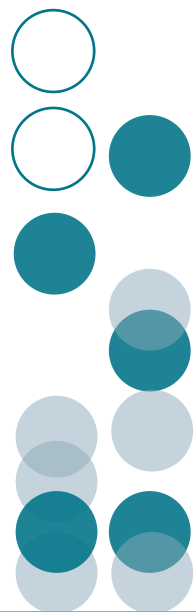
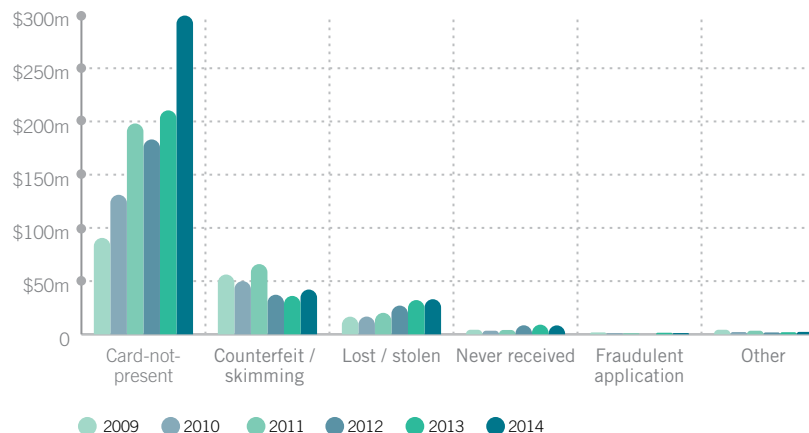
Fraud (\$m)	2009	2010	2011	2012	2013	2014
Card-not-present	\$90.6	\$131.2	\$198.1	\$183.1	\$210.4	\$299.5
Counterfeit / skimming	\$56.2	\$50.0	\$66.0	\$37.2	\$36.1	\$42.1
Lost / stolen	\$16.6	\$16.7	\$20.2	\$27.0	\$32.2	\$33.0
Never received	\$4.3	\$3.4	\$4.1	\$8.5	\$9.1	\$8.4
Fraudulent application	\$1.8	\$1.1	\$1.1	\$3.5	\$1.5	\$1.2
Other	\$4.3	\$2.2	\$3.4	\$1.8	\$2.0	\$2.3
Total	\$173.7	\$204.5	\$292.8	\$261.1	\$291.4	\$386.6
Percentage of total card fraud						
Card-not-present	52%	64%	68%	70%	72%	77%
Counterfeit / skimming	32%	24%	23%	14%	12%	11%
Lost / stolen	10%	8%	7%	10%	11%	9%
Never received	2%	2%	1%	3%	3%	2%
Fraudulent application	1%	1%	0%	1%	1%	0%
Other	2%	1%	1%	1%	1%	1%
Total	100%	100%	100%	100%	100%	100%

Source: APCA – www.apca.com.au

- Card-not-present fraud has continued to increase. This can be partly understood by:
 - the continued, and growing, popularity of the use of payment cards in the card-not-present environment, particularly online shopping;
 - criminals focusing on online fraud as it becomes more difficult to carry out counterfeit / skimming fraud following the widespread rollout of chip technology; and
 - the wider issue of greater targeting of the online space by criminals in general – card-not-present fraud being just one manifestation of the growing threat from cyber criminals experienced by governments, businesses and individuals worldwide.
- In 2014, counterfeit / skimming fraud increased by 17 per cent from 2013 but is down 25 per cent over the six years from 2009 demonstrating the benefits of the move to chip at Australian merchants. The increase over the last year is largely due to skimming attacks on ATMs. The industry is now actively moving Australian ATMs from magnetic stripe to chip technology which is expected to have a significant impact on reducing this type of fraud in the next few years.
- There has been a small increase in lost and stolen card fraud with criminals reverting to simple theft and deception to obtain cards as frauds like counterfeit / skimming become more difficult to do.

More details on card fraud trends and preventative measures are provided from pages 12 to 17. ➡

ALL Australian cards – fraud by type



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CDC

Scheme credit, debit and charge cards

APCA's data for "scheme credit, debit and charge cards" cover fraudulent transactions occurring on cards issued by the international card schemes (Visa, MasterCard, Amex and Diners) and carried over their respective networks.

CDC

Scheme credit, debit and charge cards – fraud by type

Fraud (\$m)	2009	2010	2011	2012	2013	2014
Fraud perpetrated in Australia						
Card-not-present	\$32.0	\$46.1	\$73.7	\$72.8	\$85.9	\$98.9
Counterfeit / skimming	\$15.5	\$12.6	\$16.5	\$13.1	\$9.7	\$8.4
Lost / stolen	\$7.7	\$7.4	\$8.8	\$14.5	\$18.5	\$16.7
Never received	\$2.8	\$2.0	\$3.0	\$6.8	\$7.3	\$6.5
Fraudulent application	\$1.6	\$0.9	\$1.0	\$3.4	\$1.4	\$1.0
Other	\$1.6	\$0.9	\$2.0	\$0.7	\$0.8	\$0.6
Total	\$61.2	\$70.0	\$104.8	\$111.2	\$123.7	\$132.1
Fraud perpetrated overseas						
Card-not-present	\$58.6	\$85.0	\$124.4	\$110.3	\$124.5	\$200.7
Counterfeit / skimming	\$23.1	\$22.0	\$42.2	\$14.6	\$12.8	\$16.7
Lost / stolen	\$5.6	\$5.5	\$7.0	\$8.3	\$11.1	\$13.3
Never received	\$0.3	\$0.5	\$0.2	\$0.4	\$0.5	\$0.5
Fraudulent application	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2
Other	\$0.3	\$0.3	\$0.3	\$0.4	\$0.4	\$0.3
Total	\$88.0	\$113.4	\$174.3	\$134.2	\$149.3	\$231.6
Total of all Australian issued cards	\$149.3	\$183.4	\$279.1	\$245.4	\$273.0	\$363.7

Source: APCA – www.apca.com.au

Included in this category are all frauds occurring:

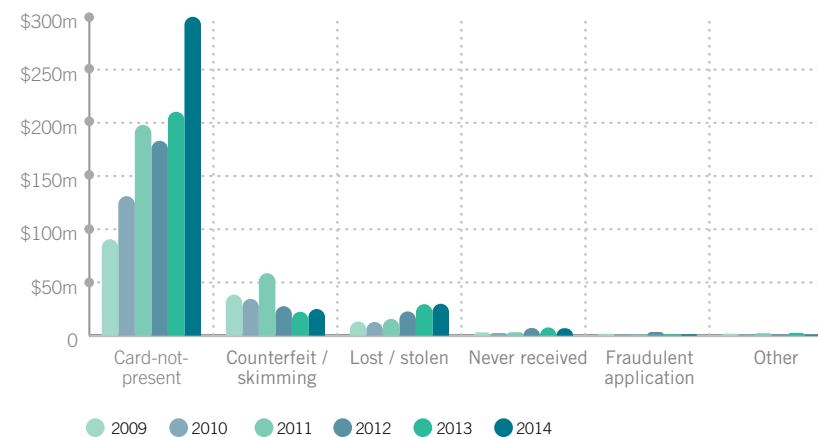
- over the internet, telephone or by mail order (card-not-present);
- where the "credit" option is chosen at the point-of-sale device; and
- on all Australian cards used overseas (including at ATMs).

A small number of frauds occurring at ATMs in Australia are also included in this data category.

In 2014, the total value of fraud on scheme credit, debit and charge cards increased by 33 per cent from \$273 million to \$364 million, with 98 per cent of this increase due to card-not-present fraud. Counterfeit / skimming fraud continues to fall on these cards in Australia, but has risen overseas.

CDC

Scheme credit, debit and charge cards – fraud by type (total)



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PDC Proprietary debit cards

APCA's data for "proprietary debit cards" cover fraudulent transactions occurring on the original domestic debit cards (as opposed to scheme debit cards from Visa and MasterCard).

Proprietary debit cards data include:

- all frauds occurring where the "cheque" or "savings" options are selected at the point-of-sale device; and
- most frauds occurring at ATMs in Australia (regardless of whether the card used is a proprietary debit card or a scheme credit, scheme debit or a charge card).

When making proprietary debit card transactions, the cardholder must always present the card and enter the PIN as authentication. In limited circumstances, transactions can occur without the PIN, for example when the terminal is off-line, but this is by exception.

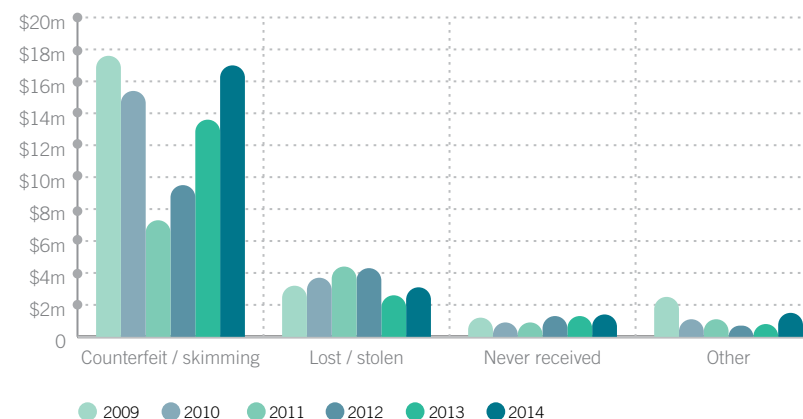
In 2014 the total value of fraud on proprietary debit cards increased by 25 per cent from \$18.4 million to \$22.9 million. This reflects an increase in counterfeit / skimming fraud, largely driven by skimming at ATMs.

PDC Proprietary debit cards – fraud by type

Fraud (\$m)	2009	2010	2011	2012	2013	2014
Counterfeit / skimming	\$17.6	\$15.4	\$7.3	\$9.5	\$13.6	\$17.0
Lost / stolen	\$3.2	\$3.7	\$4.4	\$4.3	\$2.6	\$3.1
Never received	\$1.2	\$0.9	\$0.9	\$1.3	\$1.3	\$1.4
Other	\$2.5	\$1.1	\$1.1	\$0.7	\$0.8	\$1.5
Total	\$24.5	\$21.1	\$13.7	\$15.8	\$18.4	\$22.9

Source: APCA – www.apca.com.au

PDC Proprietary debit cards – fraud by type



The following pages provide more details on the three key contributors to Australian payment card fraud: card-not-present, counterfeit / skimming and lost and stolen card fraud.



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2.3 TRENDS AND PREVENTATIVE MEASURES

Card-not-present fraud

Card-not-present fraud occurs when valid card details are stolen and then used to make fraudulent payments over the internet, telephone or by mail order.

Criminals typically try to capture consumers' card details by targeting the computer systems belonging to merchants or service providers – where payments data might be stored. They do this by, for example, inserting code and malicious software onto the target computers to exploit weaknesses and access the card details.

Criminals also target individual consumers by inserting code and malicious software (malware) onto their computers, most commonly through spam emails. Consumers can help protect themselves by using strong passwords, anti-virus software and by updating their operating systems.

The industry is also undertaking a major structural upgrade to payments technology known as Tokenisation. This technique replaces sensitive information, such as a card number, with a non-sensitive replacement value making it much more difficult for criminals to steal and make use of card details. Tokenisation is expected to have a significant effect on reducing card-not-present fraud once it is widely rolled out.

There are also simple measures merchants can build into their day-to-day practices to help protect themselves and their customers from online card fraud. These are highlighted in the **Get Smart About Card Fraud Online** training for small to medium sized merchants publicly available on the APCA website.

Industry prevention measures



3 or 4 digit verification code



Online authentication



Fraud detection tools



PCI data security standards

Fraud prevention

The payments industry has implemented a range of measures to help prevent card-not-present fraud. These include:

- additional information to verify that the card details are valid and that the person providing them is the genuine cardholder – such as the 3 or 4 digit code written on the card itself, and the stronger online authentication tools: American Express SafeKey, MasterCard SecureCode or Verified by Visa;
- fraud detection tools used by merchants, card schemes and financial institutions to identify risky or unusual purchases made with the card; and
- requiring that merchants comply with the Payment Card Industry Data Security Standard (PCI DSS) to strengthen data security and reduce the risk of card details being stolen.

Merchant Awareness



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Trends

In 2014, card-not-present fraud on Australian cards increased by 42 per cent on the previous year to \$300 million. The majority of this increase (67 per cent) occurred overseas.

This can be partly understood by the continued and growing popularity of e-commerce and the use of payment cards in the card-not-present environment.

In addition, there has been a migration to card-not-present fraud as industry measures to reduce other payments frauds take effect – through, for example, the widespread adoption of chip technology in cards and terminals. As well, the broader targeting of the online space by criminals in general is resulting in greater fraudulent activity in this area.

Part of the challenge faced by the industry today is the amount of card data stolen through large data breaches in recent years. In both Australia and overseas, the increases in card-not-present fraud represent the realisation of some of these data thefts. Industry measures to reduce the opportunities for such breaches, particularly through tokenisation and the stricter implementation of PCI-DSS standards at merchants and service providers, have been accelerated in light of these compromises. However, the challenge remains to encourage uptake of these security measures by every organisation that handles card data.

ALL Australian cards – card-not-present fraud¹



¹As card-not-present transactions are only supported by scheme credit, debit and charge cards, there is no further breakdown applicable.



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Counterfeit / skimming fraud

Counterfeit / skimming fraud usually occurs when details from a valid card’s magnetic stripe are skimmed at an ATM, point-of-sale terminal or through a standalone skimming device, and used to create a counterfeit card.

Criminals use the counterfeit card to purchase goods for resale or, if the PIN has also been captured, to withdraw cash from an ATM.

Fraud prevention

Australia’s progressive migration to chip technology and the extensive use of PINs is having a significant impact on reducing counterfeit / skimming fraud. Because of the technology involved, chip cards are far less vulnerable to counterfeit fraud than cards that rely solely on the magnetic stripe.

Industry awareness initiatives providing information on how merchants can protect against skimming fraud are available on the APCA website. These include **Safeguard Against Skimming** training videos and a set of **guidelines** providing tips on ways merchants can protect their point-of-sale terminals from skimming attacks.

Cardholders can help protect themselves against counterfeit/skimming attacks by:

- keeping their card in sight when making payments;
- always covering their hand when entering their PIN at point-of-sale terminals and ATMs; and
- ensuring they only enter their PIN in devices that look like genuine payment terminals.

The consumer awareness initiative **Protect Your PIN** provides more information.

Other industry measures underway to further reduce card skimming include:

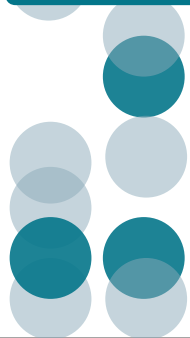
- chip reading at ATMs and other additional security features;
- chip technology on proprietary debit cards; and
- mandatory use of PIN on most scheme credit, debit and charge cards from November 2014.

Merchant / Consumer Awareness

Industry prevention measures

Chip technology

Mandatory PIN



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Trends

In 2014, counterfeit / skimming fraud on Australian cards increased by 17 per cent to \$42.1 million. The benefits of chip and PIN can be seen through the 3 per cent decrease in fraud on scheme credit, debit and charge card transactions in Australia. However, there has been an increase of 31 per cent to \$16.7 million on fraud overseas as well as an increase of 25 per cent to \$17 million on proprietary debit card transactions which are still, largely, reliant on the magnetic stripe.

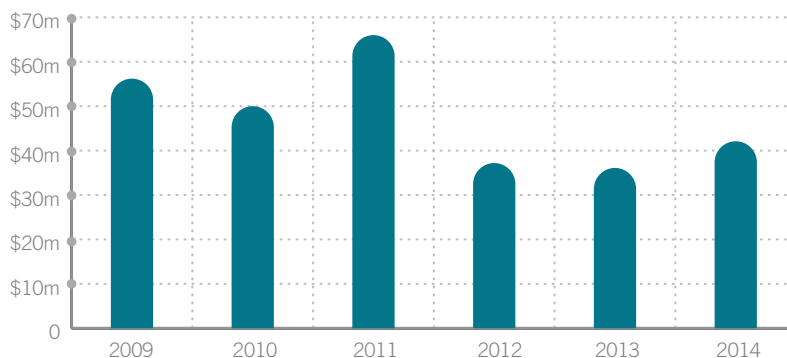
Fraudulent ATM withdrawals made in Australia using counterfeit cards are reflected in the proprietary debit card fraud figures.

In the six years from 2009, counterfeit / skimming fraud has dropped 25 per cent, largely due to the widespread rollout of chip technology on cards and at merchants and the phasing out of signatures. In 2014, however, it increased by 17 per cent on the previous year, largely due to criminal gangs targeting ATMs. The industry is actively moving Australian ATMs from magnetic stripe to chip which is expected to significantly reduce fraud from these types of attacks.

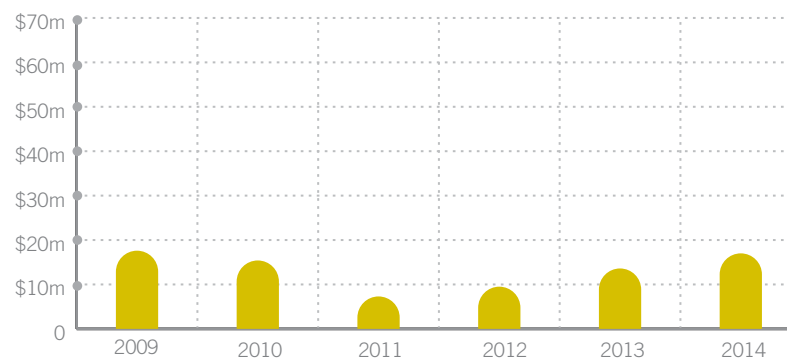
CDC Scheme credit, debit and charge cards – counterfeit / skimming fraud



ALL Australian cards – counterfeit / skimming fraud



PDC Proprietary debit cards – counterfeit / skimming fraud



Overview

- 1. Fraud rates
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Lost and stolen fraud

Lost and stolen fraud refers to unauthorised transactions on cards that have been reported as lost or stolen by the cardholder. Unless the PIN has also been captured by criminals, these cards are often used to make point-of-sale transactions by forging the signature, but they may also be used for low value transactions where neither PIN nor signature is required.

Fraud prevention

Industry initiatives to tackle this type of fraud include:

- online verification of transactions to stop payments on cards that have been reported lost or stolen;
- fraud detection systems to track customer card activity and identify unusual spending patterns;
- PIN verification for cash withdrawals at ATMs;
- using a card activation process to ensure the recipient of a new card is the legitimate cardholder; and
- placing limits on the amount allowed for transactions that are not authenticated by PIN or signature.

Since November 2014, the industry has made life harder for card thieves by making it mandatory to use PINs instead of signature authentication at point-of-sale on most cards.

Cardholders can protect themselves from this type of fraud by being vigilant and keeping their card and PIN safe. If a card is lost or stolen, it should be reported to their financial institution immediately. See www.apca.com.au for more information.

Industry prevention measures



Online verification



Fraud detection tools



PIN verification

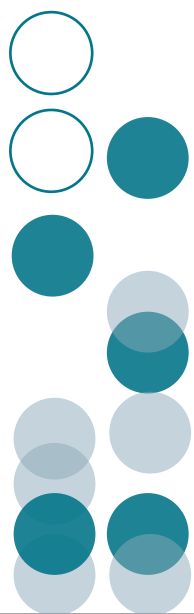


Mandatory PIN



Card activation

Consumer Awareness



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Trends

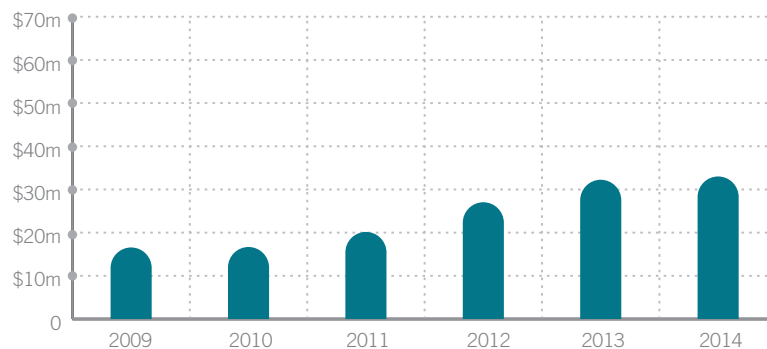
In 2014, lost and stolen fraud on Australian cards has stayed essentially level, increasing by only 2 per cent to \$33 million. This consists of \$30 million on scheme credit, debit and charge card transactions (up 1 per cent overall despite a 10 per cent drop in Australia) and \$3 million on proprietary debit card transactions (up 16 per cent) where PIN is mandatory.

Much of this increase is due to criminals reverting to simpler, more opportunistic frauds as enhanced security and detection tools make other frauds more difficult.

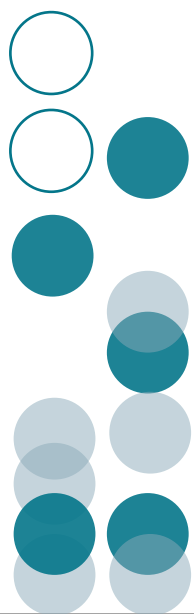
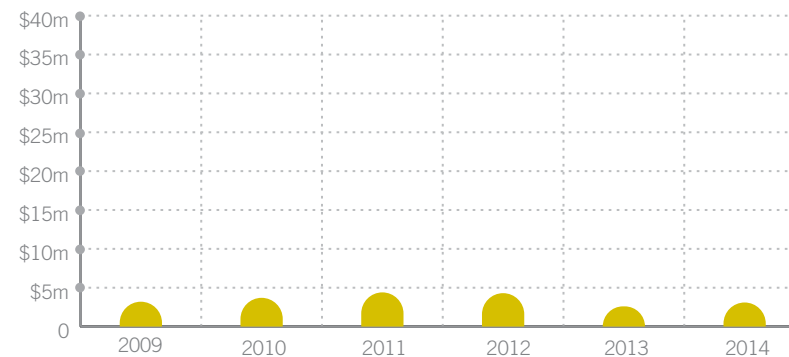
CDC Scheme credit, debit and charge cards – lost / stolen fraud



ALL Australian cards – lost / stolen fraud



PDC Proprietary debit cards – lost / stolen fraud



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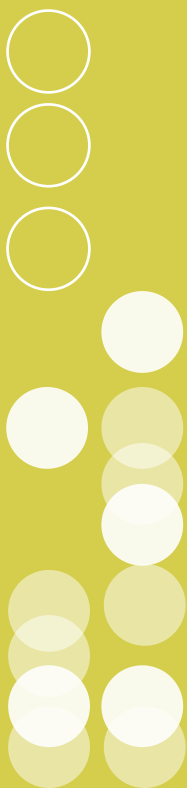
SECTION 3

OVERSEAS PAYMENT CARDS IN AUSTRALIA

When visitors from overseas use their cards at Australian ATMs or point-of-sale terminals, the transactions are carried over the international card schemes' networks.

The security features on the cards and the types of transactions vary by country of origin.

Australian merchants play a significant role in identifying and preventing fraud on overseas-issued cards.



Overview

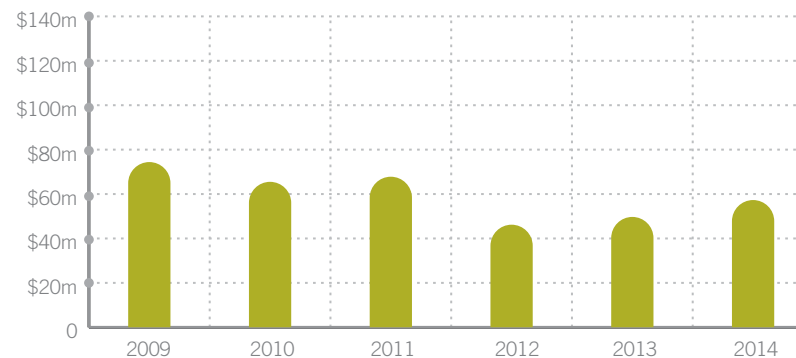
- 1. Fraud rates
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3.1 OVERVIEW

Fraudulent transactions in Australia on cards issued overseas increased by 15 per cent from \$49.7 million to \$57.3 million in 2014, but down 23 per cent from the 2009 level. This recent increase is largely due to an increase in card-not-present fraud which has risen 33 per cent – consistent with the trends seen on Australian issued cards and the global trend generally for card-not-present fraud.

Both counterfeit / skimming fraud and lost and stolen card fraud declined in 2014 by 17 per cent and 37 per cent respectively.

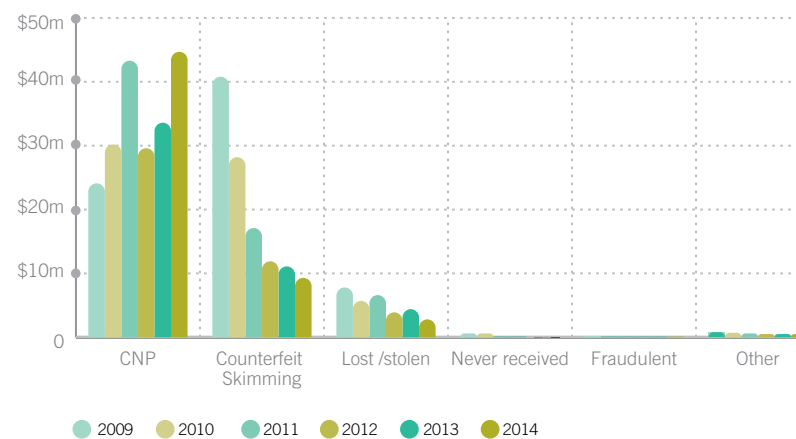
Overseas cards in Australia – fraud total



Overseas cards in Australia – fraud total

Fraud (\$m)	2009	2010	2011	2012	2013	2014
Card-not-present	\$24.1	\$30.2	\$43.3	\$29.6	\$33.6	\$44.7
Counterfeit / skimming	\$40.8	\$28.2	\$17.1	\$11.9	\$11.1	\$9.3
Lost / stolen	\$7.8	\$5.7	\$6.6	\$3.9	\$4.4	\$2.8
Never received	\$0.6	\$0.6	\$0.1	\$0.1	\$0.0	\$0.0
Fraudulent application	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
Other	\$0.8	\$0.7	\$0.6	\$0.5	\$0.5	\$0.5
Total	\$74.4	\$65.5	\$67.8	\$46.2	\$49.7	\$57.3

Overseas cards in Australia – fraud type



Source: APCA – www.apca.com.au



Overview

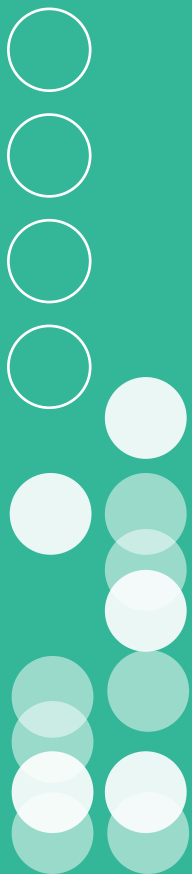
1. Fraud rates
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SECTION 4

CHEQUES

In Australia, as in other countries, cheques are in long-term decline. Cheque use has dropped by almost 70 per cent over the past ten years and is continuing to drop as payment cards and other convenient electronic payment methods take over. Today, cheques account for less than 5 per cent of all non-cash payments made by consumers and businesses each day.

This section contains information on cheque fraud, covering all cheque collection and payment activity by financial institutions in Australia.



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4.1 OVERVIEW

The “cheques” category covers Australian issued customer cheques, financial institution cheques and drafts in Australian dollars.

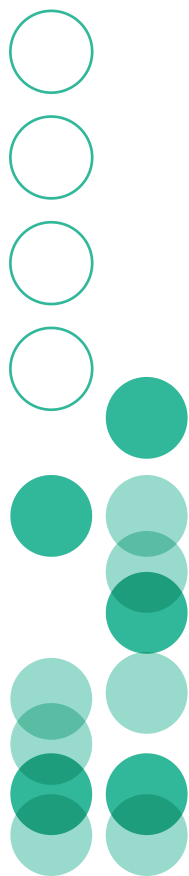
Cheque fraud data includes frauds occurring on Australian cheques in Australia and overseas. The figures represent the losses written off by financial institutions during a given year although the fraud may have occurred sometime before.

In 2014, the total rate of cheque fraud fell to 0.5 cents per \$1,000 transacted from 0.6 cents per \$1,000 transacted in 2013. The total value of cheque fraud fell from \$7 million to \$6 million.

Cheques – fraud rates and totals

Year	2009	2010	2011	2012	2013	2014
Value (\$ millions):						
Cheque transactions	\$1,500,498	\$1,418,220	\$1,279,834	\$1,206,919	\$1,220,284	\$1,228,626
Fraudulent transactions	\$12	\$18	\$9	\$10	\$7	\$6
Fraud rate (cents per \$1,000)	0.8	1.3	0.7	0.8	0.6	0.5
Number						
Cheque transactions	333m	291m	256m	224m	194m	167m
Fraudulent transactions	1,488	1,247	883	608	947	1,029
Fraud rate (as % total no. of transactions)	0.0004%	0.0004%	0.0003%	0.0003%	0.0005%	0.0006%
Average value of fraudulent transactions	\$8,203	\$14,572	\$9,978	\$15,993	\$7,541	\$6,294

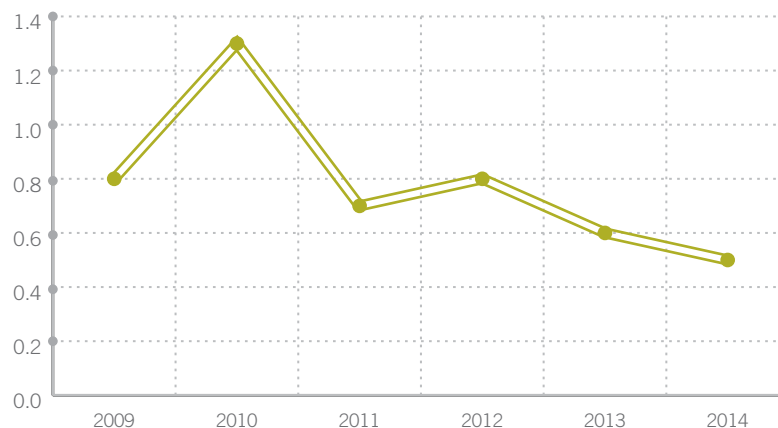
Source: APCA – www.apca.com.au and Reserve Bank of Australia – www.rba.gov.au



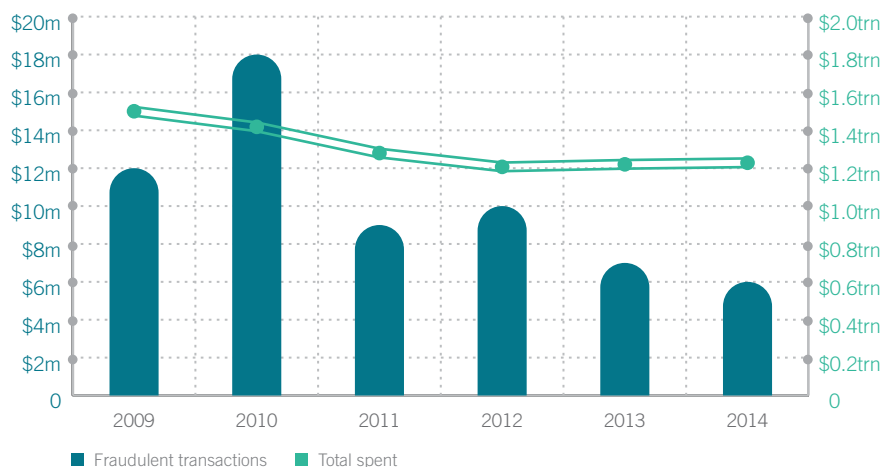
Overview

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Cheques – fraud rate (cents per \$1,000)



Cheques – total fraud and total spent



4.2 TYPES OF FRAUD OCCURRING ON CHEQUES

On-us fraud

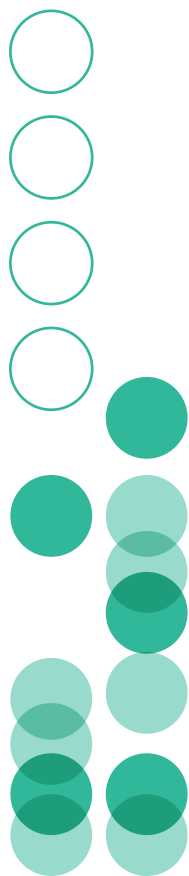
On-us cheque fraud covers fraud that has been detected and reported by the financial institution on which the cheque was issued. Types of on-us frauds include:

- *Breach of mandate* – Cheques are not signed in accordance with the arrangements set up on the account; for example the cheque may require two signatories but only one has signed.
- *Fraudulently altered cheques* – Cheques are altered to show different payee and/or dollar amount details than originally instructed by the payer.
- *Stolen blank cheque / book* – Original blank cheques are stolen and passed off as if they were written by the rightful owner.
- *Originated counterfeit cheques* – The counterfeit cheque is produced using the paper of the original cheque.
- *Non-originated counterfeit cheques* – The counterfeit cheque is produced on new paper using techniques such as laser printing and desktop publishing.
- *Valueless* – Cheques are deposited into an account knowing full well that they are worthless and will be dishonoured.

Deposit fraud

Deposit fraud is where fraud is detected and reported by a different financial institution than had issued the cheque. This type of fraud is less common than on-us fraud.

For further explanation of the types of cheque fraud visit www.apca.com.au



Overview


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Fraud prevention


Measures the industry is taking to protect against cheque fraud include:

- the use of fraud detection systems that monitor cheque transactions for suspicious and/or unusual transactions; and
- issuing customer cheques with inbuilt security features that make counterfeiting and altering cheques more difficult.

Fraud prevention



System to monitor cheque transactions



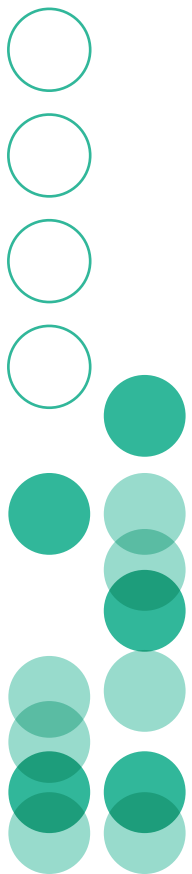
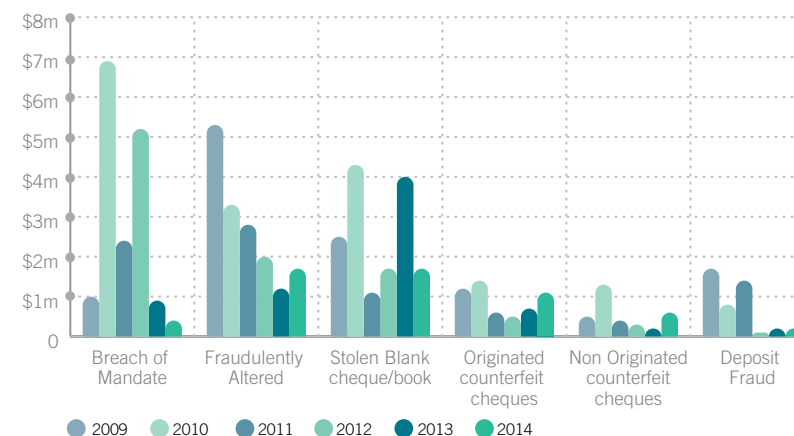
Inbuilt cheque security features

Cheques – type of fraud

Fraud (\$m)	2009	2010	2011	2012	2013	2014
On-us fraud:						
Breach of mandate	\$1.0	\$6.9	\$2.4	\$5.2	\$0.9	\$0.4
Fraudulently altered cheques	\$5.3	\$3.3	\$2.8	\$2.0	\$1.2	\$1.7
Stolen blank cheque / book	\$2.5	\$4.3	\$1.1	\$1.7	\$4.0	\$1.7
Originated counterfeit cheques	\$1.2	\$1.4	\$0.6	\$0.5	\$0.7	\$1.1
Non originated counterfeit cheques	\$0.5	\$1.3	\$0.4	\$0.3	\$0.2	\$0.6
Valueless	\$0.1	\$0.1	\$0.1	\$0.0	\$0.0	\$0.9
On-us total	\$10.5	\$17.3	\$7.4	\$9.6	\$7.0	\$6.3
Deposit fraud	\$1.7	\$0.8	\$1.4	\$0.1	\$0.2	\$0.2
Total all cheque fraud	\$12.2	\$18.2	\$8.8	\$9.7	\$7.1	\$6.5

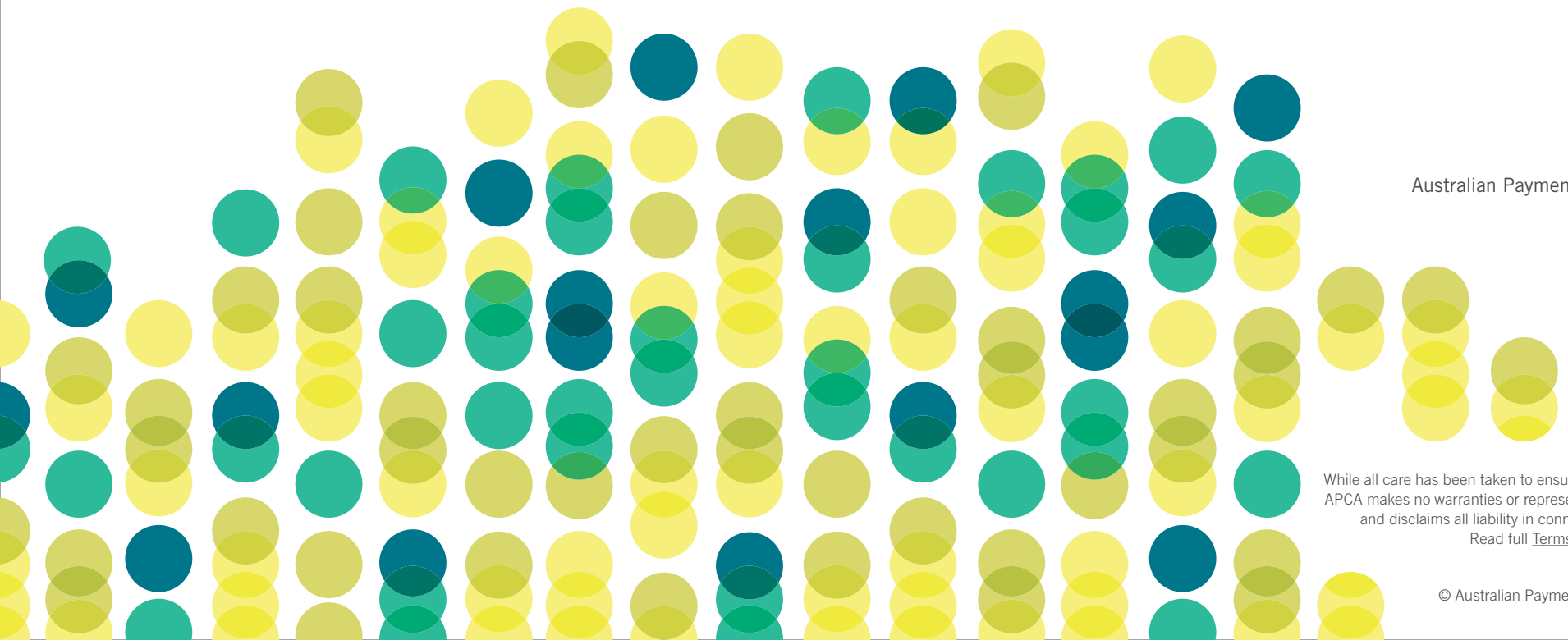
Source: APCA – www.apca.com.au

Cheques – fraud by type





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