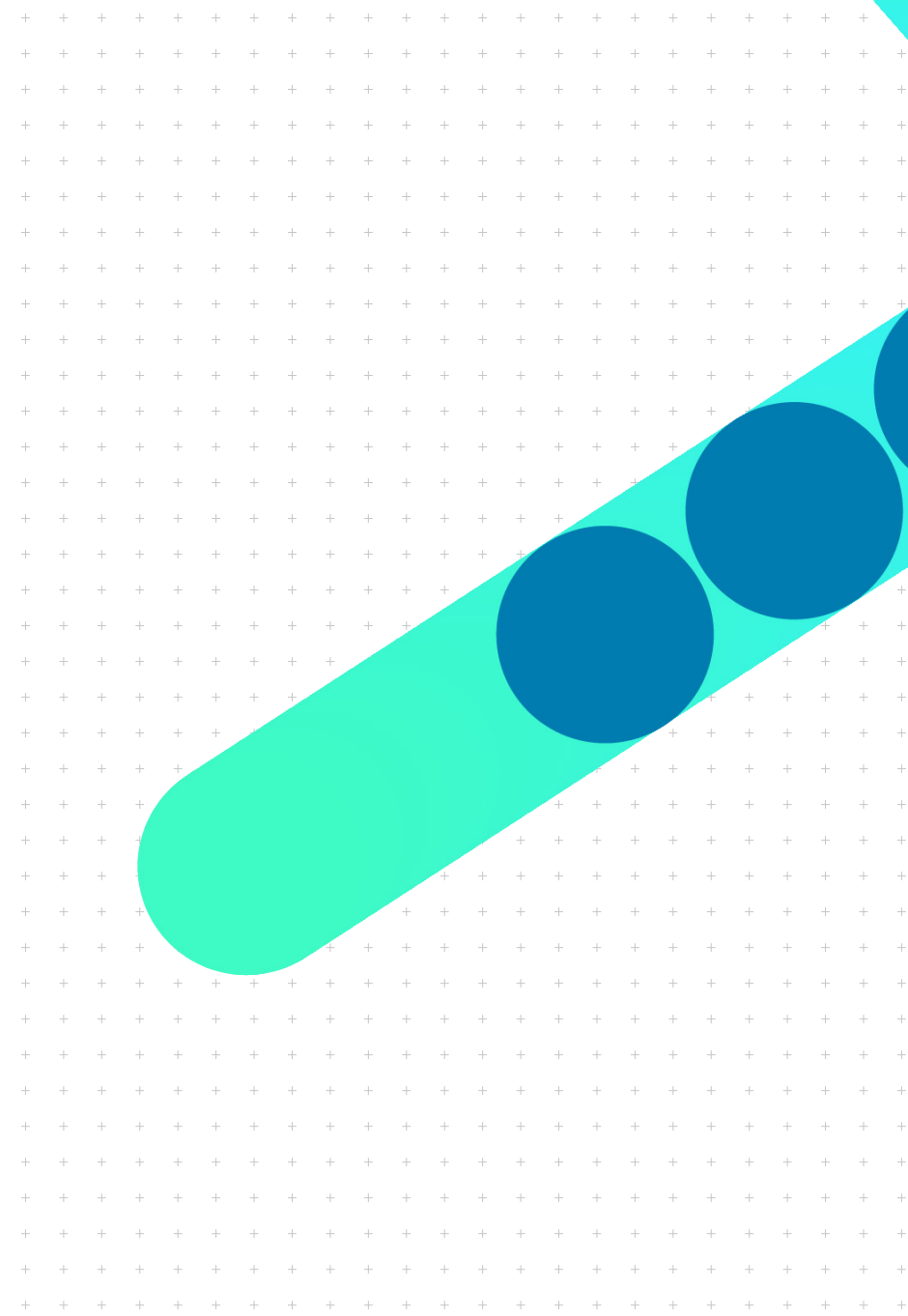


## **The Value of Australia's Retail Payments System**

American Express Australia Ltd | 2024

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## Executive summary

Payment systems are an integral part of modern economies, facilitating transactions between customers and retail businesses. Used by almost every Australian each day, these networks and arrangements enable movement of money from a payor to a payee through intermediary financial institutions, or value exchange of a physical or digital nature. They are critical economic infrastructure for the functioning of markets.



## \$38.7 billion

value to the economy in 2022 from  
electronic card payment systems

Over time, methods of payments have grown and evolved. This was accelerated by the COVID-19 pandemic's shift towards cashless and online transactions. Small- to-medium sized businesses typically offer a variety of payment options to customers (around six\*), while large businesses offer even more payments choices to their customers.

Digital wallets, cryptocurrencies and Buy-Now-Pay-Later have emerged as payment methods, alongside BPAY and electronic funds transfers. However, debit, credit and charge card payments are used in the majority of retail transactions. In 2023, Australians had almost 63 million debit and credit cards on issue, supporting over 1 billion transactions per month (which were worth over \$34 billion a month). By contrast, only 13% of transactions (and 8% of transaction value) used cash.

Within this context, American Express Australia commissioned Deloitte Access Economics to analyse the value of electronic payment systems, with a focus on retail payments, debit, credit and charge cards, and the value they provide to small- to medium-sized merchants (referred to as businesses in this report). The report is based on a survey of over 700 business leaders in Australia, data on payment systems and Deloitte econometric modelling.

Card payments play an important role in supporting overall economic growth. They do this by lifting productivity – directly through checkout efficiency and sales and payments reconciliation, but also more broadly by facilitating online commerce and supporting financial markets.

New modelling for this report finds that the growth in card transactions increased GDP by \$38.7 billion in 2022, equivalent to 1.8% of GDP. The boost to the economy from card payments benefits businesses by an estimated \$16 billion in 2022, or about \$25,000 per business for those with an annual turnover of \$2 million per year. These benefits are the result of greater revenue, improved productivity, and broader benefits. This suggests that card payments are a significant source of productivity growth, greater than has been recognised in the past.

### Higher business revenue is created through several channels:

- Amongst business leaders surveyed, 56% recognise the role of electronic payments in expanding their customer base (and only 14% disagreed). Around 6 million customers simply don't carry cash – businesses that don't offer card payments may put some revenue at risk.
- Electronic payments facilitate larger transactions. The average card transaction is around four times that of people using cash.
- Facilitating online commerce. Around 30% of businesses receive online orders and total retail online spend was \$64 billion in 2022.
- Facilitating foreign currencies. Overseas-issued credit cards acquired in Australia were worth \$1.5 billion across 12.6 million transactions per month (in June 2023).

\* These frequently include major credit and debit card schemes, as well as other methods like bank transfers and cash.

Secondly, card payments facilitate increased business productivity:

- The productivity boost saved around 46 million labour hours in the retail, hospitality and leisure industries.
- Almost 60% of business leaders agree that they increase check-out speed.
- Almost two-thirds saw value in expense tracking and sales reconciliation.

In addition to the benefits of card payments overall, credit and card payment systems provide additional benefits to businesses more generally:

- Businesses can use credit and charge cards as a source of interest-free credit. **While monthly commercial card balances totalled almost \$7 billion in 2023, around \$6 billion was interest free.**
- Greater security, through fraud and chargeback protection and trusted payment methods. 53% of businesses agree that card payments reduce fraud. Over four years of implementation, the Card-Not-Present Fraud Mitigation Framework has reduced the fraud rate from 75.0c to 57.5c per \$1,000 spent on Australian cards.

- Card systems can offer value-added services and entry to a business ecosystem. For example through payment analysis & information to help businesses understand their customers.

The benefits to the economy of payment systems far outweigh costs. Alongside cost estimates it is important to consider the significant value delivered by payment systems; principally, **\$16 billion in extra revenue for businesses, through a larger and more productive economy.**

Over time, regulation should consider how to support innovative, and trusted payment systems that are reasonable from a cost perspective, but also create value, through growth and business efficiency.

**The most significant finding from this research is that card payment systems create significant value for businesses and this should feature prominently in the design of future regulation.**



**60%**

Almost 60% of business leaders agree that card payments increase checkout speed

# Key findings | The value of the retail payment system in Australia



**\$38.7 billion**

value added to the economy in 2022 from electronic card payment systems



**\$16 billion**

in extra revenue for businesses from a larger and more productive economy

**01**

## Increased revenue & customer base



Creates additional revenue for businesses

**\$25,000**

small business annual average revenue boost



Facilitates larger transactions on average

**4 times**

larger transaction size facilitated by cards compared to cash, on average



Appeals to customers preferences and convenience

**6 million**

customers at risk of being lost by merchants without card payments



Facilitates digital (e-commerce) & cross-border transactions

**\$64 billion**

online retail spending in 2022, facilitated by electronic payments

**02**

## Enhanced productivity & operating efficiency



Labour cost savings compared to handling cash

**46 million**

labour hours saved from card payments – boosting Australian productivity



Savings on bookkeeping from value-added services, such as automated expense tracking and reconciliation

**60%**

of business leaders surveyed agree cards improve efficiency



Facilitates more business through a transaction process with reduced friction and faster checkout speeds

**95%**

of all in-person transactions are made via contactless cards

**03**

## Safer & more reliable means of doing business



Protecting merchants against fraud and chargebacks

**57%**

of business leaders agree that customers are confident to use card payments as they know their card has fraud and other protections



Reliable and secure payment methods for merchants to utilise

**75.0c to 57.5c**

Over four years of implementation, the Card-Not-Present Fraud Mitigation Framework has reduced the fraud rate from 75.0c to 57.5c per \$1,000 spent on Australian cards

**04**

## Ability to manage cashflow



Access to line-of-credit and interest-free lending

**\$6 billion**

interest-free liquidity on commercial credit card balances each month, on average

**\$506 million**

avoided interest payments on average monthly balances for businesses in 2023, by using credit instead of a loan

# 01

## Introduction and framework for analysis

Australia's retail payments system is the networks and arrangements that enable the movement of money from a payor to a payee through intermediary financial institutions, or the exchange of physical or digital instruments. Used by almost every Australian business and customer every day, the retail payments system is a critical economic infrastructure for the functioning of markets.

# About this report

## The value of the retail payment system in Australia

Payment systems are critical for the functioning of the Australian economy. From purchasing coffee at a local café to receiving pay or sending money to family and friends overseas, the payments system underpins everyday trade and commerce between consumers, businesses, and government across Australia and overseas.

Over time, methods of payments have grown and evolved, trends accelerated by the COVID-19 pandemic's impact on cashless and online transactions. While cheques are set to be phased out by 2030, cash is likely to have a continuing if diminished role. Debit, credit and charge cards, BPAY, and electronic funds transfers also compete with digital wallets, cryptocurrencies and Buy-Now-Pay-Later as payment methods.<sup>1</sup>

As a result of these changes, the payment system has expanded significantly in size and complexity, increasing the need for a safe and secure system that people can have confidence in. This requires the major platforms to invest and innovate, with the RBA noting the need to modernise the regulatory architecture to support innovation.<sup>2</sup>

The rapid pace of technological change and the need for a safe and secure system is reflected in the 2023 Strategic Plan for the Australian Payment System which lists key priorities and supporting initiatives.<sup>3</sup>

It is within this context that American Express® Australia commissioned Deloitte Access Economics to analyse the value of electronic payment systems, with a focus on retail payments, debit, credit and charge cards, and small- to medium-sized merchants (referred to as businesses in this report).

While focusing on the value to businesses, we also note that payments systems provide value to customers (such as choice, convenience and security) and to governments (in regulatory and policy contexts). These benefits are additional and not the focus of this study.

The report is based on:

- a survey of over 700 business leaders in Australia (see details opposite and Appendix A);
- data from a variety of sources including the RBA, BIS, ABS and OECD;
- Deloitte Access Economics econometric modelling.

This analysis aims to quantify some of the benefits that arise from electronic payment methods. It considers debit cards, credit and charge cards, electronic transfers, BPAY, PayPal, mobile wallets, and Buy-Now-Pay-Later, with a comparative lens against cash and cheques. In some instances, such as the overall economic modelling, the analysis is specifically about debit, credit and charge cards.

### About the survey

This research report includes data from a survey fielded in October 2023. The survey was completed by 734 business leaders familiar with their payments systems. About half of respondents (53%) were from small businesses (employing less than 20 people). 31 were from medium-sized business (employing 20-199 people). And 16% were from large businesses. There was a mix of business owners, CEO, executive, and manager respondents.

Almost all sectors were included in the survey, and owing to the focus of the research, half were from the retail, hospitality, entertainment and real estate industries (which have the most consumer transactions). The remainder were from the professional services and other industries.

This should be taken into account when interpreting results – that they refer to the sampled businesses in those industries, not necessarily those of business leaders across other sectors of the economy. More detail about the survey and respondents is contained in Appendix A.



# Introduction

## Australian businesses offer a variety of payment options to customers

The payments mix - the range of methods with which payments are made - is rapidly evolving. Consumers and businesses are consistently choosing cards and electronic payment methods over cash and cheques.

Together, debit and credit cards are used in the majority of retail transactions. In 2023, Australians had almost 63 million debit and credit cards on issue, supporting over 1 billion transactions per month (which were worth almost \$35 billion a year).<sup>4</sup>

The government has signalled its plan to phase out cheques by 2030. Further, according to the RBA, only 13% of transactions (worth 8% in value) used cash (in 2022) with the share of in-person cash payments by number declining by half since 2019. Of course, there is still a clear place for cash in the wider economy, with Australians generally feeling it is necessary to hold cash for emergencies and for privacy and security.<sup>5</sup> The RBA has also noted that despite cash usage declining, it places a high priority on the community having reasonable access to cash.<sup>6</sup> Nevertheless, the increased digitalisation of society has made electronic payments the clearly prevailing option.

Most Australian businesses provide customers with a variety of payment options. Data from the survey reveals that of 17 payment options, small- to-medium sized businesses generally offer around 6 different options on average. Large businesses (with more than 200 employees) offer 7.5 on average. These businesses are responding to the rapidly evolving consumer preferences, which have shifted from cash (which represented nearly half of all transactions ten years ago), to cards, and in recent years, digital wallets, which has seen a significant increase in usage in the past three years.<sup>7</sup>

As indicated in the chart, electronic payment forms (such as debit and credit cards, or digital wallets) tend to make up the majority of transaction value. This is particularly true as businesses become larger. While large businesses tend to offer a wider variety of payment methods than smaller ones, the size of the customer base and preferences towards more 'conventional' payment methods may lead to a large share of transaction value being made via electronic payment methods.

### Australia as of June 2023

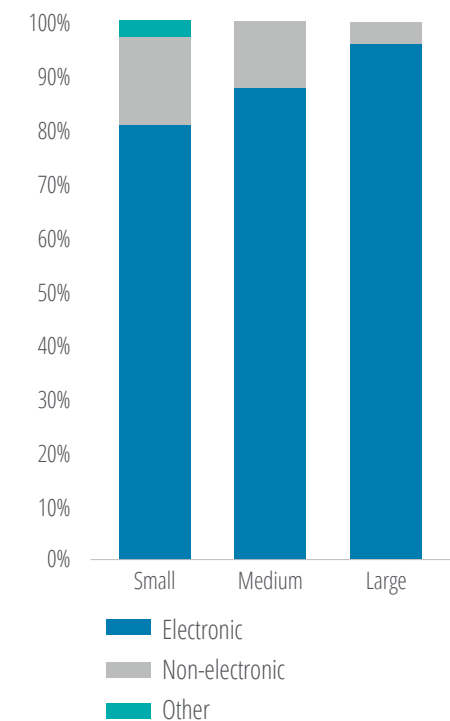
**Credit:** 13.4 million accounts, 17.7 million cards on issue

**Debit:** 39.7 million accounts, 45 million cards on issue

**Monthly transactions:**

Over 1 billion in number and \$34.3 billion in value

Share of transaction value for payment methods by business size



Source: Deloitte Access Economics survey n= 733

01

### Increased revenue & customer base



Creates additional revenue for businesses



Facilitates larger transactions on average



Appeals to customers preferences and convenience



Facilitates digital (e-commerce) and cross-border transactions

02

### Enhanced productivity & operating efficiency



Labour cost savings compared to handling cash



Savings on bookkeeping from value-added services, such as automated expense tracking and reconciliation



Facilitates more business through a transaction process with reduced friction and faster checkout speeds

03

### Safer & more reliable means of doing business



Protecting merchants against fraud and chargebacks



Reliable and secure payment methods for merchants to utilise

04

### Ability to manage cashflow



Access to line-of-credit and interest-free lending

## Framework of analysis

The framework for analysis was designed based on an assessment of existing literature and data regarding the retail payments system – pivoting from the traditionally cost-focused view towards an approach that seeks to quantify benefits. Broadly, the benefits that arise from electronic payment methods fall under the categories of increased revenue and customer base, because of the access to customers that is provided; productivity and efficiency benefits; trust and security in payment networks; as well as additional benefits like trust and security, and access to credit.

Economy-wide modelling is used to quantify the revenue and productivity effects. In addition, supporting data is used to illustrate the benefits. It is important to note that some benefits have an overlapping effect with other benefits, and in these situations, the benefits are quantified only to the extent possible, as they are not considered to be additive. In addition to the benefits of electronic payments, card payments (particularly credit cards) provide additional advantages including assisting to manage cashflow, ecosystem benefits and providing customers with a source of credit.

# Policy relevance of retail payment systems

## Cost of living, productivity, fraud, cybersecurity and driving digitisation

Many of the findings of this report relate to key economic priorities of the Australian economy in 2024. In particular, challenges with rising cost of living, lacklustre productivity growth and fraud and cybersecurity are directly impacted by the payments system. Further, longer-term agendas include the great digitisation of the economy and modernisation of payment system regulation.

### Rising cost of living

In recent years, Australians have faced higher costs of living with many experiencing greater pressure on household budgets. This report finds that surcharges on customer transactions are around \$3.7 billion a year. Higher levels of surcharging in recent years mean that surcharging is making cost of living challenges worse. This research also shows how the payments system plays an important role in driving efficiencies, lowering costs for businesses, enhancing competition and ultimately lowering costs for consumers.

### Productivity

The additional productivity boost associated with electronic card payments is the equivalent of around 46 million labour hours saved in 2022 across the hospitality, leisure and retail trade industries. Card payment systems are supporting growth at a time when productivity is stuck at pre-pandemic levels<sup>8</sup> and as the government has downgraded the longer-term productivity outlook from 1.5% per annum to 1.2% per annum in the latest Intergenerational report.<sup>9</sup>

### Economic growth and living standards

Economic modelling in this report shows that the increase in card usage has boosted productivity and increased GDP by 1.8% in 2022. This is the equivalent of \$38.7 billion. To put this in context, that is around five times larger than the \$7.7 billion average annual productivity impact that would occur through a reform such as digital financial reporting being adopted by all large businesses<sup>10</sup>. Alternatively, it is almost half the size of all the reforms recommended by the Productivity Commission to lift productivity growth in the 2017 Shifting the Dial Report.<sup>11</sup>

### Fraud and cybersecurity

Preventing fraud and online scams are also a major government priority. Consistent with this focus on cybersecurity, the retail payments system has a strong focus on protecting merchants against fraud and ensuring reliable and secure payment methods for merchants.

### Driving digital adoption

Australian businesses can be more competitive when adopting digital technologies. This research paper finds that some \$64 billion in online retail payments were supported by electronic payment networks in 2022. Stronger electronic networks and trust in those networks will be important for the continued growth of Australia's digital economy.

## A modern policy framework

The rapid pace of technological change and the need for a safe and secure system is reflected in the

2023 Strategic Plan for the Australian Payment System which lists key priorities and supporting initiatives:<sup>3</sup>

1. Promoting a safe and resilient system
2. Updating the payments regulatory framework
3. Modernising payments infrastructure
4. Uplifting competition, productivity and innovation across the economy
5. Australia as a leader in the global payments landscape

These are designed to help fulfil the vision for the payments system: “A modern, world-class and efficient payments system that is safe, trusted and accessible, and enables greater competition, innovation and productivity across the economy.” The Strategic Plan is the latest development in a sector of the economy that has undergone considerable regulatory scrutiny and change in the last two decades. Some key focus areas have been interchange fees, merchant service fees (MSF), and surcharging levels.\*

## Conclusion

Over time, regulation should consider how to support innovative, and trusted payment systems that are reasonable from a cost perspective, but also create value, through growth and business efficiency. This sentiment is echoed in the latest Strategy Plan for payments, which has a vision for: *“A modern, world-class and efficient payments system that is safe, trusted and accessible, and enables greater competition, innovation and productivity across the economy.”*

The most significant finding from this research is that card payment systems create significant value for businesses and this should feature prominently in the design of future regulation.

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\* An Interchange fee is a wholesale fee set by card networks that is paid from the merchant's financial institution to the cardholder's financial institution.

# 02

## Economy-wide impact on business revenue and efficiency

Card-based payment systems play an important role in addressing key policy issues of today, such as improving productivity, supporting the digital economy and facilitating greater financial inclusion. The proliferation of card-based electronic payments in recent decades has dramatically changed how Australians purchase goods and services and provided consumers with convenient and secure access to their funds.

# Increased card use over time has contributed 1.8% to Australia's in GDP by 2022

Increasing use of card payments over time increases business productivity through more efficient transactions, improving how businesses manage their finances, broader functioning of financial markets and improved liquidity of consumers. A more productive and larger economy also means higher business revenue through facilitating more and larger consumer transactions.

While several empirical studies have established a link between card penetration and economic activity, this analysis looks to quantify the benefits for businesses in the context of the Australia economy. In particular, the aim of this approach is to isolate the relationship between card expenditure and GDP per capita. From this approach we estimate that for a 1% increase in card expenditure\* as a share of GDP there is a 0.21% increase in GDP per capita.

Between 2004 and 2022 the value of card transactions have risen by 147% in real terms. Economic modelling shows that the increase in card usage has boosted productivity and increased GDP by 1.8% by 2022. This change reflects the net increase – i.e. how much production is higher, after taking into account the costs associated with card systems.

The additional productivity boost associated with electronic card payments is the equivalent of around 46 million labour hours saved in 2022 across the hospitality, leisure and retail trade industries. Previous research has shown handling cash costs Australian small and medium businesses \$8.7 billion in annual staff wages.<sup>12</sup>

**This modelling demonstrates that card payments have been an overlooked part of the productivity story. Card payment systems are supporting growth at a time when productivity is stuck at pre-pandemic levels<sup>9</sup> and as the government has downgraded the longer-term productivity outlook from 1.5% per annum to 1.2% per annum in the latest Intergenerational report.<sup>10</sup>**

## About the modelling

The modelling is based on analysis of economic growth in 10 countries. Card expenditure data from was collected from the Bank for International Settlements (BIS), with corresponding macroeconomic data collected from publicly available OECD, IMF and UNESCO data sources. Cross country data on card penetration is available from 2012-2021 from BIS. Data from the RBA on credit and debit card spending and Australian Bureau of Statistics data on household consumption is used across a longer time series to calculate the impact of card expenditure on consumption. Further details about the modelling is included in Appendix B.



**\$38.7 billion**  
impact on GDP by 2022

\* Card expenditure is defined as the real (inflation adjusted) value of debit and credit card spending.

# Overall business revenue was estimated to be \$16 billion higher in 2022 because of card payments

Part of the additional economic activity generated by cards occurs through increased household consumption which in turn manifests for businesses as increased sales and revenue. Overall, we estimate that business revenue was \$16 billion higher in 2022 because of card payments.

Deloitte estimates that the boost to productivity and GDP from increased card penetration benefits businesses through additional revenue of around \$25,000 for a small business with a turnover of \$2 million a year.\*

The estimated increase in overall business revenue is converted to a per business figure by calculating the total percentage increase in revenue and accounting for the 34% increase in the number of businesses across this period.<sup>13</sup> The adjustment for the growth in businesses accounts for the fact that the increase in revenue occurs from growth in the number of new businesses and growth in revenue of existing businesses.

We note that while the total gains to consumption and revenue can be divided by the number of businesses, the distribution of benefits will depend on several factors. Businesses that offer electronic card payments are more likely to win revenue and achieve efficiency benefits.

The means by which card payments facilitate more consumption and business revenue is explained further in the next section of this report.

Card payments can increase business revenue as consumers may make purchases using their cards that they would not otherwise make if they could only access cash. Consumers using cash or cheques may be limited in the amount of funds they have for transactions.

Card-based electronic payments provide consumers with access to all their available funds and lines of credit for any given transaction as well facilitating e-commerce and acceptance of foreign currency.

## Business revenue in context

How significant is the boost to business revenue from greater use of cards in transactions and a more efficient economy? An important comparison can be made against the cost of a merchant service fee (MSF). An MSF is a fee paid by merchants to their payment service provider (usually a bank) for processing the transaction.

These fees can differ based on the type of card used in the transaction (e.g. a credit/debit card), the type of transaction (e.g. online or in person) and the card network through which the transaction is processed (e.g. eftpos, Mastercard or Visa). Providers may also charge merchants different rates depending on the business size and industry.

According to the RBA merchants paid \$2.4 billion to banks in merchant service fees in 2022-23. If all non-bank financial institutions were included, the total level of merchant service fees would be higher, but with business revenue being \$16 billion higher because of card payments this suggests that the value created by card payments is well above the costs.



**\$25,000**

for a small business with a turnover of \$2 million a year\*

\* The boost to revenue is part of the overall benefits and is therefore not additive to the increased GDP.



# 03

## Increased revenue and customer base

One of the most important benefits of electronic payment systems is that they increase sales or revenue for businesses. This is demonstrated by the economy-wide modelling and supported by the survey and other evidence.



# Payments increase the volume of sales for businesses

Business leaders agree that offering card payments helps to expand their customer base. Only 1 in 7 survey respondents disagreed) that offering card payments expands their customer base (Chart 3.1). Put simply: paying electronically is what customers want and only offering cash or cheque methods of payments would considerably reduce the customer base for a business.

This makes sense when considering the scale of cards in particular. As of June 2023, there were 53.1 million credit or debit accounts, with 62.7 millions cards on issue. These accounts and cards are involved in over a billion transactions each month, with a total value around \$34 billion.<sup>4</sup>

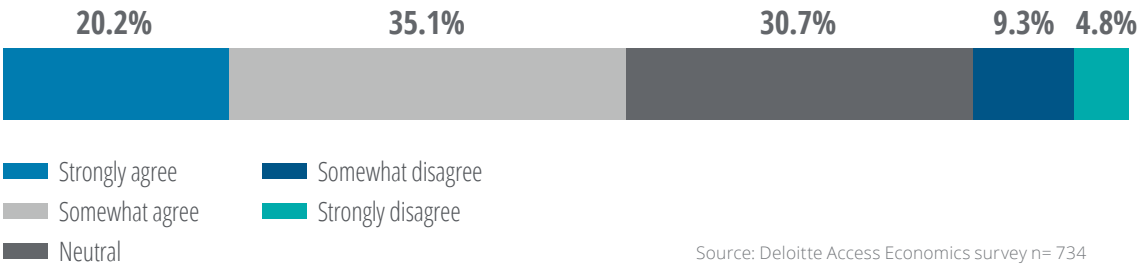
Meanwhile, in Australia cash represents only 13% of transactions and only 8% of value, and almost a third

(29%) hold no cash in their wallet. Based on the adult population, this represents almost 6 million consumers who are exclusively using cards for purchases.<sup>5</sup>

For a small business with an annual turnover of \$2 million, not accepting cards could place at risk almost \$50,000 a month in turnover per year. This is mentioned as a monthly figure, because over time, it is likely that consumers or businesses could adapt their behaviour.

These potential missed sales are referenced in literature – indeed, Bourguignon, Gomes and Tirole note that concerns about missed sales do induce merchants to take cards, which is likely to be even more so true given the growing proportion of Australians who do not carry cash in their wallet.<sup>14</sup>

Chart 3.1: Percentage of firms that agree that offering card payments expands their customer base



Source: Deloitte Access Economics survey n= 734

Merchants can also benefit from electronic payment systems by gaining access to ‘club’ benefits that are provided by card networks, such as additional advertising and marketing or access to business advice and insights. These types of programs are typically offered by major card networks. There are also programs that promote small businesses to customers, such as American Express’ Shop Small initiative, helping to increase sales volume.

Survey results indicate around 45% of businesses are engaging with these value-added services. While not all merchants will necessarily utilise all services, they can provide a level of value that would not otherwise exist with cash and certain forms of payment such as debit – for example, public data indicates that the Shop Small initiative generated \$813 million in spending in 2023.\*

\* Source: American Express

# Payments help to facilitate larger value transactions

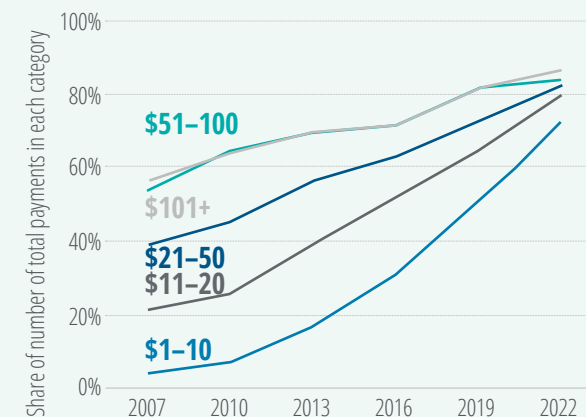
Another way in which cards can increase revenue for businesses is by facilitating larger value transactions that might not have occurred when using traditional forms of payments such as cash or cheques – payments made on card are approximately five times larger than those made with cash. Treasury estimates of the median cash transaction sit around \$12, based on 2016 data, and this is likely to still be the case in the current day.<sup>^16</sup> By contrast, the average card payment transaction size was \$64.<sup>^17</sup>



However, there is also literature to suggest that cards can facilitate additional spending relative to cash for the same transaction, providing a benefit to merchants. Prelec and Simester find that willingness-to-pay can be increased when customers are instructed to use a credit card rather than cash.<sup>18</sup> Of results that were statistically significant, the effect was estimated to be around 83%, and it appears unlikely that it arises solely due to liquidity constraints. Another study uses differences in restaurant tipping to estimate the effect at 42%, though this result could be confounded by server-diner interactions.<sup>19</sup>

Without taking this possible effect into account, a clear benefit of electronic payment still arises for both merchants and consumers – a more convenient and preferred option for facilitating larger payments.

**Chart 3.2: Card payments by size, via RBA**



Source: RBA calculations, based on data from Colmar Brunton, Ipsos and Roy Morgan Research

<sup>^</sup> Given the average number of transactions per person each year, with 13% being made with cash, and based on a forecasted \$34 billion in cash transactions in 2022, an estimate for the average transaction size still sits around \$12 - \$14

## Electronic payments help facilitate online transactions in an increasingly digital world

E-commerce has continued to grow in Australia, fuelled in particular by the COVID-19 pandemic. Online sales experienced major growth, with around \$64 billion spent on online goods in 2022. Of the survey respondents in retail trade, only 1 in 10 did not accept online sales. On the consumer side, 82% of Australian households made an online purchase in 2022.<sup>20</sup>

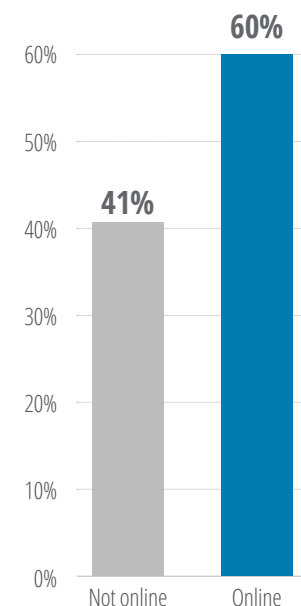
E-commerce is a means for merchants to expand their reach and customer base, allowing sales to be received at any time and from any place. Electronic payments are a necessary component for facilitating these sales – online merchants agreed more frequently that electronic payments helps them expand their consumer base than offline merchants (see Chart 3.3).

Acceptance of electronic payment methods, and the growth in ecommerce, are both part of broader trends of innovation and digitalisation of the business. ABS data on innovation suggests that 60% of retail businesses are innovation-active, making it the second-most innovative industry behind telecommunications.<sup>21</sup>

Customers have increasing preferences for digital convenience – this is reflected in the growth of usage of mobile wallets, and the overall growth in e-commerce. Merchants that wish to leverage data and analytics can also do so more freely using electronic payment methods – 62% of survey respondents that received online sales agreed that electronic payment methods allowed them to analyse transaction data to understand customers better, compared to only 46% of offline respondents.

In an increasingly digital world, electronic payments will play a major role in generating and transferring value and enhancing Australia's commerce landscape.

**Chart 3.3: Percentage of firms that agree or strongly agree that electronic payments bring a larger volume of sales and expand their customer base**



Source: Deloitte Access Economics survey n= 734



**\$64 billion**  
spent on online goods in 2022

# Payments support merchants to do business globally

Card payments also support business revenue by facilitating customer payments in foreign currencies - according to the survey, only a fraction of respondents (13%) believed that this wasn't the case at their business.

Being able to easily accept a broad range of currencies means that businesses can operate globally and expand their reach, especially through online channels. Furthermore, it reduces the risk of missed physical sales, as tourists and overseas cardholders are not excluded from transactions if they are not carrying local currency. In June 2023 alone, transaction value on overseas-issued credit cards acquired in Australia totalled \$1.5 billion across 12.6 million transactions, for an average transaction value of \$119.<sup>22</sup> For debit cards, total transaction value in the same period reached \$490 million, across 7.9 million transactions.<sup>23</sup> While these numbers naturally decreased during the COVID-19 pandemic, they are resuming to around pre-pandemic levels and trending upwards (see Chart 3.4).

**Tourism Research Australia estimates that by 2027, international tourist expenditure in Australia will reach \$48.8 billion, which surpasses pre-pandemic levels.<sup>24</sup>**

With global payments trends toward cards, and growing usage of travel cards, a significant portion of this value is likely to be facilitated by Australia's electronic payment networks.

**Chart 3.4: Overseas-issued credit and charge card transaction number and value**



Source: RBA Payment Statistics

# 04

## Productivity and efficiency

A significant benefit of electronic payment systems is increased business efficiency. This can occur through greater convenience and check out speeds or for internal business processes.

# Payments can provide greater convenience and checkout speeds

The additional productivity boost associated with electronic card payments is the equivalent of around 46 million labour hours saved in 2022 across the hospitality, leisure and retail trade industries. This includes both the direct productivity benefit achieved through greater checkout speeds but also, the broader efficiencies for businesses that result from taking their business online and from more efficient financial markets.

Approximately two thirds of survey respondents at least somewhat agree that card payments bring greater efficiency and checkout speed (Chart 4.1).

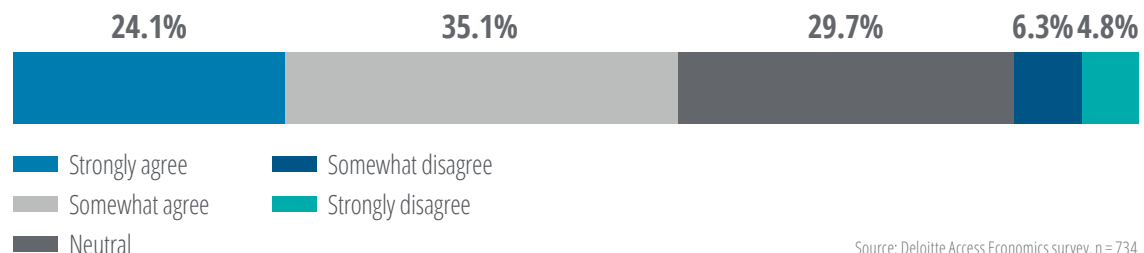
Faster payments are not only important for efficiency, but also volume of sales. For example, research on online shopping indicates that up to 50% of consumers may abandon a purchase if the checkout process takes longer than 30 seconds.<sup>25</sup> In-store, small additions in time for slow transactions can add up to many hours of labour costs.

Other research supports these findings. Schuh and Stavins find that speed time at checkout is statistically significant in influencing the use of payment instruments for consumers.<sup>26</sup> Further research also found that, on average, consumers increase their use of debit cards for small-value payments in response to receiving a contactless card, and that contactless cards increase the frequency of transactions among existing card users.<sup>27</sup>

Over time, cards have moved ahead of cash in terms of point-of-sale efficiency. In 2008, Schwarz et al. found that cash was the lowest cost payment method, and was the quickest to process, but became more costly as the value of the transaction rose.<sup>28</sup> By 2014, Stewart et al. had found that cash and EFTPOS incurred similar

costs for transactions under \$20, and that EFTPOS was lower-cost above \$20.<sup>29</sup> It is likely that cost differentials have reduced significantly since then – for example, by now, the telecommunications cost of electronic payments likely has a marginal cost close to zero – supporting the notion that electronic payments have become less costly and more convenient. Hygiene concerns as a cost of handling cash following the COVID-19 pandemic also had a significant effect on demand for physical currency, with a sharp decline in usage in 2020. Further, the fastest method by tender time – contactless cards – make up 95% of all in-person transactions as of 2022, according to the RBA Consumer Payments Survey.<sup>30</sup>

**Chart 4.1: Percentage of firms that agree card payments mean greater efficiency and checkout speed**



Source: Deloitte Access Economics survey, n = 734

# Payments mean faster reconciliation and expense tracking for merchants

Electronic payments can make expense tracking and reconciliation faster and more accurate for merchants.

43% of survey respondents ranked expense tracking as either the most-costly or second-most costly aspect of using cash, and 45% ranked cash leakage and handling errors as most or second-most costly. For small businesses, this effect was even stronger, with 47% for expense tracking and 47% for cash leakage and handling errors. These time savings factor into the 46 million labour hours saved by payment systems.

**Around 64% of survey respondents agreed that card payments made expense tracking easier, and less than 1 in 10 respondents disagreed (see Chart 4.3).**

Electronic expense tracking and sales reconciliation can enable business owners to analyse transaction data. Around 57% of respondents agreed that electronic payment would allow them to better understand customers to improve business decision-making (see Chart 4.3). This effect was above average for medium and large sized businesses (around 60% and 58% respectively) – this could be explained by larger businesses being more likely to have analytics teams.

Card payments also indirectly drive efficiency and productivity improvements, by facilitating easier business-to-business transactions, online sales (which can be more efficient than bricks and mortar stores) and making markets work more smoothly.

In addition, there are time savings that arise from avoided processes that are required with handling cash. For example, electronic payments mean automatic recording of transactions, which saves time counting and reduces the risk of entry errors at the point of sale.

Cash also needs to be stored and deposited, which has associated time costs. For many businesses that

accept cash, manual end-of-day reconciliation of cash sales must be completed before storing cash, and then when stored cash needs to be deposited, employees need to go to a bank. This is addition to the security risks associated with storing cash on premises, which itself may require more time spent on safeguarding processes. The automated nature of electronic payments reduces these costs for businesses.

Greater digitisation comes with different cyber risks and costs for business. Payment system providers, banks and other financial market players invest in a range of systems to reduce these risks for consumers and businesses.

**Chart 4.2: Percentage of firms that agree card payments mean easier expense tracking and sales reconciliation**



**Chart 4.3: Percentage of firms that agree card payments allow analysis of transaction data to understand customers**



Source: Deloitte Access Economics survey, n = 734

# 05

## Trusted payment methods

Electronic payment systems offer trusted payment systems to customers and businesses. This is achieved through fraud protection and chargebacks. This encourages customers to buy from businesses with less fear of scams or fraud. Network reliability is generally high.



# Payment systems are safe and secure for both customers and merchants alike

## Fraud prevention

Improvements in fraud prevention have made electronic payment systems safer for both customers and merchants. An initial challenge that faced electronic payments were the new forms of fraud that could occur – card-not-present (CNP) fraud is the most major form of payment fraud. In general, credit cards tend to have better fraud protection than debit cards, and impacted customers will not have their cashflow affected.

However, developments in fraud protection have significantly reduced the fraud rate in Australia. A key aspect of this was the introduction of the CNP Framework in 2019, which has significantly reduced the fraud rate across four years of implementation.<sup>31</sup>

**Since 2018, the CNP Framework has reduced the fraud rate from 75.0c per \$1,000 spent, to 57.5c – a reduction of 15.5c per \$1,000 spent**

Protection from scams is also noted as a major priority for government bodies, such as the ACCC, which recently implemented the National Anti-Scam Centre.<sup>32</sup> This is in conjunction with a strong focus from the Australian government on cybersecurity – ‘strong businesses and citizens’ are at the centre of the 2023-2030 Cyber Security Strategy. As a part of this strategy, commitments have been made to expand the reach and accessibility of cybersecurity programs that protect Australians against fraud and scams.<sup>33</sup>

Consistent with this focus on cybersecurity, there has been an increase in the implementation of fraud prevention technology, with banks employing new automated prevention systems.<sup>34</sup>

## Trusted payment methods

For consumers, making a transaction through a trusted payment method can increase their willingness to shop at a business. Research indicates that the mere presence of credit card logos can induce greater spending – around 10%.<sup>35</sup> For online sales, survey data suggests around 59% of shoppers will abandon a purchase if not offered their preferred payment option.<sup>36</sup>

Having a trusted payment method helps consumers transact without fear of scams or fraud. This was corroborated among business survey respondents, with around 57% agreeing that customers are confident to use card payments as they know their card has fraud and other protections (see Chart 5.2).

## Network reliability

While modern payment systems have become more reliable over time, experience with outages highlights the increasing reliance on electronic payment systems and the widespread consequences. Payment systems can be unavailable for a variety of reasons, including the system itself, or through dependence on another network such as electricity or telecommunications.

In Australia, individual providers of payment services are required to publish statistics about the reliability of their services, as a means of transparency and accountability.

**In most recent disclosures, systems were generally available over 99% of the time.<sup>37</sup>**

Significant investments are needed to maintain the availability of payment systems.

Survey data indicates that only around 14% of merchants experienced any kind of outage of any of their payment methods more than once a month, and 65% experienced any outage no more than once or twice per year.

In 2023, the Commonwealth Government released the Strategic Plan for Australia's Payments System. This plan places specific focus on investment in modernising payment infrastructure and promoting a resilient system. This is aligned with the key priorities of the RBA Payment Systems Board, which noted that its highest priority is strengthening the resilience of Australia's payments and market infrastructures.<sup>38</sup> This follows comments from the RBA in 2022 noting that while the New Payments Platform (NPP) infrastructure was delivering on its objectives, improvements to reliability and uptime were high priorities.<sup>39</sup>

# 06

## Lines of credit

Credit is beneficial across the entire economy. When consumers use credit, they benefit from the improved liquidity, and merchants benefit from greater sales. The widespread use of credit cards means that businesses have reasonably easy access to this improved cashflow that may not have necessarily been possible if they were restricted to cash or cheque, or as an alternative to a business loan.

# Payments give merchants access to interest-free credit that supports their business

## Improved cash flow

Credit is beneficial across the entire economy. When consumers use credit, they benefit from the improved liquidity, and merchants benefit from greater sales. This uplift effect is captured in the 0.21% increase to GDP per capita modelled earlier. Merchants also receive full payment up front, which benefits their liquidity.

For all businesses, but especially for small businesses, access to their own lines of credit can be critical. The improved access to cash flow can help cover sudden expenses, or be used for starting capital and inventories. The COVID-19 pandemic illustrated the value of cash liquidity to small businesses, with several government initiatives being implemented aiming to maintain cash flow to help businesses stay financially healthy.

The widespread use of credit cards means that businesses have reasonably easy access to this improved cashflow that may not have necessarily been possible if they were restricted to cash or cheque, or as an alternative to a business loan.



**\$506 million**

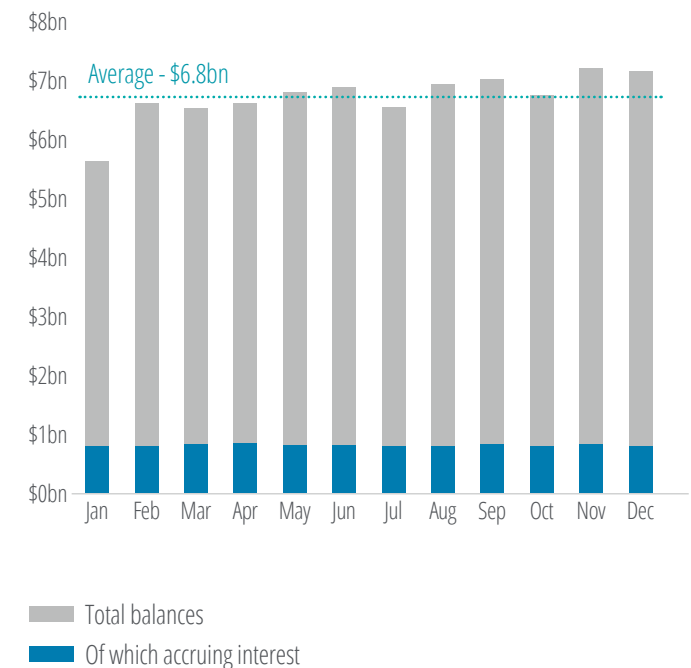
Avoided interest payments on average monthly balances for businesses in 2023, by using credit instead of a loan

In Australia, there was approximately \$6.8 billion in balances on commercial cards at the end of each month in 2023, with around 1.9 million commercial cards on issue as of December 2023.<sup>40</sup> However, only a fraction of this value accrued interest (Chart 6.1). The commercial card revolve rate – cards carrying a balance across months – is around 12%, meaning that businesses can leverage this liquidity as an 'interest-free loan'. Approximately \$6 billion each month is not accruing interest.



Given a lending rate of 8.56%, which was the average lending rate on variable loans for small businesses in 2023, this could represent around \$506 million in avoided interest payments on the average monthly balance in 2023 for commercial cards, by using credit instead of a loan.

It has been estimated that around 47% of small businesses use short-term debt products like credit cards<sup>41</sup> – with around 2.5 million small businesses in Australia, this could equate to just over a million small business cardholders, or over 60% of all commercial cards. If small businesses represent a similar portion of the balances, then in 2023 this could imply around \$223 million interest-free provided to small businesses on their average monthly balances.

**Chart 6.1: Commercial card balances at the end of each month in 2023**



Source: RBA Payment Statistics



An additional benefit to merchants that can arise from the use of credit cards (but is also possible for debit cards) is preauthorisation. Payment preauthorisation can provide a form of payment insurance to merchants that reduces the risk of fraud, or the need to undertake more complicated refund or chargeback processes, by reserving funds for a transaction before a charge is processed. Additionally, merchants do not pay an MSF until payments are confirmed.

83% of business leaders surveyed agreed (or did not disagree) with the idea that they can use card authorisation as a form of insurance. Preauthorisation is regularly used in industries across the Australian economy, but especially in the accommodation and hospitality industries.



# 07

## Australian regulatory dynamics

# Evolving regulation of payment system model

## Australia's payment system regulation has gradually evolved over time

The regulatory frameworks in Australia, initially designed to promote competition and protect consumers, since the early 2000s have become complex through multiple revisions, posing challenges to establishing a clear, stable regime.

Initially when revising regulations some years ago, RBA tackled fee opacity, and inadequate competitive signals despite increased card usage and unequal MSF across payment methods.

Subsequent RBA-led changes, like capping card interchange fees (where they were present) and encouraging MSF reductions were aimed at aligning costs with fair practices, fostering fee transparency, and healthy competition.

This reflected the decision to enact the regulatory response under the Payments Systems Act, making the RBA the principal regulator in subsequent actions. The RBA focused on three main issues:

**01 A lack of transparency:** Costs incurred by different payment instruments represent a minor part of the final price of goods and services and were not presented in the bill with which consumers were presented.

## **02 The limited signs that competition was at play:**

Observable signs of competition were notably absent as interchange fees remained unchanged over extended periods and across diverse markets despite the steady increase in the prevalence of card usage. The main sign of competitive forces being present was that merchants decided not to accept certain cards, but this tended to be quite limited.

**03 Potential consumer cross-subsidy:** Higher merchant service fees on credit cards compared to other methods (cash, EFTPOS, scheme debit) suggested possible cross-subsidisation for credit card users.<sup>42</sup>

## **Policy-makers are now rethinking the regulatory approach to address emerging issues**

As the ACCC and RBA acknowledged, the regulatory framework and payment system have not kept pace with technology and market developments.

According to remarks made by Michele Bullock during the Australian Payments Network Summit in December 2023, the RBA strongly advocates for transparency in payment service costs, emphasising businesses' rights to pass on payment method expenses to end-users.<sup>43</sup> Further changes are deemed necessary to make the regulatory framework fit for purpose.

Bullock's focus on surcharging Buy-Now-Pay-Later services aligns with the RBA's ongoing review, emphasising the importance of enabling surcharging to encourage low fees. This aligns with the RBA's pursuit of regulation measures for Least-Cost Routing and mobile wallets.

The RBA anticipates implementing reforms in 2024 and plans to initiate a comprehensive review of retail payments regulations at that time.

Given the complexity of this review, there is a challenge to craft effective, well-considered regulation that strikes a balance, avoiding unnecessary regulatory costs while fostering innovation.

More generally, a bigger shift in thinking is required to focus more on the value of payment systems. Regulation has traditionally centred on the cost of systems and transparency, overlooking the full value of payment systems.



# 08

## Conclusion



# The value of payments

Electronic payment systems provide significant value to businesses through increased revenue (via access to customers, and facilitating larger, online, & foreign-currency payments), increased productivity (both at the check-out and through sales reconciliation) and provide broader benefits (such as trusted and reliable networks).

In addition to the benefits of electronic payments, card payments (particularly credit cards) provide additional advantages including assisting to manage cashflow, ecosystem benefits and providing customers with a line of credit.

Card payments boost business productivity, with around 60% of business leaders agreeing that they increase check-out speed and almost two-thirds seeing value in expense tracking and sales reconciliation.

Economic modelling has found they **save an estimated 46 million labour hours annually in the hospitality, leisure and retail industries**. They also support businesses more generally as a source of interest-free credit with **less than \$1 billion of almost \$7 billion in commercial card balances attracting interest**.

Payment systems are an integral part of modern business, facilitating transactions between customers and retail businesses. In recent decades, payment systems have received most regulator and policy attention in terms of their costs, charges and consumer issues. Less consideration has been given to the value provided by payment systems.

Like all business processes, payment systems costs to the economy. The benefits to the economy of payment systems far outweigh costs. The value is significant: principally, \$16 billion in extra revenue for businesses, through a larger and more productive economy.

For payment systems to continuously progress and gain acceptance among the population for new technologies and solutions, it is imperative that these systems ensure security and trustworthiness. This involves implementing robust measures that safeguard sensitive financial information, prevent unauthorised access, and maintain the integrity of transactions.



## \$16 billion

in revenue for businesses through a larger and more productive economy

With the payments landscape changing rapidly and new business models and technologies emerging, the need for effective regulation is only increasing. The rapid shift towards new payment methods and away from legacy systems highlights the importance of modernising the regulatory architecture and payments infrastructure to support innovation.

Over time, regulation should consider how to support innovative, and trusted payment systems that are reasonable from a cost perspective, but also create value, through growth and business efficiency. This sentiment is echoed in the latest Strategy Plan for payments, which has a vision for: "A modern, world-class and efficient payments system that is safe, trusted and accessible, and enables greater competition, innovation and productivity across the economy."



# Appendix A

## Survey demographics

# A1 | Introduction

## Survey composition and demographics

### Final survey results

Overall, the survey received 734 responses. The sample comprises a large proportion of small businesses (Chart 1) which likely explains the largest number of respondents being business owners (Chart 2).

The most represented industry was retail trade, with 24% of all respondents – overall, consumer-facing industries made up half of the sample (Chart 3).

Chart 1: Business size

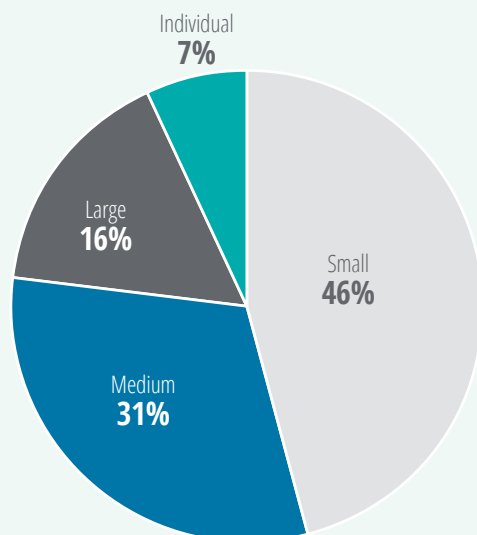


Chart 2: Respondent role

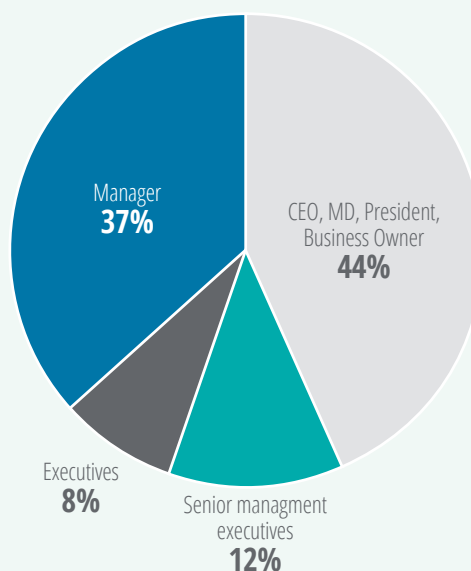
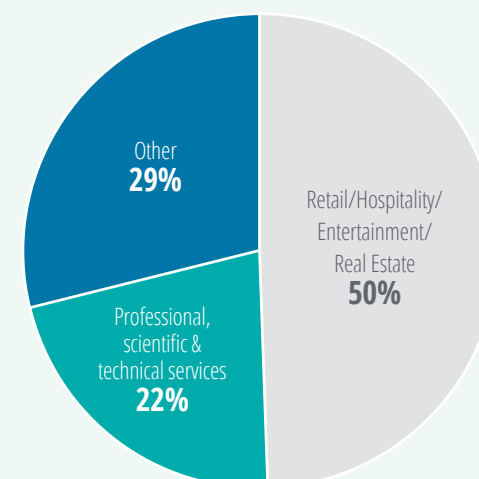


Chart 3: Industry breakdown of respondents



Source: Deloitte Access Economics survey, n = 734



# Appendix B

## Econometric modelling

# Econometric modelling approach

The key challenge in this analysis is to accurately isolate the contribution from card expenditure to GDP and consumption from other growth factors. Card expenditure can boost economic activity and consumption by improving the efficiency of transactions between merchants and consumers and reducing operating costs for merchants. While other factors, such as the growth of internet usage, could lift both GDP and card expenditure due to increased marginal benefit and decreased marginal cost.

The simple correlation between card expenditure and GDP per capita or consumption does not necessarily indicate the extent to which card spending causes higher economic activity and consumption, given other variables that may drive consumption and growth.

To account for this, we attempt to formalise that value of card spending using a growth model and instrumental variable (IV) or 2 stage least squares (2SLS) regression.

An IV estimation approach is used to estimate causal relationships when there may be reverse causality between the dependent and independent variables. In this instance, increasing GDP per capita or increased consumption per capita could be causing increased card expenditure, rather than increased card

penetration leading to increase economic activity. What we wish to isolate is the impact from increased card penetration on increased economic activity.

To do so we use the size of the tourism sector of a share of the economy as an instrumental variable for card penetration. To be a valid instrument it is assumed that the tourism share of the economy is correlated with card expenditure but not broader levels of economic activity.

The results from this regression then allow us to isolate the causal effect of card expenditure on economic activity. While the use of the 2SLS regression helps address causality issues in the analysis, it is uncertain the extent to which any reverse causality can be completely ruled out.

A simplified neoclassical production function approach is then used to model how card expenditure has contributed to GDP per capita. Using card expenditure as a share of GDP could also be picking up other factors that increase productivity, such as increased financial market sophistication across countries. This could influence the results and overestimate the contribution of card use to productivity.

Table B1: List of countries in modelling

Countries
Australia
Belgium
Canada
Germany
Italy
Mexico
Sweden
Switzerland
United Kingdom
United States

# Econometric modelling data

Card expenditure data for each country was collected from the Bank for International Settlements (BIS), with corresponding macroeconomic data collected from publicly available OECD, IMF and UNESCO data sources.

Cross country data on card penetration is available from 2012-2021 from BIS. Data from the RBA on credit and debit card spending and Australian Bureau of Statistics data on household consumption is used across a longer time series to calculate the impact of card expenditure on consumption.

**Table B2: Data sources for modelling inputs**

Parameter	Variable	Source
lnY	Gross Domestic Product (GDP) per capita	OECD
lnSch	Education – mean years of schooling (of adults, 25+)	UNESCO
ln_capital	Private capital stock per capita	IMF
ln_cardshare	Credit and debit card expenditure as a % of GDP	BIS
lnInt	Internet usage - % of individuals using the internet	Internet Telecommunication Union (ITU)
lnTrd	Trade openness – exports and imports as % of GDP	OECD
ln_empshare	Employment as a share of the population	OECD
ln_tourism	Tourism – tourism share of gross value added	OECD

# Econometric modelling results

A 2SLS regression is implemented with the first stage being a regression of card expenditure on the tourism share of the economy.

The second stage involves a modified production function which includes capital, labour, technology and card expenditure. The coefficients on the respective capital and labour terms are restricted to sum to 1.

The coefficient on the card share variable is 0.213. On average, this implies that a 1% increase in card expenditure as a share of GDP increases GDP per capita growth by around 0.213%. In real monetary terms, card expenditure in Australia has increased from around 8% of GDP to 41% over the period from 1995 to 2022.

**Table B3: Modelling results**

Parameter	Coef	St. Err	Z	P>z
First stage (ln_cardshare)				
ln_tourism	-1.613	0.115	-14.04	0.000
constant	0.133	0.147	0.90	0.367
Second stage (lnY)				
Ln_empshare	0.893	0.075	11.94	0.000
ln_capital	0.107	0.075	1.43	0.154
lnSch	0.022	0.211	0.11	0.916
nTrd	-0.193	0.032	-6.02	0.000
lnInt	0.031	0.206	0.15	0.881
ln_cardshare	0.213	0.049	4.31	0.000
constant	5.720	0.769	7.43	0.000
Number of observations	65			

Source: Deloitte Access Economics

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