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National Security and Inclusion in a Web-Based, Tokenized Global Economy

By

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9 July 2025

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Executive Summary

1. Introduction

- After the events of September 2001 United States government led a consortium of jurisdictions to refine the global standards related to anti-money laundering (AML) and better address terrorist financing in an evolving financial services sector.
- This resulted in the largest growth of financial crimes compliance (FCC) and know-your-customer (KYC) standards yet also expanded the definition of 'covered institutions' and the obligations of financial services companies, effectively rendering them de facto police forces.

2. The U.S Dollar

- The ongoing and future primacy of the US dollar is not a given. The question of how we can extend the benefits of the U.S. dollar and American capital markets to those who need it most remains a critical national and economic security priority.
- Payment apps such as WeChatPay, Alipay, and their e-CNY are increasingly mainstream and represent viable alternative examples (among others) to U.S. dollar-enabled payment mechanisms.

3. The Birth of Decentralised Financial Services

- The birth of decentralized finance was grounded in the desire to create digital value and infrastructure entirely native to the internet. However, governments have tried to ensure that innovators also put in place the critical controls to protect consumers and preserve the integrity of the financial system.
- Alternative payments are easier than ever before, which means that both well-intended innovators and countries, as well as anti-democratic and criminal entities, can equally drive their own agendas.

4. Enabling Inclusion Through Strengthened Governance, Risk and Compliance Tools

- Alternative financial services are built on distributed ledger technologies (DLT), including blockchain technology, whose underlying attributes enhance the core elements of financial system integrity. They also provide the appropriate tools for law enforcement and regulators to proactively combat and interdict financial crimes and other forms of exploitation and lack of controls in the traditional financial services marketplace.

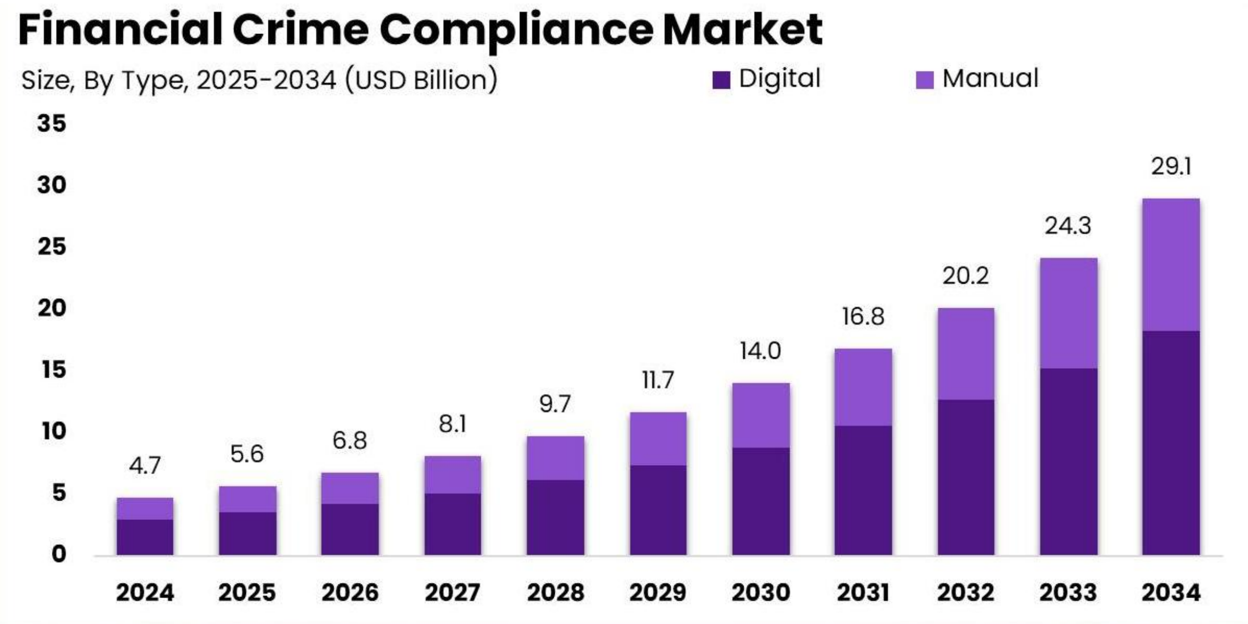
5. Leveraging Virtual Assets to Advance National and Economic Security

- Denying access to the U.S. dollar has, to date, been the primary mechanism to persuade behavior change, and/or block activities carried out by illicit actors and rogue states. However, these 'tools' are weakening in effectiveness as alternative, nontraditional and decentralized financial services (Defi) propagate; we must think differently.
- The power of DeFi services and the ability to conduct web-based tokenized transactions provides both opportunities and challenges in advancing national and economic priorities. In particular U.S. dollar-backed payment stablecoins, tokenized deposits, appropriately designed CBDCs (non-surveillance, etc.), and web-native financial services—give us a foundation to embed self-governance and compliance into these platforms while extending the reach of U.S. markets and its economic benefits.

6. Conclusion

- In the face of very real alternatives to the historically U.S.- dollar dominated global trade and finance, now is the time to capitalize on blockchain enabled services that to date have been dominated by U.S. companies.

Key Picture: Digital and Manual Financial Crime Compliance Market Forecast (2024-2034)



Source: market.us. The market will grow at CAGR of 20%. The forecasted market size for 2034 in USD is $29.1 Billion.

1. Introduction

Shortly after the tragic events of September 2001, the United States government led a consortium of jurisdictions to refine the global standards related to anti-money laundering (AML) and better address terrorist financing and other financial crimes. These efforts resulted in the largest growth of financial crimes compliance (FCC) and know-your-customer (KYC) standards, monitoring, and other controls in modern history.

However thoughtfully intended, this global growth expanded the obligations of financial services companies, effectively rendering them de facto police forces tasked with identifying and rooting out illicit and/or exploitative behaviors in the industry. This is a role traditional financial services have been ill-equipped to play, but nonetheless were forced to take in the face of new enforcement measures requiring these institutions to determine the level of risk associated with their customers, products, services and footprint.

Further, as Western nations and regions (like the U.S.) continued to lead (and dictate) the manner and pace of the global world order—both financially and economically—more emerging markets started recognizing the unequal nature of the playing field. Too many have been deprived of the purported strengths of the U.S. economy, which include open and fair markets, equal opportunity and access to essential services, and the protections that the American banking system and the U.S. dollar offer.

Arguably, the expansion of 'enforcement-centric' financial services oversight has caused several critical challenges to regulated financial services that are detrimental to the U.S.' national and economic security:

- **Slower pace of innovation:** Many traditional financial services companies are continually forced to weigh the consequences of new innovations, products, services, and technologies in the face of a regulatory lag in understanding how these may otherwise be beneficial, instead considering them 'too risky.' This lag results in significant delays in getting products to market even when they bring great opportunities for financial inclusion, and importantly systemic consumer protection and integrity controls that traditional financial services continue to struggle with.
- **Barriers for new market participants:** Many new entrants to financial services—especially nonbanks, payments companies, financial technology companies, and virtual asset service providers—are often automatically considered higher risk by traditional banks and regulators alike, and have faced costly

regulatory burdens to entry associated with licensing and access to traditional banking and payment rails.

- **Promotion of antiquated technologies:** Traditional institutions and processes have remained the default go-to by governments when providing economic stimulus, critical financial assistance, and support through antiquated technologies that exacerbate fraud, leakage, and waste (as made evident during the Covid pandemic). US Governmental authorities have more recently been more open to financial infrastructure modernization efforts—including for government benefits and operations—yet adoption and enablement has remained slow.
- **Under-leveraged digital literacy:** Growing digital literacy and adoption (in the U.S. and across the globe) is under-leveraged by financial innovation, wasting the potential for financial inclusion and ultimately limiting the reach of U.S. foreign and financial policy.

At the same time, the last 20 years have seen an exponential rise in innovations within alternative financial services that address the myriad challenges facing traditional financial services, including:

- Facilitating equitable and secure financial access to secure accounts/wallets and payments for marginalized populations.
- Enablement of greater liquidity and settlement mechanisms between counterparties—including cross border and in both retail and wholesale use cases.
- Ensuring efficient client verification and monitoring to prove validity and prevent identity fraud or association with illicit actors and enhance broader know your customer/business (kyc/kyb) controls that enhance financial system integrity as well as personal privacy.
- Protecting sensitive personal and economic information associated with financial market participants.
- Enabling real-time global payments and settlements between counterparties that currently rely on multiple third-party intermediaries (often extractive) that decrease the ultimate value of transactions and cause delays in the delivery of funds.

2. The Historic Strength of U.S. Banking and the U.S. Dollar

The U.S. dollar has served as the global reserve currency since the 1940s, and as such is a baseline store of value and a pricing instrument for goods and commodities, governments' balance of payments and settlement of accounts, and more. As a result, the U.S. dollar accounts for nearly half of global debt securities in the world (by both private and public organizations), and is a settlement instrument for nearly half of global trade and payments. It also accounts for nearly two thirds of foreign exchange reserves held by governments.

The strength of the U.S. dollar has determined global liquidity, the price of currency through U.S.-based interest rates, and in several countries is more trusted than local fiat currencies given issues related to inflation, corruption, rule of law, and commercial demand. The U.S. has historically been an attractive capital market to raise money and remains one of the most attractive proponents of innovation and entrepreneurship. Transactions that need to be settled or conducted using U.S. dollars must be done via the U.S. financial system or institutions connected directly to U.S. financial institutions (and therefore under U.S. regulatory oversight).

However, we know that ongoing U.S. dollar primacy is not a given. The question remains of how we can extend the benefits of the U.S. dollar and American capital markets to those who need it most—thereby reinforcing the positive benefits and attractive qualities of the U.S. economy well beyond its borders. Access to U.S. financial markets is part and parcel of our country's “value proposition” to the international marketplace and serves as a central tenet to our foreign policy. But how can we do this amidst a global innovation environment that is characterized by actors that don't necessarily share our commitment to democratic principles?

China and Russia, for example, continue to create financial alternatives to limit their historic reliance on the U.S. dollar. China, through its Belt and Road Initiative, and aggressive investment and engagement strategy internationally (in particular in emerging markets), has deployed millions of dollars in infrastructure projects throughout emerging and frontier markets. Using web-based platforms, China aims to enable payments and tokenized value that are native to their own proprietary technology stacks. This is under the backdrop and retreat of many U.S. companies in the face of pressures by U.S. policies that have been more ‘punitive’ in nature, denying access to U.S. dollar opportunities via sanctions and other more coercive measures.

Payment apps such as WeChatPay, Alipay, and their e-CNY are just a few examples that are increasingly mainstream and, if adoption continues, represent viable alternatives to U.S. dollar-enabled payment mechanisms. The problem, however, is that China has deliberately embedded surveillance into the application of its digital tokens—coupled with its long-standing policy to advance and grow Chinese innovation and national champions around the globe and across major sectors such as finance and technology—ad running counter to democratic values of an open, safe and private and globally interoperable financial system.

Russia, similarly, has been developing an alternative to SWIFT, called the System for Transfer of Financial Messages (SPFS) and more recently has promoted the use of virtual assets for cross-border trade to further evade the impact of U.S. and international sanctions against it.

There are many examples of this strategy over the last few years, as state-owned or affiliated organizations (oligarchs tied closely to the Putin regime and other State and non-State actors) are leveraging financial technology, infrastructure, connections and support to advance antidemocratic values and undermine burgeoning democracies such as Ukraine.

3. The Birth of Decentralized Financial Services, Blockchain and Web-Based Financial Services

In the last several years, we have seen the birth of decentralized finance (DeFi) applications built with distributed ledger technology (DLT) including private and public blockchains. The inception of this technology was grounded in the desire to create digital value entirely native to the internet, whereby its storage and transmission could be universally accessed, and such enablements were not subject to the power or hegemony of centralized/state-based systems. However, like any other regulated financial services, governments have tried to ensure that innovators also put in place the critical controls that protect consumers and preserve the integrity and stability of our financial system.

The promise of virtual assets began amidst an understandable desire by many to increase the prevalence of self-regulating financial instruments accessible online and through mobile applications, and to eliminate rent-seeking that has largely been ‘anointed’ by governments and/or extracted fees and exacerbate financial exclusionary practices. Early enthusiasts looked to decentralize an economic system plagued with imbalanced centralized controls and a handful of extractive 'intermediaries' that cost people and businesses time and money. The security and inclusivity weaknesses in centralized finance are continually addressed by third-party solutions built to legacy technologies. These solutions may be sufficient for centralized regulators and financial market supervisors but are proving to be limited and costly in an increasingly globalized and connected world.

Additionally, ensuring consumers' private, personal, and economic data are protected, that service providers adhere to strict ethical standards, and the preservation of financial system integrity are all equally important to reinforce in these new alternative channels. The good news is that the very technology on which modernized web-based applications are being built has a number of attributes that enable safe and equitable access as well as accountability, security, essential privacy controls, and compliance.

We are in the middle of a revolution in financial services fuelled by new technologies native to the internet—enabling peer-to-peer (P2P) applications, digital wallets that can be 'downloaded' anywhere with an internet connection, crypto currencies, stablecoins, and even central bank digital currencies (CBDCs). Alternative and web-based payments are easier today than ever before, which means that both well-intended innovators and countries, as well as anti-democratic and criminal entities, can equally drive their own agendas that may undermine our collective national security.

Regardless of the motivation behind these alternatives, they reinforce several stark realities:

- Blockchain and web-based innovations are here to stay and will only grow. Institutional adoption has continued to grow exponentially, and enterprise grade solutions are growing apace.
- Alternative and fast-growing emerging payments technologies, including those that are native to the web and leveraging blockchain technologies are borderless by design, and therefore practically borderless in their supervision.
- Ensuring borderless financial systems remain committed to security, transparency, and safety will require embedding incentivized self-governance and modernized risk and compliance controls, which will differ from those applied to traditional banks and financial intermediaries.

Indeed, we must now look at how these innovations not only help deliver on the promise of economic prosperity, but also how they reinforce our commitment to collective security and democratic principles of equitable access, extending the promise and reach of the U.S. dollar across the globe. In other words, strong governance and compliance controls are part and parcel—not a tradeoff—of driving more inclusive and secure finance globally.

4. Enabling Inclusion Through Strengthened Governance, Risk and Compliance Tools

Alternative, decentralized, web-native financial services applications and cryptographically tokenized value systems are built on DLT or blockchain technology, whose attributes enhance the core elements of financial system integrity and essential AML and consumer protections that are required to enable equitable and secure access. Further, they provide the appropriate tools for law enforcement and regulators to proactively combat and interdict financial crimes and illicit/malign actors who perpetrate them. We have already seen such applications benefit regulatory oversight and targeted counter-illicit financial activities from U.S. and global regulators, law enforcement and other bodies. Blockchain's underlying attributes reaffirm the core principles of security and inclusivity:

- **Distributed**: Blockchain creates a shared system of record among network members, eliminating the need to reconcile disparate ledgers.
  - Transactions via blockchain networks are ultimately accessible via secured channels for audit and tracking purposes. This can be very helpful for both client and transaction- related data, protecting KYC (identity) data between corresponding financial intermediaries.
- **Immutable**: Consensus is required from all members and all validated transactions are permanently recorded. Even a system administrator cannot delete or alter a transaction.
  - Transactions can be recorded for auditability and monitoring. The settlement functionality can facilitate near real-time payments between counterparties vs. a 3-5- day settlement times via traditional channels. Transaction history and specifics cannot be altered once inputted, which means the associated identities of senders and receivers of a transaction can be verified as associated with the transaction itself.
  - The ledger's immutability benefits ongoing client and transaction monitoring, increasing process efficiencies and reducing costs associated with compliance activities. It also aids law enforcement and regulatory investigations, which, in the case of financial crimes, often take years to process and adjudicate. Access to an immutable transaction ledger provides a tremendous tool to 'follow the money,' which is central to combatting money laundering, terrorist financing, and other economic crimes. In certain instances, as more malign actors—individuals as well as nation states and parastatals—transact in virtual assets, our ability to trace activities from petty theft to weapons proliferation are greatly enhanced when transactions are undertaken over blockchain.
- **Privacy Enhancing**: While transactions on public blockchains enable a transparent look into transaction history and the movement of funds between wallets, underlying sensitive personal identifying information can be protected.

  - Digitally verifiable credentials and decentralized identity mechanisms (DIDs) related to individuals and businesses associated with wallets and transactions on a public ledger are easily verifiable without the need for disclosure to multiple parties. This provides protection against identity theft and fraud, while enabling essential consumer controls and increasing protection from data breaches, while bringing modernized verification tools not only at the time of onboarding clients but also in enhancing dynamic and ongoing monitoring tools and customer information programs (CIP).
  - KYC and associated AML controls to verify and validate wallet holders and transaction counterparties can be better served with 'near-instant' verification, solving for the costs and inefficiencies that exacerbate financial exclusion and hamper investigative efforts.
  - Consumers are better able to control their own personal and economic data, allowing its use only when there is need. Traditional intermediary-based financial transactions do not offer that same privacy, and remain 'honey pots' of concentrated personal, financial and transaction data that can be exploited. Further, artificial intelligence tools (AI deep fakes, agentic AI) are introducing new threat vectors.
- **Permissioned**: Each member of the network must have access privileges, and information is shared only on a need-to-know basis between network nodes.
  - Information regarding the transaction origin(sender)and recipient can be permissioned between nodes for easy and secure access without unauthorized disclosure to third- parties.

These underlying attributes are not only a boon to enforcement efforts in protecting financial ecosystems, but these are the same tools that enable secure and equitable access to financial services themselves—including and especially between cross-border payments and financial market ecosystems as well as P2P platforms. When coupled with the power of the U.S. economy and its innovation engine, America's foreign policy goals can be realized through virtual assets in ways never before thought of.

5. Leveraging Virtual Assets to Advance National and Economic Security

The U.S. has long driven its financial and economic power through enforcement-led strategies meant to identify and target malign actors through financial touchpoints to the U.S. economy. Denying access to the U.S. dollar has, to date, been the primary mechanism to persuade behavior change, and/or block activities carried out by such actors. U.S. sanctions and other tools in our financial crimes arsenal (e.g. use of Section 311 of the USA PATRIOT Act) have traditionally revolved around cutting off access to the U.S. economy, capital markets, and the U.S. dollar itself.

Traditional financial crimes compliance (FCC) tools have failed to systemically protect underlying institutions and associated activities as evidenced by ongoing fines and sanction to traditional global financial institutions for failure to implement essential controls and ongoing exploitation by illicit actors. With these 'tools' weakening in effectiveness, we must think differently. There must be a new playbook that leverages the creation and exponential growth of alternative economic value and banking and payments technologies in an increasingly tokenized global economy. This is especially true given the fact that an increasing number of non- financial market institutions and companies are entering financial services and undertaking activities that do not explicitly come into the purview of U.S. regulators and financial crimes enforcement authorities.

In addition to the power of the U.S. economy, capital markets, and the U.S. dollar itself, the U.S. is also home to the lion's share of the world's financial technology and alternative financial services companies. While we will likely continue to see volatility and liquidity risks in crypto currency markets more broadly, tokenized forms of U.S. dollars such as payment stablecoins—especially those with strong disclosures and adherence to regulatory audit and review standards—present a tremendous opportunity to advance financial inclusion across the globe.

Here are a few statistics to consider from research conducted by Circle, Uniswap, TRM Labs, the World Bank, and others:

- DeFi payment rails utilizing stablecoins could reduce costs to un-/under-banked individuals by 80%.
    - This means the U.S. could provide underserved populations with cheaper and more efficient remittance corridors (which represents three times the dollar figure for foreign aid/official development assistance, while helping achieve a marquee sustainable development goal).
- According to TRM Labs, approximately 99% of fiat backed stablecoin value is associated with the U.S. dollar. One of the most stable, liquid, and transacted U.S. dollar-backed stablecoins is USD Coin or USDC, which has grown in circulation by 860% since 2018.
    - As global transaction volumes grow, the ability to transact in near real-time with a USD- backed asset can extend U.S. financial and banking benefits globally.
- With over $45 billion of USDC in circulation backed by 80% short dated (3-month) Treasuries and the balance in U.S. dollar cash across eight U.S. banking partners in segregated accounts, users are easily able to redeem USDC and use it in place of cash for day-to-day transactions.
    - USDC users are operating in an extended U.S. dollar domain, but unlike cash transactions, USDC can be driven 24/7 by users anywhere in the world.
- According to McKinsey, the decline in the use of hard cash continues and was expedited during the pandemic. Circle estimated that $30 billion of economic activity was facilitated with approximately "15% being wallet-to-wallet transactions (compared to 2% for non-financialized transfers in traditional payments)."
    - Increasingly, everyday transactions are happening digitally, which means the extension and reach of tokenized value will become more mainstream and allow direct facilitation (e.g. aid, government stimulus, balance of payments, etc.) of transactions including by and between government entities and private sector businesses and individuals.

In short, the power of DeFi services and the ability to conduct web-based tokenized transactions provides both opportunities and challenges in advancing national and economic priorities. As the above illustrates, virtual assets—in particular U.S. dollar-backed stablecoins, tokenized deposits, appropriately designed CBDCs (non-surveillance, etc.), and web-based services—give us a foundation to embed self-governance and compliance into these platforms while extending the reach of U.S. markets and its economic benefits.

The U.S. dollar remains its most under-leveraged economic export., but the manner of such tokenization efforts should be driven by fit-for-purpose use cases that better enable financial market participants to issue, transact, custody and provide essential liquidity mechanisms to enhance financial products and services. The good news is that there are a host of services that are already paving the way to this core intent: modernized governance and compliance, security through universal access and privacy protections (e.g., digital identity), and secure and real-time payments.

This is an opportune time to re-visit the broader U.S. strategy. The de-risking exercise that the U.S. government embarked on in the wake of 9/11 may have been a well-intentioned effort to decrease the risk of our financial system being used for nefarious purposes. That said, there have and continue to be many negative consequences— chiefly that many otherwise well-intentioned actors have been, and continue to be, shut out of the global financial system. But what we need now is the opposite of what happened after 9/11. Financial inclusion should be a priority, not something we are willing to unnecessarily sacrifice in the hopes of achieving a safer financial environment under the false premise of its being a tradeoff to financial system security and integrity. The reality is security and financial inclusion go hand in hand. Indeed, the solution to the excesses of digital finance can best be addressed only through active engagement from the U.S. government to broaden access to financial services and extend the reach and power of its capital markets, and the U.S. dollar to global economies.

We have shown that the attributes of blockchain and DLT technologies, along with an active and engaged Treasury Department, the Federal Reserve Bank(s) and other federal financial regulators (as well as state-based authorities), can both serve to enhance financial crimes compliance while extending the reach of U.S. economic and financial benefits. This reality requires a continued leveraging of commonalities between international financial activities and the U.S. The advent of these technologies enables financial activities at the retail (individual), wholesale (institutional), and governmental level. With the current dominance of U.S.-backed stablecoins and associated accounts and wallets, we can enable worldwide distribution and transactions in U.S. dollars (and their equivalents) and tie them back to accounts domiciled in the US. This reinforces the strength of our economy, driving additional reach for new customers and markets.

6. Conclusion

We can make good on the perceived shift in U.S. posture to digital asset innovation. The recent passage of the GENIUS act by the U.S. Senate and more active engagement of financial regulators to digital asset innovation is a positive start. We can bring to life President Biden's March 9, 2022, Executive Order on Ensuring Responsible Development of Digital Assets as well as President Trump's January 23, 2025, Executive Order on Strengthening American Leadership on Digital Financial Technology. With this renewed momentum for the sector, we can reinforce the principles of privacy, security, and addressing human rights by re- imagining our approach to national and economic security by embracing the transformative impact of web3/decentralized technologies that advance US dollar-backed value and reach across borders and extend the reach of the US capital markets—and its digitized/tokenized value—across an even more interconnected internet-based economy.

In the face of very real alternatives to the historically U.S.- dollar dominated global trade and finance, now is the time to capitalize on blockchain and web-native services that to date have been dominated by U.S. companies. We can now embrace the innovation built on the back of U.S. economic power—including its currency—as an extension and example of market driven solutions—including modernized identity that unlocks services securely and importantly in a way that enhances our cherished privacy objectioves—that address our pressing national and economic security challenges, all while advancing democratic principles.