

The Impact of Electronic Payments



Payment cards aren't just convenient—they help stimulate growth for economies around the world, according to a study conducted by Moody's Analytics commissioned by Visa

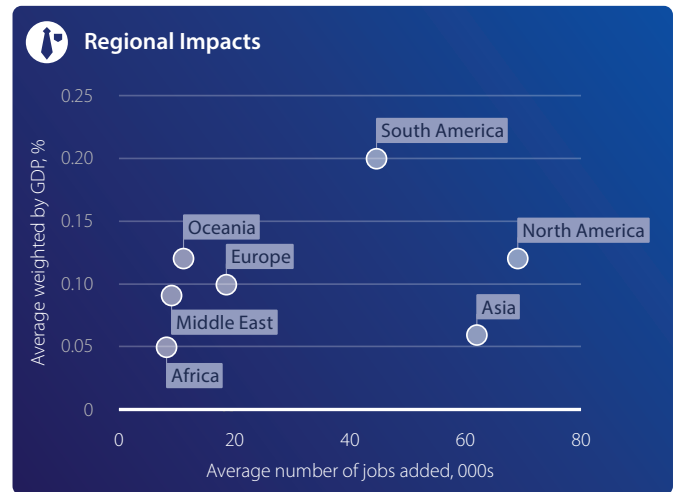
Summary

Moody's Analytics set out to test whether the long-term shift to credit, debit and prepaid cards stimulates economic growth. Overall, Moody's Analytics found that electronic card payments continue to have a meaningful impact on the world economy, with both emerging economies and developed countries benefiting from increasing electronic payments.

Value of Electronic Payments

The evolution to electronic payments from cash and checks has changed the behavior of, and in some cases the relationship between, consumers and merchants.

- **Benefits to Consumers and Merchants** Electronic payments provide greater access to financial resources. Consumers using cash or checks are limited to the funds they have on hand, while cards provide consumers with access to all available funds or lines of credit and give merchants peace of mind about payment guarantees.
- **Security** Merchants have guaranteed payment and consumers feel more comfortable making purchases when they can pay with a card.
- **Transparency** Electronic payments help reduce paper transactions, reducing the cost to central banks of providing notes and coins, and also increase tax revenues through the reduction of the gray economy, or transactions not accounted for in official statistics.
- **Access** Cards provide consumers the means to participate in the digital economy and merchants access to a global consumer base.
- **Convenience** Consumers cite the convenience of electronic payments, whether it means not having to visit the ATM to obtain cash or not having to count out the cash at the point of sale.



Global Key Findings

In the 70 countries studied between 2011 and 2015:

\$296bn

Amount electronic payments added in real U.S. dollars to GDP

2.6m

Average number of jobs per year supported, or about 0.4% of total employment

\$104bn

Amount each 1% increase in the usage of electronic payments adds to GDP on average each year

Methodology

This study estimated the impact of increased card penetration on consumption in 70 countries over five years, 2011-2015. Real private consumption (consumption adjusted for inflation) was modeled as a function of three factors: real disposable income, real interest rates, and card penetration. To isolate the impact of increased card usage, the model used actual income and interest rates during the survey period. The consumption figure was multiplied by the portion of GDP that is represented by consumer spending in each country and can therefore estimate the impact of card usage on the overall economy.

Future Economic Benefits

Countries with the largest increases in card usage have seen the biggest contributions to growth.

- In developed countries, a 1% increase in card usage could produce \$75 billion in GDP growth
- In emerging markets, a 1% increase in card usage could produce \$29 billion in GDP growth

Benefiting from Electronic Payments

Expanding electronic payments alone will not necessarily increase a country's prosperity—it requires the support of a well-developed financial system and healthy economy to have the greatest impact. To encourage the further electronification of payments, countries must promote policies that minimize unneeded regulation, create a robust financial infrastructure, and lead to greater consumption.

Spotlight Australia



Regional Contribution to GDP

Oceania had the second largest average increase in GDP due to increased card usage of 0.12%. This was entirely due to the influence of Australia's 0.19% increase. New Zealand experienced a more modest 0.06% increase in GDP due to an increase in card usage. This region stands out because it is predominantly made up of developed countries and because of its extremely high card usage rate, which, at around 60% for countries included in the sample, is higher than the card usage rate in any other region. Increased electronic payment usage added USD \$11,930,000,000 to Australia's economy from 2011 to 2015.

Contribution to Jobs

Increased electronic payment usage created the equivalent to an average of 21,360 jobs in Australia per year between 2011 and 2015.

Population | Australia

23,490,736

Economy | Card usage contribution to GDP in Australia (average, 2011-2015)

0.19%

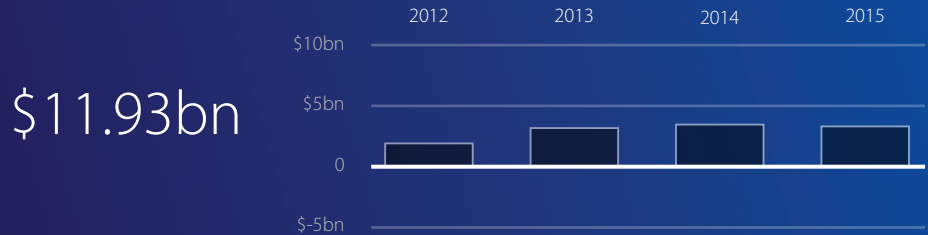
Employment | Jobs supported in Australia (average, 2011-2015)

21,360

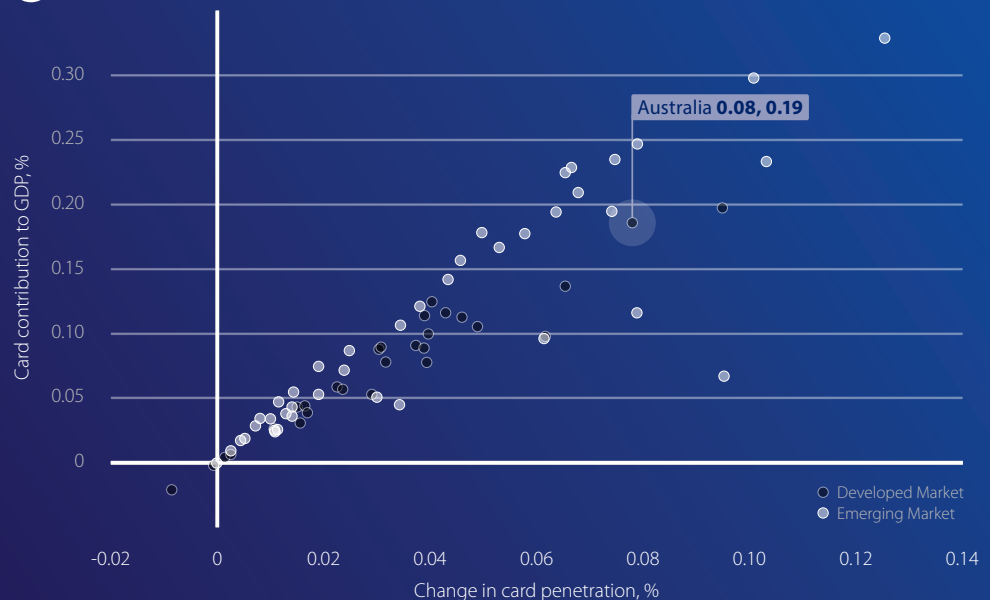
For more information on the study and to explore the interactive tool, please visit:

visa.com/moodysanalytics

Economy | Contribution to GDP growth in Australia



More card usage provides a bigger boost to GDP



Sources: Moody's Analytics study, 'The Impact of Electronic Payments on Economic Growth' (2016).
 United Nations, 'World Economic Situation and Prospects: Country Classification' (2014).
 World Bank Data, Total Population (2014).
 Index Mundi, Taiwan demographics profile (2014).

*Please note that countries/regions classified as 'In transition' have been denoted here as 'Emerging Markets'.

