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# STABLECOINS & CREDIT UNIONS: STABILIZE AND ACT NOW ON THE GENIUS ACT

Kevin "Payments Professor" Olsen

#### ncuma.com



Kevin Olsen, AFPP, AAP, NCP, APRP, CHCP SVP, Innovation & Strategy, Pidgin "The Payments Professor"

#### www.PaymentsProfessor.com

"Making learning fun, entertaining, and engaging"



www.youtube.com/c/paymentsprofessor

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"...pretty much all transactions will settle on blockchains eventually, and that all money will be digital," said Winters.

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Bill Winters, CEO, Standard Chartered (UK bank) As quoted during Hong Kong Fintech Week (This is important!)



#### **But First Coffee!**



### Iced Pecan Crunch Oatmilk Latte

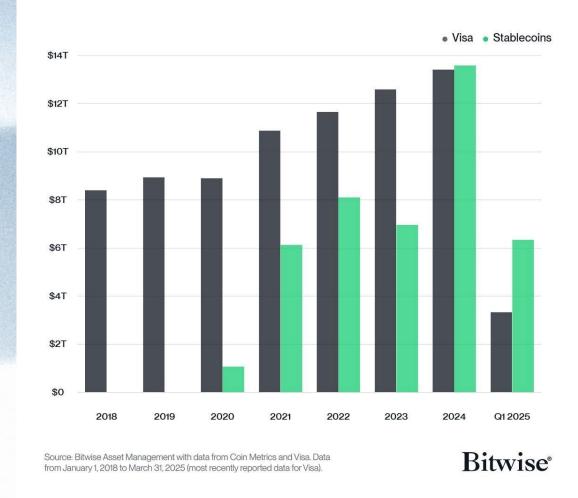
410 calories <sup>①</sup>

### VOLUME: STABLECOIN TRANSACTIONS VS. VISA PAYMENTS

In 2024 more money was transferred through stablecoin transactions than Visa payments, globally.

In Q1 2025, stablecoin volume was nearly DOUBLE Visa's.

#### Volume: Stablecoin Transactions vs. Visa Payments



Source: Bitwise Asset Management with data from Coin Metrics and Visa. Data from Jan. 1, 2018 to March 31, 2025.

### WHAT IS A STABLECOIN?



- A stablecoin is a type of digital asset designed to maintain a stable value by being backed 1-to-1 by a traditional currency like the U.S. dollar.
- It combines the speed and programmability of crypto technology with the price stability of fiat currency, making it useful for faster, lower-cost payments and settlements, especially when issued by a regulated, trusted entity.
- Some say they are a prominent "killer applications" in the crypto space.

## THE DIFFERENCE BETWEEN STABLECOINS



- Algorithmic Stablecoins (True but not for Fls)
  - They don't rely on reserves of assets.
  - Instead, they use smart contracts and algorithms to automatically expand or contract supply.
- Collateralized Stablecoins (Crypto-Backed) (True but not for FIs)
  - These are backed by other cryptocurrencies as collateral (usually over-collateralized to handle volatility)
- Dollar-Backed Stablecoins (Fiat-Backed) (THIS ONE!)
  - Backed 1:1 by fiat currency (usually U.S. dollars) or cashequivalents like Treasury bills, held by a custodian (FI or trust).
  - Example: USDC (Circle), USDT (Tether).

### WHAT A STABLECOIN IS NOT?



 In a statement issued on April 4, 2025, the staff of the Division of Corporation Finance of the Securities and Exchange Commission (SEC) announced that certain stablecoins are not subject to federal securities laws.

# BENEFITS OF USING STABLECOINS FOR EVERYDAY TRANSACTIONS



#### Stability

 Compared to traditional cryptocurrencies such as Bitcoin or Ethereum, which experience dramatic swings, stablecoins offer more predictable pricing, making them reliable for everyday transactions.

#### Low costs

• Using stablecoins often involves lower transaction fees than traditional banking systems, making them a desirable option for international transfers.

# BENEFITS OF USING STABLECOINS FOR EVERYDAY TRANSACTIONS



#### Speed

 Stablecoin transfers and payments can happen almost instantly, even across borders; they are not tied to geographical boundaries.

#### Accessibility

• Stablecoins may allow anyone with an internet connection to transact without a traditional banking account, making them ideal for individuals in regions with limited banking infrastructure.

#### DISINTERMEDIATION



#### **Traditional Payments**



Sender







FI "A"

FedNow/Wire/SWIFT/ACH







FI "B"

Recipient

#### **Cryptocurrency Payments**

Blockchain protocols







Recipient

#### DISINTERMEDIATION

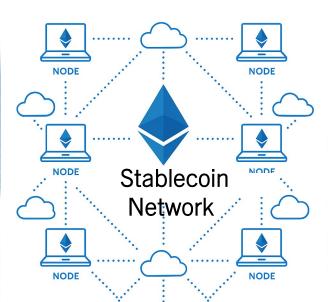
Stablecoin

**Account** 

Holder

Account Holder





NOTE: A Stablecoin Network utilized by FIs is a secure and "private" network.

## WHAT'S HAPPENING/ HAPPENED?



- Since taking office, the Trump administration has initiated significant changes in US policies toward the digital asset industry.
- On March 7, 2025, the Office of the Comptroller of the Currency (OCC) rescinded its Interpretive Letter 1179, which outlined the agency's supervisory nonobjection process for banks to engage in digital asset activities.





**RESIDENTIAL ACTIONS** 

### STRENGTHENING AMERICAN LEADERSHIP IN DIGITAL FINANCIAL TECHNOLOGY

The White House

January 23, 2025

President Trump promised to make the United States the "crypto capital of the world," emphasizing the need to embrace digital assets to drive economic growth and technological leadership.



#### Section 1. Purpose and Policies.

- (a) The digital asset industry, like cryptocurrencies and blockchain is important for innovation, the economy, and keeping the U.S. a global leader.
- That's why my Administration supports the responsible growth of digital assets and related technologies across all parts of the economy by:
- Protecting people's rights to use public blockchain networks legally, this includes the right to build and use software, mine or validate transactions, trade freely with others, and hold digital assets themselves (without relying on third parties), all without being unfairly targeted or punished.



### Sec. 5. Prohibition of Central Bank Digital Currencies.

- (a) Except to the extent required by law, agencies are hereby prohibited from undertaking any action to establish, issue, or promote CBDCs within the jurisdiction of the United States or abroad.
- (b) Except to the extent required by law, any ongoing plans or initiatives at any agency related to the creation of a CBDC within the jurisdiction of the United States shall be immediately terminated, and no further actions may be taken to develop or implement such plans or initiatives.



- President Trump had a goal of signing stablecoin legislation by August; with some version of the two bills (STABLE/GENIUS) to become law soon.
- The GENIUS Act was signed July 18, 2025.



• The GENIUS Act (Guiding and Establishing National Innovation for U.S. Stablecoins Act) creates a regulatory framework for payment stablecoins by requiring issuers to maintain full reserves, conduct regular audits, and comply with anti-money laundering (AML) laws.



- The GENIUS Act requires 100% reserve backing with liquid assets like U.S. dollars or short-term
   Treasuries and requires issuers to make monthly, public disclosures of the composition of reserves.
- Stablecoin issuers must comply with strict marketing rules to protect consumers from deceptive practices.
  - Crucially, they are forbidden from making misleading claims that their stablecoins are backed by the U.S. government, federally insured, or legal tender.



- In the event of insolvency of a stablecoin issuer, the GENIUS Act prioritizes stablecoin holders' claims over all other creditors, ensuring a final backstop of consumer protection.
- The GENIUS Act explicitly subjects stablecoin issuers to the Bank Secrecy Act, thereby clearly obligating them to establish effective anti-money laundering and sanctions compliance programs with risk assessments, sanctions list verification, and customer identification.



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### GENIUS ACT WHO GETS TO ISSUE STABLECOINS?



- The Act creates three paths to become a stablecoin issuer, which the law calls Permitted Payment Stablecoin Issuer (PPSI):
  - Bank subsidiary: A subsidiary of an existing bank.
  - OCC charter: Non-banks and uninsured national banks can apply to the Office of the Comptroller of the Currency (OCC) for a new federal charter.
  - State issuer: Issuers who will issue less than \$10 billion can do so under a state charter, so long as their state's regulatory regime is certified by a new federal Stablecoin Certification Review Committee (Treasury, Fed, and FDIC).



- Every token in circulation must be backed 1:1 with high-quality, liquid assets:
  - Cash or demand deposits, custodied at banks
  - Short-term U.S. Treasuries
  - Other highly liquid, low-risk instruments, to be defined by regulators
- Issuers cannot back stablecoins with equities, corporate debt, or volatile crypto assets.
- Issuers must also publish monthly public reports about their reserves and undergo annual audits.



- The Act explicitly states that it is unlawful to represent that a payment stablecoin is "subject to deposit insurance by the FDIC" or "share insurance by the NCUA."
- The GENIUS Act prohibits permitted payment stablecoin issuers from paying the holder of any payment stablecoin any form of interest or yield solely in connection with the holding, use, or retention of such payment stablecoin

## GENIUS ACT REDEMPTION POLICY



- An issuer must publicly disclose its redemption policy, which shall:
  - Establish clear procedures for the timely redemption of stablecoins; and
  - Disclose in plain language all fees
     associated with purchasing or redeeming
     the stablecoins, provided that fees can only
     be changed upon seven days' notice.

#### GENIUS ACT GOES LIVE



- 18 months (January 18, 2027) after it's signed into law, or
- 120 days after final regulations are issued by federal payment stablecoin regulators.

GENIUS ACT
GOES LIVE
BUT WAIT, WE NEED
RULES!



- The Act requires the Secretary of the Treasury, federal regulators, and state regulators to work together and publish implementing regulations within one year of the law's enactment.
- By July 18, 2026, Federal banking regulators (including the OCC, FDIC, and NCUA) must issue final regulations implementing the act.

## SPECIAL CONSIDERATIONS WHILE WE WAIT



- Issuers and non-issuers should develop business strategies supported by ongoing regulatory and competitive risk analysis.
- A formalized risk management framework is essential to identify, measure, monitor, and mitigate risks like regulatory noncompliance, market volatility, operational inefficiencies, and cybersecurity threats.
- Establishing a risk governance framework to define risk appetite and maintain effective controls is crucial for compliance and timely response to changing regulatory requirements.



#### Issuance of PSCs

- Fls can create and distribute PSCs, assuming responsibility for their issuance and redemption.
- FIs will have the opportunity to create reliable solutions (whether B2B or B2C) that leverage payment stablecoins to streamline operations with faster, secure payments.



- Under the proposed PSC acts, permitted payment stablecoin issuers would be limited to non-bank entities (NBEs) and subsidiaries of insured depository institutions (IDIs).
- NBEs could be controlled by a bank holding company, or a company that does not control an IDI.
- Under these proposed regimes, while IDIs would be permitted to issue tokenized deposits, they would not be permitted to issue payment stablecoins.



#### Transaction FI

 FIs can facilitate the ongoing collection and disbursement of fiat related to the minting and redemption of PSCs.

#### Reserve Bank

• Fls can function as reserve banks, holding and managing the reserve assets that back PSCs.

#### Custodian of PSCs

• Fls can safeguard PSCs on behalf of clients and users, providing secure storage and the ability to use PSCs on platforms that allow their use.



#### Building Platforms for Use

 FIs can act as the platform which builds the interface enabling the use of PSCs for settlement, processing, and integration.

#### Providing Ecosystem Services

 Businesses can offer a range of support services to the PSC ecosystem, including technology solutions, compliance assistance, and advisory services.

#### KEY CONSIDERATIONS



#### Regulatory Compliance

 Fls must navigate a complex and evolving regulatory landscape, including AML/KYC requirements, consumer protection policies, and potential restrictions on transactions with affiliates.

#### Risk Management

• Fls need to establish robust risk management frameworks to address cybersecurity, operational risks, market risks, and blockchain-specific risks.

#### KEY CONSIDERATIONS



#### Essential Capabilities

 Develop strong governance arrangements, effective treasury policies for managing reserves, and robust technology and information security measures.

#### Capital and Liquidity

• Fls issuing PSCs will need adequate capital and liquidity to support heightened standards addressing safety, soundness, and financial stability concerns.

#### Third-Party Risk Management

 Fls must carefully manage risks associated with thirdparty vendors involved in the PSC ecosystem, such as custodians and wallet providers.



HOW DOES A
STABLECOIN WORK?
(RETAIL EXAMPLE)

#### STABLECOIN EXAMPLE



#### O. Before any payment (issuance & funding)

- The Issuer maintains a 1:1 reserve of permitted assets and mints stablecoins when institutions or users fund them with dollars.
- The Customer acquires stablecoins via:
  - A fiat on-ramp (FI transfer → stablecoin to wallet), or
  - An exchange/fintech app (buys stablecoin and holds it in a platform wallet), or
  - A P2P receive from someone else.



#### 1. Checkout

- Customer selects "Pay with Stablecoin" at the merchant's checkout (web, app, or POS).
- Merchant/PSP shows a payment request: amount, supported chain (e.g., Solana), token (e.g., USDC), and a destination address (merchant or PSP's address).
- A QR code + deeplink is provided.



#### DEEPLINK DETOUR

- A deeplink (short for deep link) is a direct hyperlink that takes a user straight to a specific page, function, or action inside an app or website instead of just opening the app's homepage.
- They're extremely useful for streamlining digital payments, mobile experiences, and marketing campaigns.
  - A normal link opens the front door of an app.
  - A deeplink takes you directly into a specific room.



#### DEEPLINK DETOUR

- When you click "Pay with USDC" or scan a QR code at checkout, the system may open your crypto wallet app using a Deeplink.
- That link:
  - Opens the wallet app automatically (if installed).
  - Fills in the recipient address, token, and amount.
  - Prompts you to confirm and sign the transaction.



#### DEEPLINK DETOUR

- Why they're important in payments?
  - Enable frictionless checkout (click or scan → wallet opens instantly).
  - Reduce manual entry errors (no need to copy/paste wallet addresses).
  - Improve security (prevents phishing by encoding verified addresses).
  - Power cross-app experiences (e.g., link from merchant site to FedNow®, RTP®, or crypto wallet).



- 2. Compliance pre-checks (instant, behind the scenes)
- If the PSP/merchant uses hosted wallets or handles funds, they typically run sanctions screening on source/destination addresses.
- For larger/covered transactions or hosted-wallet flows,
   Travel Rule / KYC obligations may apply
   (PSP/exchange handles messaging where required).
- If anything fails, the PSP blocks the payment and prompts another method.



#### 3. Customer authorizes the transfer

- Customer opens their wallet (self-custody or custodial app) via the deeplink/QR and confirms:
  - chain, token, amount
  - network fee (gas) (small; varies by chain)
- Wallet signs and broadcasts the transaction to the blockchain.



#### 4. Blockchain settlement

- Validators/miners include the transaction in a block.
- After the required confirmations (often seconds on fast chains), the transfer is final on-chain.



#### 5. PSP detects and credits the merchant

- PSP watches the chain for the exact payment request (amount, address, memo/ID).
- On confirmation, PSP notifies the merchant's storefront/terminal: "Payment received."
- If the merchant wants to hold stablecoin, funds remain in their crypto wallet.
- If the merchant wants fiat, the PSP triggers auto-conversion.



- 6. Optional auto-conversion to fiat money
- PSP sends the stablecoin to its liquidity partner or its own treasury wallet to sell for USD.
- Proceeds are sent to the merchant's Fl account via ACH / RTP® / FedNow® (as configured).
- Merchant sees a payout in its settlement report with fees and FX (if cross-border).



#### 7. Receipts & reconciliation

- Customer sees a transaction hash in their wallet history.
- Merchant/PSP record the payment with:
  - on-chain tx hash, block time, and amount,
  - internal order ID,
  - payout details (if converted).
- Accounting systems map on-chain receipts to invoices/orders for audit.



#### 8. Edge cases

- Under/over-payment
  - PSP can auto-refund, prompt a top-up, or issue store credit.
- Wrong chain/token
  - PSP can detect mismatches; policies determine recovery/refund.
- Chargebacks
  - None on-chain; refunds are merchant-initiated only.



# STABLECOIN VS TOKENIZED DEPOSITS

# WHAT THE GENIUS ACT SAYS ABOUT STABLECOINS ("PAYMENT STABLECOINS")



- The Act regulates a category called payment stablecoins, defined as digital assets that
  - (i) are used (or designed) for payment or settlement,
  - (ii) whose issuer is obligated to redeem them or convert them at a fixed amount of monetary value, and
  - (iii) represents or aims to maintain stable value relative to a fixed amount of monetary value.
- The Act explicitly excludes certain things from the definition of payment stablecoins. Notably, bank deposits (whether traditional or "on-chain") are carved out (i.e. "a payment stablecoin does not include ... bank deposits" under the Act)
- The Act sets regulatory regimes, reserve requirements (a 1:1 backing in "permitted reserves" such as U.S. dollars, short-term Treasuries, certain repo agreements, etc.)

WHAT THE GENIUS
ACT SAYS ABOUT
STABLECOINS
("PAYMENT
STABLECOINS")



- The Act also prohibits a permitted payment stablecoin issuer from paying interest or yield "solely in connection with the holding, use, or retention of such payment stablecoin"
- The Act clarifies that payment stablecoins are not to be considered securities, bank deposits, or bank liabilities (i.e. they are carved out of those definitions).
- So, under the Act, a payment stablecoin is a regulated digital token whose liabilities (i.e. outstanding coins) are backed by a pool of reserve assets, redeemable at a fixed value, and with some rules around disclosure, reserve management, redemptions, etc.

# WHAT IS (OR COULD BE) A TOKENIZED DEPOSIT



- Because the Act excludes "bank deposits" from the definition of payment stablecoins, the concept of a tokenized deposit is allowed to exist outside the stablecoin regime.
- In effect, tokenized deposits remain in the domain of traditional banking law (or bank regulation) rather than being subsumed under the stablecoin regime.

# WHAT IS (OR COULD BE) A TOKENIZED DEPOSIT



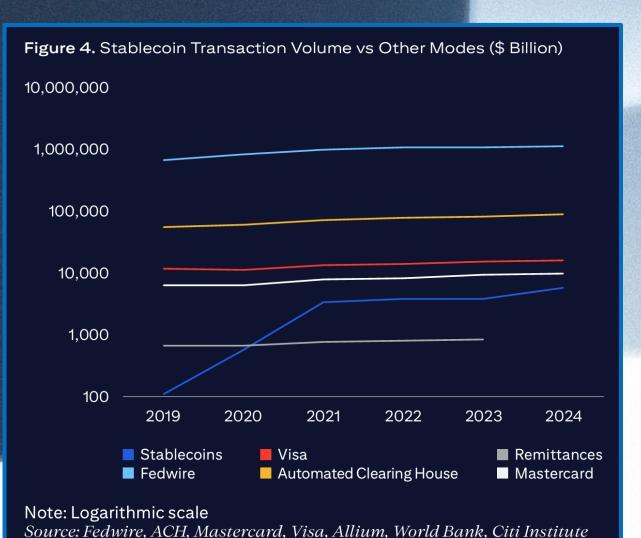
- The GENIUS Act does not fully define "tokenized deposit," the concept is often used in banking and crypto literature to mean:
  - A deposit held at a FI(i.e. a liability on the bank's balance sheet, like any other deposit).
  - But represented on a distributed ledger (blockchain) in token form, so depositors can transact, transfer, or settle "on-chain" using those tokens.
  - The deposit retains all the legal and regulatory characteristics of a traditional bank deposit (including rights, obligations, protections).
  - Because it is not treated as a "stablecoin" under the GENIUS
     Act, it may not be subject to the same reserve, disclosure, or
     redemption rules of the payment stablecoin regime, but would
     instead fall under banking and deposit regulation.



WHAT IS THE FUTURE OF STABLECOIN AND WHERE DOES IT FIT IN?

### STABLECOIN VOLUME





- Citi Global Perspectives &
   Solutions. (April 2025). Future of
   money: Blockchain and the digital
   dollar. Citigroup.
  - https://www.citigroup.com/rcs/citigpa/storage/public/GPS Report Blockchain Digital Dollar.pdf
- This same report estimates stablecoins could grow to \$3.7 trillion by 2030.

WHERE ARE WE
HEADED?
STABLECOINS 2030
WEB3 TO WALL
STREET SEPTEMBER
2025



- Citi forecasts that stablecoins will become a \$1.9 trillion market by 2030 (base case), potentially reaching \$4 trillion in a bull scenario, up from ~\$280 billion in 2025.
- Citi calls 2025 "blockchain's ChatGPT
  moment"—a turning point for institutional
  adoption, catalyzed by U.S. regulatory clarity
  (notably the GENIUS Act).



#### **DOMESTIC PAYMENTS**

#### **INTERNATIONAL PAYMENTS**

STABLECOIN
USDC, PYUSD, "GENIUS Act Stablecoin"

Cards Wallets Local
(Visa, AmEx, (Venmo, CashApp, (ACH, FedNow,
Mastercard) PayPal) RTP, FedWire)

Instant (SEPA, PIX, UPI, FPS) International Wallets (Alipay, WeChat)

International (SWIFT, CHIPS, B2B Connect)

### INDUSTRY IMPLICATIONS



#### Payment Networks

 Stipe, PayPal, Visa and Mastercard are integrating stablecoin settlement.

#### New Layer-1 Chains

 Circle (ARC), Stripe (Tempo), Tether (Plasma), and others build blockchains optimized for financial settlement.

#### Corporate Issuers

• BigTech and e-commerce platforms explore proprietary stablecoins to cut costs and retain payment data.

#### Institutional Infrastructure

 Custody, clearing, and tokenized asset markets reach production grade, creating demand for digital settlement money.

# IMPLICATIONS FOR FINANCIAL INSTITUTIONS



- New Business Opportunities
  - Institutions may now issue their own stablecoins or distribute federally approved ones as part of deposits and payments services.
- Integration with Payment Rails
  - GENIUS-compliant stablecoins are positioned to interoperate with existing rails (ACH, FedNow®, RTP®) and may support tokenized deposits.
- Customer Demand
  - Offering regulated stablecoin products can enhance digital banking services, appeal to younger demographics, and support cross-border payments.
- Competitive Landscape
  - Traditional financial institutions can now compete with fintechs by offering safe, regulated digital dollars directly to consumers and businesses.

# EMERGING USE CASES



#### Consumers

• P2P payments, remittances, DeFi, retail settlement.

#### Enterprises

 Treasury management, cross-border payroll, supplier payments.

#### Institutions

• Collateral management, tokenized asset settlement, inter bank liquidity.



SMART
CONTRACTS
(PROGRAMMABILITY)



- 1. Instant, Programmable Settlement
- Smart contracts eliminate the delay between initiation and settlement, allowing transactions to clear in seconds, 24/7/365.
- This reduces liquidity risk and enables continuous operations beyond Fedwire® or ACH hours.



- 2. Automated Compliance & Reporting
- Regulated stablecoin smart contracts
   can embed compliance logic (e.g., AML,
   KYC, transaction limits) that triggers
   automatically.
- This cuts manual review time and enables real-time transaction monitoring for regulators and auditors.



- 3. Integrated Minting & Redemption Controls
- Smart contracts maintain transparency between fiat reserves and token supply, minting when deposits are received and burning when redemptions occur.
- This gives regulators and banks instant proof of reserve integrity.



- 4. Interoperability Across Networks
- Because smart contracts operate on open blockchain standards (e.g., ERC-20, ERC-3643), banks can connect across networks, linking FedNow®, RTP®, and stablecoin rails for hybrid settlement models.



- 5. Reduced Reconciliation Effort
- Every transaction is recorded immutably on-chain.
- FIs can reconcile in near real time, dramatically cutting operational overhead, exceptions, and postsettlement disputes.



- 6. Programmable Escrow & Conditional Payments
- Smart contracts allow conditional logic, funds can be released automatically when predefined conditions are met (e.g., delivery confirmation, loan disbursement, or trade settlement milestones, real estate, car sales).



- 7. Enhanced Security & Auditability
- With cryptographic verification and open-ledger transparency, all transfers are traceable, timestamped, and auditable.
- This provides stronger proof of compliance and reduces fraud exposure.



- 8. API-Driven Banking-as-a-Service (BaaS) Opportunities
- FI can expose stablecoin smart contract functions through APIs to fintech partners, supporting programmable money services, embedded finance, and automated treasury operations.



- 9. Cross-Border Efficiency
- Smart contracts can settle cross-border transactions using regulated stablecoins instantly and at lower cost, bypassing the delays of correspondent banking while maintaining regulatory traceability.



- 10. Regulatory Alignment & Innovation Bridge
- Under the GENIUS Act, banks can use smart contracts to issue compliant digital assets while remaining within supervisory oversight, helping bridge innovation with existing safety and soundness rules.



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# Time for my Coffee! The Use Case No One Sees!



# Iced Pecan Crunch Oatmilk Latte

410 calories <sup>(i)</sup>

HOW AI PAYMENTS
CAN USE
STABLECOINS
(AGENT PAYMENTS
PROTOCOL AND
X402)



- Autonomous Purchases by Al Agents
  - Your Al calendar agent books a flight and instantly pays the airline using a stablecoin wallet.
  - Your Al grocery bot orders items online, pays the supplier, and manages receipts.
- Microtransactions & Pay-Per-Use
  - Instead of paying \$20/month for an AI tool, your agent could pay \$0.02 every time it queries an API.
  - Websites could charge fractions of a cent per article view—no ads required.

HOW AI PAYMENTS
CAN USE
STABLECOINS
(AGENT PAYMENTS
PROTOCOL AND
X402)



#### Instant Settlement for Businesses

- A manufacturer's AI system could automatically release payment in NET Dollar the moment a delivery is confirmed.
- No waiting 2—3 days for ACH or card settlement.
- Creator & Content Compensation
  - Al systems trained on your article, music, or video could pay you directly (in real time) whenever your content is used.
  - Moves us toward fairer Al ecosystems where content owners get compensated automatically.



#### CONCLUSION

- As the adoption of stablecoins increases, the potential for disintermediation of existing financial systems becomes more pronounced.
- However, with a robust federal framework in place, financial institutions have the opportunity to develop reliable solutions that leverage payment stablecoins to enhance operational efficiency through faster and more secure payments.



### ncuma.com

# Kevin Olsen, AFPP, AAP, NCP, APRP, CHCP SVP, Innovation & Strategy, Pidgin "The Payments Professor"

### www.PaymentsProfessor.com

"Making learning fun, entertaining, and engaging"



www.youtube.com/c/paymentsprofessor



# CLASS DISMISSED!