

# 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

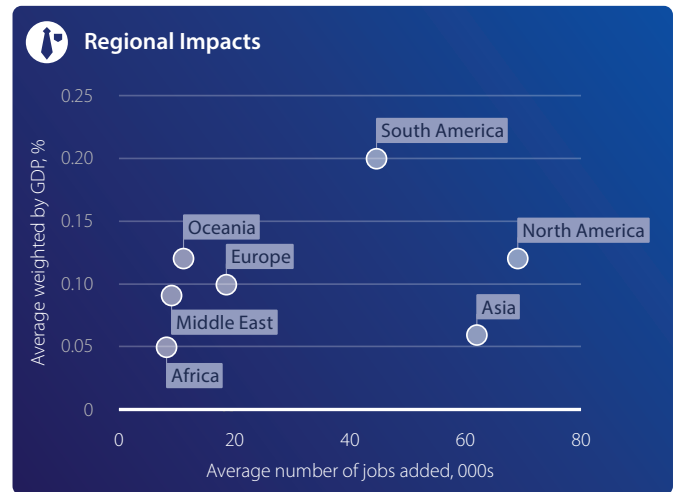
## Summary

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 Hong Kong



## Regional Contribution to GDP

Hong Kong is among the highest user of cards across the 70 countries studied. Asian countries experienced an average GDP increase of 0.06% resulting from increased card usage. Within this region, Thailand (0.19%), Vietnam (0.14%), and Singapore (0.1%) experienced the largest weighted average increase in GDP due to increased card usage. One possible explanation for the increased card usage is the greater internet availability across these Southeast Asian countries, since easily accessible internet gives consumers the possibility to both learn about and access different forms of electronic payments. Increased electronic payment usage added USD \$920,000,000 to Hong Kong's economy from 2011 to 2015.

## Regional Contribution to Jobs

Countries with the largest number of job gains per year were also the largest countries. Notably, the two countries with the greatest average job increases were China (427,000 jobs added) and India (336,000 jobs added), which both had large gains in employment because of the combination of fast growing labor productivity and increasing card usage. Led by these emerging markets, the emerging markets group averaged a greater number of jobs added per year (43,600) than did developed countries (14,800). Increased electronic payment usage created the equivalent to an average of 3,290 jobs in Hong Kong per year between 2011 and 2015.

### Population | Hong Kong

7,241,700

### Economy | Card usage contribution to GDP in Hong Kong (average, 2011-2015)

0.09%

### Employment | Jobs supported in Hong Kong (average, 2011-2015)

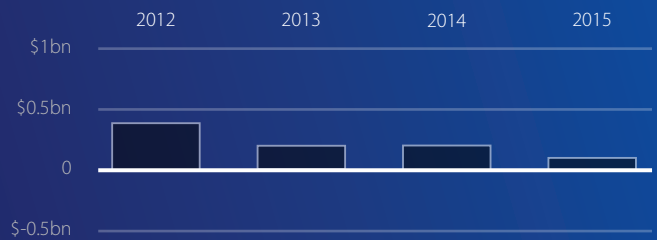
3,290

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

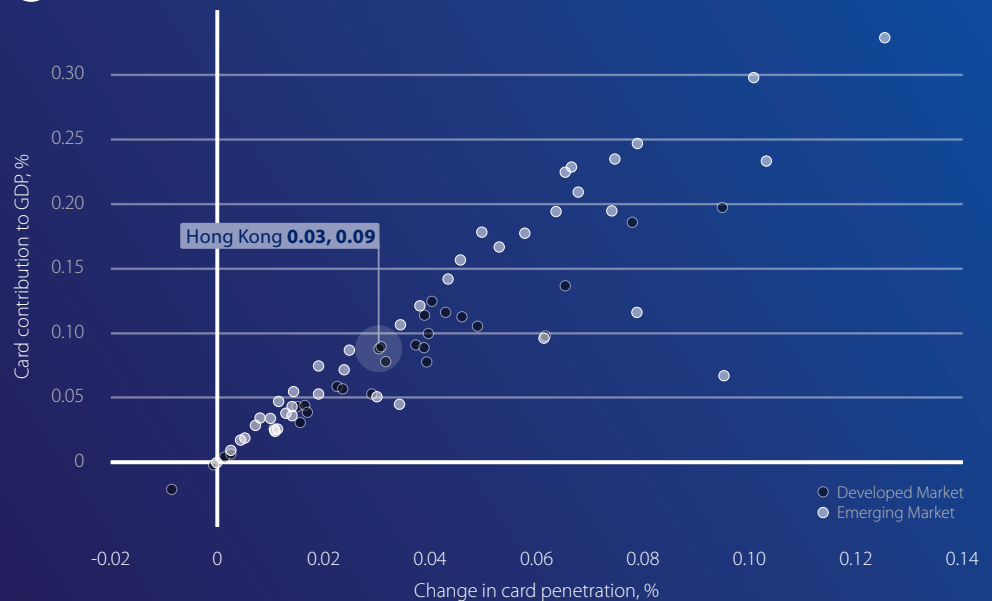
[visa.com/moodysanalytics](http://visa.com/moodysanalytics)

### Economy | Contribution to GDP growth in Hong Kong

\$0.92bn



### 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 classified as 'In transition' have been denoted here as 'Emerging Markets'.

