

India Demonetization Monitor

Issue #1

April 2017

From cash to a digital payments economy

India's Union Budget on February 1, 2017 and the demonetization policy announcement on November 8, 2016 are two of the most important policy statements in India's modern economic history. Together, they reveal that Asia's second largest economy is pursuing policies aimed at more inclusive growth and a "less-cash" society, with digital payments likely to grow in place of cash.

The Union Budget confirms that demonetization was more than a simple banknote redenomination. A broader reform agenda is now in place to reduce the shadow economy, expand the number of banked individuals, make the economy and government more efficient and build a modern payments infrastructure.

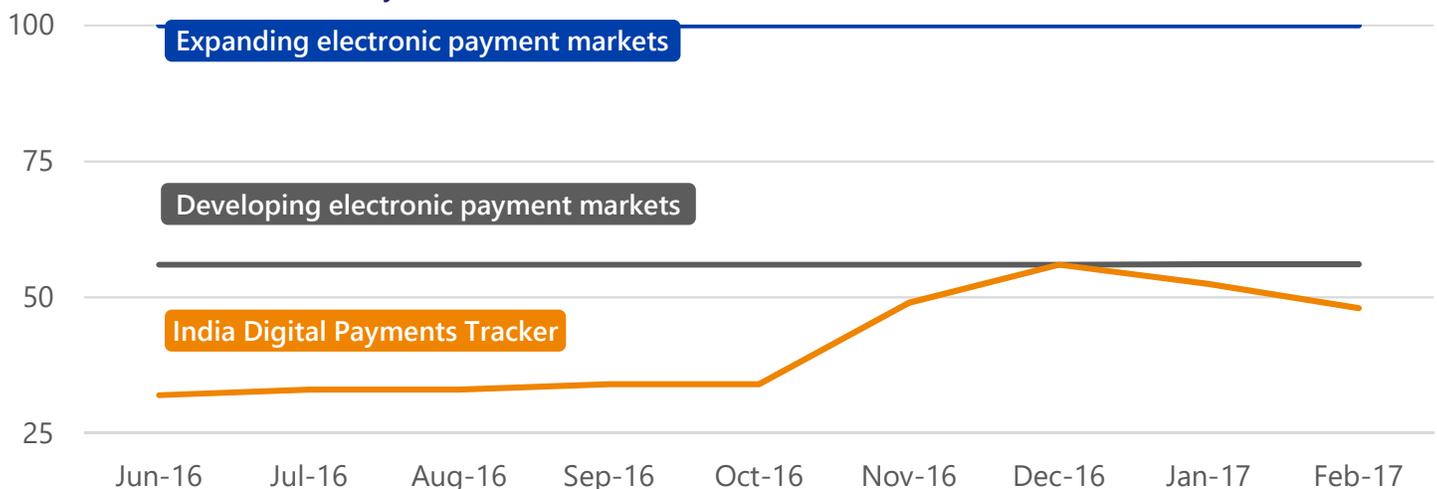
The agenda will be a success if the economy overcomes the temporary shock of the reforms and Indians shift towards greater usage of digital payments.

Visa created a **new composite index** of five key industry and economic indicators to track India's progress as a digital payments market relative to other economies where digital payments are either still developing or already taking off.

Visa's quarterly publication will follow India's move to a "less cash" society, aiming to capture the tipping point when consumers are digitally-enabled and primed for a more dynamic payments infrastructure and economy.

Tracking India's development as a digital payments market

(Indexed based on five key economic indicators)



Sources: Visa Business and Economic Insights analysis of industry data, including Haver Analytics



Key Points:

Demonetization is part of a broader reform agenda

Most bank notes (87 percent*) were outlawed and banned from circulation

* Reserve Bank of India

Visa's new index—Digital Payments Tracker—measures convergence with economies where digital payment use is more widespread

Changing consumer behavior will drive the shift to less cash

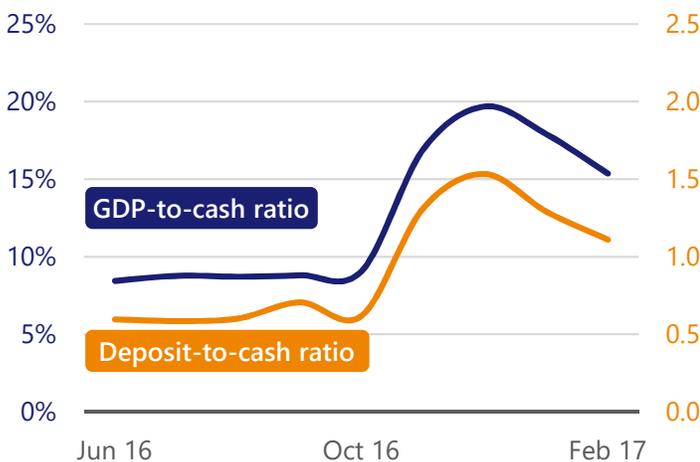
Five key indicators to track the transition of payments in India

Two policies highlight the broader reform scope of the 2017 Union Budget, including the ban on cash transactions larger than INR 300,000 (\$4,500) and plans to nearly triple the number of point-of-sale machines over the next six months.

Under this backdrop, Visa's index draws from a range of economic, digital and payments indicators in India. Visa's own data assets are also utilized to align with indicators that may need more robust or timely information.

The index includes two monetary indicators: **GDP-to-cash ratio**, which measures the cash intensity of an economy, and **demand deposits-to-cash ratio**, gauging funds available to support electronic payments.

GDP-to-cash and deposit-to-cash ratios (percent)



Sources: Haver and Visa

If successful, India should see a sustained drop in cash with the public and a steady rise in bank demand deposits. Both ratios indicate the first stage of demonetization has been a success, with 87 percent* of bank notes outlawed and banned from circulation.

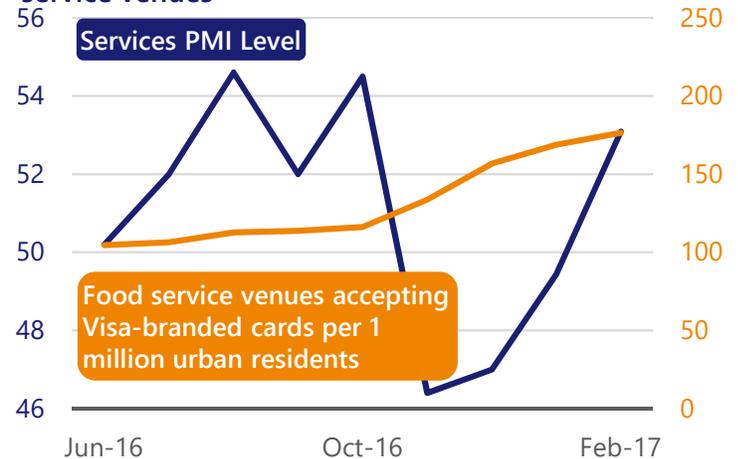
However, the drop in bank notes in circulation, not a rise in GDP, has shifted the GDP-to-cash ratio, reflecting government decrees and a shortage of actual banknotes, rather than an actual change in consumer behaviour. Over the next few months, banknotes should rise again. Whether they plateau at a lower level than before demonetization, relative to the size of the economy, will be a critical test of that change.

As the digital payments infrastructure expands, demand deposits should grow faster than both cash holdings and time deposits to help fund digital wallets and transactions.

That currently is not the case. Three-fourths of the funds deposited since demonetization went into time deposits. As banks start to increase their lending in response to the new funds, this should increase demand deposits.

Because a key aim of demonetization was to force money out of the shadow economy, much of the funds deposited late last year will be audited for tax evasion and could face confiscation by the government or a holding period. As such, shifting cash into the formal economy does not mean that money will immediately return to circulation.

Services PMI and card acceptance at food service venues



Sources: Haver and Visa

The cash-intensive sectors of the economy will provide a key window into demonetization's impact. India's services sector is both large (53 percent of GDP in 2014, according to the World Bank) and cash intensive.

Commonly cited gauges of the service sector such as the services purchasing managers' index (PMI) deteriorated significantly showing the impact of the cash crunch. However, the services PMI contains no information on how consumers are paying for services. For this, the Visa index includes a **card acceptance indicator**, measuring the share of food service venues actively accepting card payments per one million urban residents.

* Reserve Bank of India

A “less-cash” society requires a much deeper payments infrastructure than what currently exists in India. To monitor progress in this area, the Visa index includes two additional indicators—the **share of consumer spending on Visa-branded cards** and **mobile phone subscriptions**.

Both indicators are picking up, with usage of Visa cards increasing more rapidly than mobile phone subscriptions. This suggests that there is still a digital infrastructure gap that needs to be closed, but change is happening. Mobile phone subscriptions should grow faster in 2017 as more Indians choose to participate in the digital economy.

Summary

India made significant progress toward becoming a “less-cash society” since the demonetization announcement last November. With cash taken out of the economy, India has converged to its “peer group” in a relatively short period of time.

Methodology

The India Digital Payments Tracker combines the five variables (GDP-to-cash ratio, deposits-to-cash ratio, food service venues accepting Visa-branded cards, Visa-branded cards’ share of personal consumption expenditures, and mobile phone subscriptions) with varying weights to create the composite index. Greater weight is placed on monetary variables as changes in cash usage and deposits are the starting point for digital payment adoption.

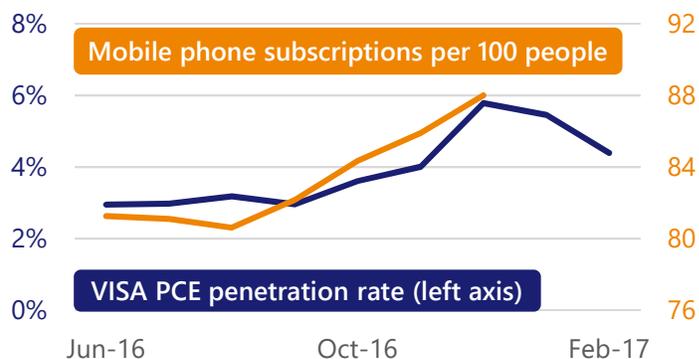
For ease of comparison between India and other countries,

India Digital Payments Tracker

Key Indicators	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017
GDP-to-cash ratio	8.7	8.8	9.1	16.9	19.7
Deposits-to-cash ratio	0.59	0.70	0.61	1.31	1.53
Food service venues accepting Visa-branded cards per 1 mil. urban residents	113	114	116	134	157
Mobile phone subscriptions per 100	80.6	82.2	84.3	85.9	88.0
Visa PCE penetration rate	3.6%	4.0%	5.8%	5.5%	4.4%

Source: Visa Business and Economic Insights analysis of industry data, including Haver Analytics

The digital infrastructure gap is narrowing



Sources: Visa and Haver

As cash returns to circulation, some slippage is occurring and may continue over the short term. However, the ongoing infrastructure build-out should help India to continue making progress in coming years to join the more advanced group of economies where digital payments have been enabled, and are taking off.

reference points were needed. A second identical index was created for a group of similar low-to-middle income countries. The countries are sorted into two peer groups depending on their level of card adoption and electronic payment penetration rates.

Countries further along the digital payments process are included in one group (“expanding”), while those where usage and adoption remain nascent are in a second group (“developing”). The first group is used as the benchmark.

What to watch for until Visa's next demonetization update

Event	Date	Why to watch
Reserve Bank of India (RBI) monetary policy meeting and statement	2017 05 th -06 th April 06 th -07 th June 01 st -02 nd August 03 rd -04 th October 05 th -06 th December 2018 06 th -07 th February	<ul style="list-style-type: none"> The Indian banking system is now flush with funds, given the success of the obsolete bank note exchange policy. Banks have cut lending rates across the board, but lending will likely be slow to pick up. Deposit growth may have peaked with the cash note exchange deadline, but deposits could continue to increase as informal agents, such as PayTM Bank, are brought under the formal banking umbrella. Official statements will indicate how the RBI thinks the economy is doing. The RBI may feel less pressure now to cut rates to accommodate the demonetization shock.
India Mobile Phone Subscription Data	Early April	<ul style="list-style-type: none"> The pace of mobile phone adoption will be a key indicator of whether the infrastructure for a digital economy is growing
Manufacturing PMI April	01 st May 2017	<ul style="list-style-type: none"> Softer demand due to "less cash" in the economy, though this sector is already "less cash" than the services sector. Consumers may avoid purchasing larger items.
Services PMI April	03 rd May 2017	<ul style="list-style-type: none"> The services PMI has rebounded in each month of the first quarter. The March level of 50.3 is above the key 50 line, a sign that the demonetization shock is quickly working through the economy.
Consumer Price Index	11 th May 2017	<ul style="list-style-type: none"> The transition to electronic payments was expected to affect consumer demand, but downward pressure on the headline rate of inflation has not been as firm as expected, suggesting the economy has not softened significantly.
VisaNet data	Early Apr 2017	<ul style="list-style-type: none"> March VisaNet transaction figures will show whether the momentum towards electronic payments is continuing.
1Q2017 GDP Data	31 st May 2017	<ul style="list-style-type: none"> The Indian economy has appeared to weather the demonetization shock with less economic disruption than anticipated. The details of the Q1 GDP data will confirm whether this continues to be the case

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