

The Reappearing Cheque

Why Cheque Usage Is Actually On the Rise in Developing Countries

In much of the world, the common wisdom is that cheque usage is declining – and for the most part, that's correct.

The number of cheques written in the top 10 countries that use them the most dropped by 6 percent per year, on average, from 2007-2017. In certain places, though, this trend is reversed, and cheque usage has held steady, or even increased, over the same period.

How is this possible? It's mostly happening in places where unbanked consumers are joining the formal financial system in huge numbers – either because of rapid economic growth, or ambitious policy and infrastructure projects that have made access easier. Many of these countries are in the Asia-Pacific region or the Indian subcontinent, which is the focus of this report. Several of them, including the Philippines, appear poised to continue their reversal of cheque decline well into the next decade.

Executive Summary

As we mentioned in the introduction, a small number of countries around the world are displaying cheque usage trends opposite of what we've come to expect – the number of paper cheques written is remaining steady, or even rising, at a time when the global trend is for a steady decline.

While advances in payments technology in Western nations have become synonymous with electronic payments that *replace* paper cheques, the situation is not the same everywhere in the world. In developing nations, new payments technology might include some familiar elements like mobile banking or card transactions – but it also often refers to fundamental modernization of a country's payments system overall. These modernization efforts not only make banking services more readily available to tens of millions of potential new customers, but also come with other improvements that make payments faster and more reliable, including cheques.

In particular, faster clearning times and lower expenses associated with truncation or full image-based clearning tend to make the cheque a much more reliable means of payment, and much less cumbersome to deal with. Even if other, more modern electronic payment methods are introduced at the same time, in many cases, the baseline status five or ten years ago was an all-cash economy in which few people had formal bank accounts. It is these situations in which the overall improvements in efficiency and banking inclusion are sufficient to overwhelm any decline in cheque usage for the time being.

In this report, we take a brief look at cheque usage in the following countries:

- India
- Nepal
- Vietnam
- Cambodia
- Indonesia
- Philippines

While this paper is not intended to be an in-depth analysis of each country's full banking system, we attempt to examine various broad-scale contributing factors: Banking access, telecommunications infrastructure and Internet penetration, and government regulations – all of which can affect the viability of the cheque in the payments system. We hope you will find this research of interest when considering your next cheque-related projects in the region.

The Unexpected Persistence of the Cheque in Developing Countries

For more than two decades, cheques have been in a steady decline, gradually dwindling in number as they're replaced by paperless technologies. In most Western countries, cheque usage has declined by 50 percent or more since its all-time peak in the 1990s.

In Digital Check's 2017 white paper, *The Reappearing Check*, we discovered that – at least in the United States – the decrease in cheque volume was not an inevitable force in its own right. Rather, it was closely linked to a series of new technological innovations, which were themselves so evenly spaced throughout time as to resemble a constant change. During a few years in the mid-2010s, the focus of new banking technology in the United States drifted away from cheque replacement, and – for a while at least – the decline of the cheque took a break.

The story has been largely the same in most of the other biggest cheque-using countries: The more new payment methods are introduced, the faster cheque volume falls off in the short term. Various countries have experienced the introduction of different technologies in different orders, but when considered together, the trend of a roughly 6 to 7 percent annual decline in cheque usage has held steady for most of the past decade.

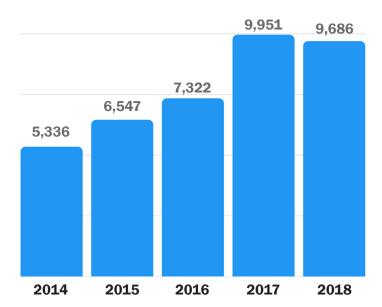
In one relatively unknown corner of the market, however, time seems to be running in reverse. As more technological advances are introduced, the decline of cheques slows down, or cheques even increase in number. One factor remains constant across all members of this group: They comprise developing nations that have recently made great strides toward modernizing their banking systems and/or expanding general access to banking services.

In other words, when a country is actually developing successfully, the influx of new members to the banking system can offset, or even outpace, the decline in cheques, even when paperless technology is introduced simultaneously.

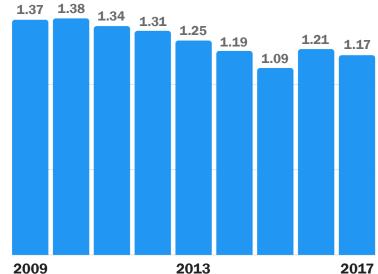
The countries in this study lie primarily in Southeast Asia and the Indian subcontinent, specifically chosen because the regions contain the highest numbers of unbanked persons anywhere in the world. However, the majority of these countries are in the midst of ongoing efforts to improve their payments and telecommunications infrastructures, and are in the process of bringing financial services to large segments of the unbanked population.

While the infographics on the following pages will show that most of the countries on our list rank in the lower third of Gross Domestic Product (GDP) per capita, that number is less important than the accessibility figures that come immediately after. Taken together, the numbers reflect these countries' having made an effort to improve infrastructure for large numbers of people who truly needed it, and that those efforts are paying off. In most of these places, cash was the dominant payment method until a few years ago, and oftentimes, it was the only one accepted outside the major cities. As other payment methods became faster and more reliable, they grew in popularity – and the cheque has been no exception. If anything, the mysterious sustainability of the cheque has come as a result of an overall trend that economic growth and modernization are opening up brand-new possibilities that simply didn't exist before.

NepalCheques per year, millions



IndiaCheques per year, billions



Source: Nepal Clearing House, Annual Report 2017-18

Source: Bank of International Settlements

Nepal: Overcoming Access Issues

Over the past five years, cheque usage in Nepal has almost doubled, from 5.3 million in 2014 to almost 9.7 million in 2018, according to the Nepal Clearing House, Ltd. (NCHL) – a nearly 13 percent compound annual growth rate. What's responsible for this huge contradiction to the worldwide trend of declining cheque volume? More than anything, it's a modernization effort, which has helped expand basic infrastructure and services to towns and villages in some of the most geographically isolated areas in the entire world.

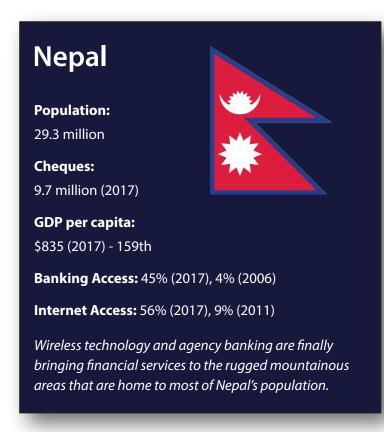
In 2017, Nepal reported a per-capita Gross Domestic Product (GDP) of less than \$1,000, which ranked 159th among countries tracked by the World Bank. While this would place it among the least-developed countries in the world, it is also important to note that the average person's income has more than doubled over the past decade. Despite a difficult recovery from the magnitude-7.8 earthquake that devastated much of the country in 2015, Nepal's economy was among the ten fastest-growing in the world, according to the latest comprehensive statistics.

The number of Nepalese with access to banking services has skyrocketed over the past decade. According to a 2006 World Bank report, about half the population had "access" to formal financial services at the time; although, only 4 percent were estimated to hold a bank account. That last figure rose to 25 percent in 2011 and 45 percent by 2017.

Just as important, Internet access increased from just 9 percent in 2011 to 56 percent in 2017¹. While broadband access remains low at 14 percent², and mostly concentrated around the major cities, nearly all of the population now resides in at least a 2G mobile coverage area. Ambitious efforts, such as the Nepal Wireless Project, are beginning to expand wireless access to remote mountain villages through line-of-sight relay stations. The sum of



Nepal features some of the most rugged terrain in the world, which makes infrastructure projects challenging, to say the least. The Nepal Wireless Networking Project (NWNP) is a grassroots effort to provide Internet access to remote mountain towns using powerful line-of-sight wireless arrays, such as the one pictured here.



these efforts is that several new options have opened up for banks to reach new customers – whether that means opening traditional branches, using automated techniques like kiosks and ATMs, or hiring banking agents to do business on behalf of the bank.

In addition, money flows more quickly when communities have online access. Cheque clearing times were reduced dramatically when NCHL opened its electronic cheque clearing system in 2011 – a major reason why the cheque persisted as a viable form of payment.

Interestingly, cheque volume has remained steady, even after NCHL introduced its own electronic payments network called connectIPS. While this system and others like it may one day handle the lion's share of transactions in Nepal, for now, participation is still relatively low, and cash remains the dominant method for conducting business.

It should be noted that transaction fees for electronic payments are comparable to charges for clearing cheques. A payment of up to 50,000 Nepalese rupees (about \$450) costs the same, whether made via cheque or connectIPS. Between 50,000 and 2,000,000 rupees (\$450-\$17,500), the cheque is slightly less expensive at 10 rupees (9 cents), compared to 15 rupees (13 cents) for the electronic payment.

Cambodia and Vietnam: Opening Doors with Mobile

We've grouped these two countries together because cheques are rarely used by consumers in either one, and, therefore, their overall numbers are very small – around 1 million per year or less. Overall, changes in cheque volume in these countries seem to be a reflection of general economic growth.

Cambodia's cheque usage has moved almost in lock-step with its GDP, which has risen by 6 percent or more every year since the turn of the century, except for 2009, and often reaching double-digit growth. According to the National Bank of Cambodia's figures, the number of cheques processed has nearly tripled since 2009 – although that increase was only from a paltry 420,000 cheques then to a projected 1.2 million today (data for the last three months of 2018 was not yet available at the time of this report, but more than 900,000 cheques had been cleared through September).

While corporations are the primary users of cheques in Cambodia, it's also worth noting that they occupy a niche in the bank-to-bank settlement system, as there is no electronic method in place for interbank funds transfers, according to the NBC. We find it highly probable that this will change in the future as further modernization steps are taken.

As for the consumer sector, the primary means of financial inclusion has come through mobile banking – no surprise, given nearly 99 percent of the growing number of individuals who can access the Internet do so primarily through wireless devices. The percentage of people with formal bank accounts – an estimated 17 percent, according to the first formal study in 2015 – is still among the lowest in the world, although that's up from nearly nil historically.

Outside of the capital, most of the recent growth in financial inclusion has come from a hybrid mobile-agency model, most notably through Wing Bank, which claims to have 3 million accountholders and 6,000 physical agent locations. The future model for growth on the consumer side looks to follow this largely paperless approach.

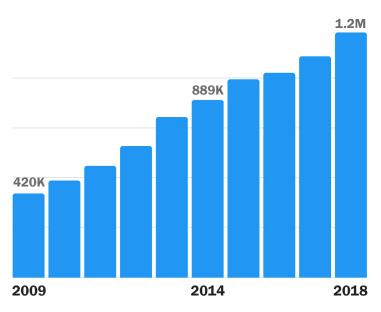
Vietnam appears to fit a similar profile, with cheque usage mainly confined to business payments, and representing less than 0.1 percent of total payments processed by the State Bank of Vietnam. The number of cheque payments reported by SBV peaked at around 830,000 in 2016 – up from 470,000 five years prior – before declining roughly 15 percent in the following years.

Much like Cambodia's, Vietnam's payment landscape was dominated by cash until fairly recently, with a modernization push in progress to move directly toward electronic payments. Internet penetration has increased from 31 percent in 2011 to an estimated two-thirds or more today, again with the great majority using widely available 3G or 4G mobile service to get online.



CambodiaCheques per year

access financial services.



Source: National Bank of Cambodia, Annual Report 2018

India: Public Policy Matters

As one of the largest financial systems in the world, India's is far too complex to summarize in a few paragraphs. It does, however, provide an excellent illustration of how one-time events can influence payments preferences – whether they are matters of policy or technology.

The country underwent an amazing leap forward in financial inclusion over the past decade, with an estimated 80 percent of all Indians now owning at least one bank account. One effort in particular saw more than 200 million people open bank accounts for the first time³ in 2014-15, as the government sought to convert subsidies and benefit payments for farmers into strictly electronic form. During the same time period, cheque usage declined, on average, about 1.3 percent per year – far less than the worldwide average, and the lowest among the top cheque-using countries.

Two events, in particular, stand out for their influence on consumer behavior regarding cheques. First was the introduction of the Cheque Truncation System (CTS) in 2010, during which clearing times for compliant cheques were reduced from several days down to 24 hours. Cheque usage in 2010 actually went up by 1 percent, as the improved transaction speed made it much more viable for everyday transactions – a trend we often see repeated in other countries where fully electronic clearing has just taken effect.

That was nothing compared to India's surge in cheque usage in 2016, the year of the government's demonetization campaign. Ostensibly designed to crack down on corruption and black-market activity, the surprise announcement in November created severe currency shortages that lasted well into the following year.



Customers line up outside a bank in November 2016, in the midst of India's surprise demonetization program. A severe currency shortage pushed many people from the cash economy into the formal banking system, and cheque usage increased by 50 percent for the next several months.

(Photo courtesy of monito.com via Creative Commons 2.0)



Despite not occurring until the penultimate month of 2016, the demonetization led to a 10 percent increase in cheque usage for the entire year. The immediate rise in cheque volume was more than 50 percent, with a permanent increase of about 10 million cheques per month (12 percent above the previous volume) once things had returned to normal. In that sense, it would appear the policy achieved its stated goal of forcing much of the cash economy into the formal banking system.

In both India and neighboring Nepal, a large part of the population has entered the banking system through online or mobile access, without any of the traditional physical touchpoints, such as branches, ATMs, or banking agents. While perhaps not to quite the same extent as in Vietnam and Cambodia, the role of mobile in bringing banking within reach of the unbanked population is a recurring theme we see throughout the region.

Incredibly, even with 80 percent of the population holding a bank account, the approximately 191 million unbanked people in India are still more than the *total* populations of all but five other countries in the world. While the overall trend of cheque decline appears to have gradually restarted since the end of the demonetization shock, the reservoir of potential new accountholders is also so vast that the cheque in India could still continue its back-and-forth movement for some time.

Indonesia: One Country, Two Economies

Like many nations on this list, Indonesia can almost be said to be "two countries" – a connected and modern one concentrated around several bustling metropolises; and a vast rural population that is largely cut off from core infrastructure by geography or distance. Perhaps nowhere else on the planet is this divide more stark than in Indonesia. Home to the world's fourth-largest population (and its third-largest metropolitan area, Jakarta), it is also spread across almost 18,000 ocean islands, and includes various extreme terrain, from mountainous to rainforest.

At the risk of greatly oversimplifying things, a handful of the biggest cities on the main islands of Java and Sumatra are connected to an automated electronic payments system, while those in less-populated areas – including virtually the entire eastern geographical half of the country – have no way to access it. Among other things, this has prevented a fully automated cheque processing system. While the larger banks in the big cities are capturing cheque images, these cannot be cleared electronically with much of the country still disconnected.

The difficulty in connecting the outlying areas of the country has resulted in a typical situation for rural areas: Cash is the only reliable means of payment, with everything else (including the cheque) accepted sporadically and only in specific use cases. Among the consumer population in these locations, mobile is often the first thing to bridge the gap, and also usually represents the first experience with banking or electronic payments for most – so many individuals skip right over traditional bank accounts, cheques, and cards. Hardwired broadband, when it arrives, brings a host of other capabilities, both banking-related and otherwise. Inthis respect, a big change may be coming for much of Indonesia's currently disconnected population.

Overall, access to banking and online services in Indonesia have improved dramatically, each from about a fifth of the population at the start of the decade to about half currently. However, the pace of modernization has slowed somewhat as the urban centers approach full participation, while the situation in the countryside remains completely different. Most of Indonesia's estimated 95 million unbanked citizens live in rural or semi-rural areas, with distance the most commonly cited reason for not having a formal bank account.⁴



Population:
268.4 million

Cheques:
139 million (2017)

GDP per capita:
\$3,847 (2017) - 113th

Banking Access: 49% (2017), 20% (2011)

Internet Access: 54.6% (2018), 17.5% (2010)

Rapid growth in access to banking and Internet service stalled somewhat as urban areas reached saturation.
The ambitious Palapa Ring project aims to bring broadband Internet to the entire country with thousands of miles of undersea cable.

Nonetheless, Indonesia is one of the only countries in the world where cheque usage has actually *risen* steadily for several years in a row – from 113 million in 2015 to 139 million last year. As with most countries discussed here, cheques are primarily used by businesses. The growth in cheque usage, though, mirrors the overall jump in financial inclusion, as well as a steadily rising GDP of around 5 percent per annum.

The coming years may see the rural population starting to catch up with urban areas, as the ambitious Palapa Ring program nears completion. The massive infrastructure project will use nearly 45,000 kilometers of undersea and land-based fiber-optic cable to bring broadband Internet to every part of the country. Particularly in the vast eastern region, this stands not only to improve access to financial services, but also to enable faster and more reliable transactions for banks and businesses.

Indonesia's long distances and difficult geographical barriers would make it an ideal candidate for universal truncation, as well as for remote deposit capture – provided the considerable connectivity challenges can be overcome. Currently, cheque volumes are rising, despite not being a viable payment method in much of the country. If clearing times, or even clearing certainty, improve with the Palapa Ring's completion, this could prove a windfall for cheques and other modern payment methods alike. If the country can also duplicate India's success at converting its huge unbanked population, which seems likely, cheque volumes could sustain themselves for the foreseeable future.

Philippines: Sitting Ready for Takeoff

As a heavily populated archipelago of several thousand islands, and with severe access issues in outlying areas, one could easily confuse the physical description of the Philippines with that of our previous section's subject, Indonesia. The financial system in the Philippines, though, could be said to be much more dynamic, both in terms of its current issues and its long-term promise.

Over the past several years, the Central Bank of the Philippines has gone to great lengths to create a modern electronic payments framework – the problem is, few consumers are using it. As of 2017, fewer than 23 percent of Filipinos held bank accounts, one of the lowest percentages anywhere in the world. Furthermore, of those accounts, only about half were in the formal banking sector. At the same time, though, the country boasts a full cheque truncation system with one-day clearing times, a nationwide ACH network, and even instant electronic funds transfers.

Cash and cheques accounted for 99 percent of retail transactions as of 2014, with electronic payments making up the remainder.⁵ The central bank set a goal of raising that total to 20 percent by 2020 – which could be possible if more consumers were persuaded to participate. The National Retail Payments System, with its two subservient systems – PESONet (ACH) and InstaPay (instant account-to-account funds transfers) – are considered the gateway for enticing the unbanked and underbanked to join the formal payments network.

It is undeniable that the conversion to fully image-based clearing in 2017 greatly boosted the utility of cheques in the Philippines, with settlement times reduced to one business day instead of a typical 3-5 days under the previous process of truncation with paper to follow. As we have witnessed in other countries that switched to image-based clearing, the one-day settlement time tends to cause a short-term boost in the use of cheques. This is primarily driven by more businesses becoming willing to accept them, as the faster payment and lower uncertainty make them much more viable than they were previously.

The clearing change represented a boon for the financial industry itself as well. While the previous Electronic Check Clearing System (ECCS) in place since 1999 had substantially reduced time and expense from purely paper-based processes, the physical documents still had to be exchanged eventually. Much like the American clearing system in the late 1990s, a fleet of vehicles was employed to whisk paper checks around the country after the close of business. There were a few key differences: The system was not exclusively air-based; ground transport, such as trains and armored cars, played a key role. Also, cheques that were sent by air tended to be sent on regularly scheduled commercial flights, not on their own private jets.

While the straight-line geographical distances involved in the Philippine cheque-clearing system may be shorter than those in the United States, the challenges of traversing island chains and extreme terrain are orders of magnitude more difficult. Regardless, the expense of any such system to move paper around a country overnight is enormous, and all-electronic clearing comes



as a relief to the participating banks.

The year 2017 is also notable for the fact that it marked a rare nationwide increase in cheque usage for the Philippines – by the barest of margins, about 0.06 percent. Previously, it had been gradually declining, albeit by only about 1 percent a year, far less than the world average.

It would appear that all types of non-cash payments – cheques, cards, and electronic transfers – are poised to explode over the next several years, as the framework for adoption is already in place and waiting to attract users. With one of the world's largest untapped pools of customers, the potential is massive.

If consumers follow the roughly five-year adoption cycle that's been commonplace in other countries that have successfully moved to include their unbanked populations, banks in the Philippines could see an additional 30 million or 40 million accountholders by 2024. Fortunately, the payment system seems ready to handle such an influx.

Assuming the incoming wave of customers results in similar usage patterns to those of other countries, cheque volume could be expected to remain steady in the near future before electronic methods erode those gains. As in Indonesia and Nepal, the physical isolation of many communities would present an ideal use case for remote deposit capture when physical bank branches are not present, or where banking agents are used.

Conclusions and Acknowledgements

It is easy to think of cheques as a "non-electronic" form of payment. In many cases, it is even part of their appeal (as one of the only payment methods – cash being the other – that allows a transaction to be completed, regardless of whether both parties are "connected").

While the non-electronic moniker may have been appropriate for much of the cheque's history, the truth is that it, too, is much more effective when modern electronic banking and clearing systems are at hand. When there is ready access, either physically or electronically, to the backbone of the banking system, cheques clear quickly, settlement is certain, and they remain a viable way to pay someone. Without it, they are just as detached from the banking system as everything else, and cash remains the default means of payment.

In the countries we have studied, the common thread shared by all is a banking system in which the payments infrastructure is catching up with the modern electronic age, and where electronic payments are just beginning to reach the areas outside the major cities. Not coincidentally, this is also the reason why such high unbanked populations have historically existed in these areas. If there's no infrastructure, it's as difficult to clear a cheque as it is to process a credit card transaction, or for that matter, to open a bank branch. Only in the last decade or so has reliable access become possible at a reasonable cost, and the results have been astounding. This is a problem totally unfamiliar to many whose only experience is with the Western banking and payments systems, but it is the reality for much of the world.

The rise of the cheque in the developing world does not necessarily have anything to do with an inherent advantage as a form of payment. Rather, it is a reflection on steadily improving access to services, including banking, that is aiding commerce and the overall quality of life in predominantly remote and rural areas. While it is encouraging for us, as a player in the cheque capture business, to see cheque volumes remain steady or increase, the more important story is the cheque's status as just one indicator of better times that are arriving for millions.

Data Sources and Footnotes:

All country-by-country GDP figures are from the World Bank.

Banking Access figures, unless otherwise noted, are from the World Bank Global Financial Inclusion Database (2017), and earlier figures are from previous World Bank reports, if available, or from various historical reports from the central banks of their respective countries.

Internet usage statistics are from the central telecommunications authorities of their respective countries, where available, or from the best available local news sources, as noted.

Cheque usage data are from the countries' respective central banks and clearing houses, or from the Bank of International Settlements, as available.

¹One in Two Nepalis Use Internet: NTA Report; The Kathmandu Post; 9 May 2017.

²Nepal Wireless Networking Project: Elevating community Internet usage in remote mountainous regions; 1 World Connected; 12 Jul 2017.

³Accounts Opened under Pradhan Mantri Jan-Dhan Yojana (PMJDY) up to 25.05.2016; Open Government Data Platform India; 18 Nov 2016.

⁴Indonesia makes headway in curbing its unbanked population; Asian Banking & Finance; 20 Apr 2018.

5Bangko Sentral ng Pilipinas thinking ahead on electronic payments; The Manila Times; 3 May 2018.