Spotlight

SHIFTING PERSPECTIVES

Cashless Economies

The Rise of Decentralized Finance: Flipping the Coin.

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Gallagher

Insights

1 **Social inequality and demographic resistance** remain challenges in the transition to cashless economies. Financial and digital literacy along with a systemic trust in physical currency may hamper cashless ambitions in the near term, until broad-scale education and confidence helps to build trust.

2 **Emerging markets have developed open payment systems,** a viable challenge to the traditional bank/card model adopted by major, developed economies and the fintech pioneers that are currently driving aspects of the payment platform change. As such, developed economies may end up adopting systems developed by emerging economies.[11]

3 **Cryptocurrency and fintech platforms have reduced appeal**—falling confidence in crypto following a series of market values leading to a $2.2 trillion wipeout and market value tumbling by 73% in 2022[14], while fintech platforms have more work to do to restore historic investor confidence.

4 **Geopolitical tensions and the desire to control international payment markets** may accelerate the race to develop payment systems in the short to medium term with major powers such as China, India and the United States introducing multilateral payment platforms, instant payment services and viable alternatives to traditional bank/card transactions.

Introduction

The concept of transitioning towards cashless economies is gaining pace during the global pandemic, with 87 countries (representing more than 90% of global GDP) exploring the potential development of central bank digital currencies (CBDCs).[1] With rapid digitzation proving to be a pervasive force of change across multiple economic sectors and the Internet of Things (IoT) offering increased accessibility to digital devices and financial data, cashless economies are becoming a realistic prospect for major and developing economies.

China, India, Norway and Sweden have made significant advances in recent years, with Norway as one example reporting 98% of their population owning a debit card[2] and over 95% using mobile payment apps to complete a mix of transaction types, and physical currency likely to become a thing of the past. As of August 2023, three CBDC projects have been launched in Jamaica, the Bahamas and Nigeria while pilots are underway in India, China, Canada, Saudi Arabia, Uruguay, Switzerland and France. And a recent report from Smarter Travel predicts that cities like Stockholm, Reykjavik, Seoul, Singapore, and several cities in China will go cashless.[3]

In theory, the promise of greater efficiencies and simpler payments are enticing. Some of the drivers towards cashless societies include increased simplicity and convenience, ease of international travel and business transactions, more efficient economic functioning through to reduced tax avoidance and tackling financial crime (fraud, money laundering, tax evasion) with increased sophistication.

While this is exciting news in a number of respects, our 3,000+ year relationship with physical currency, the readiness to switch to digital trading, and varying degrees of trust in technology and data across age groups and demographics suggest that the transition is likely to be far from straightforward and that there are a number of risks and opportunities to take into consideration.

Cashless economy headlines

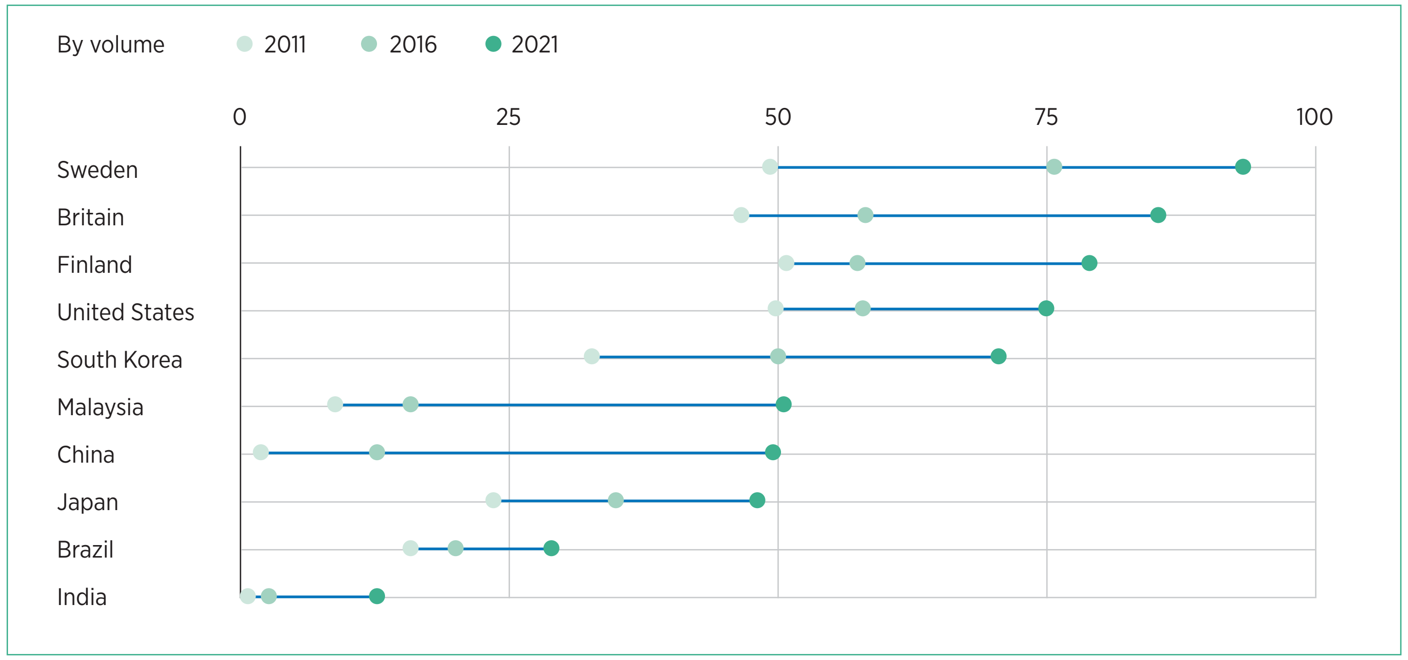
Forecasted U.S. digital payment transactional value will reach US$2,041 billion in 2023.[4]

More than 50% of UK consumers use digital wallets.[5]

India's digital payment market will triple in size to $10 trillion by 2026, while its Unified Payments Interface (UPI) is currently clocking 5.95 billion transactions in mid-2023, with Rs. 10.41 trillion value.[6]

69% of payments in the Middle East are expected to be cashless in 2023, partly influenced by regional government efforts such as Saudi Arabia's "*Vision 2030 strategy*".[7]

The digital march[11]
Non-cash payments as % of all transactions



The cashless payment pendulum swings from East to West

The COVID-19 pandemic, geopolitical tensions and a challenging macroeconomic environment as inflation and interest rates bite, has shifted the adoption cycle from 2016 when Asia pushed forward with cashless payment infrastructure building and was expected to take the lead globally. Move forward to 2021 and Europe and the United States have taken the lead.

This may be a temporary position and the pendulum will swing once again as China leads the charge to create an Asian payment system with the yuan as the primary currency.
As technology reduces currency exchange costs and opens up potential alternatives to the US dollar, Asia may step up its challenge to the West's grip on international finance. With control over payment systems comes political power and influence.

A variable transition path towards a globally cashless economy

The real momentum to transition into cashless economies happened during the global pandemic, with 87 countries exploring Central Bank Digital Currencies. Some of the drivers towards cashless societies include technological advancements, government initiatives, and changing consumer preferences.

Based on the August 2023 position presented by the Central Bank Digital Currency (CBDC) Tracker[13] (see map below), the transition towards becoming a global economy is continuing at a variable pace, with roughly 40% of countries reported as currently undertaking research and a similar percentage having reached proof of concept stage. The prospect of the world's major economies becoming cashless within the next date is open to question.

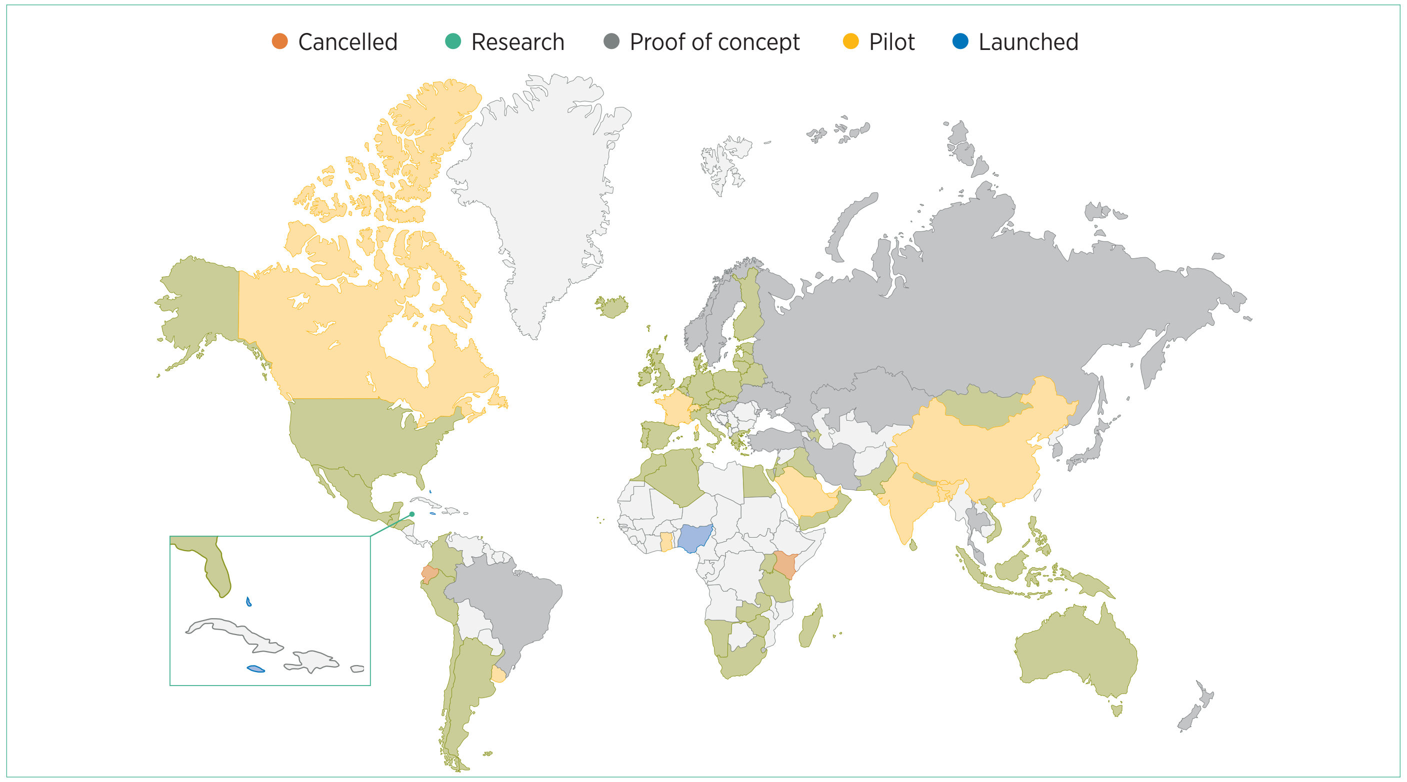
CBDCs, while promising increased speed and efficiency, require a significant shift in the scope and scale of technology and infrastructure investment. Mitigating concerns of a central banking institution holding an enormous amount of data with elevated cybersecurity risk, requires careful consideration from both an institutional and consumer perspective.

The presence of unbanked economies (1.4 billion adults in 2021[15]) and countries with a high percentage of their population without access to banking services[13], will require investment in broad-scale education and access to digital devices to enable the leap from physical currency to cashless trading. Vietnam, Morocco, Egypt, the Philippines and Mexico form part of a long list where the unbanked population percentage exceeded 60% in 2021.

Other global heavyweights such as the US illustrate the socio-cultural dynamic shaping the transition. Research undertaken by Pew Research Center[16] with 41% of Americans using digital payment only in 2022[16] (2018: 29%), with roughly 60% of high income earners (>US$100k p.a.) and the under 50 age group are steadily switching to cashless transactions, whereas lower income and 60+ age groups are bucking the trend by preferring physical cash payments.

Globally, financial literacy remains a significant barrier. An OECD-led 2020 international study highlighted only 17% of surveyed adults stating their financial knowledge was high.[8]

Transition of the global economy to cashless economies and CBDC central bank presence: August 2023[13]



Shifting perspectives

The case for adoption

Cashless economies drive unparalleled opportunities and financial inclusion

- **Financial inclusion and more effective disbursement of welfare.** With roughly 1.6 billion unbanked people worldwide, financial inclusion would eliminate barriers to accessing markets and the ability to trade more easily.[9] Governments worldwide are taking strategic steps such as exploring CBDCs and partnerships with banks to achieve their national goals. India's introduction of e-voucher platforms such as e-RUPI, redeemable without internet or card, has increased financial inclusion levels.
- **Transparency and anti-corruption.** The cash-free economy increases transparency, reduces financial crime and money laundering, and enables investment in public services. This in turn enables banks and digital platforms to expand their customer base as trust and confidence deepens in cashless transactions.
- **Reduction in crime and tax avoidance.** Increased visibility and having a digital transaction record makes money laundering, tax evasion and financial crime harder to commit.
- **Greater efficiency, convenience and simplicity.** Frictionless and lower-cost transactions are part of the upside of transitioning to cashless platforms. Less time and cost associated with handling, storing, and depositing physical currency, and easier currency exchange while travelling internationally. These benefits extend to banks and financial institutions no longer needing to store and transport physical currency and manage cash reserves.
- **Paying forward the savings from not producing physical currency (coins and notes).** In a cashless economy, the government no longer needs to produce and supply physical currency. The money saved could be used to deliver a range of social benefits including tax waivers.
- **Ease of cross-border trade and international travel.** Facilitating the ease of cross-border trade and international travel by eliminating the need for physical currency exchange, digital current transfer methods enable seamless transactions in multiple currencies, reducing conversion fees and simplifying financial interactions. Reduced processing time and balance updates, and ease of capitalizing on positive currency exchange movements will be viewed by some as a positive development.
- **AI, IoT, fintech and emerging innovations.** Disruptive technologies including AI, fintech and IoT (wearables such as smartwatches, rings and key fobs) are driving the cashless payment environment, ensuring secure and efficient financial transactions. AI and blockchain are steadily transforming the banking sector with an international regulatory framework helping the sector to adapt to emerging digital payment technologies.

The case for caution

Data security, regulatory challenges and social inequality suggest caution is needed

- **Cyber security risks.** The significantly increased pool of central data raises the exposure to identity theft and ransomware attacks due to value and sensitivity of consumer data held by central banking institutions.
- **Technology hurdles.** Cash and physical currency payments are easy to execute for smaller amounts of money, providing trust that the transaction has been completed.

Technology challenges such as poor wi-fi/network connections, software bugs, service outages and battery related issues present a range of challenges for cashless transactions that may slow down the pace of adoption for sections of the eligible cashless trading demographic.

- **Financial inequality.** Bridging a financial inequality gap in the transition towards a cashless economy is a challenging prospect, as the gap between digital natives and the unbanked, low-income and 60+ demographic widens. Dependency on digital devices, credit/debit cards and app-based platforms requires broad-scale education and support to drive adoption, literacy, and advocacy. For some letting go of physical cash will be a step too far.
- **Banking infrastructure challenges.** In a cashless economy, one of the significant shortcomings lies in the reliance on banking infrastructure. As cashless transactions increase, banks must continuously invest in upgrading their systems to handle the growing volume and ensure security. Without proper maintenance and innovation, the banking infrastructure becomes vulnerable to cyberattacks and operational failures, disrupting financial services and causing inconvenience to customers.
- **Big Brother: data privacy is a major concern.** Transactions made electronically are traceable and trackable, with a digital footprint providing detailed information about the pattern of purchases and data being collected about an enormous range of your activities, including medical conditions, political donations, personal and household consumption and general spending behaviors. While increased transparency is viewed by some as a good thing, others hold a divergent view voicing privacy concerns. The ability of a CBDC and/or government to impose mandatory controls on spending and involuntary seizure of accounts may present another hurdle to voluntary adoption of cashless transactions.
- **Security of sensitive data.** A tech enabled banking platform raises concerns around data privacy and network security. Data breaches exposing sensitive information along with fraud, identity theft and closer scrutiny of transactions are some of the concerns facing cashless banking systems. Addressing these challenges to instill deeper trust and confidence amongst consumers, and transparency by financial institutions and technology providers are integral to delivering an inclusive and resilient cashless economy.
- **Risk of overspending, over-borrowing and debt.** Risk of overspending, over-borrowing and debt. The ease and convenience of digital transactions leads to heightened risk of overspending and unmanageable debt. In the absence of physical currency it becomes easier to lose track of spending and the risk of impulsive purchases beyond an individual's means. Education, risk awareness and embedding mindful spending habits will be crucial to reducing the debt cycle.
- **Complex regulatory framework.** As the pace of digital transactions gathers increased international momentum, regulatory challenges and conflicts may arise, ranging from consumer protection and privacy issues to cybersecurity and fraud prevention. Governments and regulatory bodies will need to work together to create robust, scalable frameworks that are positioned to navigate a complex and evolving regulatory environment.
- **AI, IoT and fintech.** While the cashless economy brings numerous benefits, integrating AI, IoT and fintech also presents drawbacks. Relying on digital platforms exposes us to risks from malicious actors. Data collection raises privacy concerns, and technical glitches may lead to disruptions. It is crucial to prioritize cybersecurity measures, privacy protections, and regular monitoring is vital.

The UK, 50+ age group retain a strong preference for cash/physical currency.[10]

10 million people

18% of UK adult population

5 million (51% of the 10 million) would struggle to cope in a cashless society

Spotlight

Major risk scenarios in a cashless economy

The transition to a globally cashless economy presents a range of risk scenarios. Part 2 of the Cashless Economy series opens this thinking out future. Here we provide an overview of three scenarios arising from technology, market confidence and geopolitical factors:

1 Cloud outage, economic shutdown and widespread business interruption

- **Inability to access and process digital payments,** disrupting transactions and causing inconvenience.
- **Supply chains severely impacted,** disruption to flow of essential goods & services.
- **Short-term financial hardship**
- **Critical financial data and records compromised or lost.** Significant data privacy and security, heightened fraud risk.
- Power outages and natural disasters are the main threats to the cashless economy.

Mitigation strategy:

- Software/hardware malfunction claims at point of purchase/ transaction are likely to increase.
- Liability claims related to power outages, cyberattacks and natural disasters that result in digital payment system shutdowns or malfunctions may occur.

2 Digital run on the bank

- Rapid cycle of digital money transfers leads to **ripple effects on the world's financial markets** as confidence falls.
- **The race to transfer digital funds to other institutions,** exacerbating panic and straining the financial system further.
- **Domino effect** across the digital banking system intensifies the issue, leading to liquidity shortages, financial instability, and potential collapse of multiple CBDCs.

Mitigation strategy:

- Strengthening regulatory frameworks.
- Adequate capitalization.
- Implementing robust contingency plans.
- Education and awareness—safety measures and protections to avoid unnecessary panic.

3 Hostile state targeting a banking system — economic shutdown / capital market shockwaves

- **Economy rendered inoperable,** trading.
- **Restricted access to capital,** creating liquidity challenges and restricted trading ability.
- Cashless economies become weaponized by hostile states.
- Sharp currency devaluation.
- "Disrupt or destroy" tactics operated by hostile state perpetrators.

Mitigation strategy:

- Critical event response.
- Introduction of a new product segment for cyber insurance.
- Cyber regulation and risk controls tightened.

Future trends shaping a cashless global economy

The future of a cashless economy will bring about significant trends that will reshape how we handle transactions and interact with money. Here are some key trends to look out for:

- **Growing Adoption:** Cashless transactions will continue to soar, with digital payments like mobile wallets, contactless cards, and online payment platforms.
- **Biometric Authentication:** Fingerprints, facial recognition, and voice recognition will become more widespread to enhance convenience and boost the adoption of digital payments.
- **Internet of Things (IoT):** You can expect to see more connected devices, from smart appliances to wearable devices, facilitate cashless transactions.
- **Blockchain and fintech:** This technology will continue to shape the cashless economy as governments and financial institutions explore its potential. Decentralized digital currencies like Bitcoin and Ethereum offer enhanced security, transparency, and efficient cross-border transactions.
- **Open payment systems:** Using Open Banking to accept payments and enable customers to pay with a real-time bank transfer. Safer, faster and more cost effective banking offering multiple benefits to household customers and businesses.
- **Enhanced Data Analytics:** The shift to digital payments generates vast data. Leveraging advanced analytics, businesses and governments can gain valuable insights into consumer behavior, spending patterns, and economic trends.

Closing thoughts

Cashless or hybrid? The future of cashless from both sides of the coin

The future of cashless societies looks promising with IoT integration, smart cities, and decentralized finance offering convenience and efficiency while curbing financial crime and the confidence to transact with increased ease and convenience.

Building trust and accountability for central banking institution while investing in robust cybersecurity defense are critical to transitioning economies and stimulating economic growth. While a cashless society may not be the panacea many are hoping for, there is a growing expectation and readiness that it will become part of the future plan.

Insurance and risk management practices will play a central role in enabling many aspects of the cashless economy transition, and continue its role as a cornerstone of the commercial world.

By embracing the advantages and opportunities presented by a cashless economy while remaining aware and alert to evolving risks, there is general cause for optimism in what the future may hold. That said, there is still considerable work to be done to translate the historic legacy of physical currencies to a digital ecosystem.

Citations

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Spotlight

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Welcome to Spotlight—presenting insights, shifting perspectives and reframing evolving global trends.

Presenting the issues, opportunities and risks that are transforming the way we do business, from industry hot topics and emerging growth markets through to perspectives on the big questions shaping our world today, this article provides actionable insights and analysis to inform strategic decision making and power onward growth plans.

The Spotlight content series is designed for company executives, risk managers, industry operators and business owners looking to reframe pressing issues, shape strategy and pursue their future ambitions with confidence.

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