

AUSTRALIAN PAYMENTS FRAUD

DETAILS AND DATA

2016



Australian
Payments
Clearing
Association



The **Australian Payments Clearing Association** is the self-regulatory body for Australia's payments industry. APCA has 100 members including Australia's leading financial institutions, major retailers, payments system operators and other payments service providers.

APCA has published statistics on payments fraud reported by Australia's financial institutions and major card schemes since 2006.

The aggregated data helps inform consumers and businesses about payments fraud issues, and assists financial institutions in monitoring fraud trends and developing targeted mitigation strategies.





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GLOSSARY

Types of fraud:

Card-not-present (CNP) fraud: occurs when valid card details are stolen and then used to make purchases or other payments without the card, mainly online or by phone.

Card present fraud: occurs when a card is used fraudulently at ATMs or point-of-sale devices.

Counterfeit / skimming: details are skimmed from a card's magnetic stripe and used to create a fake card.

Lost / stolen: transactions made on a card that has been reported lost or stolen.

Never received: transactions made on a card that was stolen before it was received by the owner.

Fraudulent application: transactions made on a card where the account was established using someone else's identity or other false information.

Other: covers fraudulent transactions that cannot be categorised under any of the common fraud types above. For example: identity takeover.

Types of cards:

Scheme credit, debit and charge cards: operated by international card schemes - Mastercard, Visa, American Express and Diners.

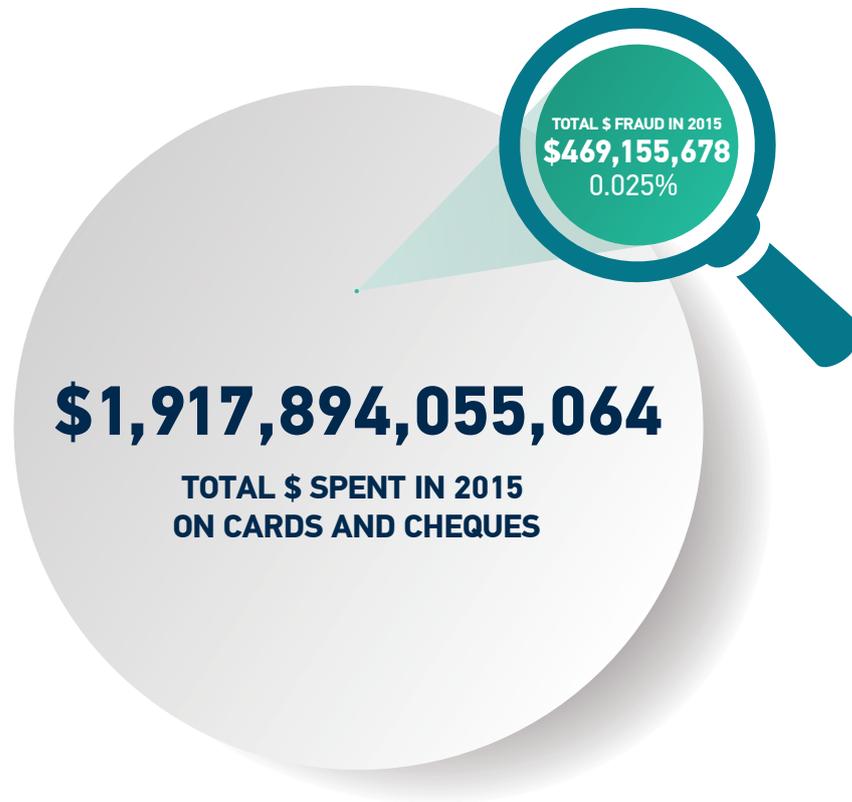
Proprietary debit cards: operated by eftpos Payments Australia Limited as well as cards used to make Australian ATM transactions.

Key terms:

Fraud rates: the most common measure used to monitor movements in fraud and the effectiveness of prevention initiatives. The measure calculates the amount of fraud as a proportion of the total transactions made. This allows comparisons between different time periods and across jurisdictions.

Payment card industry data security standard: PCI DSS is a security standard mandated by the international card schemes which is aimed at ensuring sensitive card data is held securely.





Australia’s payments landscape is increasingly digital. **Consumers are spending more than ever on their cards**, particularly online.

In 2015, Australians spent \$1.92 trillion using their cards and cheques; of this overall total, 0.025%, or \$469 million, worth of transactions were fraudulent.

While some areas of card fraud have declined, overall card fraud has risen due to a significant increase in CNP fraud.

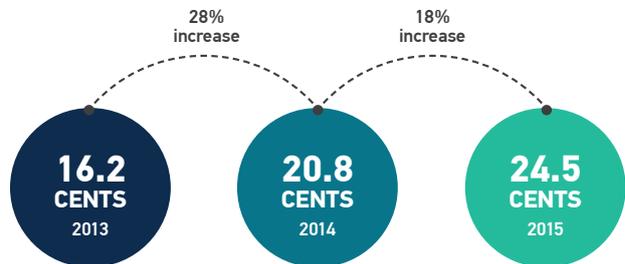
The Australian payments industry works actively to combat fraud and uses a range of counter measures. This report is provided as part of the industry’s ongoing commitment to minimise payments fraud.¹

¹ Some 2014 figures have been revised since publication in 2015. Full details available on www.apca.com.au. Where totals do not add up, the difference is due to rounding.





RATE OF FRAUD PER \$1,000



SNAPSHOT OF TRENDS

The rate of fraud across all Australian cheques and cards increased from 20.8 cents in 2014 to 24.5 cents in 2015.

Australian payment cards fraud

Australians are spending more than ever on their cards and the rate of fraud is increasing.

- The total amount spent on cards in 2015 increased 5% to \$689,470 million. The rate of card fraud increased to 66.8 cents per \$1,000, up from 58.8 cents in 2014.

Fraud on Australian cards domestically

With chip technology providing strong protection against counterfeit cards in Australia, fraud is increasingly migrating online.

- Counterfeit / skimming fraud **dropped** 10% in 2015 to \$22.9 million, down from \$25.4 million in 2014.
- Card-not-present (CNP) fraud **increased** 38% to \$136.7 million, up from \$99 million in 2014.

Fraud on Australian cards overseas

Fraud on Australian cards is occurring in the US and other countries at terminals that haven't yet been upgraded to chip technology.

- Counterfeit / skimming fraud **increased** 77% to \$28.1 million, up from \$15.8 million in 2014.

Australian cards have been caught up in large scale data-breaches overseas.

- CNP fraud **increased** 13% to \$226.3 million, up from \$200.9 million in 2014.

Overseas payment cards used in Australia

Chip technology is protecting overseas cards used for card present transactions in Australia.

- Counterfeit / skimming fraud **dropped** 14% to \$8 million, down from \$9.3 million in 2014.

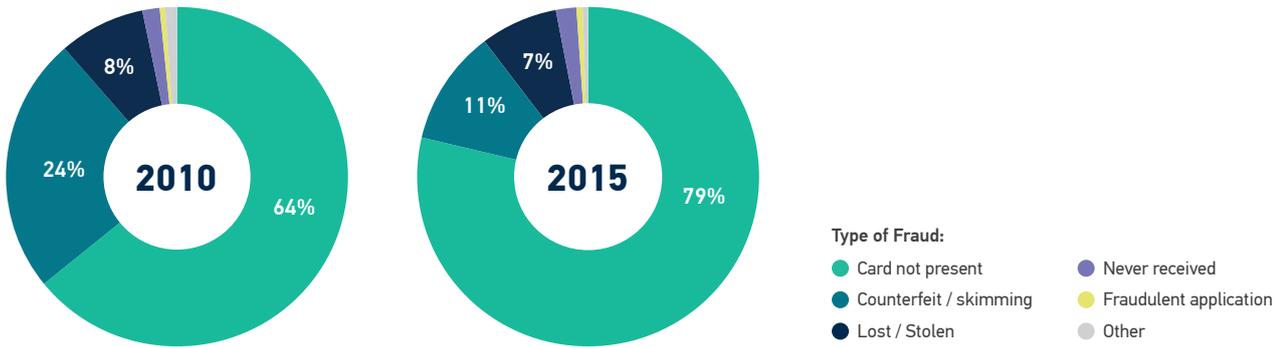
However CNP fraud on overseas cards in Australia is increasing.

- CNP fraud **increased** 7% to \$47.8 million, up from \$44.7 million in 2014

Cheques used in Australia

Cheque use has dropped more than 70% in Australia over the past 10 years. The total rate of cheque fraud increased to 0.7 cents per \$1,000 in 2015, up from 0.5 cents in 2014 - remaining under 1 cent per \$1,000.





OVERVIEW OF ISSUES & CHALLENGES

Australians **spent \$689,470 million** on their cards in 2015.

The overall amount of fraud on Australian cards increased from to \$386.5 million to \$460.8 million.

The rate of fraud increased to 66.8 cents per \$1000 spent, up from 58.8 cents in 2014. This compares to the UK's 2015 card fraud rate of 83 pence per £1000.²

CNP fraud increased to \$363 million, with 62% or \$226.3 million occurring overseas. Most of this fraud is likely due to sophisticated malware and phishing attacks and large-scale data breaches. It reflects

the growth in cyber-crime generally.

Domestically, CNP fraud increased 38% to \$136.7 million. This channel is increasingly attractive to criminals as Australians spend more online and as measures to tighten up card present channels, both in Australia and overseas, take positive effect.

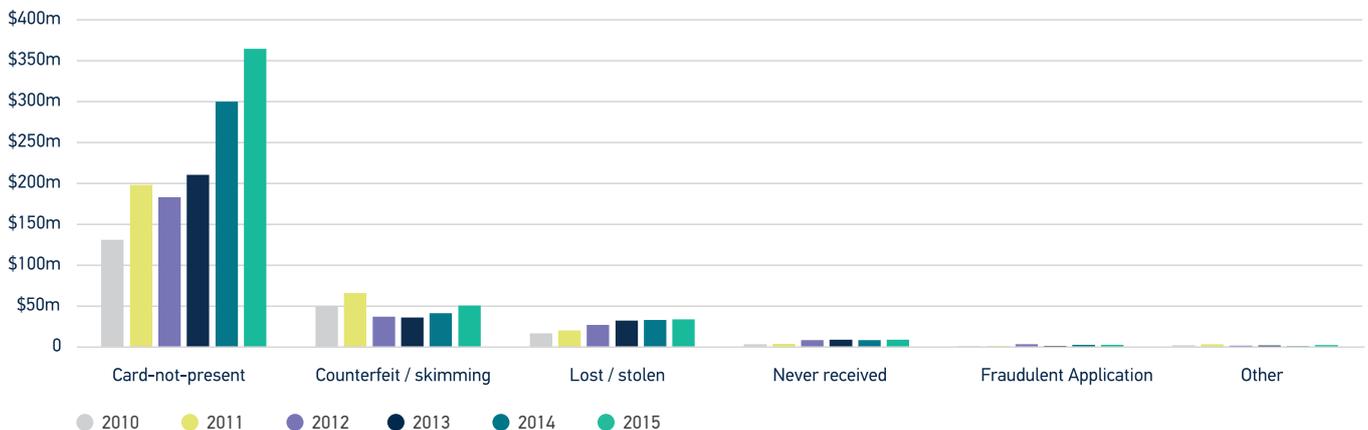
As the US transitions to chip technology - the last significant economy to upgrade from magnetic stripe - criminals are increasing their focus to online domains. Similar to the cards of other jurisdictions such as the UK, this is

impacting Australian cards, which are often captured by data breaches occurring in the US.³

Counterfeit / skimming fraud on Australian cards domestically dropped 10% to \$22.9 million.

However, knowing the window of opportunity is closing, fraudsters are rushing to use fake cards at US merchants where the magnetic stripe is still accepted. This largely explains the 77% increase in counterfeit / skimming fraud on Australian cards overseas.

TOTAL AUSTRALIAN CARD FRAUD – TYPE OF FRAUD



²⁻³ Fraud the Facts 2016.





PREVENTATIVE MEASURES

Vulnerability to card fraud is being reduced with measures that:

1. Reduce opportunities for sensitive card data to be stolen

Tokenisation replaces sensitive card information with a token that is of no value to criminals. Merchants use it to securely store card data while it is also used by financial institutions, card schemes, and third party vendors in their implementation of digital wallet technology.

Merchants and third party providers are continuing their efforts to comply with the Payment Card Industry Data Security Standard (PCI DSS) in strengthening card data security.

2. Identify and stop fraudulent payments in real-time

Financial institutions, merchants and payment gateways use dedicated analytics tools to stop fraud in real-time. Data such as the device being used to make the payment, the location, the nature of the purchase, and the cardholder's payments history are used by the software to identify potentially fraudulent transactions.

For card present transactions, chip technology identifies and stops transactions attempted with fake cards.

3. Authenticate the cardholder

Developments in technology have increased the opportunity for strong cardholder authentication to take place. This includes one-time passwords delivered by SMS or through a mobile token app, physical biometrics such as checking fingerprints, or behavioural biometrics such as recognition of keystroke dynamics.

The mandatory use of PINs domestically on all Australian cards introduced in 2014 has strengthened cardholder authentication for card present transactions. This measure provides strong protection from counterfeit / skimming and lost and stolen fraud.

Closer cooperation between financial institutions and law enforcement is also helping to limit losses from ATM skimming attacks and card theft. Sharing information on payments fraud is helping to identify the activities of criminal gangs operating in Australia and to shut them down.

Preventing payments fraud continues to require effort at every level – from financial institutions and card schemes through to merchants and consumers.

Australian consumers are protected from personal loss caused by fraud and will be refunded as long as they have taken due care with their confidential data.

MERCHANT AWARENESS



GET SMART ABOUT CARD FRAUD ONLINE



SAFEGUARD AGAINST SKIMMING



PCI SECURITY STANDARDS COUNCIL'S RESOURCES FOR MERCHANTS





SECTION ONE FRAUD RATES

Fraud rates are the most common measure used to monitor movements in fraud and the effectiveness of prevention initiatives.

The measure calculates the amount of fraud as a proportion of the total transactions made. This allows comparisons between different time periods and across jurisdictions.

The rate of fraud on Australian cards and cheques is now 24.6 cents per \$1,000.





KEY FRAUD TRENDS

The rate of fraud on Australian cards and cheques increased from 20.8 cents per \$1,000 in 2014 to 24.5 cents per \$1,000 in 2015.

Cards

The rate of fraud on Australian cards increased from 58.8 cents to 66.8 cents per \$1,000.

As a comparison, in 2015 the UK's card fraud rate increased from 75 pence to 83 pence per £1000 spent.⁴ In 2014, card fraud in the US was \$1.27 per \$1,000 and accounted for 48.2% of worldwide losses.⁵

Cheques

The rate of fraud on Australian cheques was 0.7 cents per \$1,000 transacted in 2015, remaining under 1 cent per \$1,000 transacted since 2011.

FRAUD RATES (CENTS PER \$1,000)

	PAYMENT CARDS	CHEQUES	TOTAL
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
2015	66.8	0.7	24.5

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)



⁴ Fraud the Facts 2016. ⁵ The Nilson Report – July 2015.





SECTION TWO AUSTRALIAN PAYMENT CARDS

Payment cards are the most common non-cash payment method used by Australian consumers.

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

Card fraud data in this section is presented by:

All Australian cards: used both domestically and overseas.

Scheme credit, debit and charge cards: operated by international card schemes - Mastercard, Visa, American Express, and Diners.

Proprietary debit cards: operated by eftpos Payments Australia Limited as well as cards used to make Australian ATM transactions.

Financial institutions report card fraud data as gross actual losses.

Fraud continues to move online. Domestically, card-not-present fraud on Australian cards increased 38% in 2015 while the strong security provided by chip technology saw counterfeit / skimming fraud drop 10%.





OVERVIEW

ALL AUSTRALIAN CARDS

In 2015, **Australians spent \$689,470 million** on their payments cards.

Fraud accounted for 0.07% of this total at \$460.7 million, an increase of 19% on the previous year. The rate of fraud increased to 66.8 cents per \$1000, up from 58.8 cents per \$1000 in 2014.

Since 2010, the fraud rate has risen from 37.9 to 66.8 cents per \$1000 spent.

The types of fraud occurring on Australian cards are explained in the [Glossary](#).

AUSTRALIAN CARDS – FRAUD RATES AND TOTALS

	2010	2011	2012	2013	2014	2015
Value (\$ millions):						
All card transactions	\$539,138	\$568,754	\$598,823	\$624,953	\$657,206	\$689,470
Fraudulent transactions	\$204	\$293	\$261	\$291	\$386	\$461
Fraud rate (cents per \$1,000):	37.9	51.5	43.6	46.6	58.8	66.8
Number:						
All card transactions	4,704m	5,142m	5,644m	6,141m	6,670m	7,290m
Fraudulent transactions	827,936	1,150,942	1,243,106	1,415,487	1,733,821	2,190,123
Fraud rate (as % of total no. of card transactions)	0.018%	0.022%	0.022%	0.023%	0.026%	0.030%
Average value of fraudulent transactions	\$247	\$254	\$210	\$206	\$223	\$210

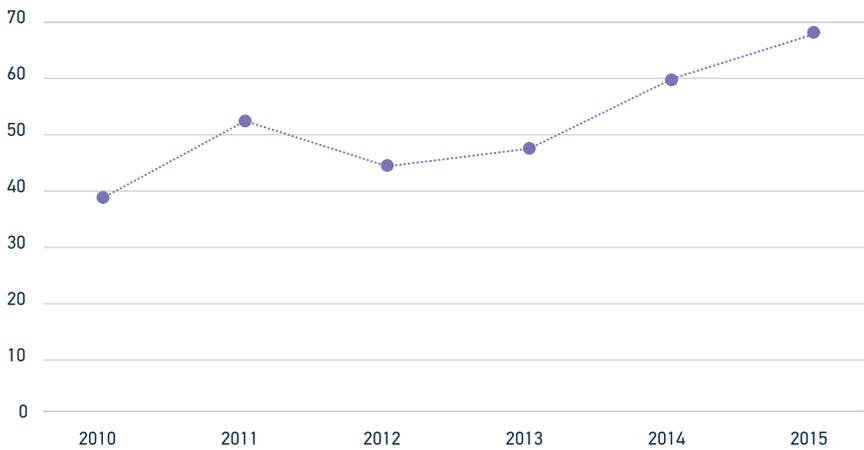
Source: APCA – www.apca.com.au and the Reserve Bank of Australia – www.rba.gov.au



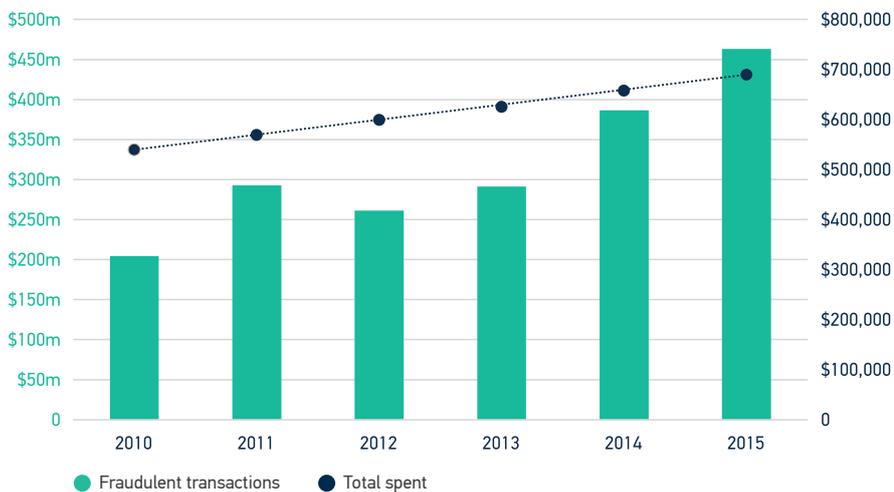


OVERVIEW

ALL AUSTRALIAN CARDS – FRAUD RATE (CENTS PER \$1,000)



ALL AUSTRALIAN CARDS – TOTAL FRAUD AND TOTAL SPENT





TYPES OF FRAUD OCCURRING ON AUSTRALIAN CARDS

CARD FRAUD TRENDS

The continued growth in online retail means CNP fraud is increasingly attractive to fraudsters.⁶ **CNP fraud is the most prevalent type of fraud on Australian cards**, reflecting the general increase in cyber-crime.

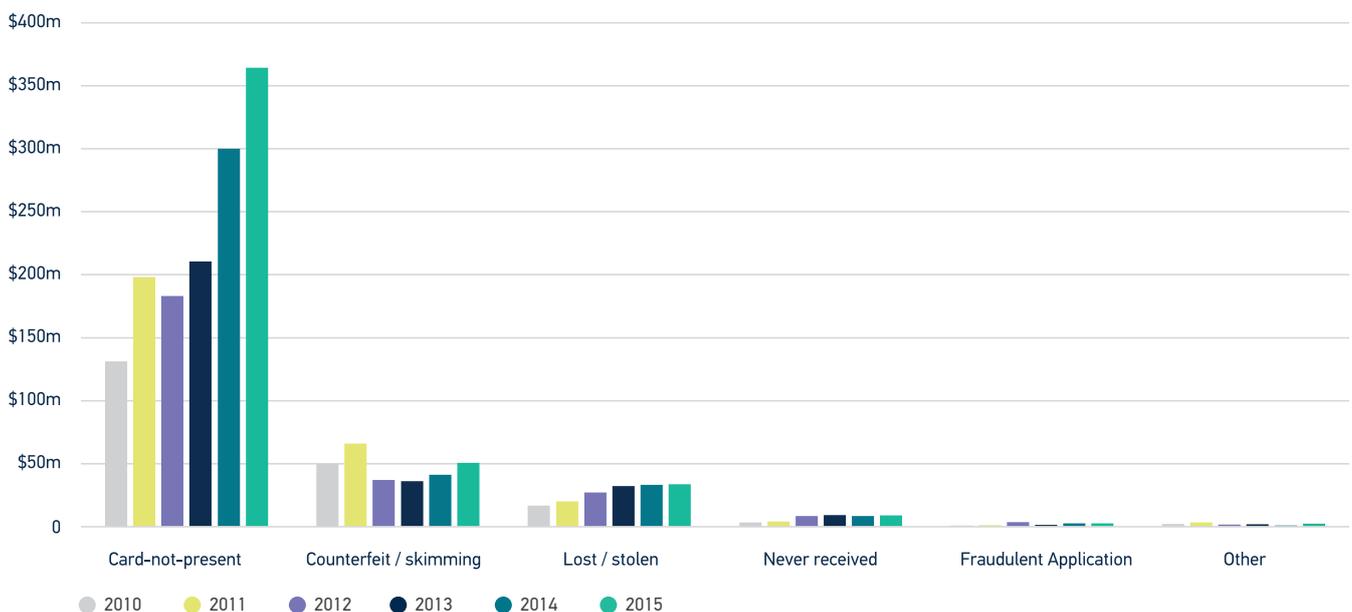
Industry measures such as the widespread adoption of chip technology have made it harder for criminals to operate where the card is present, causing them to move to online fraud.

The table on the next page shows that in 2015, CNP fraud accounted for 79% of the fraud amount on Australian cards and counterfeit / skimming for 11%.

Lost and stolen card fraud accounts for 7% of the overall amount of card fraud compared to 8% in 2010.

More details on card fraud trends and preventative measures are provided on pages 16 to 21.

ALL AUSTRALIAN CARDS - FRAUD BY TYPE



⁶ Payments System Board Annual Report 2015.





TYPES OF FRAUD OCCURRING ON AUSTRALIAN CARDS

ALL AUSTRALIAN CARDS – FRAUD BY TYPE

Fraud value (\$m)	2010	2011	2012	2013	2014	2015
Card-not-present	\$131.2	\$198.1	\$183.1	\$210.4	\$300.0	\$363.0
Counterfeit / skimming	\$50.0	\$66.0	\$37.2	\$36.1	\$41.3	\$51.0
Lost / stolen	\$16.7	\$20.2	\$27.0	\$32.2	\$33.1	\$33.3
Never received	\$3.3	\$4.1	\$8.5	\$9.1	\$8.6	\$9.1
Fraudulent application	\$1.1	\$1.1	\$3.5	\$1.5	\$1.2	\$1.3
Other	\$2.2	\$3.4	\$1.8	\$2.0	\$2.3	\$3.1
TOTAL	\$204.5	\$292.8	\$261.1	\$291.4	\$386.6	\$460.8
Percentage of total card fraud						
Card-not-present	64%	68%	70%	72%	77%	79%
Counterfeit / skimming	24%	23%	14%	12%	11%	11%
Lost / stolen	8%	7%	10%	11%	9%	7%
Never received	2%	1%	3%	3%	2%	2%
Fraudulent application	1%	0%	1%	1%	0%	0%
Other	1%	1%	1%	1%	1%	1%
TOTAL	100%	100%	100%	100%	100%	100%

Source: APCA – www.apca.com.au





TYPES OF FRAUD OCCURRING ON AUSTRALIAN CARDS

SCHEME CREDIT, DEBIT AND CHARGE CARDS

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

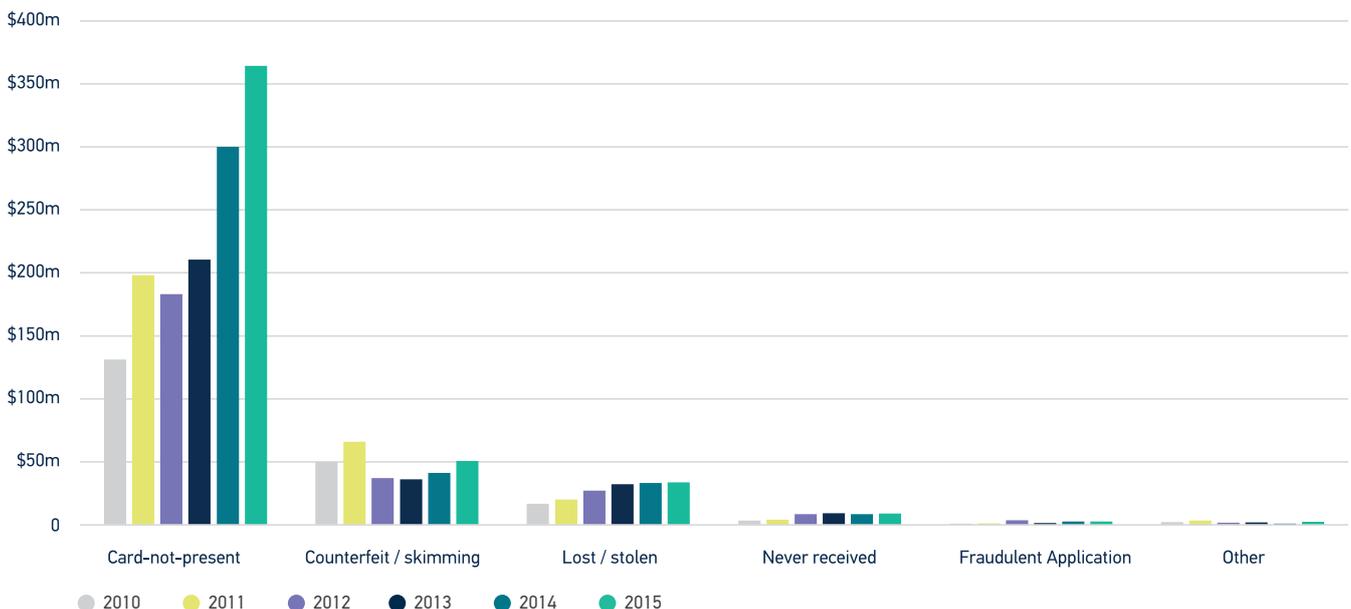
Included in this category are all frauds occurring:

- Over the internet, telephone, or by mail order (CNP).
- Where the ‘credit’ option is chosen at the point-of-sale device.
- 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 2015, the total value of fraud on scheme credit, debit, and charge cards increased 20% to \$437.9 million, with 83% of this increase due to CNP fraud. Counterfeit / skimming fraud on these cards continued to fall within Australia dropping 24% to \$6.4 million, but has risen 77% to \$28.1 million overseas.

SCHEME CREDIT, DEBIT AND CHARGE CARDS – FRAUD BY TYPE (TOTAL)



Source: APCA – www.apca.com.au





TYPES OF FRAUD OCCURRING ON AUSTRALIAN CARDS

SCHEME CREDIT, DEBIT AND CHARGE CARDS – FRAUD BY TYPE

Fraud (\$m)	2010	2011	2012	2013	2014	2015
Fraud perpetrated in Australia						
Card-not-present	\$46.1	\$73.7	\$72.8	\$85.9	\$99.1	\$136.7
Counterfeit / skimming	\$12.6	\$16.5	\$13.1	\$9.7	\$8.4	\$6.4
Lost / stolen	\$7.4	\$8.8	\$14.5	\$18.5	\$16.7	\$17.0
Never received	\$2.0	\$3.0	\$6.8	\$7.3	\$6.7	\$6.9
Fraudulent application	\$0.9	\$1.0	\$3.4	\$1.4	\$1.0	\$0.8
Other	\$0.9	\$2.0	\$0.7	\$0.8	\$0.6	\$0.9
TOTAL	\$70.0	\$104.8	\$111.2	\$123.7	\$132.5	\$168.8
Fraud perpetrated overseas						
Card-not-present	\$85.0	\$124.4	\$110.3	\$124.5	\$200.9	\$226.3
Counterfeit / skimming	\$22.0	\$42.2	\$14.6	\$12.8	\$15.9	\$28.1
Lost / stolen	\$5.5	\$7.0	\$8.3	\$11.1	\$13.3	\$12.8
Never received	\$0.5	\$0.2	\$0.4	\$0.5	\$0.5	\$0.6
Fraudulent application	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	\$0.5
Other	\$0.3	\$0.3	\$0.4	\$0.4	\$0.3	\$0.8
TOTAL	\$113.4	\$174.3	\$134.2	\$149.3	\$231.0	\$269.1
Total of all Australian issued cards	\$183.4	\$279.1	\$245.4	\$273.0	\$363.7	\$437.9

Source: APCA – www.apca.com.au





TYPES OF FRAUD OCCURRING ON AUSTRALIAN CARDS

PROPRIETARY DEBIT CARDS

APCA's data for 'proprietary debit cards' covers fraudulent transactions occurring at ATMs and on the original domestic debit cards operated by eftpos Payments Australia.

Proprietary debit cards data include:

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

In 2015 the total amount of fraud on proprietary debit cards remained static at \$22.9 million although the fraud mix changed. A decline of \$0.5 million in counterfeit / skimming fraud was counteracted by an equivalent increase in lost and stolen and never received fraud.

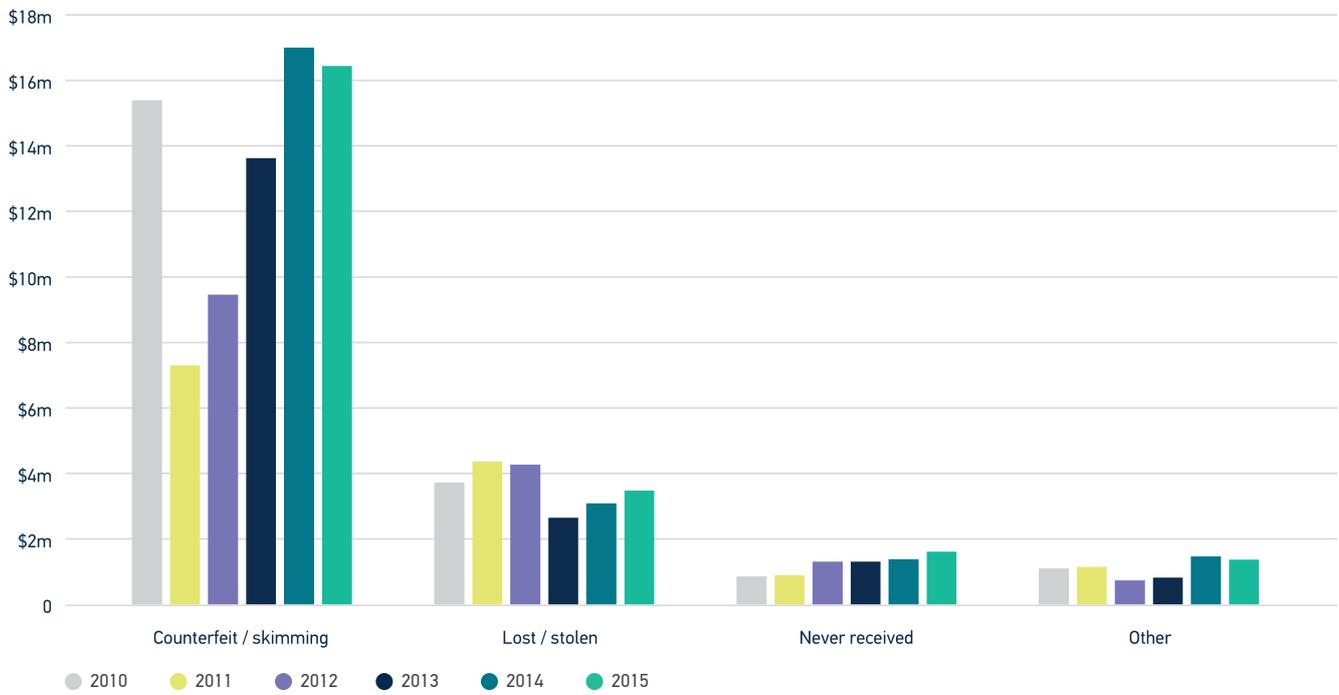
Fraudsters are increasingly using dummy terminals to skim cards particularly in taxis and convenience stores, and skimming attempts at ATMs continue. Close cooperation between financial institutions and the police is assisting in tackling these attacks.





TYPES OF FRAUD OCCURRING ON AUSTRALIAN CARDS

PROPRIETARY DEBIT CARDS – FRAUD BY TYPE



PROPRIETARY DEBIT CARDS – FRAUD BY TYPE

Fraud (\$m)	2010	2011	2012	2013	2014	2015
Counterfeit / skimming	\$15.4	\$7.3	\$9.5	\$13.6	\$17.0	\$16.5
Lost / stolen	\$3.7	\$4.4	\$4.3	\$2.6	\$3.1	\$3.5
Never received	\$0.9	\$0.9	\$1.3	\$1.3	\$1.4	\$1.6
Other	\$1.1	\$1.1	\$0.7	\$0.8	\$1.5	\$1.4
TOTAL	\$21.1	\$13.7	\$15.7	\$18.4	\$22.9	\$22.9

Source: APCA – www.apca.com.au





TRENDS & PREVENTATIVE MEASURES



The following pages provide more details on the three key contributors to Australian payment card fraud: **CNP, counterfeit/skimming, and lost and stolen card fraud**



CARD-NOT-PRESENT FRAUD

CNP 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 card details by targeting the computer systems belonging to merchants or service providers where payments data might be stored. They do this by inserting code and malicious software (malware) onto the target computers to exploit weaknesses and access the card details.

Criminals also target individual consumers by phishing for card information or by inserting malware onto their computers or mobile devices. Consumers can help protect themselves by using strong passwords, keeping their security software and operating systems up to date, and by downloading trusted programs and apps.

Fraud Prevention

The payments industry uses a range of measures to help prevent CNP fraud.

These include:

- Online fraud detection tools used by merchants and financial institutions to identify risky or unusual purchases on a card.

- Additional information to verify that the card details are valid and that the person providing them is the genuine cardholder, such as the three or four digit code written on the card.
- Requiring that merchants comply with the PCI DSS to strengthen data security and reduce the risk of card details being stolen.
- Tokenisation, which replaces sensitive information, such as a card number, with a token that is of no value to criminals.

Tools that help authenticate card owners online are becoming increasingly sophisticated and widespread. In addition to merchants and card issuers, digital wallet providers are using these tools to validate their customers.

Merchants can also build simple measures 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



TOKENISATION

MERCHANT AWARENESS



GET SMART ABOUT CARD FRAUD ONLINE



PCI SECURITY STANDARDS COUNCIL'S RESOURCES FOR MERCHANTS





TRENDS & PREVENTATIVE MEASURES

Trends

CNP fraud on Australian issued cards has continued to increase both in Australia and overseas:

- In Australia fraud has risen from \$99 million in 2014 to \$136.7 million in 2015 – an increase of 38%.
- Overseas, fraud has risen from \$200.9 million in 2014 to \$226.3 million in 2015 – an increase of 13%.

Fraudsters are continuing to focus on the online channel as chip technology makes it increasingly difficult to perpetrate fraud in card present channels.

The transition to chip technology in the US, the last significant economy relying on magnetic stripe for payments, gained momentum in 2015 as merchants act to comply with the international card schemes' decision to mandate chip technology at point-of-sale.

This has led to an increase in CNP fraud in the US, a trend that also occurred when other jurisdictions migrated to chip technology, including the UK and Australia.

Another by-product has been an increase in CNP fraud on Australian cards, particularly as cards captured in recent large-scale data breaches at US merchants included Australian cards.

Fraudsters are also using phishing attacks to gain passwords used to authenticate cardholders online. As more and more card issuers move to dynamic authentication

methods, such as one-time passwords and physical or behavioural biometrics, these type of attacks will become less effective.

The industry's implementation of tokenisation, combined with the stricter implementation of PCI-DSS standards at merchants and service providers, will reduce opportunities for card data to be stolen.

ALL AUSTRALIAN CARDS – CNP FRAUD⁷



⁷As CNP transactions are only supported by scheme credit, debit and charge cards, there is no further breakdown applicable



TRENDS & PREVENTATIVE MEASURES



COUNTERFEIT/SKIMMING FRAUD

Counterfeit/skimming fraud occurs when details from a 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 migration to chip technology and the use of PINs for all Australian issued cards continues to have 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 on how merchants can protect against skimming fraud include [Safeguard Against Skimming training videos](#) and a set of [guidelines](#) providing tips on ways merchants can keep their point-of-sale terminals safe. These are available on the [APCA website](#).

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

- Keeping their card in sight when making payments.
- Always using their hand to cover their PIN entry at point-of-sale terminals and ATMs.
- 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.
- Contactless cards and terminals.

INDUSTRY PREVENTION MEASURES



CHIP TECHNOLOGY



MANDATORY PIN

MERCHANT AWARENESS



SAFEGUARD AGAINST SKIMMING



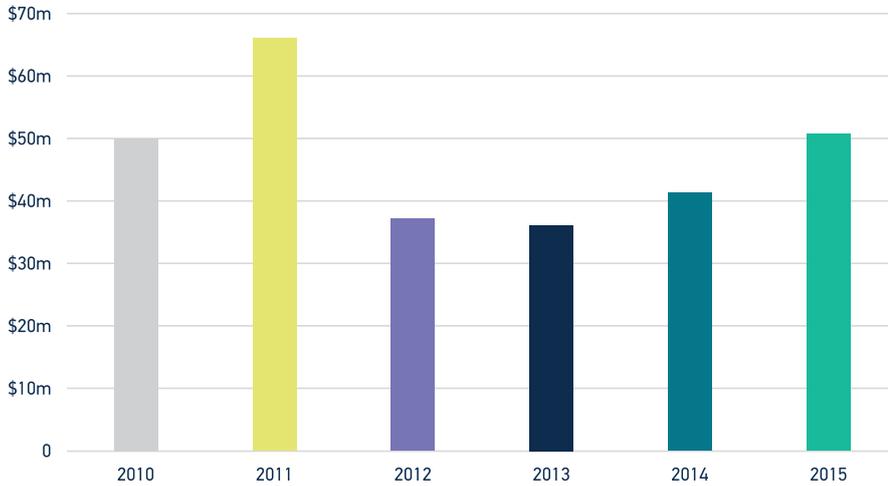
MERCHANT GUIDELINES





TRENDS & PREVENTATIVE MEASURES

ALL AUSTRALIAN CARDS – COUNTERFEIT/SKIMMING FRAUD



SCHEME CREDIT, DEBIT AND CHARGE CARDS – COUNTERFEIT/SKIMMING FRAUD



Trends

In 2015, counterfeit / skimming fraud within Australia continued to drop but overseas fraud increased significantly:

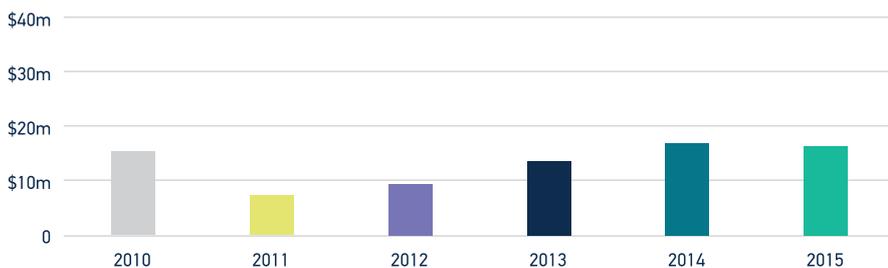
- In Australia fraud has dropped 10% to \$22.9 million.
- Overseas, fraud has risen 77% to \$28.1 million.

This disparity demonstrates the benefits of chip and PIN which is well advanced in Australia but has not been adopted in all markets.

Fraudsters are taking advantage of opportunities in the US before its roll-out of chip technology to point-of-sale terminals is complete. This is a likely contributor to the increase in counterfeit / skimming fraud on Australian cards overseas.

Any fraudulent withdrawals made at ATMs in Australia using counterfeit cards are reflected in the proprietary debit card fraud figures. These show a drop of 3% in 2015 to \$16.5 million. Close cooperation between Australian financial institutions and law enforcement remains effective in shutting down targeted attacks.

PROPRIETARY DEBIT CARDS – COUNTERFEIT/SKIMMING FRAUD





TRENDS & PREVENTATIVE MEASURES



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, criminals may use these cards at point-of-sale by forging the signature where accepted, or for low value purchases where neither a PIN nor signature is required.

Fraud prevention

Industry initiatives to tackle this type of fraud include:

- PIN verification for cash withdrawals at ATMs and point-of-sale terminals.
- Limits on the amount allowed for contactless purchases and mandatory PIN verification for point-of-sale transactions above those limits.
- 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.
- Card activation processes to ensure the recipient of a new card is the account holder.

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 the issuing financial institution immediately.

See www.apca.com.au for more information.

Trends

In 2015, lost / stolen fraud on Australian cards increased 1% to \$33.3 million. This consists of a 1% decrease on scheme, credit, debit, and charge cards to \$29.8 million, with 57% of this fraud occurring in Australia. On proprietary debit cards, lost / stolen card fraud increased 13% to \$3.5 million.

This type of crime is often opportunistic and is becoming increasingly attractive as other ways of perpetrating card present fraud are reduced. However, the removal of signature as an option at point-of-sale, and close cooperation between financial institutions and law enforcement, act to keep lost / stolen fraud low.

INDUSTRY PREVENTION MEASURES



ONLINE VERIFICATION



FRAUD DETECTION TOOLS



PIN VERIFICATION



MANDATORY PIN



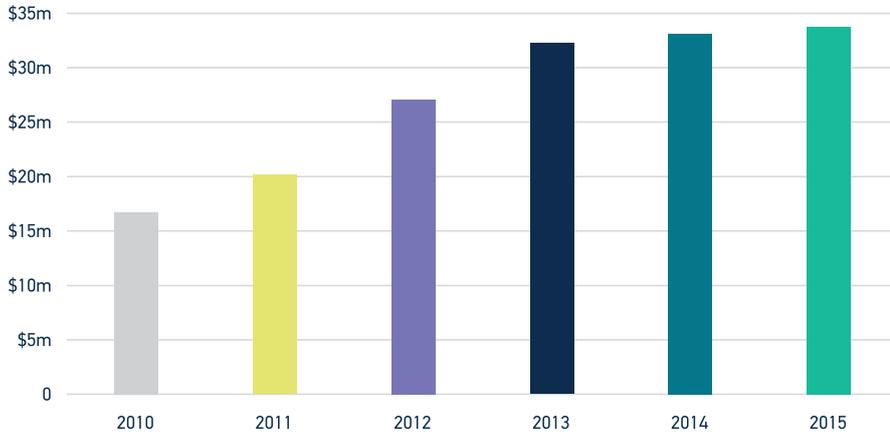
CARD ACTIVATION





TRENDS & PREVENTATIVE MEASURES

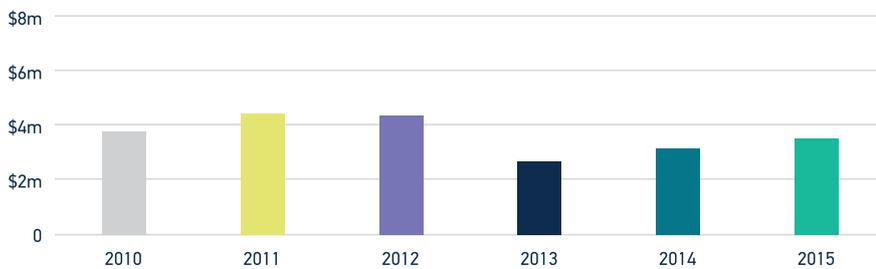
ALL AUSTRALIAN CARDS - LOST/STOLEN FRAUD



SCHEME CREDIT, DEBIT AND CHARGE CARDS - LOST/STOLEN FRAUD



PROPRIETARY DEBIT CARDS - LOST/STOLEN FRAUD





SECTION THREE OVERSEAS PAYMENT CARDS IN AUSTRALIA

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

Security features on these cards vary by the country of origin. When international visitors use their cards at Australian ATMs or point-of-sale terminals, the transactions are processed by the international card schemes.

Chip technology is protecting overseas cards used in Australia, however card-not-present fraud on overseas cards is increasing.

Counterfeit / skimming fraud dropped 14% in 2015 while CNP fraud increased 7%.





OVERVIEW

OVERSEAS CARDS IN AUSTRALIA

Fraudulent transactions in Australia on **cards issued overseas increased 4% from \$57.4 million** in 2014 to \$59.6 million, but remain 9% down on 2010.

CNP fraud increased 7% in 2015 to \$47.9 million, while counterfeit / skimming fraud dropped 14% to \$8 million – another indication of the benefits of chip technology.

OVERSEAS CARDS IN AUSTRALIA – FRAUD TOTAL

Fraud value (\$m)	2010	2011	2012	2013	2014	2015
Card-not-present	\$30.2	\$43.3	\$29.6	\$33.6	\$44.7	\$47.9
Counterfeit / skimming	\$28.2	\$17.1	\$11.9	\$11.1	\$9.3	\$8.0
Lost / stolen	\$5.7	\$6.6	\$3.9	\$4.4	\$2.8	\$3.0
Never received	\$0.6	\$0.1	\$0.1	\$0.0	\$0.0	\$0.1
Fraudulent application	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
Other	\$0.7	\$0.6	\$0.5	\$0.5	\$0.5	\$0.6
TOTAL	\$65.5	\$67.8	\$46.2	\$49.7	\$57.4	\$59.6

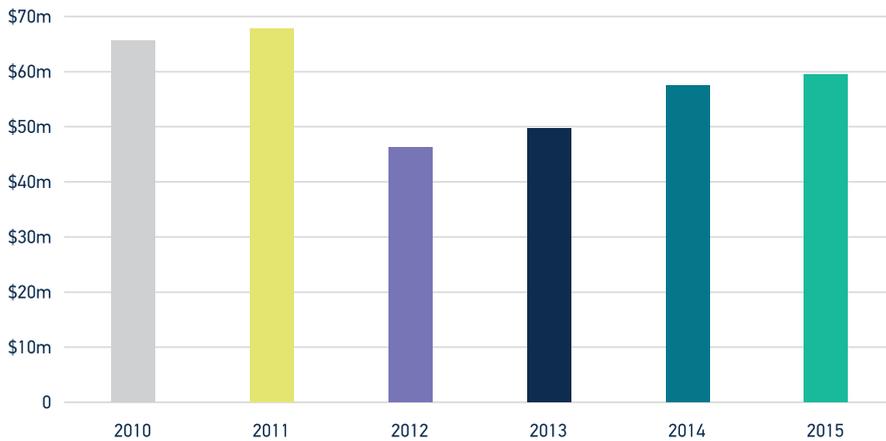




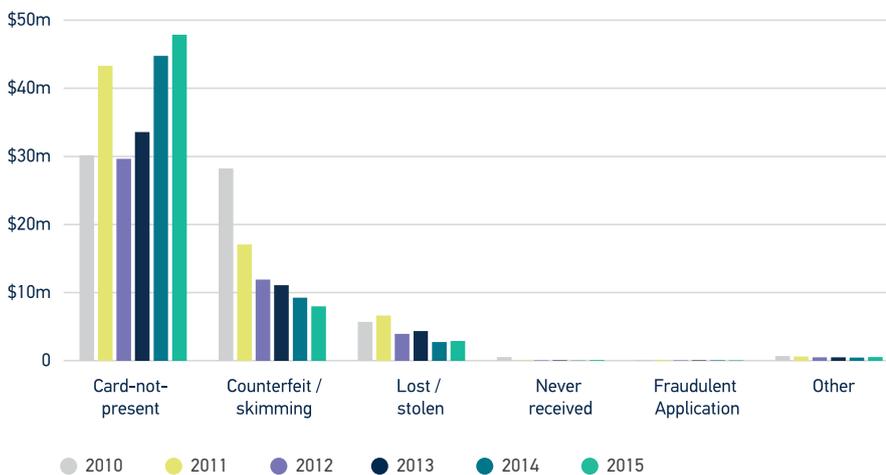
OVERVIEW

OVERSEAS CARDS IN AUSTRALIA

OVERSEAS CARDS IN AUSTRALIA – FRAUD TOTAL



OVERSEAS CARDS IN AUSTRALIA – FRAUD TYPE





SECTION FOUR CHEQUES

Cheque use has dropped by more than 70% over the past decade and is continuing to drop as the digital economy grows.

Cheques account for less than 5% of all non-cash payments made in Australia each day.

Although cheque use has dropped 70% over the past 10 years, the overall value of cheques has remained steady, and the rate of fraud under 1 cent per \$1,000.



OVERVIEW

CHEQUES OVERVIEW

‘Cheques’ covers Australian personal cheques, financial institution cheques, and drafts in Australian dollars.

The cheque fraud data covers 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 2015, the total rate of cheque fraud increased to 0.7 cents per \$1,000 transacted, up from 0.5 cents in 2014 but still remaining under 1 cent per \$1,000 transacted.

The total amount of cheque fraud increased from \$6.5 million to \$8.4 million in 2015, having dropped from \$7.1 million the previous year.

Despite this increase, it is still substantially down from 2010 when \$18 million was lost in cheque fraud, representing 1.3 cents per \$1,000 transacted.

CHEQUES – FRAUD RATES AND TOTALS

	2010	2011	2012	2013	2014	2015
Value (\$ millions):						
Cheque transactions	\$1,418,220	\$1,279,834	\$1,206,919	\$1,220,284	\$1,228,626	\$1,228,424
Fraudulent transactions	\$18	\$9	\$10	\$7	\$6	\$8
Fraud rate (cents per \$1,000):	1.3	0.7	0.8	0.6	0.5	0.7
Number:						
Cheque transactions	291m	256m	224m	194m	167m	140m
Fraudulent transactions	1,247	883	608	947	1,029	1,160
Fraud rate (as % total no. of transactions)	0.0004%	0.0003%	0.0003%	0.0005%	0.0006%	0.0007%
Average value of fraudulent transactions	\$14,572	\$9,978	\$15,993	\$7,541	\$6,294	\$7,232

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



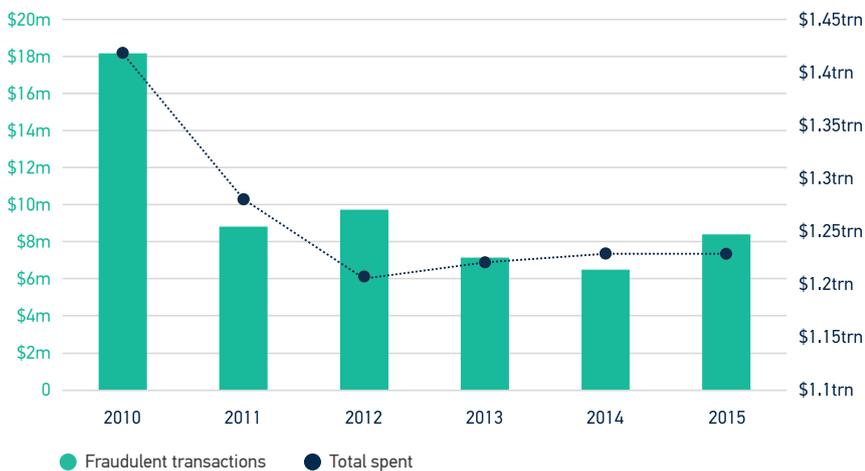
OVERVIEW

CHEQUES OVERVIEW

CHEQUES – FRAUD RATE (CENTS PER \$1,000)



CHEQUES – TOTAL FRAUD AND TOTAL SPENT



TYPES OF FRAUD OCCURRING ON CHEQUES



For further explanation of the types of cheque fraud:
APCA Fraud Statistics - Methodology Paper
apca.com.au/docs/fraud-statistics



CHEQUE FRAUD

On-us fraud

On-us cheque fraud covers fraud that has been detected and reported by the financial institution that the cheque is drawn on.

Types of on-us frauds include:

- Breach of mandate – payment is made without the correct authority; for example the cheque may require two signatures, but there is only one.
- Fraudulently altered – payee and/or dollar amount details are altered to be different than originally written.
- Stolen blank cheque / book – original blank cheques are stolen and passed off as if they were written by the account holder.
- Originated counterfeit – a counterfeit cheque is produced using the paper of the original cheque.
- Non-originated counterfeit – a 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 refers to fraud that has been detected and reported by a financial institution other than the cheque drawee. This type of fraud is less common than on-us fraud.

Trends and preventative measures

Over the years, cheque fraud has declined substantially and it remains low. However, a spike of \$1.9 million in additional losses on fraudulently altered cheques occurred in 2015 compared to 2014.

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

- Using fraud detection systems that monitor cheque transactions for suspicious and unusual activity.
- Issuing customer cheques with inbuilt security features that make counterfeiting and altering cheques more difficult.

FRAUD PREVENTION



SYSTEM TO MONITOR
CHEQUE TRANSACTIONS

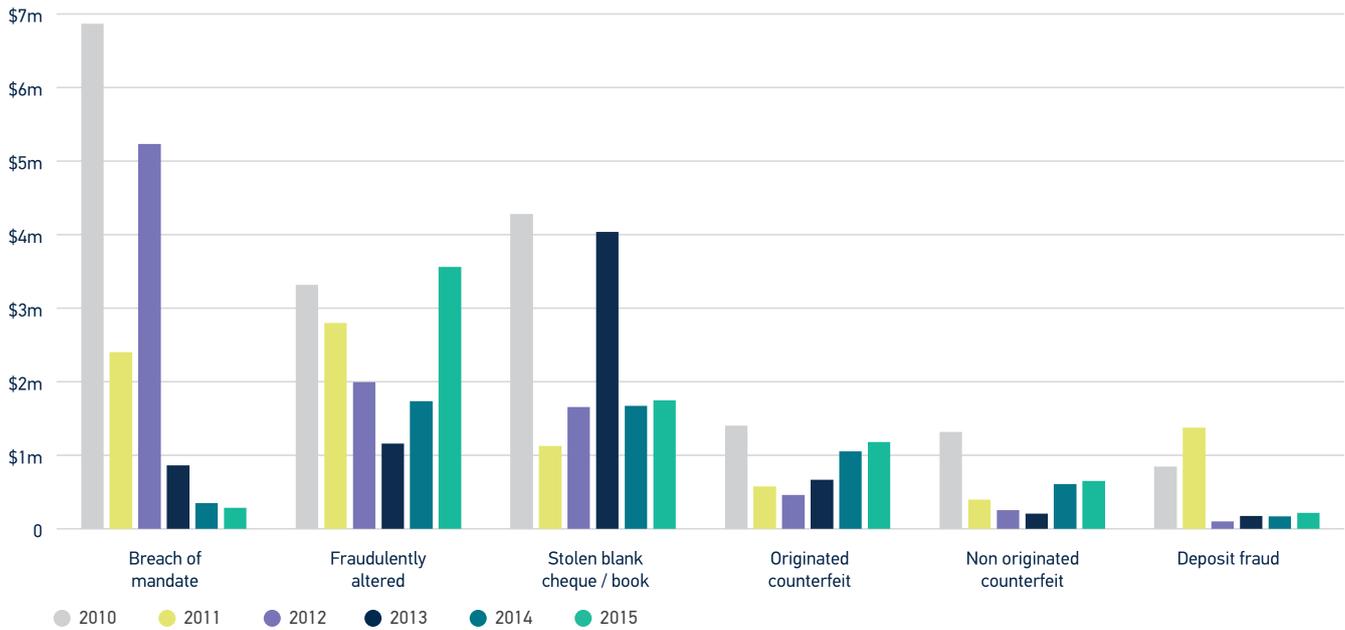


INBUILT CHEQUE SECURITY
FEATURES



TYPES OF FRAUD OCCURRING ON CHEQUES

CHEQUES – TYPE OF FRAUD



CHEQUES – TYPE OF FRAUD

Fraud (\$m)	2010	2011	2012	2013	2014	2015
On us fraud:						
Breach of mandate	\$6.9	\$2.4	\$5.2	\$0.9	\$0.4	\$0.3
Fraudulently altered	\$3.3	\$2.8	\$2.0	\$1.2	\$1.7	\$3.6
Stolen blank cheque / book	\$4.3	\$1.1	\$1.7	\$4.0	\$1.7	\$1.8
Originated counterfeit cheques	\$1.4	\$0.6	\$0.5	\$0.7	\$1.1	\$1.2
Non originated counterfeit cheques	\$1.3	\$0.4	\$0.3	\$0.2	\$0.6	\$0.7
Valueless	\$0.1	\$0.1	\$0.0	\$0.0	\$0.9	\$0.2
On-us total	\$17.3	\$7.4	\$9.6	\$7.0	\$6.3	\$7.6
Deposit fraud	\$0.8	\$1.4	\$0.1	\$0.2	\$0.2	\$0.2
Total all cheque fraud	\$18.2	\$8.8	\$9.7	\$7.1	\$6.5	\$7.9

Source: APCA – www.apca.com.au



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