# Encik Abdul Rasheed Ghaffour: Optimal balance of paper and digital, cash and cashless; and next page for physical currency

Welcoming address by Mr Encik Abdul Rasheed Ghaffour, Deputy Governor of the Central Bank of Malaysia (Bank Negara Malaysia), at the Currency Conference 2017, Kuala Lumpur, 15 May 2017.

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Mr Richard Haycock, Chairman, Currency Research,

Fellow central bankers,

Distinguished participants.

A very good morning and a warm Selamat Datang to Malaysia.

## Paper lives on

A lot has changed in the past 10 years. In May 2007, there was no such thing as a smartphone. Tablets did not exist, and the human race had not discovered the fast-expanding universe of mobile apps. Back then, we read the news by leafing through the pages of a large newspaper. We listened to music with CDs, and bought or rented DVDs to watch movies. Today, most of these are streamed through internet devices. When e-book sales increased by over 1,000% in the two years leading up to 2010, many questioned the future of the printed book. The bankruptcy of Borders in the United States the following year solidified these fears.

Similarly, there has been much hype about the end of cash. This has been sparked by the rising use of e-payments and the recent proliferation of digital currencies in an increasingly virtual world. However, just as physical books continue to enjoy increasing sales, we have seen cash in circulation rise in many countries, quicker than their GDP growth for some. The majority of global consumer transactions still take place through cash. As previous Currency Conferences have affirmed, we expect physical cash to remain necessary and relevant.

Digital media has significantly transformed the way we experience the world. However, it has not brought us to the closing pages for physical media – including notes and coins. This may appear strange, if one considers the fact that much of our communication, planning and transportation revolve around the internet. As a recent McKinsey report puts it, mobile devices have become the "digital container" of our daily lives. This marks a profound cultural shift. The smartphone is fast becoming an extension of ourselves. Indeed, this digitalisation is altering the way payments are being made. We are not only spending more time online, we are spending more money through online channels. Our familiarity with and dependence on mobile devices is unprecedented. I believe that this attachment has made us increasingly comfortable with digital payments. They now appear more intuitive, more reliable and more convenient than ever before.

This trend is evident in the findings of a recent international survey by ING. Most of the respondents are using less cash now compared to a year ago. A third of Europeans surveyed were even willing to go completely cashless if it were possible. We have seen a similar shift here in Malaysia. When internet banking was first introduced in Malaysia back in 2000, most people were sceptical about its safety and reluctant to learn how to use it. Today, with a mobile penetration rate of 145%, internet transactions are becoming more prevalent. Last year, Malaysians spent 23% more on online shopping platforms compared to 2015. This is consistent with what is happening around the globe. The number and value of non-cash transactions have increased steadily in recent years.

# Balance between paper and digital

However, despite these observations, central banks around the globe expect cash to stay necessary and never go away. There are several reasons for this but ultimately they boil down to having a good mix of both. Think about the printed book. There are some things that an e-book simply cannot offer. You can't turn down a corner, leaf through the pages, or crack a spine. However conversely, reading off a tablet or Kindle saves you the hassle of lugging around heavy books or lengthy academic articles – especially when you do not need to read them from cover to cover.

As a policy maker, I would think that there are three elements, or the '3S', that we should consider in determining an optimal balance of paper and digital, cash and cashless.

## Security

The **first** consideration is **security**. Counterfeiting is as old as money itself. However, cash has become more secure in recent years. In Malaysia, the amount of counterfeits discovered reduced by 25% in the past year. The currency industry is continuing to make good progress in enhancing security features. I am particularly pleased to note the recent efforts to make such features intuitive – so that the man on the street is likely to notice when something is amiss

The security challenge will not disappear by going cashless. The latest being the recent Ransomware attack. Cyber risk remains a real threat that must be managed. Significant efforts have been made to strengthen resilience against cyberattacks. The banking and payments systems industry has made this a key priority in recent years. However, cybersecurity is ultimately a shared responsibility between the provider and the consumer. Even the most robust systems can be breached if consumers do not exercise adequate caution or are deceived by fraudsters. In this regard, consumer education plays an important role in keeping cashless payments secure.

In addition, cash is also a choice payment instrument for illicit activities. Unlike digital transactions which almost always leave a trail to the parties, payments in cash are anonymous. In his recent book, The Curse of Cash, Kenneth Rogoff points out a very sobering reality – the amount of US Dollars in circulation outside of banks suggests that each American should have around USD4,200 in their wallet. This is not the case. According to him, most of this money is used to hide transactions.

However, this alone does not warrant moving away from cash entirely. Rogoff himself acknowledges this, and proposes the solution of eliminating large denomination notes – such as the United States' hundred dollar bill. The logic is simple. With the next largest bill being USD50, such a move would immediately make it twice as cumbersome to hoard and pass around suitcases of cash. This is in fact a policy call which Malaysia has made, when we phased out the RM1000 and RM500 notes in 1999. At the same time, the case for removing large denominations becomes weaker as each year goes by. This is because the effect of inflation plays a similar role in making cash transactions more difficult for illegal activities.

#### Social cost

The **second** element for consideration is the **social cost** imposed by the form of currency chosen. On the surface, cash may appear to be costless. Consumers do not have to worry about subscription fees and exorbitant interest rates lying in wait. Retailers are not required to pay fees to accept cash, and so need not pass on any servicing charges to the consumer. There is no need for banks and merchants to invest in and maintain sophisticated software and hardware to support digital payments.

However, cash does not come cheap. Money needs to be printed and minted, and then

transported, counted and guarded – several times over. Each step here poses a significant cost to various actors within the economy. Central banks have to deal with the rising cost of producing secure and durable money. Storing and moving money around under tight security can be expensive for both commercial banks and retail businesses. This does not yet account for the losses relating to under-reported taxes which is directly enabled by a cash economy – a cost borne by society as a whole. A 2005 study estimated this figure to be USD100 billion annually in the United States alone

The task of calculating the relative total cost of cash and cashless payments is a difficult one. Apart from the methodological challenges, the findings for each study are also likely to differ according to the nuances of each country. Nonetheless it is a worthwhile endeavour. Policy makers around the world have made positive progress in this area, and I believe we will see more efforts on this front in the coming years.

This leads to another dimension of the social cost consideration, which is the impact on financial inclusion. Millions of people live in rural areas globally, with little or no access to the modern infrastructures necessary to facilitate cashless solutions. The availability of cash is therefore paramount in ensuring that they continue to be seamlessly included in the financial system. At the same time, the success of mobile payments operator M-Pesa in rural Kenya has demonstrated that cashless alternatives can in fact be a means to promote financial inclusion for the unbanked. Here in Malaysia, where mobile banking transactions have tripled in the past year, there is potential to leverage the high mobile penetration rate to improve financial inclusion.

## Stability

The **third** element is **stability**. The ability to make retail payments reliable is crucial for the effectiveness of the financial system. As discussed earlier, we have come a long way in developing a reliable way of transacting electronically – through solutions such as credit cards, mobile transfers and prepaid balances. Central banks are now carefully monitoring newer developments, particularly digital currencies based on the use of a distributed ledger. Digital currencies have tended to be volatile and subject to speculative hoarding. This raises the potential for runs on the digital currency, triggered for instance by a loss of confidence in the currency itself or a third party provider like an exchange. This risk is likely to be augmented where the digital currency is not backed by an issuer, and where there is no lender of last resort function. If digital currencies are widely used, such a shock could have systemic repercussions. At the same time, some of these concerns may be addressed if the digital currencies used are issued by a central bank. Many policymakers are studying this option.

In addition to facilitating payments, cash has been a powerful instrument for central banks to build trust and credibility with the public. The notes issued by central banks provide us with a direct and tangible link to the people – making it a key branding tool. Trust and confidence in the central bank are crucial for us to effectively deliver our mandate. This dynamic is augmented in jurisdictions like Malaysia, where the central bank is responsible for promoting both monetary and financial stability. If we were to go completely cashless, central banks might lose this traditional means of maintaining a strong brand.

### The policy calibration in Malaysia

At present, Malaysians still transact mostly via cash. While Malaysia endeavours to accelerate the migration to e-payments, we see that cash is necessary and will always be in demand. Although e-payments per capita nearly doubled in the past five years, the ratio of cash in circulation to GDP rose by 17%. We are therefore committed to ongoing enhancements in the way we manage cash and its circulation. To this end, we have invested in a new Automated Cash Centre, which most of you will be visiting as part of this Conference. We are also in the process of building a new modern Mint.

# The next page for physical currency

As we consider the future of physical currency, it is crucial that we bear in mind the sensitivities of the users of cash. We live in an increasingly aware and empowered generation. For this reason, issues of environmental footprint cannot be an afterthought. Similarly, banknote production must carefully consider the public interest and legitimate ethical concerns across society – including special interest groups. In addition, the industry must be run with manifest integrity. The Banknote Ethics Initiative is a welcome step forward in this regard. The industry will also benefit from continued and candid engagement with central banks, who understand the nuances of their respective populations.

We also cannot ignore the fact that the idea of a cashless utopia is becoming more popular. This will be a real challenge for us — as we hope to see physical currency remain relevant. The sustainability and competitiveness of this industry depends on being able to deliver on the three considerations I mentioned earlier — namely, ensuring that cash continues to be **secure**, socially and economically **cost-effective**, and enabling for the promotion of monetary and financial **stability**.

With that, I would like to wish all of you a productive conference as you discuss these important issues in the coming days. Have a pleasant stay in Malaysia, enjoy yourselves, and please do not hesitate to include in some shopping – we do accept cash!