

Current Trends in Physical Value-Transfer Methods

The use of **physical money and value-transfer instruments** is evolving. Traditional cash (banknotes and coins) still dominates in many daily transactions, but usage is declining globally. For example, global cash usage in 2024 was only ~80% of its 2019 level and is falling about 4% per year ¹. In card-centric markets (e.g. the US), cash payments now account for only about 5% of consumer spending by value ². Even so, cash remains important as a *backup* and "safe haven" – central banks report steady public demand for cash for emergencies or savings ³. Surveys in advanced economies find >90% of consumers intend to keep using cash indefinitely, citing its utility during power outages, universal acceptance (by small merchants, charities, farmers' markets), and as a budgeting tool ⁴ ³. Usage patterns vary widely: in parts of Asia, Africa and Latin America, cash is still used for most daily purchases, especially among the underbanked. In contrast, places like India, Malaysia and Indonesia are rapidly digitizing: instant-payment adoption is projected to cut India's cash share of consumer spending from ~23% in 2024 to under 10% by 2028 ⁵. (Germany and Japan, by contrast, retain stronger cash traditions with slower declines.)

Precious metals (gold, silver, etc.) are no longer everyday money but remain significant stores of value. Gold in particular has seen record prices in 2024 amid geopolitical uncertainty ⁶. Central banks (e.g. India, Türkiye, Poland) have aggressively added gold to reserves, treating it as a safe-haven asset ⁶. In many emerging economies, individuals also hold gold jewelry or bullion as a form of savings. However, gold/silver are *not* used for routine transactions except in niche cases (e.g. gifting or in places of hyperinflation). **Commodity-money** examples (like salt, tobacco, or even cigarettes or fish) are mostly historical curiosities. Indeed, "virtually anything can serve as money" if widely accepted – prisons have famously used cigarettes or even canned mackerel as currency when official money is scarce ⁷. Today, such commodity-currencies appear only in extreme situations (e.g. cigarettes as informal money in prisons or collapsed economies ⁷).

Modern Semi-Physical Forms

Prepaid cards and gift cards are widely used as semi-physical value carriers. Gift cards (retail or restaurant) are a common gift and incentive; prepaid debit cards are used by parents and by unbanked individuals to make payments without a bank account. For example, in the US about 5.9% of households held a prepaid card in 2023 (down from 6.9% in 2021), and use among *unbanked* households fell from 32.8% (2021) to 21.6% (2023). These cards are popular worldwide for travel (preloaded foreign currency cards) and for government or corporate disbursements in regions lacking banking infrastructure. The global prepaid/gift-card market is large (hundreds of billions USD annually), and trends suggest continued growth, though often as part of broader digital payment ecosystems (e.g. linked to mobile wallets).

Physical cryptocurrency wallets (hardware "cold" wallets or printed paper-wallets) are another semi-physical form. These devices store private keys offline (e.g. Ledger, Trezor devices) and are used by crypto investors who prioritize security. While owning a hardware wallet is still a minority behavior (industry data suggest only ~22% of crypto users store coins in cold wallets, vs ~78% who use "hot" online wallets ⁸), adoption is rising as crypto ownership grows. Retail hardware-wallet revenue (~\$469M in 2024 ⁹) is projected to grow sharply, reflecting both individual and institutional demand for offline storage. In

practice, however, most everyday crypto transfers occur via digital apps; physical wallets serve mainly as long-term vaults rather than payment media.

Stored-value tokens such as casino chips or transit tokens are used in closed systems. Casino chips in gambling halls are basically cash alternatives within the casino: high rollers or casual gamblers can cash chips in and out for real money. Similarly, amusement-park or arcade tokens, and old-style subway/bus tokens, are pre-loaded value instruments. These tokens remain relevant where digital payment acceptance is limited or to restrict value to a defined ecosystem. For example, casinos worldwide still issue chips (a \$462B global casino gaming market in 2025), though online gambling and cashless terminals are slowly reducing chip usage. Likewise, most transit systems now use smart cards or mobile apps, but some services still offer token or cash fare options in areas with low technology penetration. In summary, stored-value tokens are **highly specialized**: they see significant use within specific industries (gambling, local transport, loyalty programs), but carry negligible value beyond those niches.

Informal and Alternative Systems

Barter systems (direct exchange of goods/services) have re-emerged in certain contexts. Typically used in emergencies or tight-knit communities, barter covers anything from neighborhood swap events to organized barter networks. Historical examples include barter clubs in Greece during the 2010s debt crisis, and widespread barter in post-war or hyperinflationary economies ¹⁰ ¹¹. Today, modern barter may be informal (neighbors trading skills) or internet-enabled (online barter platforms, local community exchange). It's not a main mode of commerce in normal times, but provides flexibility when money loses value or liquidity is scarce. For instance, Venezuela's recent currency collapse led many to barter for food and medicine ¹⁰. Barter persists as a resilience strategy where formal banking fails or where trust/tradition favors direct exchange ¹⁰ ¹¹.

Hawala and other informal value transfer networks operate by trust and physical payment, bypassing official banking. Hawala is traditional in South Asia, the Middle East and parts of Africa. A sender pays a local hawaladar (broker) cash, and a counterpart in the destination delivers cash to the recipient – often with no formal records. This system serves migrants and traders when banking is expensive or unreliable. Notably, in Afghanistan an estimated 90% of transactions (even before recent turmoil) flowed through hawala networks ¹². Hawala remains common for remittances to rural areas, to avoid currency controls, or when banking infrastructure is weak. (Worldwide, informal remittances likely exceed recorded ones by ~50% ¹³.) The downside is lack of transparency and regulatory oversight, which raises concerns about money laundering. Despite this, hawala and similar hundi networks continue to be used wherever trust-based cash transfer is needed – for example among the Pakistani and Bangladeshi diaspora, Middle Eastern migrant workers, and in conflict zones cut off from formal finance ¹².

Local and community currencies are printed (or digital) currencies issued for use in a defined area. Famous examples include the Bristol Pound (UK) and BerkShares (Massachusetts). These complementary currencies aim to boost local trade by keeping money circulating in the community. Their usage is always limited to participating shops/participants. In practice, local currencies are very niche: the Bristol Pound had a few thousand users at its peak and ceased in 2020 14. A few dozen towns worldwide experiment with such systems, but they typically remain small due to scalability and regulatory challenges. In our context, local currencies are an alternative physical form of value, but **very small-scale** and rarely significant in the broader economy.

Method	Main Users / Use-Cases
Cash (banknotes, coins)	General public, especially <i>older, rural, or unbanked</i> populations. Used for daily purchases, small transactions, and as emergency/back-up money ² ⁴ . Cash is also used by communities and charities where cards are impractical.
Precious metals (gold, silver)	Investors and central banks (worldwide) for reserves and savings; also savers in parts of Asia and the Middle East (gold jewelry as wealth storage) 6. Rarely used directly for commerce today.
Commodity items (tobacco, etc.)	Very niche/exceptional. Examples include cigarettes or mackerel used as money in prisons 7, or essential goods used informally in hyperinflation (Weimar, Venezuela).
Prepaid & gift cards	Retail consumers (as gifts, incentives), parents, and unbanked people. Used for gift-giving, travel cash, payroll (payroll cards), or limited retail purchases. ~5–6% of US households use prepaid cards.
Physical crypto wallets	Crypto asset holders and fintech firms. Hardware "cold" wallets (e.g. Ledger) for long-term storage of crypto. Used mainly by tech-savvy investors or institutions for security; still far less common than software wallets 8.
Stored-value tokens (chips)	Casino patrons (chips), game/arcade players, public transit users (tokens/smartcards). Purpose-built systems (e.g., Las Vegas chips, subway tokens) for confined payment networks; not widely used outside those venues.
Barter networks	People in crisis or close-knit communities. E.g. neighbors exchanging goods, organized swaps in economic downturns (Greece, Venezuela) 10 11. Used when money is scarce or mistrusted.
Hawala/informal remittances	Migrant workers, traders across Middle East/South Asia/Africa. Sends funds via cash-brokers on both ends 12 . Used for family remittances or trade when formal money transfer is costly or blocked.
Local/community currencies	Local businesses and residents in specific towns. E.g. Bristol Pound supporters. Used only within a community to support local spending. Always limited scale, more of a local token than mainstream money.

Digitization, Mobile Payments and CBDCs

Global digitization of payments is eroding many physical modes. The rise of instant mobile payments and cards has taken share from cash and checks ⁵ ³. In developing markets with low card use (India, Southeast Asia), mobile wallets and QR-code payments have rapidly displaced cash for everyday purchases ⁵. In developed economies, real-time bank transfers and contactless cards now cover most transactions. According to the BIS, "digital payments have not yet fully replaced cash," but growing infrastructure and regulations (open banking, real-time rails) are pushing further adoption ³.

Central banks are responding: as of 2023 roughly 93% of surveyed central banks were researching or developing a **central bank digital currency (CBDC)** ¹⁵ . A few countries (Bahamas, Jamaica, Nigeria) already have live retail CBDCs, and others (India, Ukraine, China) are in pilot stages ¹⁶ ¹⁷ . The main driver

is a decline in cash use coupled with demand for faster/easier cross-border payments 18 17 . However, many central banks tread cautiously: concerns over privacy and financial freedom mean most are not yet phasing out cash 19 18 . For example, in 2023 the Reserve Bank of India continued piloting a digital rupee alongside remaining committed to cash availability, and the European Central Bank plans a digital euro only by the mid-2020s 17 .

Mobile money services (e.g. M-Pesa) have similarly filled gaps where banks are scarce. Globally, mobile money accounts now exceed two billion, with \$4–5 billion transferred daily ²⁰ (especially in Africa and South Asia). This reduces reliance on physical cash for many consumers (farmers buying inputs via phone wallet, for instance). Yet, digitization also raises new roles for physical forms: e.g., hardware crypto wallets serve as analog *vaults* for digital money, and prepaid cards can be loaded from apps or kiosks, blending the physical and digital.

Overall, digitization is **shrinking but not eliminating** physical methods. BIS notes that "cash remains steady, both as a means of payment and as a safe haven" ³. Consumer surveys reinforce that even techsavvy individuals value cash's offline reliability: ~60% of U.S. consumers cite cash "just in case" for outages or unbanked needs ²¹. In effect, digital systems displace some cash use, but cash (and other physical means) survive where privacy, resilience or simplicity are needed.

Future Outlook: Role, Niches and Risks of Physical Methods

Looking ahead, physical value-transfer methods are expected to **persist in niche roles**, even as digital grows. Cash will likely shrink in wealthy countries but remain vital elsewhere. For example, many households – especially the unbanked, elderly or rural – will still need cash or cash-like alternatives for decades. Surveys show over 90% of American consumers plan to keep using cash, often as a hedge against system outages or as a spending tool ⁴. Central banks themselves acknowledge that fully phasing out paper currency is years away; PwC reports "the use of central banks' cash is in decline, and new digital money use cases will emerge" – but does not foresee an immediate cashless world ¹⁸.

Physical **precious metals** will remain a global store of value. Gold and silver are likely to stay in demand as safe assets: central bank gold reserves have been increasing steadily ⁶. However, gold coins or bullion will rarely be used for ordinary payments except by specialists; instead, they underpin trust in the monetary system.

Prepaid and gift cards are expected to grow with travel and retail, potentially linked to digital wallets. As more people travel internationally, reloadable currency cards may serve as a convenient physical alternative to cash. Regulatory changes (e.g. open-loop gift card networks) could expand their use. But smartphone payment apps and CBDCs might eventually subsume many simple prepaid functions.

Crypto hardware wallets will become more common as cryptocurrencies mature. If digital assets integrate into finance, individuals and institutions may increasingly use hardware wallets for self-custody. That said, reliance on hardware wallets is limited by user friendliness; many users will still keep money on exchanges or apps.

Stored-value tokens in industries like gaming may gradually be replaced by digital accounts, but probably not totally. Casinos could move to chipless systems (e.g. RFID casino cards), but will retain secure vaults of

funds. Local transit systems will likely finish phasing out paper tokens in favor of smartcards or mobile tickets, except where fraud is a serious concern.

Barter and other informal systems will resurface during crises. For instance, if a currency collapses (hyperinflation, sanctions), communities have shown they will revert to barter or alternative monies. Barter itself may see revival among survivalists or in disaster scenarios (where neither electricity nor cash is reliable). **Hawala and informal networks** could decline if digital remittance costs plummet, but as long as some regions remain underserved by banks or suffer financial disruptions (bank freezes, sanctions), trust-based cash transfer will persist. Governments may try to regulate hawala, but its resilience makes it hard to eliminate.

Lastly, **privacy and resilience niches** will keep some physical channels alive. Cash and physical gold offer anonymity, which many users (and criminals) value. CBDCs and digital payments, by contrast, are easily traceable. Thus, even a future with widespread digital money will likely see a black-market or subculture that clings to cash, barter, or even cryptocurrencies for privacy. In remote or disaster-affected areas, the simplicity of cash (or even livestock, seeds, etc.) may outlast complex systems. In sum, while the global trend is clear – **digitization and central bank digital currencies will capture most routine transactions**1 18 – physical forms of value transfer are expected to endure in specific roles: as **private, resilient, off-grid** alternatives. Their future relevance will hinge on use-cases like privacy (personal freedom), crisis resilience (no-power or no-network scenarios), and inclusion (serving populations that digital finance does not reach) 21 19.

1 2 5 McKinsey's Global Payments Report 2024 | McKinsey

https://www.mckinsey.com/industries/financial-services/our-insights/global-payments-in-2024-simpler-interfaces-complex-reality.

3 Digital payments make gains but cash remains

https://www.bis.org/statistics/payment_stats/commentary2301.pdf

4 21 2023-sdcpc-final-052324 cg typos revise--changes tracked

https://www.atlantafed.org/-/media/documents/banking/consumer-payments/survey-diary-consumer-payment-choice/2023/sdcpc_2023_report.pdf

6 Precious metals surge to all-time highs

https://blogs.worldbank.org/en/opendata/precious-metals-surge-to-all-time-highs

7 The Nature and Creation of Money

https://saylordotorg.github.io/text_principles-of-economics-v2.0/s27-the-nature-and-creation-of-mon.html

8 9 Hardware Wallet Market Statistics 2025: Explosive Growth • CoinLaw

https://coinlaw.io/hardware-wallet-market-statistics/

10 11 The Revival of Barter | RECOIL OFFGRID

https://www.offgridweb.com/preparation/the-revival-of-barter/

12 Migrant workers sent \$650bn overseas last year – what it means | Migration | Al Jazeera

https://www.aljazeera.com/features/2024/8/10/migrant-workers-sent-650bn-overseas-last-year-what-it-means and the statement of the statement

13 Remittances: Funds for the Folks Back Home

https://www.imf.org/en/Publications/fandd/issues/Series/Back-to-Basics/Remittances

14 Bristol pound - Wikipedia

https://en.wikipedia.org/wiki/Bristol_pound

15 16 17 18 19 PwC Global CBDC Index and Stablecoin Overview 2023

https://www.pwc.com/gx/en/financial-services/pdf/pwc-global-cbdc-index-and-stablecoin-overview-2023.pdf

²⁰ The State of the Industry Report on Mobile Money 2025 - GSMA

https://www.gsma.com/sotir/