

# Methodology and Country Profiles

## Executive Summary

In this section, each country will be described by its payments mix over time, split between ecommerce and POS transactions. What follows is a review of available payment card cost disclosures, either voluntary or regulated, and an analysis of publicly available country-level cost data. Here's an overview of the report's key findings:

### AUSTRALIA:

- **Payments Mix:** As a result of explosive growth of card payments in the period 2010-2020, Australia has become one of the most developed card markets in the world, with over 70% of online transactions and 80% of POS payments taking place on card or digital wallet. Contactless payments, wherein the consumer taps their card against a POS terminal, rose 5x between 2016-2019, and now is one of the most popular methods of transacting in-store card payments. By 2022, digital wallets were the most popular payment method for ecommerce transactions, representing 31% of spending. It's important to note, however, that a significant share of digital wallet spending may in fact represent card spending, as some of the most popular digital wallets in Australia utilize digital cards as the underlying payment method. According to Visa, these card types are typically referred to as pass-through wallets, and the payments mix analysis does not separate these payments from staged or stored-value wallets.<sup>43</sup>
- **Public Resources for Cost Analysis:** The Reserve Bank of Australia has published monthly and quarterly statistics on cost of card payments by network since 2002. These metrics include total volume of spending by card type, network type, and channel. The bank publishes this data monthly and provides average card fees by card type, network type, channel, and geography. In addition, Visa and Mastercard publish interchange rates, pursuant to the RBA's 2016 requirements on interchange transparency.
- **Price Trends:** Following the enforcement of the 2003 interchange caps and surcharging rights, Visa and Mastercard cost of acceptance for Australian merchant fell from 1.45% to 1.08% in just one year. While American Express was exempt from the interchange caps, American Express fees have steadily fallen from 2.51% in Q1 2003 to 1.32% in Q4 2023. By Q2 2020, when the RBA began to report on Visa and Mastercard debit and credit fees separately, the average merchant fee for those networks was 0.62%, less than half the Q1 2003 value. Over the period Q3 2020 to Q4 2023, Visa and Mastercard credit rates had the highest increase, rising by 0.09% and 0.12% respectively. In that same period, eftpos merchant fees also increased by 0.09%, with average Eftpos merchant fees sitting at 0.35% by Q4 2023. In part, these increases can be explained by the introduction of new eftpos rates in 2022 for mobile transactions and higher spend in CNP channels, which typically cost more than in-store transactions and card not present transactions.

## INDIA:

- Payments Mix:** Previously a cash-dominant economy, India's economy has undergone rapid shifts in its payments mix as the result of the government's launch of Unified Payments Interface (UPI), an interbank solution that facilitates payments. Between 2017 and 2022, digital wallets, powered by UPI's infrastructure, nearly doubled in share of online spending from 26% to 50%. As of 2022, digital wallets were also the most popular payment method for POS transactions, representing 35% of spending. Most notably, cash's share of POS spending plummeted alongside the growth of UPI's rise, with cash representing just 27% of spending, down 45 percentage points from 2017.
- Public Resources for Cost Analysis:** The Reserve Bank of India (RBI) publishes monthly reporting of transaction statistics of various payment methods by channel since 2021. While Merchant Discount Rates for debit were capped for POS and QR-based transactions in 2018, and National Payment Corporation of India (NPCI) introduced interchange rates for UPI transactions in 2023, neither average interchange nor MDR by payment method are published regularly by the RBI.
- Price Trends:** While the RBI does not publish regular interchange statistics on average cost, the RBI has capped debit card interchange fees for a number of transaction types.<sup>44</sup> In 2018, the RBA capped POS and QR-based debit transactions between 0.3-0.9% of transactions for both card present and card not present transactions, with varying rates for small businesses. In addition, India's UPI, which previously operated at zero cost and featured subsidies from the RBI to payments players for facilitating acceptance, saw interchange fees introduced by operator NPCI in 2023. The fees range from 0.5-1.1% but do not cover all transaction types, meaning some transactions will still operate cost-free.<sup>45</sup>

<sup>44</sup> There are two merchant categories to which debit interchange caps apply: small merchants (turnover up to 20 lakh) and other merchants (turnover above 20lakh). For physical PoS infrastructure (including online card transactions) the MDR must not exceed 0.4% for small merchants and 0.9% for other merchants. These rates are capped at ₹200 and ₹1000 per transaction, respectively. For QR code-based card acceptance structure, the MDR must not exceed 0.3% for small merchants and 0.8% for other merchants. These rates are also capped at ₹200 and ₹1000 per transaction, respectively.

<sup>45</sup> By April 2023, NPCI had in fact announced that UPI transactions would attract a series of interchange fees depending on the industry. The fees for UPI-based PPI transactions are characterized below:

- 1.1% interchange fee for high-ticket (Rs 2,000)
- 0.5% interchange fee for fuel transactions
- 0.7% interchange fee for telecom, utilities, post office, education, and agriculture transactions
- 0.9% interchange fee for supermarket
- 1% interchange fee for mutual fund, government, insurance, and railways

## JAPAN:

- **Payments Mix:** Cash is still one of the most dominant payment methods in Japan. In fact, Japan is reported to be only one of three countries where cash remained the dominant payment method in 2022. The role of cash, however, has been slowly changing. Driven by the government's "Cashless Vision"<sup>46</sup> and the COVID-19 pandemic, cash's share of POS spending fell from nearly 70% in 2018 to slightly over 51% in 2022. In parallel, credit card spending and digital wallets have been on the rise. Interestingly, Japan's reported debit card spending has consistently remained below 10% of total spending, indicating lower value transactions are typically paid with cash or credit cards.
- **Public Resources for Cost Analysis:** Japan's Fair Trade Commission (JFTC) has published two surveys on the cost of card acceptance, one held in 2019 and the other 2020-2021. Both surveys found that none of the five international card brands surveyed published standard interchange fee rates for Japan.
- **Price Trends:** Based on the 2019 and 2020-2021 JFTC surveys, the average merchant MDR fell from 3.2% in 2019 to 2.70% in 2021. The reduction could be due to the provisioning of grants by the Ministry of Trade and Industry (METI) to cover the cost of purchasing or leasing POS terminals. The report also found that merchants that negotiate or compare network rates are more likely to see lower costs, with non-negotiated rates sitting at 2.89% and negotiated rates sitting at 2.51%. The benefits of network negotiation pervade all merchant sizes, with 10 to 50 basis point differentials when comparing negotiated vs. non-negotiated rates across all merchant sizes.

## SINGAPORE:

- **Payments Mix:** Singapore has seen significant changes in its payments mix between 2017 and 2022, largely in response to the Monetary Authority of Singapore's (MAS) Payment Services Bill of 2018. Since the bill's introduction there's been significant churn in the payments mix of Singapore, with digital wallet's share of ecommerce spending tripling from 10% in 2017 to over 30% in 2022. In parallel, the volume of cash spending dropped, as cash's share of POS spending fell from 40% in 2019 to below 20% in 2022. The growth of wallets and decline in cash also coincides with the rapid adoption and use of FAST, Singapore's interbank settlement system, which had more than doubled in volume between August 2020 and September 2021.
- **Public Resources for Cost Analysis:** Only one bank in Singapore, Development Bank of Singapore (DBS), has published MDRs for Visa, Mastercard, JCB, and Union Pay transactions for retail and service-based merchants. From a cost specific standpoint, DBS, a nationally-owned bank, reported MDRs for Visa, Mastercard, JCB, and Union Pay transactions for retail merchants and service-based merchants at 2.5% and 3.0% respectively. The ecommerce rate for both retail and service-based merchants was 3.0%.<sup>47</sup>

<sup>46</sup> Facilitated subsidies to small retailers for accepting cashless payments. Subsidies were meant to compensate for the cost of reward card points. A cap of 3.25% on processing fees was also implemented. ([link](#))

<sup>47</sup> <https://www.dbs.com.sg/iwov-resources/forms/sgsme/en/day-to-day/accounts/business-account/merchant-services-pricing.pdf>

- **Price Trends:** There's insufficient data on the average MDR for Singaporean merchants for pricing trend analysis to be performed. Individual articles have published the older rates including 2.5% MDR for retail merchants at POS and 3% MDR for service-based merchants at POS as well as the 3% uniform ecommerce rates.