

# DIGITAL CURRENCIES

## A question of trust

An OMFIF Report on global public confidence in monetary, financial and payment institutions

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## A question of public trust



**Wolfram Seidemann**  
CEO, G+D Currency  
Technology

WHEN it comes to payment, consumers want freedom of choice. Central banks have established cash as a public good enabling people to settle transactions at par and free of charge. For decades, citizens around the world have trusted central banks to uphold stable economic and financial systems with the help of cash.

Commercial players offer a wide range of digital payments services, and digital transformation is still gaining speed and impact. The challenge lies in transferring to the digital world the benefits of cash and its characteristic as a public good, including the trust associated with it. This is central banks' mandate as guardians of currency and economic stability.

This survey by Ipsos MORI, analysed by OMFIF, shows that there are many aspects to consider when it comes to digital currencies. There is a need to adapt solutions to jurisdictions' varying historical, cultural and technical influences.

Central banks have the expertise to tailor digital currencies to their national requirements. This calls for a robust regulatory framework, investment in technology and people, and examining best practice around the world. Central banks have been upholding public trust in currency, and this study demonstrates clearly that the public continues to see central banks in this role.

## Prepare for digital currencies



**David Marsh**  
Chairman,  
OMFIF

TRUST may not be everything, but without trust everything is nothing. These words, paraphrasing Ludwig Erhard and Karl Schiller, two legendary former German economics ministers, apply in the most fundamental form to the bedrock of the world economy: monetary and financial transactions.

The world is entering a new phase in the international monetary system, with the possible introduction of digital currencies by leading central banks. Big technology companies, with their immense financial and technological reserves, are limbering up for an aggressive campaign to build up their payments businesses. Banks and other traditional payments organisations that have assembled a comfortable and generally lucrative place in the world of payments are preparing uneasily for an assault on their established market positions.

It is vital to assemble the right technical and commercial expertise to win. Yet without trust in the underlying systems, and in the institutions supporting them, these new mechanisms will falter. Our survey is the first in what we hope will be a series examining the backing for new payment mechanisms which could stimulate and disrupt the financial order. We commend this study to all those around the world preparing to embark on the journey.

## EXECUTIVE SUMMARY

# Central banks in pole position to issue digital currency

DIGITAL payments are proliferating worldwide and are proving increasingly popular. In China, the mobile payments market is worth \$5.7tn and is dominated by two behemoths, Alipay and WeChat Pay. Facebook wants to launch Libra, a global digital currency, later this year, a move which has prompted wider discussion about central bank digital currencies.

While the rise in digital payments is global, different regions have disparate needs. In advanced economies, services such as FedNow in the US and Faster Payments in the UK are evolving to meet the need for faster back-end payment solutions which can underpin retail payments. In emerging markets, the surge in mobile payments makes it much easier for workers to send remittances home to their families.

These changes in consumer behaviour and the surrounding policy debate make this the ideal time to present this OMFIF report, which centres on the findings of a global opinion poll on public trust in monetary institutions, payment characteristics and digital currency. The poll was conducted by Ipsos MORI across 13 advanced and emerging countries.

Our findings suggest that central banks are well-positioned to issue digital currency. In almost all countries, respondents indicated that they would feel most confident in digital money issued by the domestic monetary authority. Respondents globally expressed a lack of confidence in digital money issued by a tech or credit card company, particularly respondents from advanced economies.

The survey reveals significant differences in attitudes depending on levels of income and education, age and nationality. High-income and young respondents express the most confidence in current and future digital money, and consider speed to be part of the appeal.

The results indicate that openness to digital offerings rises with income and education levels, but declines with age. When respondents are asked about their preferred ideal characteristics for a payment method, they are unanimous in citing safety from fraud and theft as the most important feature, across all countries. Speed is the least important characteristic, suggesting that digital money will have to improve its safety features if it is to be adopted widely.

The findings suggest that cash remains king: it has the highest average score across all different payment characteristics posed to respondents, across most different income, education and age groups. Cash is particularly popular in some advanced markets, such as the US and Britain. Respondents in emerging markets show the greatest level of willingness to embrace digital currency in the future and are open to the question of who should issue it.

These findings should prove informative and useful for monetary policy-makers and private sector practitioners alike. They provide the first clear, quantitative indication of which groups and markets are most amenable to digital currency, and can serve as guidelines for regulators, central bankers and those working in the private sector who want to market their digital offerings to a broader audience.

## METHODOLOGY AND DEFINITIONS

THE survey was conducted by Ipsos MORI in 13 countries through an internet-based questionnaire for the most efficient reach in all countries. Fieldwork dates were 25 October to 8 November 2019 for 12 countries and 22 November to 6 December for Malaysia. The total global sample size consisted of just over 13,000 individual respondents aged 16-75. The sample size was approximately 1,000 in each country except Malaysia, Russia and South Africa which had sample sizes of 500. Results have been weighted so that each country counts equally in the total figures.

The survey consisted of four questions, listed in order below. The institutions surveyed in questions 1 and 2 are: major internet technology companies such as search engines and social media companies; high street banks (banks that offer standard products like savings and current accounts to individuals and businesses); your country's central bank; payments service provider (a company that offers shops online or mobile services for accepting electronic payments by a variety of methods such as PayPal or Apple Pay); credit card companies.

**1.** Please look at this list of different types of organisations and institutions. In general, do you think each is trustworthy or untrustworthy? (Please use a scale of 1 to 5, where 1 is very trustworthy and 5 is very untrustworthy).

**2.** The next questions are about **digital money**. Digital money is a type of currency that can only be used in digital or electronic form, in contrast to physical currency such as banknotes and coins. Examples of digital currency include bitcoin. How much confidence, if at all, would you have in digital money issued by each of the following? (A great deal, a fair amount, not very much, none at all, don't know).

**3.** Below is a list of characteristics

■ Annual income  
■ Education

Source: Ipsos MORI

different payment methods could have. Which one or two, if any, of the following, are most important to you? Please pick up to two options. Options included: privacy protection; ease of use; speed; safety from fraud or theft; being widely accepted by whoever I want to make a payment to; other; none of these; don't know.

4. How good or poor would you rate each of the following payment methods (**cash, card, digital money**) on the following characteristics? (Very good, fairly good, neither good nor poor, fairly poor, very poor, don't know). Options included: privacy protection; ease of use; speed; safety from fraud or theft; being widely accepted.

Charts throughout the report amalgamate 'trustworthy' and 'very trustworthy' ratings into one 'trustworthy' category for ease of viewing and illustration; the same holds for 'very good' and 'fairly good' and other similar descriptors. For example, in figure 3.8, 'confident' includes both 'confident' and 'very confident' responses.

Final results were broken down by a series of characteristics including sex; education level; income level; age; business ownership; employment status; region; senior executive/decision-maker status; and marital status. For a breakdown of the definitions of 'low,' 'medium,' and 'high' income and education levels in different countries, please see the adjacent figure. However, when comparing findings from developed markets with emerging markets, it is important to bear in mind that due to the online nature of the research, the sample in emerging markets will tend to be slightly more educated, more urban, and to have higher incomes than their fellow citizens. Final results were weighted by Ipsos MORI to allow for comparison across samples.

Country	Low	Middle	High
Brazil	Up to \$R1,000	\$R1,000-\$R5,000	\$R5,001 and over
	Up to incomplete secondary education	Complete upper secondary or incomplete university education	Complete university education (incl. Master's, Doctorate, or professional degrees)
Canada	Up to \$24,999	\$25,000-\$74,999	\$75,000 and over
	Up to high school graduate	Up to incomplete university education	Complete university education (incl. Master's, Doctorate, or professional degrees)
China	Up to Rmb2,999	Rmb3,000-Rmb7,499	Rmb7,500 and over
	Up to complete primary or junior school	Training school, professional high school, or college	Complete university education (incl. Master's, Doctorate, or professional degrees)
France	Up to 15,000€	15,001€-36,000€	36,001€ and over
	Up to lower secondary education	Vocational or regular upper secondary education	Complete university education (incl. Master's, Doctorate, or professional degrees)
Germany	Up to 18,000€	18,001€-30,000€	30,001€ and over
	Up to lower secondary education	Vocational or general upper secondary education	Complete university education (incl. Master's, Doctorate, or professional degrees) or higher professional education (e.g. Meister)
India	Up to Rs. 25,000	Rs. 25,001-Rs. 100,000	Rs. 100,001 and over
	Up to 9 years of schooling	Up to completed 12th class or some college education	Complete university education (incl. Master's, Doctorate, or professional degrees)
Italy	Up to 15,000€	15,001€-36,000€	36,001€ and over
	Up to lower secondary education	Vocational or general upper secondary education	Complete university education (incl. Master's, Doctorate, or professional degrees) or higher professional education
Japan	Up to ¥5,999,999	¥6,000,000-¥11,999,999	¥12,000,000 and over
	Up to upper secondary school education	Professional training, technological, or junior college education	Complete university education (incl. Master's, Doctorate, or professional degrees)
Malaysia	Up to RM3,999	RM4,000-RM7,999	RM8,000 and over
	Up to primary school education	Secondary school education	Complete university education (incl. Master's, Doctorate, or professional degrees) or higher professional education
Russia	Up to 20,000 Rubles	20,001 Rubles - 40,000 Rubles	40,001 Rubles and over
	Up to upper secondary education	Vocational education or incomplete higher education	Complete university education (incl. Master's, Doctorate, or professional degrees)
South Africa	Up to Zar3,999	Zar4,000-Zar11,999	Zar12,000 and over
	Up to upper secondary education or technical/secretarial education	Artisan's or technical education	Complete university education (incl. Master's, Doctorate, or professional degrees)
Britain	Up to £14,999	£15,000-£44,999	£45,000 and over
	Up to GSCE/lower secondary level	Up to A/AS/upper secondary level	Complete university education (incl. Master's, Doctorate, or professional degrees)
US	Up to \$24,999	\$25,000-\$74,999	\$75,000 and over
	Up to high school diploma or GED	Incomplete higher education	Complete university education (incl. Master's, Doctorate, or professional degrees)

**SECTION 1**

# Convincing the public

MONETARY service providers – which for the purposes of this report include central banks, payments service providers, commercial banks, credit card companies and large technology companies – have a tough job convincing citizens that they are trustworthy. Central banks are trusted the most the world over, while tech companies are the least trusted. This could impede the adoption of payments offerings from tech companies in key jurisdictions.

There are strong regional variations within the emerging and developed market groups. In developed markets, it appears unlikely that tech companies will be entrusted with monetary transactions. At the same time, central banks are largely considered the most trustworthy payments institutions in both types of market. This is an important finding for the current discourse on the rise of private monies such as Libra and the potential of central bank digital currencies. It suggests that in developed markets, respondents agree with François Villeroy de Galhau, the governor of the Banque de France, who claimed in January 2020 that ‘currency cannot be private, money is a public good of sovereignty.’

In all countries in the sample, educational, income and geographical differences have a significant impact on trust. Those individuals with higher levels of education or income, or who live in urban regions, are more likely to trust all types of payments institutions.

# 1. Central banks are the most trusted institutions, tech companies lag

CENTRAL banks have the highest trust rating of all the monetary service providers considered in this survey, as shown by the share of respondents expressing outright trust in them. Payments service providers (companies such as PayPal) are the runners-up, followed by commercial banks, credit card companies and major technology companies such as search engines and social media firms. The ranking is the same for net trust (or trustworthiness minus untrustworthiness) for each category: central banks, PSPs and commercial banks are the three categories with positive net trust ratings.

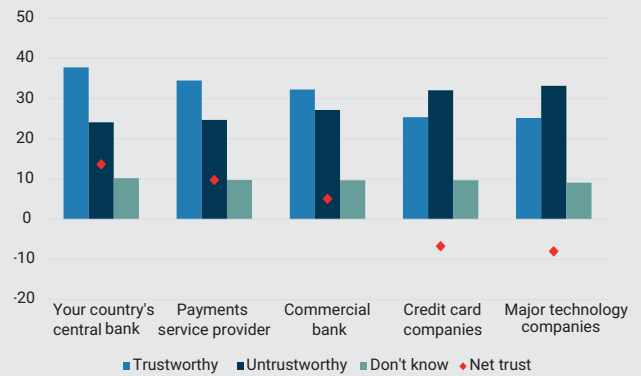
Central banks score the highest net trust rating (more than 13 percentage points), whereas major tech companies have a net trust rating of almost negative 10 percentage points (Figure 1.1). For each type of institution, 'don't know' responses account for roughly 10% of the answers.

Net trust in central banks is positive in almost all of the countries surveyed (Figure 1.2), but there are significant differences within the emerging and developed market groups. Respondents in Malaysia have the highest net trust in their central bank, at more than 40 percentage points. India ranks second, whereas in Brazil, net trust is less than five percentage

points, highlighting differences within the Brics group of countries. In both Britain and Canada, respondents have higher-than-average trust in their monetary authorities, in contrast to other developed economies. With the exception of Britain, 'don't know' responses account for more than 10% in each of the advanced economies.

**Fig. 1.1: Central banks the most trusted global MSP; tech companies lagging behind**

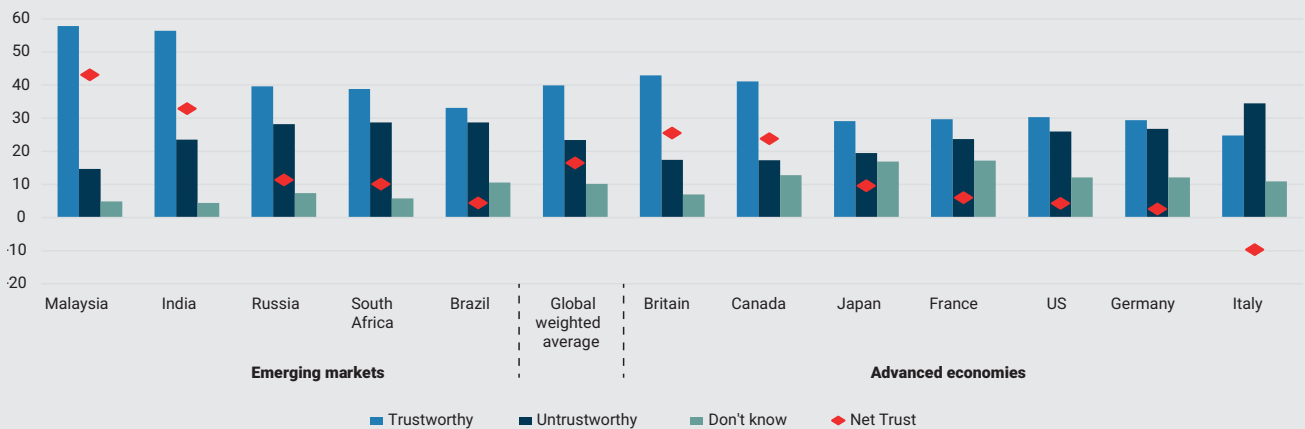
'Do you think each of the following institutions is trustworthy or untrustworthy?', % of global 'trustworthy,' 'untrustworthy' and 'don't know' responses



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

**Fig. 1.2: Global central bank trust highest in emerging markets**

'Do you think each of the following institutions is trustworthy or untrustworthy?' for central banks, % of 'trustworthy,' 'untrustworthy' and 'don't know' responses by country



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses and China excluded

## 2. Divide in trust in tech companies within advanced and emerging market economy groups

TRUST in tech companies varies within the emerging and advanced economy groups, with respondents from developed countries expressing particular scepticism (Figure 1.3). In each of the developed markets, net trust in tech companies turns out negative. In Japan, which has the highest level of trust, net trust is negative 11 percentage points; at the other extreme, net trust is below minus 30 percentage points for Germany and France.

There are also substantial differences among the emerging markets. In Russia and India, net trust is

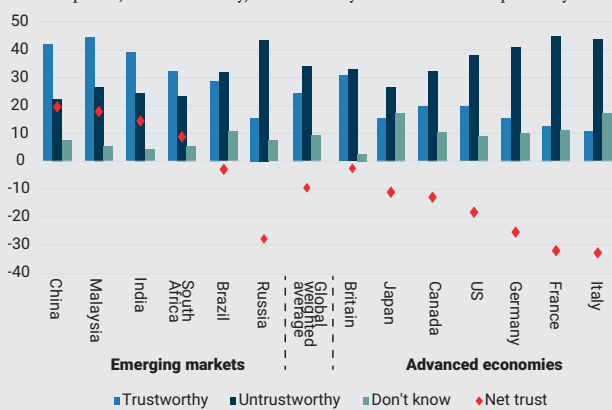
around 20 percentage points, whereas in Brazil, net trust in tech companies is negative. When it comes to commercial banks, there are big differences in levels of trust. In emerging markets, the highest net trust in commercial banks is shown in China (39 percentage points), followed by Malaysia (30 percentage points) and India (20 percentage points). Net trust in commercial banks is negative in Brazil and Russia. In developed markets, net trust in commercial banks is largely negative. The lowest net trust score for commercial banks is in Italy, at close to minus 30 percentage points (Figure 1.4).

PSPs benefit from positive net trust in 11 of the 13 countries surveyed; only in Japan and France is net trust in such providers negative (Figure 1.5). Other developed economies (Canada, Germany and the US) have positive – but low – net trust in PSPs. Within the emerging markets group, China has the highest net trust in PSPs (34 percentage points), with India and Russia second and third. Credit card companies have positive net trust scores in India, China and South Africa, as well as most other emerging economies in the survey. Among the emerging markets, China generally has the highest net trust in its monetary service providers (not including its central bank in the listed institutions), alongside India.

However, credit card companies and PSPs are relatively less popular in developed economies, with little variation among them.

**Fig. 1.3: Tech companies least trusted on payments in developed markets**

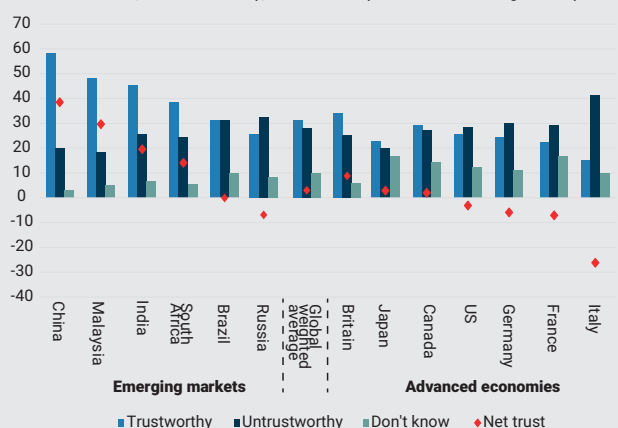
'Do you think each of the following institutions is trustworthy or untrustworthy?' for major tech companies, % of 'trustworthy,' 'untrustworthy' and 'don't know' responses by country



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

**Fig. 1.4: Commercial banks well regarded in emerging markets**

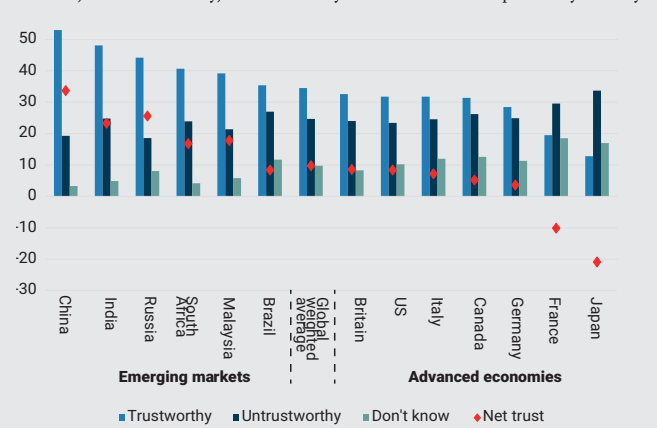
'Do you think each of the following institutions is trustworthy or untrustworthy?' for commercial banks, % of 'trustworthy,' 'untrustworthy' and 'don't know' responses by country



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

**Fig. 1.5: Japan and France have the lowest trust in PSPs from advanced economies**

'Do you think each of the following institutions is trustworthy or untrustworthy?' for PSPs, % of 'trustworthy,' 'untrustworthy' and 'don't know' responses by country



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded



# 3. Richer, better-educated individuals more likely to trust financial institutions

RESPONDENTS in the higher-income and higher-education categories tend to place more trust in monetary service providers than those from low-income and low-education households, both in emerging and advanced economies.

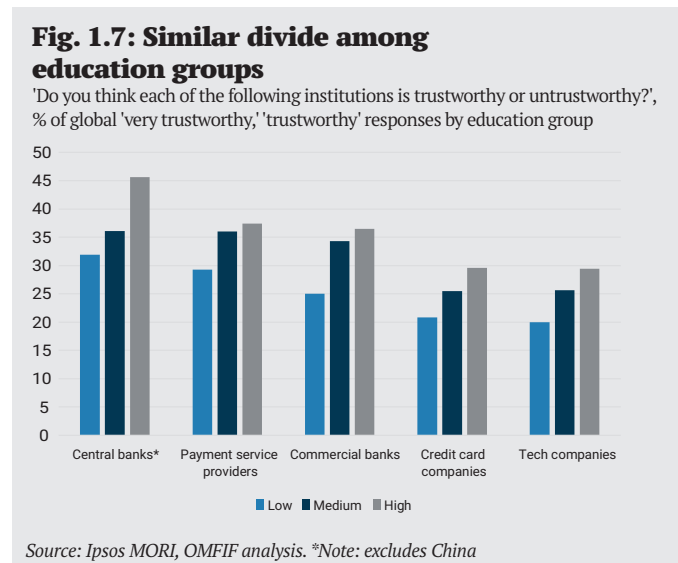
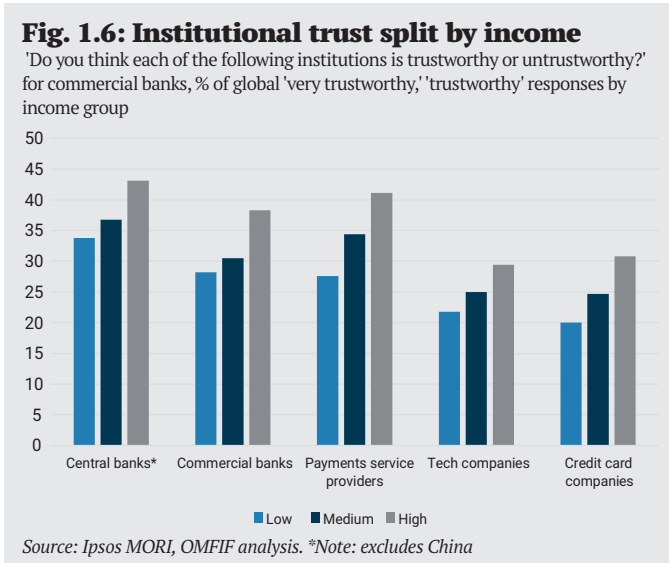
For example, 29% of high-income individuals trust tech companies, compared with 22% of low-income people (Figure 1.6). Across the global sample, respondents in the higher and lower incomes brackets give these companies a relatively high untrustworthy rating of 33% to 34%. The biggest difference concerns their ‘don’t know’ responses, a category that accounts for 16% of low-income respondents but only 4% of higher-income earners.

The same holds true for commercial banks, where trust levels also rise with income (Figure 1.6). For medium-income households, trust and mistrust are

balanced, while banks enjoy relatively high levels of trust among higher earners. In the case of credit card companies, only 20% of low-income respondents consider them trustworthy; the corresponding figure among high-income individuals is 31%.

A similar pattern occurs for different levels of education: individuals in the low-education bracket have less trust than better-educated respondents in the various providers, whether tech companies or central banks (Figure 1.7). ‘Senior executives and decision-makers’ have relatively high levels of trust in central banks, as do ‘business owners’.

Low-education households exhibit much lower trust levels than medium- and high-education individuals when it comes to central banks, with a 14 percentage point disparity between the two extremes (Figure 1.7).



# 4. Large gender and age gaps in worldwide trust in central banks and tech companies

ACROSS all countries surveyed, women express a lower trust level (35%) in central banks than do men (40%). The corresponding net trust levels, which consider 'untrustworthy' responses, stand at 15 percentage points for men but just 12 percentage points for women. Japan and Russia are the only countries where women have greater trust than men in their central bank. The largest extreme in trust towards central banks between men and women is in the US (Figure 1.8).

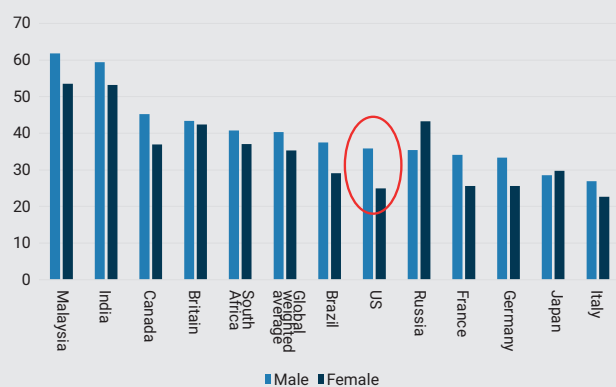
A similar pattern is evident for tech companies, although with lower overall levels of trust. Out of the global sample, 26.6% of men say they trust tech companies for payments, against only 23.8% of women. Parallel net trust levels are negative 7 percentage points for men and negative 9 percentage points for women.

Female respondents' views on tech companies vary significantly, both within the emerging and developed market groupings. The net negative ('distrust') balance among women towards tech firms is very high in advanced economies such as Germany, France, and Britain (Figure 1.9). At the same time, it is relatively lower in countries including Italy and Japan. Within the

emerging markets group, views vary: net trust among women is negative in South Africa and Brazil, but substantially positive in India, Russia, and China, for example.

**Fig. 1.8: Men generally have higher trust in their central bank than women**

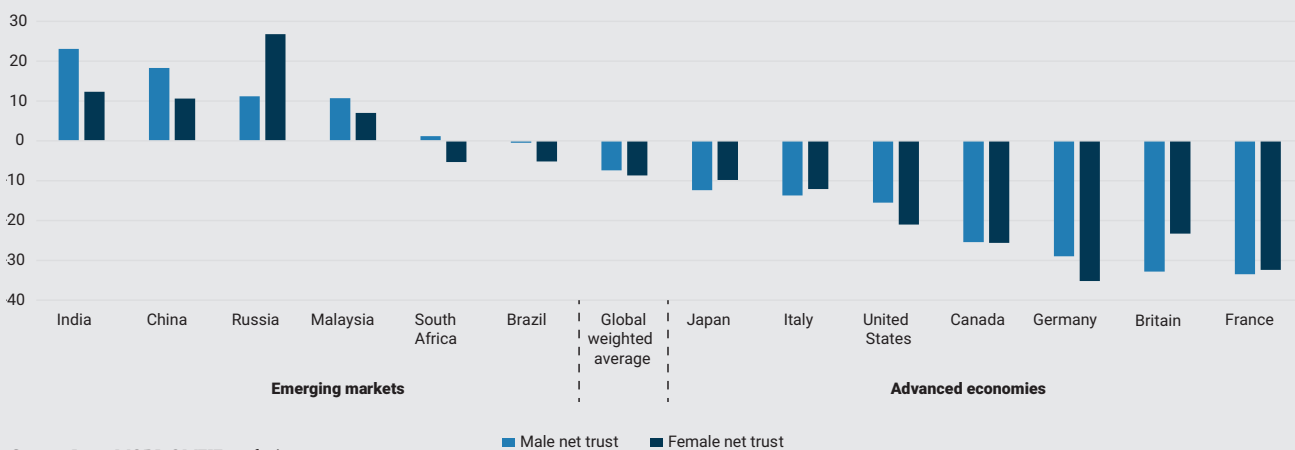
'Do you think each of the following institutions is trustworthy or untrustworthy?' for central banks, % of global 'very trustworthy,' 'trustworthy' responses by sex



Source: Ipsos MORI, OMFIF analysis. Note: China excluded

**Fig. 1.9: Similar trust gaps for tech companies**

'Do you think each of the following institutions is trustworthy or untrustworthy?' for major tech companies, net trust score by sex



Source: Ipsos MORI, OMFIF analysis

# 5. How regional divisions affect trust around the globe

RESPONDENTS from urban regions across most developed and emerging economies show much greater trust in central banks than do people in more rural regions, illustrating another facet of the income and social class divide which affects attitudes towards payments.

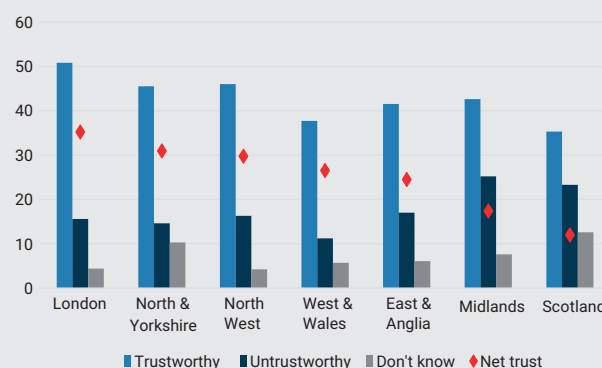
Russia's far eastern and southern federal districts record the lowest trust in the country's central bank; trust levels are almost 20 percentage points higher in the more urban and densely populated north-western and Ural federal districts.

Similar distinctions can be drawn in Britain. In London, more than 50% of respondents trust the Bank of England; in Wales and western England, the corresponding figure is 38%, and 35% in Scotland (Figure 1.10). In Germany, respondents from densely populated, urban areas such as North Rhine-Westphalia express almost 14 percentage points more trust in the Bundesbank than respondents from former East Germany, for example.

But not all countries display such regional discrepancies. In France and the US, all regions give relatively homogenous answers regarding trust in the Banque de France and Federal Reserve respectively.

**Fig. 1.10: Britain's stark regional divides**

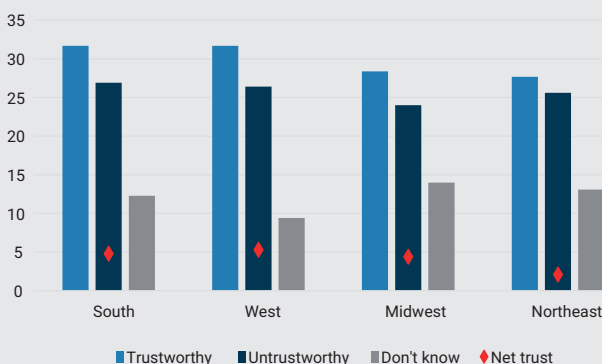
'Do you think each of the following institutions is trustworthy or untrustworthy?' for the Bank of England, % of 'trustworthy,' 'untrustworthy' and 'don't know' responses by region



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

**Fig. 1.11: Homogenous distrust in the US**

'Do you think each of the following institutions is trustworthy or untrustworthy?' for the Federal Reserve, % of 'trustworthy,' 'untrustworthy' and 'don't know' responses by region



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

**SECTION 2**

# Preferred characteristics of payments systems

RESPONDENTS in different countries and across different age and income ranges express widely differing views on the preferred characteristics of payments systems. Emerging market consumers have an appetite for fast and secure payments, whereas in developed economies, there is more emphasis on key safety features, including safety from fraud and theft as well as privacy protection. In developed economies, cash and card payments achieve relatively lower approval ratings, particularly from low-income and low-education individuals. However, these groups are generally unwilling to put their faith in digital currencies.

However, there are significant disparities within and across different groups and demographics. Among the developed economies, respondents in English-speaking countries such as Britain and Canada express far greater confidence in cashless payments and digital money than their other Western European counterparts. Japanese respondents express the highest level of discontent with existing payment methods and are also the most optimistic developed market respondents when it comes to the potential of digital money. Respondents from the US express the highest

level of enthusiasm for cash, out of all the countries in the survey, across the five key characteristics, tying into the general distrust of institutions outlined in section 1. The peculiar payment characteristics preferred by developed economy respondents and their policy implications should be heeded by potential digital currency issuers.

Respondents from emerging markets appear sanguine about the prospects for digital currency; those from India and China express the highest degrees of confidence in existing payment methods and are most enthusiastic about the speed and ease of use of digital cash.

# 1. Priority for safety and privacy in payment methods across all countries

WHEN asked about the most critical characteristics of a payment instrument, respondents in all surveyed jurisdictions select ‘safety from fraud and theft’ as the most important attribute. ‘Privacy protection’ is the second-most important feature for all but two countries. The exceptions are Britain and Russia, where respondents chose ‘wide acceptance’ (39% of responses) and ‘ease of use’ (47%) respectively. No respondents select ‘speed’ as the primary, second-most or even third-most important feature (Figure 2.1).

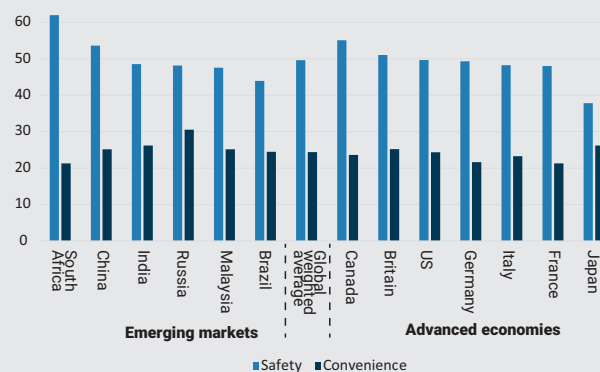
The prominence of privacy in these responses helps explain the popularity of cash, which is typically regarded as furnishing a high degree of anonymity in transactions.

When attributes are separated into the categories of ‘convenience’ (‘ease of use’, ‘speed’, ‘wide acceptance’) and ‘safety’ (‘privacy protection’, ‘safety from fraud or theft’), the country showing the highest regard for payment security is South Africa, exhibiting a 40-percentage-point difference between the share of respondents selecting ‘safe’ over ‘convenient’ characteristics. The second-most security-conscious country is Canada, where the gap between safety and convenience is 32 percentage points. China is home to the third-largest share of security-conscious respondents.

The balance between safety and convenience depends partly on respondents’ age. Over-50s pay more heed to safety from fraud or theft (65%) than do under-35s (54%) and people aged 35-49 (60%). Across the global sample, high-income individuals are more likely to prioritise safety in payment instruments than do low- or middle-income earners, by margins of 14 and six percentage points respectively.

**Fig. 2.2: Safety widely preferred over more convenient characteristics, such as ease of use**

‘Below is a list of characteristics different payment methods could have. Which one or two, if any, of the following, are most important to you?’, average % of respondents



Source: Ipsos MORI, OMFIF analysis

**Fig 2.1: Safety from fraud and privacy protection most important characteristics**

From the characteristics of payment methods, which one or two, if any, of the following, are most important to you?, blue = most selected, purple = second most

	Global average	US	Britain	South Africa	India	Brazil	Canada	France	Germany	Japan	Italy	China	Russia	Malaysia
<b>Safety from fraud or theft</b>	60%	62%	72%	75%	52%	52%	69%	56%	58%	42%	63%	56%	64%	53%
<b>Privacy protection</b>	39%	37%	30%	49%	45%	36%	41%	40%	41%	34%	34%	51%	32%	42%
<b>Ease of use</b>	30%	25%	28%	22%	35%	35%	26%	26%	28%	33%	32%	32%	47%	23%
<b>Being widely accepted</b>	28%	36%	39%	28%	25%	25%	35%	23%	24%	33%	24%	26%	19%	27%
<b>Speed</b>	15%	12%	8%	13%	19%	14%	10%	15%	13%	12%	14%	17%	26%	26%
<b>Other</b>	1%	1%	0%	1%	2%	1%	1%	1%	2%	2%	1%	1%	0%	1%

Source: Ipsos MORI, OMFIF analysis

## 2. Emerging markets open to digital money; developed markets deeply sceptical

ASKED about the characteristics they most prefer and seek in payments systems – choosing between cash, payment cards (debit or credit) and digital money – respondents globally rate cash and cards higher than digital money (defined in this survey to include bitcoin and other tokens). This fits with common perceptions of cash. As noted by Bank of Japan Deputy Governor Masayoshi Amamiya at a Reuters speech in July 2019, ‘demand for cash payments is thought to be related to people’s perception of cash: less concern about wasting money than when using cashless payment instruments; a safe environment where cash is rarely stolen and is even often returned when people lose their pocketbooks or purses; and public confidence in the high anti-counterfeit security levels of Japanese banknotes.’ It may also be due to the association of digital money with bitcoin, money laundering and cybercrime, influencing its relatively poor performance compared to more mainstream payment methods.

However, there are marked differences in personal preferences between and within emerging and advanced economy groups. Respondents were asked to give ratings between ‘very good’ and ‘very poor’ to the three payment methods, focusing on the five

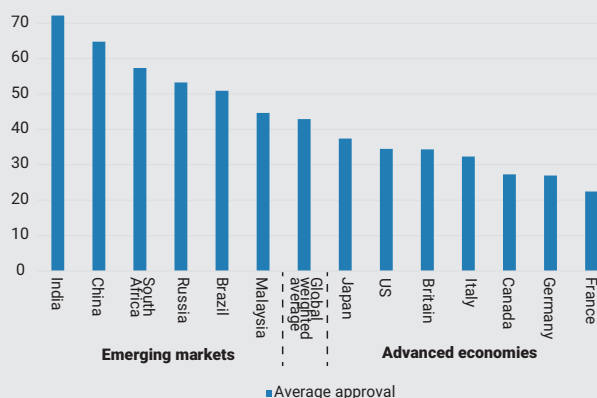
preference categories of wide acceptance, safety from fraud or theft, speed, ease of use and protecting privacy. Emerging market respondents are much more open to digital money than their advanced-economy counterparts, and express greater confidence in all three payment options generally.

Among emerging markets, the countries where respondents give the highest net approval to digital money across the five categories are Brazil and Russia, while respondents in Malaysia express the lowest degree of trust. In developed economies, average results are much lower. Respondents in Japan express the highest average confidence in the payment characteristics of digital money, at 37%, (Figure 2.3), whereas those in Germany and France express the lowest confidence in the features of digital money, at between 10 and 15 percentage points less.

Among German and French respondents, 41% and 34% respectively raise concerns about privacy protection as the main reason why they score digital money poorly. Specifically, 34% and 31% of those respondents cite fraud and theft as key risks (Figure 2.4). Japanese respondents, for example, are less concerned about these risks.

**Fig 2.3: India leads emerging market approval of digital money characteristics**

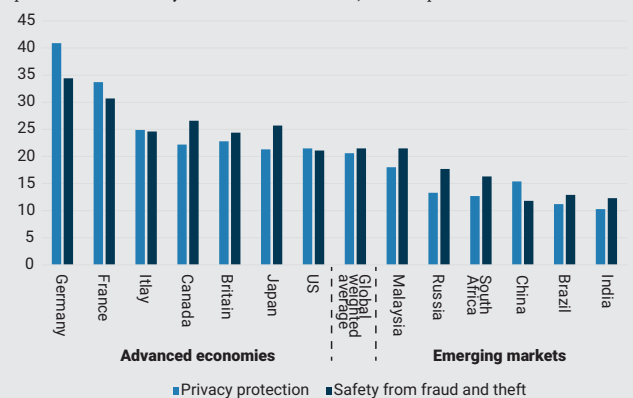
‘How good would you rate each of the following payment methods on each characteristic?’, average score across all characteristics of digital money



Source: Ipsos MORI, OMFIF analysis

**Fig 2.4: Germany and France highlight privacy and safety concerns for digital money**

‘How poor would you rate each of the following payment methods for privacy protection and safety from fraud and theft?’, % of responses



Source: Ipsos MORI, OMFIF analysis

### 3. Male-female and generational divides over safety and speed

THERE is an important divide between men and women in their preferred payment attributes. Speed is a sought-after characteristic for 18% of male respondents, but only 13% of women. Women are more worried about safety. Globally, 43% of female respondents (36% of men) consider privacy protection to be important, while 62% of women (57% of men) say safety from fraud or theft is the most important attribute. In all countries, women are more concerned than men when it comes to privacy.

Unlike older respondents, who prioritise safety over convenience, under-35s and better-educated people are more interested in speed. This partly explains their penchant for digital money and card payments. Speed is the most sought-after feature of payments systems for 19% of under-35s, against 11% of over-50s.

For specific payment methods, cash scores highest among older respondents. The groups with the highest confidence in the different functions of cash are over-50s, high-income groups and better-educated respondents. For each of these, cash receives an average approval rating across categories greater than 70%, although it is generally well regarded among all age groups given its ease of use and wide acceptance (Figure 2.6). Cash scores remarkably well among all age groups and jurisdictions, including those in which cashless payments are commonplace, such as Britain. In each jurisdiction, cash has the highest average score across all five categories. It also performs well among

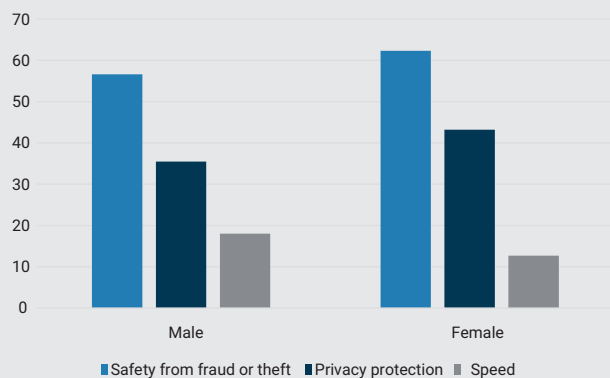
young people compared to other payment methods, as well as among the better-educated and better-off in all jurisdictions. For example, young people globally feel that cash and debit cards perform equally well in their ease of use. In all other categories, cash performs substantially better than debit cards among young people globally, pointing towards cash’s wide appeal.

There are greater disparities in the case of digital money. On both convenience and safety, under-35s are much more confident in digital money than are over-50s (a difference of 13 to 15 percentage points), and marginally more confident than those aged 35-49 (four percentage points) (Figure 2.6). This is most evident in the ease of use category.

Digital money’s highest-rated attributes, by sizeable margins, are speed and ease of use (see Figure 2.9 on p.16). These are the only features that receive approval ratings greater than 50%, although only among younger people. Yet forthcoming policy initiatives may help improve this perception. As noted by Javier Eduardo Guzmán Calafell, deputy governor of Banco de México, in St Louis on 9 July 2019: ‘CBDCs are seen as a means to ameliorate outstanding gaps in financial inclusion of important segments of their populations. [Yet] CBDCs could also help counter the proliferation of illegal activities,’ and they have ‘the potential to enhance the safety of the payments system through a back-up given mounting operational risks in some segments.’

**Fig 2.5: Women more concerned with safety and privacy in payments than men**

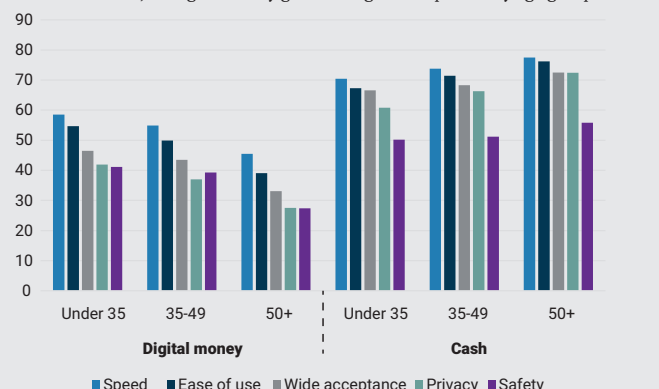
'From the characteristics of payment methods, which one or two, if any, of the following, are most important to you?' by gender, % of responses



Source: Ipsos MORI, OMFIF analysis

**Fig. 2.6: What do you like about cash and digital money?**

'How good or poor would you rate cash/digital money on each of the following characteristics?', % of global 'very good' and 'good' responses by age group



Source: Ipsos MORI, OMFIF analysis

# 4. Low-income groups show less confidence in performance of existing payments systems

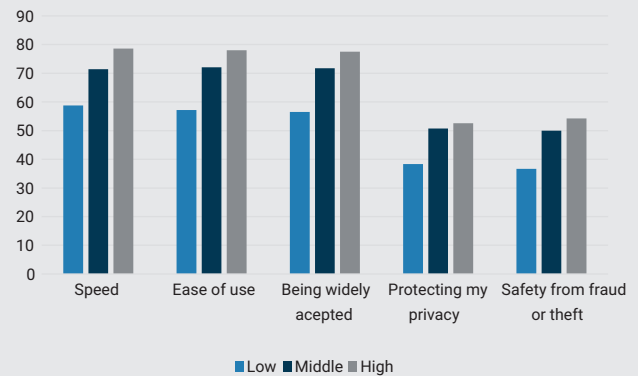
ALL payment methods under review are rated worse by low- and middle-income earners compared with those on higher incomes (Figures 2.7-2.9).

Debit and credit cards perform worse among low-income and low-education households by a significant margin, across all categories (Figure 2.8). Only 37% of low-income households believe that cards perform well in terms of safety from fraud or theft, compared with 54% of high-income earners. This difference is slightly more pronounced in emerging markets than in developed economies, with some exceptions. Higher-income respondents are more likely to express trust in digital money across all categories than those from either middle- or lower-income households (Figure 2.9). This effect is even more pronounced when employment patterns are reviewed. Respondents in work express almost 10 percentage points more confidence in digital money than unemployed people. Business owners and senior executives have more trust in digital money in

all categories, by between 14 and 17 percentage points in each case, than other respondents.

**Fig. 2.8: Cards seen as rapid and easy**

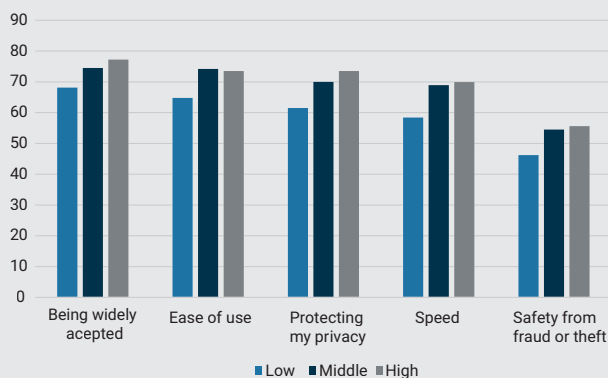
'How good or poor would you rate credit and debit cards on each characteristic?', % of 'very good' or 'good' responses by income group



Source: Ipsos MORI, OMFIF analysis

**Fig. 2.7: Cash most evenly appreciated among income groups**

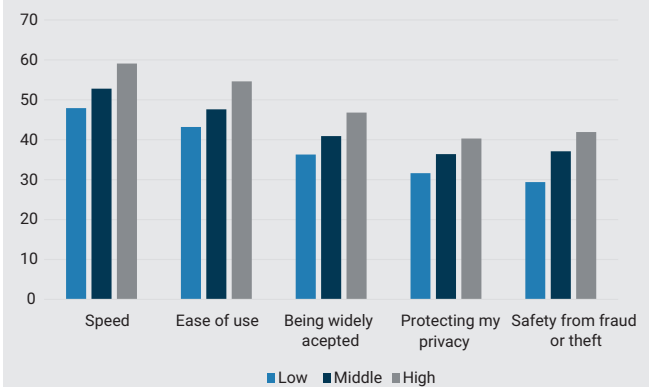
'How good or poor would you rate cash on each characteristic?', % of 'very good' or 'good' responses by income group



Source: Ipsos MORI, OMFIF analysis

**Fig. 2.9: Scepticism of digital currency safety**

'How good or poor would you rate digital money on each characteristic?', % of 'very good' or 'good' responses by income group



Source: Ipsos MORI, OMFIF analysis



# 5. Differences over digital money point to need to raise confidence, including through regulation

DIFFERENCES in attitudes towards digital money (Figure 2.10) reveal where adjustments are needed to raise levels of trust. In nearly all cases, an improved operating environment, including in the regulatory sphere, is necessary if central bank digital currencies are to gain ground in future compared with more commonly used payment methods.

Given that most respondents probably have not used digital money in its current forms, responses regarding the preferred attributes or characteristics of digital money can be seen as expressing expectation when it comes to the future design of CBDC. In all but one of the countries surveyed, respondents identify speed as digital money's greatest attribute, followed by its ease of use. Brazil is the sole exception, where ease of use and speed are rated approximately equally.

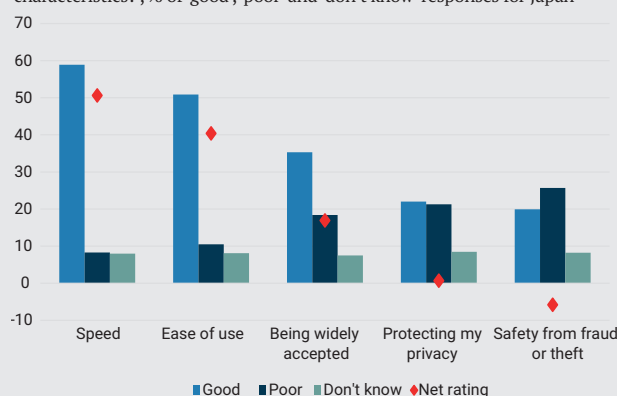
Among the advanced economies, 51% and 59% of Japanese respondents respectively highlight ease of use and speed as digital money's main strengths, whereas just 22% and 20% point to privacy protection and safety from fraud or theft (Figure 2.11). In Canada, convenience categories score less than 40%, and safety categories less than 25%. French respondents are the least bullish on digital money's safety attributes.

The gaps between these categories at national level show the main areas where improvement is needed. In Japan for example, developing more rigorous regulatory infrastructure might help consumers feel safer using

digital money and facilitate higher adoption rates. In France and Canada, where scores are relatively low across all categories, regulatory enhancements and upgrades in digital payments infrastructure are needed. These would facilitate the adoption of CBDC in the future. As Ravi Menon, managing director of the Monetary Authority of Singapore, noted in a May 2019 Banque de France lecture: 'as finance adopts more technology, it must pay close attention to risks so as to maintain the trust of consumers.' These figures point to where consumers feel those risks lie.

**Fig 2.11: Japan prefers speed and ease of use of digital money but safety remains a concern**

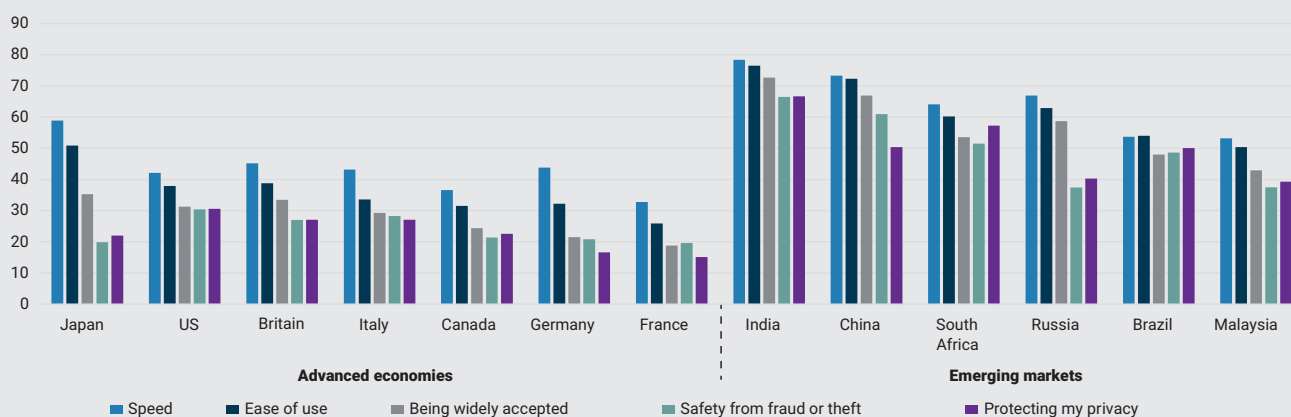
'How good or poor would you rate digital money on each of the following characteristics?', % of 'good', 'poor' and 'don't know' responses for Japan



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

**Fig 2.10: Emerging markets favour digital money characteristics more than advanced economies**

'How good or poor would you rate digital money on each characteristics?', % of 'good' responses by country



Source: Ipsos MORI, OMFIF analysis

**SECTION 3**

# Trust in issuers of digital money

Survey respondents regard central banks as the preferred institution to issue a digital currency, whereas tech companies are the least preferred option. However, important differences arise between emerging and advanced economies, as well as among respondents in different income, education and age brackets. Emerging market respondents are generally open minded on the question of who should issue digital money in the future, with only a slight preference for the central bank in some countries. The findings suggest that public-private partnerships may be an accepted route for digital currency issuance.

# 1. Central banks are preferred digital currency issuers

EMERGING technologies, more resilient networks and better security systems are changing the ways that people save, pay and transfer value. Thanks to mobile technology and application-based services, such transactions have become easier and more convenient. The use of cash is even declining in some regions and the debate over potential digital currency issuance is more topical.

When asked about their confidence in various potential issuers of digital money, 51% of respondents globally say they would trust a digital currency issued by their central bank. PSPs, commercial banks and credit card companies follow in that order, while major internet technology companies rank last, with just 37% of respondents indicating any kind of confidence (Figure 3.1).

A monetary instrument's fitness for use depends largely on the trustworthiness of the issuer – hence respondents' preference for central bank digital currencies. Users of any potential digital currency system will question whether it can offer a reliable store of value, be widely accepted and convertible, and function as a unit of account. Fiat sovereign currency is the most trusted form of money in most monetary systems. During financial crises, depositors and investors must be able to access safe assets and cash. A central bank, by issuing a digital currency, would

have the ability to extend the trust of fiat currency to a digital instrument.

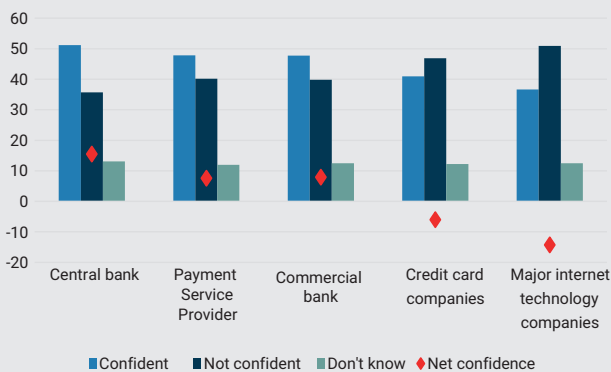
According to the survey, respondents have concerns about current iterations of digital money, particularly matters of safety from fraud or theft and protection of privacy. Responses suggest that a digital currency issued by a central bank could overcome these hurdles. A CBDC could satisfy preferences for convenience, while enjoying the reputation for safety associated with public, sovereign-backed fiat currency issuers.

There are important differences in trust regarding CBDC issuance. In emerging markets such as India, respondents have overwhelming confidence in the ability of the domestic central bank to perform this task well. But results from advanced economies suggest that central banks may have to improve their public perception before their constituents feel comfortable with CBDC. (Figure 3.2).

Half of the central banks that participated in the OMFIF-IBM study 'Retail Central Bank Digital Currencies', published in October 2019, expressed concern about the potential fragmentation of payments stemming from the issuance of non-fungible private digital currencies. Central banks, most of which are regarded as highly trustworthy, can afford to be ambitious and optimistic in their pursuit of digital currency issuance.

**Fig 3.1: Central banks garner greatest confidence for digital money issuance**

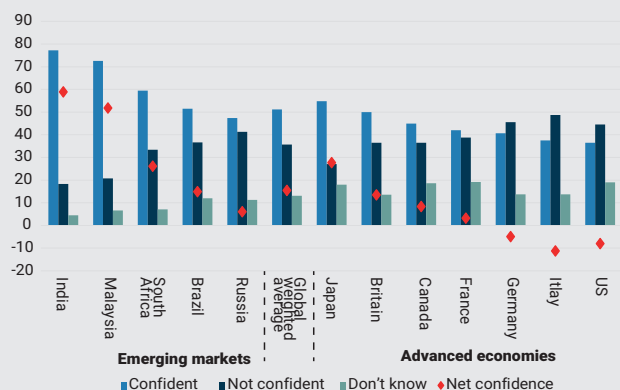
'How much confidence, if at all, would you have in digital money issued by each of the following?', Global average



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

**Fig 3.2: India and Malaysia show the greatest confidence in CBDCs**

'How much confidence, if at all, would you have in digital money issued by your central bank?', by economy



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

## 2. Emerging markets welcome all digital money providers, developed markets prefer central bank

FINANCIAL inclusion is a strong motivation for the provision of digital money. Across emerging markets, 57% of respondents say they would have a relative degree of confidence in any type of institution issuing a digital currency, suggesting that the benefits of a digitalised payment instrument would be welcomed, regardless of the provider.

Respondents in India are the most bullish of those surveyed in emerging markets when it comes to digital currency and, as Figure 3.2 on p.19 shows, they have more confidence in the ability of their monetary authority to issue a CBDC than respondents in any of the other countries covered by the poll. Indians are also the most supportive of tech companies potentially issuing a digital currency, with 66% of respondents backing this (Figure 3.3). Average support for tech companies issuing a digital currency across all countries, excluding India, is just 34%, and net confidence is significantly negative in many advanced economies.

The overwhelming lack of support for a digital currency issued by a tech company reflects the lack of faith in such companies themselves. In the advanced economies, where trust in tech companies is lowest (as illustrated in section 1), Germany, France and Britain all show a net trust in tech-issued digital money of below negative 40 percentage points. This figure is slightly higher, at minus ten percentage points, in Japan. Yet overall, among advanced economies in our sample, there is a clear lack of support for a digital

currency issued by a major technology company.

India’s relative trust in CBDCs may be linked to public policy initiatives of recent years. The country’s Aadhaar card was set up to create a nationwide digital biometric identity database, and it was made interoperable with the Unified Payments Interface – a real-time, 24-hour, interbank system – which supports retail payments comprising up to a quarter of all digital payments in India, according to the National Payments Corporation of India. It is more popular for payments than credit and debit cards, as well as any internet and mobile banking services in India.

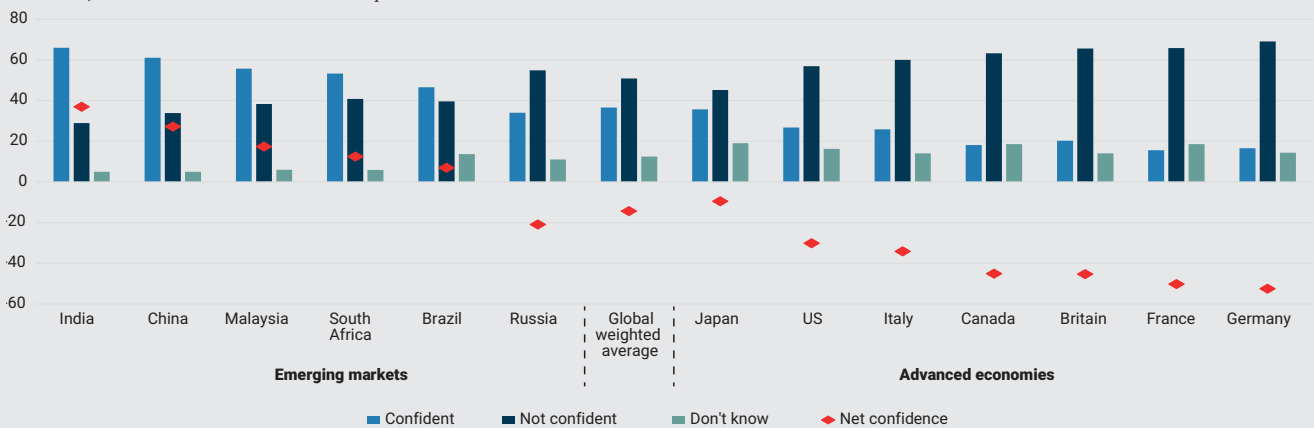
Although the Reserve Bank of India is researching the benefits and risks of digital currency issuance, it is yet to make any formal announcement regarding its application in the country.

Major tech companies are well placed to deliver retail payments services in emerging markets. WhatsApp, which is owned by Facebook, is carrying out a trial providing payments services alongside its messaging platform to more than 400m Indians. If successful, and pending regulatory approval, this project may see a wider rollout in the country.

To sum up, the survey clearly shows that connected citizens in emerging markets are happy to accept digital money from almost any issuer, with a preference for central bank digital currency. But in developed economies, respondents have very different preferences, and only limited appetite for a digital currency, even one that is issued by a central bank.

**Fig. 3.3: Developed markets not confident in tech-issued digital currency**

'How much confidence, if at all, would you have in digital money issued by major internet technology companies such as search engines and social media companies?', % of 'confident', 'not confident' and 'don't know' responses



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

### 3. PSPs well-regarded as potential issuer in emerging markets

AFTER central banks, payments service providers rank second with respondents as potential issuers of digital currency. Globally, 48% of respondents say they would place confidence in issuance by PSPs, which would be able to make use of their existing consumer bases, networks and customer-facing expertise.

In many countries, PSPs are regarded as the second-most preferable digital currency solution after the central bank, including in India, Russia, and Canada. In all cases except for Japan, PSPs are preferred as providers over tech companies, pointing to public perception of PSPs as trusted institutions. They are the second- or third-most trusted monetary service provider in all jurisdictions in this sample. At the same time, they are far more trusted by high-income groups globally (55%) and business owners (62%), than by low-

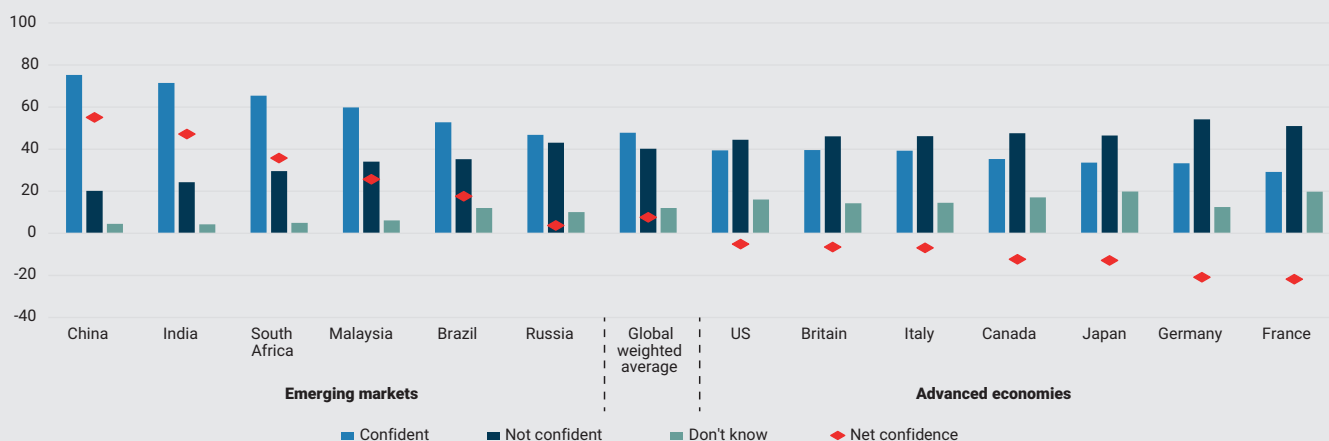
income groups or non-business owners, underscoring that work is to be done convincing marginalised groups of their monetary value.

In countries such as the US, numerous payments providers, such as Paypal, service retail payments. However, these systems are noninteroperable, limiting transfers to people on the same system. A central aim of FedNow, the forthcoming US interbank instant payments system announced by the Federal Reserve in August 2019, is to use commercial banking relationships to facilitate instant retail payments and reduce fragmentation in the payments market.

This may encourage central banks to bolster their public perception as a technology provider and currency issuer.

**Fig. 3.4: Slightly more confidence in PSP issued digital currency**

'How much confidence, if at all, would you have in digital money issued by a payments service provider such as PayPal or Apple Pay?', % of 'confident,' 'not confident' and 'don't know' responses



Source: Ipsos MORI, OMFIF analysis. Note: 'neutral' responses excluded

# 4. Lower confidence in digital money from older, lower-income and less-educated respondents

ALMOST half of all respondents over the age of 50 have little to no confidence in any institution issuing a digital currency. This age group has the least confidence in tech companies (just 28%). Over-50s much prefer (48%) the prospect of central banks issuing digital money (Figure 3.5).

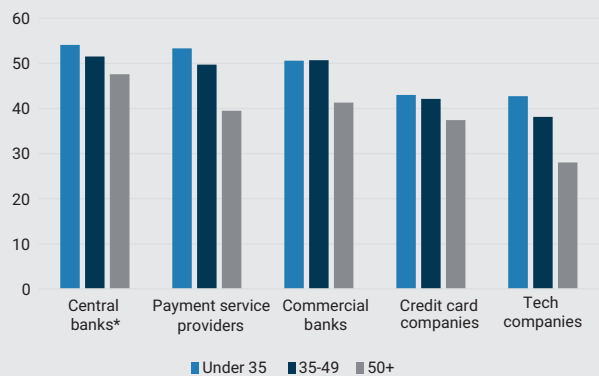
For those with lower education levels or lower incomes, confidence in any potential provider of digital currency is low. Respondents with a lower education have an average confidence of 39% in any potential issuer of digital currency, 13 percentage points lower than the average for those with higher education levels. The corresponding figure for low-income respondents is 40%, which is 10 percentage points lower than for high-income individuals (Figure 3.6). Among low-income groups, central banks remain the most favoured potential provider of digital currency, although at a relatively low absolute level of confidence.

A relatively large share of respondents (13%) say they do not know in which type of institutions they should place their confidence for digital currency issuance. The

highest share of respondents by demography responding 'don't know' are those with low incomes (18%), low education (17%) or who are unemployed (16%).

**Fig. 3.5: Stark age gaps, especially on tech**

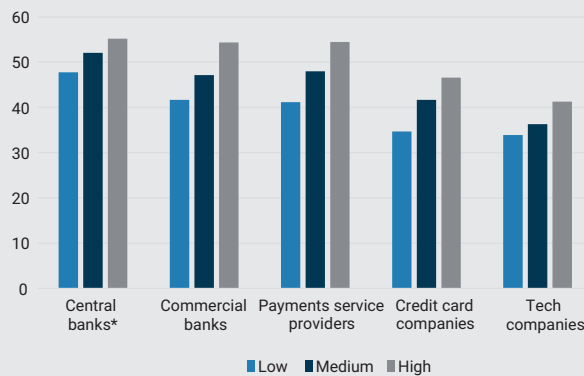
'How much confidence, if at all, would you have in digital money issued by each of the following?', % of 'confident' responses by age group



Source: Ipsos MORI, OMFIF analysis. \*Note: excludes China

**Fig. 3.6: Trust in digital currency issuers rises with income**

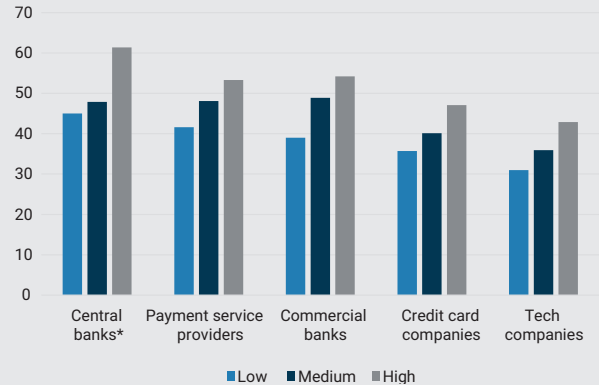
'How much confidence, if at all, would you have in digital money issued by each of the following?', % of 'confident' responses by income group



Source: Ipsos MORI, OMFIF analysis. \*Note: excludes China

**Fig. 3.7: Higher educated show greater CBDC trust**

'How much confidence, if at all, would you have in digital money issued by each of the following?', % of 'confident' responses by education group



Source: Ipsos MORI, OMFIF analysis. \*Note: excludes China



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### **AUTHORS**

#### **Bhavin Patel**

Senior Economist & Head  
of Fintech Research

#### **Pierre Ortlieb**

Economist

---

#### **Simon Hadley**

Director, Production

#### **Julie Levy-Abegnoli,**

**Sara Webb**

Subeditors

#### **William Coningsby-Brown**

Assistant Production Editor



30 Crown Place, London  
EC2A 4EB United Kingdom  
T: +44 (0)20 3008 5262 [omfif.org](http://omfif.org) [@OMFIF](https://www.instagram.com/OMFIF)