



Preface

This report, *Ponzi Games: Anatomy, Evolution, and Containment Strategies*, is part of the **Bank & Finance Deep-Dive Series**. The series provides forward-looking analysis on the strategic, financial, and policy implications of emerging global trends, with a focus on the challenges and opportunities facing institutional investors, regulators, and financial market participants.

Ponzi Games have been with us for more than a century, yet they remain misunderstood as anomalies rather than recurring financial pathologies. From Sarah Howe's "Ladies' Deposit" in 1879 to FTX and Billions Trade Club in the 2020s, the same fragile mechanics — outsized promises, opacity, and payouts funded by new inflows — continue to resurface in new technological wrappers. In today's world, digital platforms, payment infrastructures, and crypto assets have dramatically compressed the lifecycle of frauds, allowing them to scale globally before regulators can react.

This report deliberately integrates perspectives not only from advanced economies but also from the Global South — including Latin America, Africa, Eastern Europe, and Asia — recognizing that Ponzi Games exploit vulnerabilities wherever financial literacy, regulatory capacity, or macroeconomic stability is weakest.

The report builds on the structure and style of earlier publications in our series, including:

- 1. Cyber Resilience in Finance: From Risk Mitigation to Competitive Advantage
- 2. The Future of Payments and Cross-Border Finance: Navigating Transformation Amid Risk and Opportunity
- 3. Open Finance: Unleashing the Next Wave of Financial Innovation
- 4. Global Financial Stability in Transition: Structural Risks, Regulatory Challenges, and Strategic Pathways
- 5. Climate Change and Financial Risks: Navigating the Transition and Managing Physical Exposure
- 6. <u>Demographic Change: Challenges and Opportunities in the Age of Low Fertility and Aging Populations</u>
- 7. <u>Unveiling the Future of Digital Currency Infrastructure Navigating the Transformation of Finance in a Tokenized World</u>
- 8. Artificial Intelligence Industry Deep-Dive Report: Investment Implications and Strategic Outlook 2025 2030
- 9. Financing Infrastructure with Private Participation

In each, our aim is to go beyond technical detail to frame issues in terms of financial stability, institutional strategy, and global competitiveness.

We hope this report will help financial institutions, regulators, and policymakers better understand the anatomy of Ponzi Games, anticipate how they evolve, and design containment strategies that protect investors and safeguard financial systems.

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List of Acronyms

AACB – Association of African Central Banks

ACH - Automated Clearing House

Al – Artificial Intelligence

AML - Anti-Money Laundering

BIS - Bank for International Settlements

CDO - Collateralized Debt Obligation

CNBV – Comisión Nacional Bancaria y de Valores (Mexico)

CONDUSEF – Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios

Financieros (Mexico)

CFTC – Commodity Futures Trading Commission (U.S.)

DOJ - U.S. Department of Justice

ESMA - European Securities and Markets Authority

EU - European Union

FATF - Financial Action Task Force

FOMC - Federal Open Market Committee

FOMO – Fear of Missing Out

FSB - Financial Stability Board

FTC – Federal Trade Commission (U.S.)

HYIP – High Yield Investment Program

IOSCO – International Organization of Securities Commissions

KYC - Know Your Customer

MDB - Multilateral Development Bank

MiCA – Markets in Crypto-Assets Regulation (EU)

MiFID – Markets in Financial Instruments Directive (EU)

MLM - Multi-Level Marketing

MBS - Mortgage-Backed Securities

OECD – Organisation for Economic Co-operation and Development

OSC – Ontario Securities Commission (Canada)

PSP - Payment Service Provider

SEC – Securities and Exchange Commission (U.S.)

SIPRES - Registro de Prestadores de Servicios Financieros (Mexico)

SQL – Structured Query Language

U.S. FCIC – U.S. Financial Crisis Inquiry Commission



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Executive Summary

Ponzi Games are not anomalies but recurring financial pathologies that exploit trust and opacity faster than regulation can adapt. Every generation rediscovers — and then forgets — that money cannot be conjured from thin air indefinitely. From Sarah Howe's "Ladies' Deposit" in 1879, to Charles Ponzi's postal coupon arbitrage in 1920, to Bernard Madoff in 2008, and today's crypto "staking" apps, the story is familiar: enticing promises of guaranteed wealth sustained only by the confidence of new entrants (Kindleberger and Aliber, 2011; Frankel, 2012).

Why they endure. Ponzi Games thrive where three conditions converge: excessive trust in charismatic promoters or platforms, opaque or complex claims that defy verification, and heightened vulnerability driven by greed or economic stress. Behavioral biases such as extrapolation and fear of missing out amplify their reach (Blanchard and Watson, 1982; Gorton, 2010; OECD, 2019).

What has changed. Technology has transformed both the speed and scale of these schemes. What once took years to build now collapses in weeks (BIS, 2023; FSB, 2022). Social media accelerates hype, tokens create endlessly replicable wrappers, and global payment rails enable instant cross-border inflows. At the same time, a widening "grey zone" of financial fragilities — from FTX's misuse of client assets (SEC, 2022; BIS, 2023) to the subprime mortgage crisis (U.S. Financial Crisis Inquiry Commission, 2011; Gorton, 2010) — shows how complex innovations can reproduce Ponzi-like dynamics without being formally fraudulent.

What must be done. Eradication is unrealistic, but containment is achievable. This report proposes a layered response: (i) early-warning systems using complaints data, payment anomalies, and blockchain forensics (FSB, 2022; BIS, 2021); (ii) smarter prevention for households through red-flag checklists, in-app registry verification, and targeted literacy campaigns (OECD, 2019; CONDUSEF, 2024); and (iii) a stronger policy playbook with harmonized definitions, platform accountability, proof-of-reserves, whistleblower protection, and rapid cross-border enforcement (FSB, 2023; IOSCO, 2022; Egmont Group, 2020).

The **central lesson** is clear: Ponzi Games flourish when trust outruns transparency and oversight lags innovation. With better signals, faster interventions, and coordinated action, their cycles can be shortened and their impact contained.

The next frontier — Al-driven investment platforms, DeFi protocols, and global payment rails — will likely become the new camouflage for Ponzi dynamics unless regulators act decisively.



Figure 1 synthesizes these insights into five key highlights — continuity, variation, digital acceleration, systemic risk, and containment.

Figure 1 – Key Highlights of the Report

Continuity Across Centuries

- Same mechanics: new inflows fund old payouts.
- From Sarah Howe (1879) to Billions Trade Club (2024).

Variation in Wrappers

- Postal coupons, stock tips, real estate, green energy, crypto wallets.
- Fraudsters adapt to each era's most credible narrative.

Digital Acceleration

- Social media virality, tokens, and cross-border payments compress fraud lifecycles.
- Global scale in weeks, not years.

Systemic Risk Potential

- Most scams remain retail, but some (Albania 1997, Madoff, Subprime, FTX) destabilize entire systems.
- Regulatory failure amplifies contagion.

Containment Is Possible

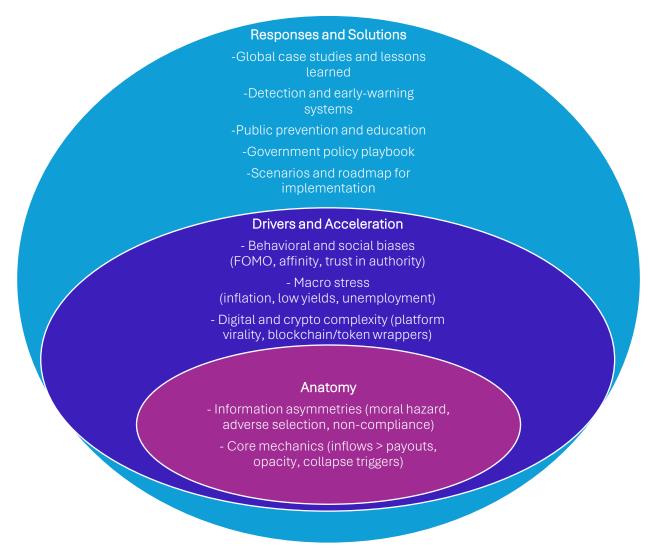
- •No eradication, but shorter lifecycles and smaller scale.
- Four pillars: unified definitions, platform accountability, rapid response, public empowerment.

Source: Bank & Finance synthesis, based on report analysis and historical cases.



Figure 2 sets out the report's roadmap, tracing the progression from anatomy and drivers, through case evidence and technological enablers, to regulatory gaps, scenarios, and policy prescriptions. Together, they frame the report's central message: Ponzi Games are timeless in design but adaptive in form, and only proactive containment can safeguard financial stability.

Figure 2 – Report Roadmap



Source: Bank & Finance synthesis.



1. Introduction and Scope

Ponzi schemes — or what we call here **Ponzi Games** — are not relics of financial history. They are recurring phenomena that adapt to the institutions, technologies, and vulnerabilities of their time (Kindleberger and Aliber, 2011). While the term originates from **Charles Ponzi's postal-coupon fraud of 1920**, similar schemes were documented decades earlier, and new variants continue to appear today, often under the guise of digital innovation.

The defining feature of Ponzi Games is their reliance on **information asymmetries** (Frankel, 2012). Promoters know there is no genuine source of profit, while investors, facing limited visibility, accept narratives that promise extraordinary and often guaranteed returns. This asymmetry enables:

- Moral hazard: operators diverting or misusing funds.
- Adverse selection: investors most vulnerable to losses often retail households are disproportionately drawn in.
- **Non-compliance**: schemes operating outside regulatory oversight or across fragmented jurisdictions.

In parallel, the **rising complexity of technology** has made Ponzis harder to detect and easier to scale. From opaque mortgage products in the 2000s, to the misuse of customer assets in FTX, to crypto token "staking" schemes and AI-trading narratives, the camouflage provided by technical jargon and platform virality has expanded the reach and speed of frauds.

This report takes a global, cross-historical view to examine:

- 1. **The anatomy of Ponzi Games,** tracing their common cash-flow mechanics and collapse triggers.
- 2. The drivers that sustain them, including behavioral biases, macroeconomic stress, and digital acceleration.
- 3. Case studies across more than a century, spanning charitable savings banks, postal-coupon arbitrage, national-scale pyramids, real estate and mining projects, and the crypto frontier.
- 4. **Detection and prevention strategies**, from early-warning dashboards to consumer education.
- 5. A policy playbook —concrete measures governments and regulators can adopt.
- 6. Forward-looking scenarios, assessing risks and opportunities for 2025–2027.

Our purpose is twofold: first, to demonstrate the **continuity of Ponzi mechanics across eras and asset classes**; and second, to highlight how **modern tools and coordinated policy responses** can materially reduce their scale and societal cost.



2. The Anatomy of Ponzi Games

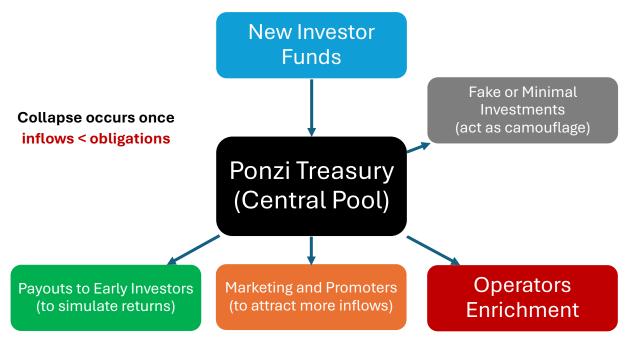
At their core, Ponzi Games are **fragile cash-flow machines**. They promise high or guaranteed returns, but instead of generating genuine profits, they recycle money from new investors to pay earlier ones. Three reinforcing loops sustain the illusion until collapse (Blanchard and Watson, 1982):

- 1. Acquisition loop (hype and affinity). Recruitment through aggressive marketing, personal testimonials, or community identity creates credibility and urgency.
- 2. **Funding loop (inflows > outflows).** Net positive inflows mask insolvency. "Profits" paid to early participants are actually their own principal or money from later entrants.
- 3. Opacity loop (obfuscation and jurisdiction shopping). Complex jargon ("Al arbitrage," "blockchain staking") or shell companies obscure the true use of funds and delay detection.

Failure triggers usually include a slowdown in recruitment, payment processor off-boarding, critical media coverage, or regulatory intervention (OECD, 2019). When inflows falter, the illusion unravels rapidly and residual asset recovery tends to be minimal.

Figure 3 illustrates the fundamental cash-flow dynamics common to all Ponzi Games. Regardless of whether the scheme claims to trade postal coupons, real estate loans, or crypto tokens, the flow of money remains constant: new deposits sustain payouts, promotion, and operator extraction Ponzi Games operate on a fragile cash-flow engine.

Figure 3 – The Cash-Flow Engine of a Ponzi Game



Source: Bank & Finance synthesis, based on Frankel (2012); Blanchard and Watson (1982).



This figure shows that the Ponzi engine is fundamentally **cash-flow negative**: the scheme cannot survive without exponential growth in new entrants. This structural flaw is what makes Ponzi Games timeless — regardless of wrapper, they are destined to collapse.

Ponzi Games often adapt their disguise to local markets and investor appetites. **Table 1** classifies common variants — from "high yield investment programs" to token-based staking schemes — each sharing the same fragile core.

Table 1 – Typology of Ponzi Games

Archetype	Promise	Recruitment Channel	Payment Rail	Opacity Tactics	Typical Trigger for Collapse
Classic HYIP	Daily/weekly fixed % returns	Forums, DM groups	Cards, crypto	"Proprietary trading"	Processor off- boarding
MLM- masking	Referral commissions	Social media, YouTube	Bank wires, e- wallets	"Membership products"	Regulator action
P2P-fraud	"Diversified loan portfolios"	Apps, web portals	Bank ACH	Fake loan books	Complaints surge
Token Ponzi	Staking/yield tokens	Telegram, Discord	On-chain wallets	Circular tokenomics	Token price collapse
Real-asset wrapper	"Secured" real estate, mining, solar leases	Broker networks, private placements	Bank transfers	Sham borrowers or assets	SEC/DOJ investigations, liquidity freeze

Source: Bank & Finance synthesis, based on historical case studies (Boxes 1–13); Kindleberger and Aliber (2011); Frankel (2012).

Across archetypes, the reliance on **information asymmetry** is consistent: investors cannot verify promised returns, the quality of underlying assets, or the sustainability of payouts. This makes detection and early warnings essential.

3. Why They Happen: Behavioral, Social, and Macro Drivers

Ponzi Games do not survive by chance. They thrive because they exploit **predictable patterns** in human behavior, social trust and contagion, and macroeconomic vulnerabilities. Added to this are information asymmetries and regulatory blind spots that make scams harder to detect in time.

3.1 Behavioral Finance Drivers

At the core of Ponzi Games lies the exploitation of predictable behavioral biases. Investors are not deceived merely by numbers, but by psychological levers that make implausible promises



feel credible. Decades of research on bubbles and financial fraud show that operators routinely activate biases such as fear of missing out, authority effects, and the illusion of guarantees (Kindleberger and Aliber, 2011; Frankel, 2012). The following bullet points illustrate how these behavioral traps manifest in practice.

- Fear of Missing Out (FOMO). Rising payouts create urgency: "everyone else is getting rich."
- Authority and halo effects. Promoters use status symbols (luxury lifestyle, endorsements, false credentials) to project legitimacy.
- Extrapolation bias. Investors believe early payouts prove sustainability, ignoring base-rate collapse risk.
- Overconfidence and small-sample learning. Early winners become loud advocates, reinforcing the cycle.
- Illusion of guarantees. Fixed, risk-free returns are psychologically sticky, even when implausible.

As these examples show, Ponzi promoters thrive on human heuristics, not rational calculation. Even sophisticated investors, as in the Madoff case (see Box 9 in Section 6), fell prey to smooth return illusions and authority bias (SEC, 2009; Markopolos, 2010). This highlights the need for counter-measures — education campaigns, "red flag" checklists, and design nudges — that directly target behavioral vulnerabilities.

3.2 Social Dynamics

Ponzi Games are never purely individual decisions; they are social contagions. Recruitment typically occurs through communities, social media, or identity-based networks, where trust amplifies marketing claims. Fraudsters harness affinity ties and testimonial cascades to generate credibility faster than regulators can respond (OECD, 2019). The bullet points below summarize the most common social channels exploited.

- Affinity fraud. Scams target communities bound by religion, ethnicity, or profession, where trust is high.
- **Testimonial cascades.** Early payouts generate word-of-mouth marketing, amplified by social media.
- Community identity. Investors often defend schemes aggressively, labeling skeptics as "FUD" or "outsiders."
- Silencing mechanisms. Critics are threatened with exclusion, lawsuits, or online harassment.

Together, these social mechanisms explain why Ponzi Games often resist scrutiny until collapse. The same networks that accelerate entry also silence dissent. But social trust can



also be redirected: by empowering communities to detect and share warnings, the same dynamics could shorten Ponzi lifecycles rather than extend them.

3.3 Macroeconomic and Market Context

Beyond psychology and networks, Ponzi Games flourish in certain macroeconomic climates. Low interest rates, high inflation, or widespread financial exclusion increase the appeal of schemes promising "easy money." Historical work on bubbles shows how systemic fragilities interact with household desperation to make investors more susceptible (Blanchard and Watson, 1982; Gorton, 2010). The bullet points highlight recurring macro conditions that give Ponzi Games room to expand.

- Low yield environments. In times of suppressed interest rates, investors search for higher income streams.
- **High inflation or unemployment.** Financial stress makes households more susceptible to promises of easy money.
- **Financial exclusion.** In emerging markets, limited access to safe savings pushes retail investors toward informal or high-risk products.
- Market booms and bubbles. Rising asset prices create fertile ground for Ponzi narratives from dot-com stocks to crypto tokens.

These macro settings create fertile soil for Ponzi narratives to take hold. Recognizing them allows supervisors to treat Ponzis not only as micro-frauds but as symptoms of wider economic stress — and to calibrate macroprudential responses accordingly.

3.4 Regulatory and Information Gaps

Finally, Ponzi Games exploit institutional weaknesses. When regulatory definitions diverge, oversight is siloed, or enforcement lags, promoters arbitrage the gaps. Modern cases — from crypto tokens to online referral clubs — have thrived on definitional inconsistencies and platform liability blind spots (FSB, 2022; IOSCO, 2022; OECD, 2019). The bullets below summarize the most common vulnerabilities.

- Fragmented regimes. Different agencies oversee securities, banking, payments, and advertising, creating loopholes.
- Cross-border arbitrage. Operators hop jurisdictions, moving money through weakly supervised channels.
- Non-compliance. Many schemes simply ignore licensing and disclosure requirements, betting on slow enforcement.



The persistence of these gaps shows why Ponzi Games adapt so easily to new wrappers. Without harmonized scope, faster cross-border cooperation, and platform accountability, promoters will continue to exploit asymmetries of information and jurisdiction.

Taken together, behavioral biases, social contagion, macro stress, and regulatory gaps explain why Ponzi Games are so resilient. Yet what makes today's environment distinctive is the speed and scale added by digital technologies. Social media funnels, e-wallets, and crypto tokens have dramatically compressed Ponzi lifecycles, allowing frauds to expand globally in weeks rather than years (FSB, 2022; BIS, 2023). The next section examines how digital platforms and payment infrastructures act as accelerators — both amplifying scams and, if better regulated, offering new opportunities for early detection.

The recruitment of Ponzi Games follows a predictable hype cycle: early secrecy and exclusivity, rapid growth through social contagion, and eventual saturation and collapse as illustrated in **Figure 4**, which highlights the importance of *early-warning signals* during the acceleration phase, when red flags are visible but before collapse. Monitoring this recruitment curve can help regulators and platforms intervene earlier.

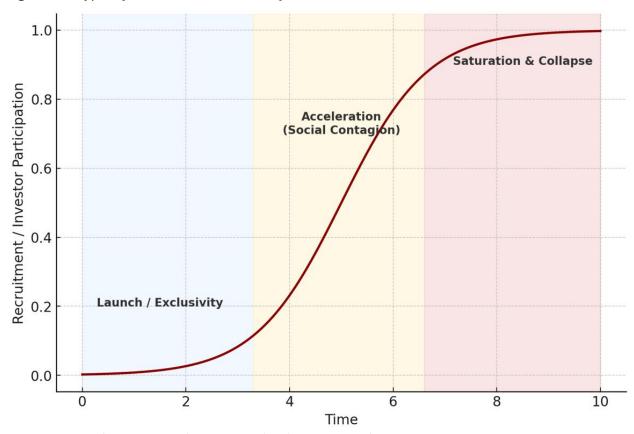


Figure 4 – Hype Cycle and Recruitment Dynamics

Source: Bank & Finance synthesis, based on historical press archives and OECD (2019).



While the behavioral, social, and macro drivers explain *why* Ponzi Games take root, individual investors often miss the tell-tale signs that they are being lured into one. **Table 2** summarizes a **checklist of red flags** that can help the public identify and avoid schemes before committing their savings.

Table 2 – Red-Flag Checklist for the Public

Red Flag	What It Means	Why It's Dangerous		
Guaranteed or fixed high returns	Promises of "2–3% weekly" or "risk-free 30% monthly"	No genuine investment offers guaranteed outsized returns; this is the hallmark of a Ponzi.		
Urgency and pressure to act	"Limited slots, join in 24h"	Creates FOMO and prevents due diligence.		
Opaque or vague strategy	Buzzwords like "Al arbitrage" or "secret algorithm"	Complexity and secrecy mask the absence of real business activity.		
Unregistered or unlicensed promoters	Not listed in regulatory registries (e.g., SIPRES in Mexico, SEC/FINRA in the US)	Lack of supervision means no recourse if the scheme collapses.		
Referral-based payouts	Earnings grow mainly by recruiting others	Core mechanic of pyramid/Ponzi structures.		
Unusual funding channels	Wallet-to-wallet crypto transfers, gift cards, obscure payment processors	Hard to reverse and trace, making recovery unlikely.		
Screenshots/testimonials as proof	Reliance on testimonials instead of audited statements	Fake or cherry-picked evidence used to lure new victims.		
No independent custody of funds	I money, no third-party			
Offshore or complex corporate shells				
Hostility toward questions	Skeptics branded as "FUD" or banned from groups	Suppresses healthy scrutiny and keeps the illusion alive.		

Source: Bank & Finance synthesis, based on OECD (2019); SEC (2009); CONDUSEF (2024); BIS (2021).

Table 2 illustrates that Ponzi Games rely not only on clever operators but also on **predictable behavioral traps**. The public's first line of defense is recognizing these red flags. Regulators and platforms can amplify this checklist through education campaigns, app-store warnings, and embedded registry checks to reduce the asymmetries that fraudsters exploit.



4. Digital Acceleration: Platforms and Crypto

The digital era has not created Ponzi Games — but it has **supercharged** them (FSB, 2022; IOSCO, 2022). Social platforms, messaging apps, and crypto tokens allow scams to spread faster, reach broader audiences, and disguise themselves under layers of technical jargon. Charles Ponzi once relied on newspaper ads, today's operators use WhatsApp groups, YouTube influencers, and white papers filled with blockchain buzzwords.

4.1 Platform Funnels

Digital platforms have become the primary recruitment funnels for modern Ponzi Games. Today's operators depend on algorithmic amplification, viral testimonials, and encrypted groups. Research shows that scams spread faster and reach broader audiences when recruitment channels are embedded in daily digital interactions (FSB, 2022; IOSCO, 2022). The following bullets highlight the main pathways through which platforms act as accelerators.

- Social media virality. TikTok, Instagram, and YouTube spread testimonial videos and "success stories" at scale, often algorithmically amplified.
- Messaging apps. Telegram and WhatsApp host private recruitment groups, where peer pressure and affinity ties are strong.
- Influencers. Micro-influencers lend credibility; regulators have only recently begun enforcing rules on paid promotions.
- Advertising loopholes. Despite ad policies, scam promotions still appear in search ads, social feeds, and app stores.

Together, these digital channels substitute speed and scale for the slower word-of-mouth of earlier eras. Unless platforms are held accountable for promotions and influencer activity (ESMA, 2021), Ponzi funnels will continue to operate in plain sight, embedded in the same ecosystems that billions of users rely on for information and community.

4.2 Payment Infrastructure

Recruitment is only half of the story; successful Ponzi Games also rely on payment rails that can capture inflows quickly and obscure outflows. Payment service providers, e-wallets, and crypto transfers create low-friction channels that help operators scale globally before regulators respond (BIS, 2021). The following bullet points show the most common conduits.

• Cards and PSPs. Credit cards and payment service providers (PSPs) process transactions until chargebacks or complaints spike.



- E-wallets and prepaid cards. Provide quick on-ramps but limited traceability.
- Crypto rails. Wallet-to-wallet transfers enable rapid inflows, low friction, and cross-border reach, but also hinder clawbacks.
- Merchant laundering. Fraudsters use shell merchants with benign-looking categories to bypass detection.

These infrastructures are not neutral pipes: they can either enable scams or serve as points of detection. Stronger KYC, merchant monitoring, and cooperation between PSPs and regulators could transform these channels from accelerants into choke points (FSB, 2023).

4.3 Crypto Complexity

Cryptocurrencies have provided fertile ground for new Ponzi wrappers, not because they change the underlying mechanics but because they increase opacity. From staking tokens to "black-box bots," technical jargon and complex tokenomics create powerful information asymmetries (BIS, 2023). The bullets below illustrate how this complexity sustains digital Ponzis.

- **Ponzinomics.** Token "staking" schemes promise high yields, but the yields come from new inflows or token inflation rather than economic activity.
- Circular liquidity. Promoters trade their own tokens to simulate price appreciation.
- White paper theatre. Dense technical jargon creates an illusion of sophistication, widening the information asymmetry.
- Cross-chain bridges and mixers. Used to obscure fund flows and complicate enforcement.

Crypto's promise of decentralization has in practice created new forms of opacity. Without enforceable standards for technical disclosure and auditability, schemes such as OneCoin or PlusToken (see Box 10 in Section 6) flourish by exploiting investor ignorance. Policymakers have stressed that transparency and audit obligations are essential to close these gaps (FSB, 2022; BIS, 2021).

4.4 On-Chain Detection Tools

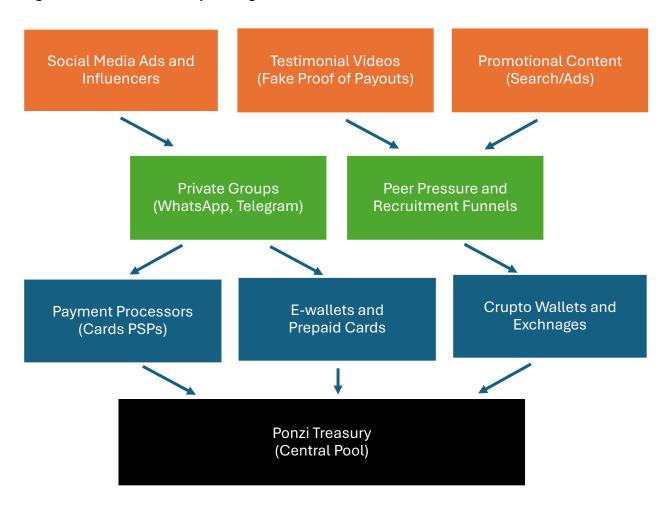
While crypto complexity enables fraud, blockchain technology also creates new detection opportunities. Transaction ledgers, if analyzed properly, can reveal anomalies and operator clusters in real time. Supervisory bodies such as the BIS highlight the value of anomaly



detection and wallet clustering as early-warning tools (BIS, 2021; IOSCO, 2022). The bullets summarize the most relevant techniques.

- Clustering and tagging. Blockchain analytics can identify common operators across wallets.
- Transaction anomalies. Burst patterns of small-ticket inflows followed by large outflows are red flags.
- **Stablecoin monitoring.** Flows into newly promoted tokens often pass through stablecoin liquidity pools, providing traceable signals.

Figure 5 – Platform Pathways of Digital Ponzis



Source: Bank & Finance synthesis, based on BIS (2021); FSB (2022); IOSCO (2022); ESMA (2021).

The challenge is that on-chain tools are often in the hands of specialists, not regulators or retail investors. Embedding these analytics into supervisory frameworks and even public-facing



dashboards could shorten Ponzi lifecycles dramatically. Harnessing blockchain's traceability is thus one of the most promising frontiers for containment (BIS, 2023; FSB, 2023).

Figure 5 illustrates how digital Ponzi Games exploit the online ecosystem. Platforms act as recruitment engines, while payments and crypto rails act as conduits for funds. Platforms and payments are not neutral channels: they can either **amplify scams** or, if regulated effectively, serve as **early-warning nodes** for detection and intervention.

Table 3 illustrates how regulatory regimes differ across products and jurisdictions, creating exploitable gaps for Ponzi promoters.

Table 3 - Regulatory Obligations by Product and Jurisdiction

Product / Channel	US	EU	Mexico/LatAm	Gaps and Challenges
Securities (traditional Ponzis)	SEC registration required	Prospectus + MiFID	CNBV/SIPRES registry	Non-compliance and cross-border arbitrage
MLM / Referral Programs	FTC oversight, limited	Country- specific rules	Mixed (some bans, some unregulated)	Overlap between consumer and securities law
Financial Promotions (influencers, ads)	Increasing SEC/FTC enforcement	EU: MiFID and ESMA guidelines	Weak enforcement	Lack of liability for platforms
Payment Processing	Bank Secrecy Act, PSP KYC	PSD2, AMLD	AML laws apply	Merchant laundering and offshore PSPs
Crypto tokens and wallets	Patchwork; SEC/CFTC debates	MiCA (2024– 25 rollout)	Early-stage frameworks	Global inconsistency; regulatory arbitrage

Source: Bank & Finance synthesis, based on SEC, ESMA, CNBV, BIS, IOSCO, FSB, and OECD reports.

The digital acceleration of Ponzi Games makes **regulatory coordination** essential: fragmented oversight allows schemes to migrate across channels and borders. Closing these gaps requires harmonized definitions, stronger liability for platforms, and faster asset-freeze mechanisms.

These dynamics are vividly illustrated by cases such as OneCoin, BitConnect, and PlusToken (see Box 10 in Section 6). Each promised transformative technology and outsized returns, but all were sustained by the same underlying Ponzi engine — inflows of new money disguised as investment income. Those cases demonstrate how crypto complexity amplifies Ponzi fragility.



Each case relied on buzzwords (blockchain, trading bots, wallets) that investors could not independently test. The lesson for policymakers is twofold: technical disclosure and auditability must be enforced, and platforms must act as gatekeepers, preventing viral promotion of schemes that show these clear red flags.

5. Regulatory Landscape, Gaps, and Cross-Border Coordination

Ponzi Games are a global phenomenon. Their persistence reflects not only human behavior but also the gaps in regulatory oversight, fragmented mandates, and slow cross-border coordination that promoters exploit. Since the Madoff scandal and the global financial crisis, supervisors have enhanced their tools, but asymmetries of information and the rising complexity of financial technology allow scams to migrate and scale faster than regulators can respond.

5.1 Fragmented Oversight and Inconsistent Definitions

A central vulnerability in the fight against Ponzi Games is the fragmented nature of financial supervision. Different regulators oversee securities, banking, insurance, payments, and advertising, often with conflicting or incomplete definitions. This patchwork approach creates loopholes that promoters exploit (FSB, 2023).

Financial supervision remains siloed across securities, banking, insurance, payments, and advertising. In the United States, jurisdiction over crypto-based schemes remains contested between the SEC and CFTC, while the FTC oversees deceptive promotions. In the European Union, MiFID and the forthcoming MiCA framework aim for harmonization, but uneven implementation across member states leaves room for arbitrage. In many emerging markets, under-resourced agencies maintain incomplete registries, amplifying information asymmetries between promoters and retail investors.

Implication: promoters disguise themselves as "membership clubs," "digital assets," or "referral programs" to escape securities law, exploiting definitional inconsistencies.

The lesson is that definitional inconsistencies are not minor legal quirks — they are operational enablers of fraud. If promoters can switch their labels from "investment" to "membership" or "digital asset," oversight silos will allow scams to flourish across jurisdictions.

5.2 Enforcement Gaps and Liability Blind Spots

Even when definitions are clear, enforcement delays blunt regulatory effectiveness. History shows that many large schemes — from Madoff to OneCoin — continued for years after early red flags emerged. Platforms, too, have faced limited liability, leaving critical blind spots (OECD, 2019; ESMA, 2021).



Even when rules exist, enforcement lags. Investigations into Madoff, OneCoin, and PlusToken revealed years of delay between early red flags and official action. Platforms — social networks, messaging apps, payment processors — generally face limited liability, leaving blind spots where scams thrive. The EU's Digital Services Act moves toward duties of care, but most jurisdictions rely on reactive "notice-and-takedown" models, which leave schemes running for months.

Implication: without shared liability, the asymmetry between investors (who cannot verify legitimacy) and promoters (who face little downside until collapse) remains wide.

Without shared liability and faster enforcement, the asymmetry between investors and fraudsters remains overwhelming. Strengthening platform duties of care and moving beyond reactive "notice-and-takedown" models are essential to reduce the lifespan of schemes before collapse.

5.3 Cross-Border Challenges

The globalization of finance has made Ponzi Games borderless. Operators routinely exploit offshore incorporation, multi-language promotion, and opaque payment flows to arbitrage regulatory differences (Egmont Group, 2020). Modern Ponzi Games scale globally before detection. Operators use:

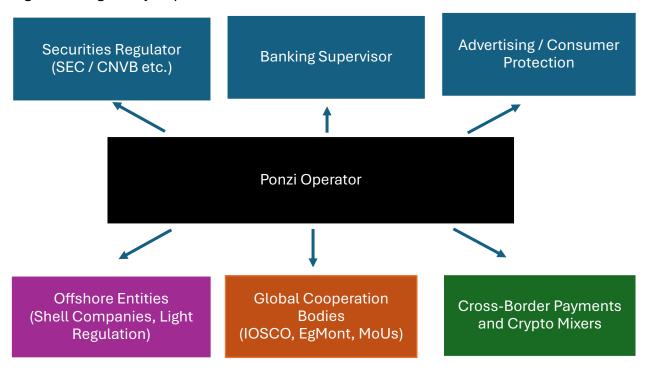
- Jurisdiction hopping into lightly supervised offshore centers.
- Cross-border payments through crypto mixers or shell PSPs.
- Multi-language promotion across YouTube, Telegram, and TikTok.

Frameworks such as IOSCO MoUs, the Egmont Group, and bilateral treaties exist but move too slowly for schemes that implode within weeks. Asset freezes, extraditions, and evidence-sharing often occur only *after* collapse, limiting recovery. Ultimately, the challenge is not just domestic gaps but the "spaces between regulators." Unless protocols for real-time cooperation are developed, cross-border Ponzi Games will continue to move faster than supervisory responses.

Figure 6 illustrates how Ponzi Games exploit weak points in the regulatory ecosystem. Fragmented domestic oversight, offshore incorporation, opaque cross-border payment flows, and the slow pace of global cooperation all combine to create fertile ground for frauds to expand rapidly across jurisdictions.



Figure 6 – Regulatory Gaps and Cross-Border Flows



Source: Bank & Finance synthesis, based on SEC (2009, 2017, 2022); ESMA (2021); CNBV reports; BIS (2021, 2023); IOSCO (2022); Egmont Group (2020).

Figure 6 highlights that combating Ponzi Games is not only about strengthening individual regulators but about **closing the spaces between them**. Unless oversight silos are bridged, offshore channels curtailed, and global protocols accelerated, promoters will continue to arbitrage information asymmetries and technological complexity across borders.

5.4 Toward a Stronger Global Regime

Recognizing the persistence of fragmented oversight and enforcement lags, policymakers have emphasized the need for a more coherent global regime. Reports by IOSCO and the FSB highlight that harmonization, platform accountability, and rapid-response tools are central to containing fraud (IOSCO, 2022; FSB, 2023). Containing Ponzi Games requires harmonized definitions, faster cooperation, and stronger accountability:

- 1. **Unified definitions and scope** harmonize what counts as a Ponzi scheme across securities, MLMs, tokens, and lending products.
- 2. **Platform accountability** impose duties on platforms to monitor, block, and report high-risk promotions.
- 3. **Rapid-response protocols** pre-arranged freezes and information-sharing that can be triggered within days, not months.



4. **Regional hubs of expertise** — capacity building in emerging markets (with G20/MDB support) to integrate blockchain forensics, ad-library scans, and registry data.

The path forward is not elimination but **containment**: shrinking the window between red flags and intervention, reducing investor harm, and ensuring promoters face credible deterrence wherever they operate. Only by addressing both **information asymmetries** and **technological complexity** can regulators close the space in which Ponzi Games thrive. By combining harmonized scope, shared liability, and global cooperation, Ponzi Games can be transformed from systemic threats into manageable nuisances. Containment is possible — but only if regulators act in concert rather than in silos.

6. Global Case Studies and Lessons Learned

Ponzi Games are often dismissed as isolated frauds, but a historical and global perspective shows they are **systemic patterns of financial deception** that adapt to context (Kindleberger and Aliber, 2011). The same core mechanics — inflows of new money funding outflows to earlier participants — appear in vastly different wrappers, from charitable savings banks in 19th-century Boston to crypto wallets in modern Asia.

Case studies provide three critical insights. First, they highlight **continuity**: the tactics of opacity, hype, and guaranteed returns recur across centuries. Second, they reveal **variation**: each era's dominant technologies and institutions shape how Ponzis are marketed, from newspaper ads to Telegram groups. Third, they illustrate the **scalability** of risk: while some scams affect a few thousand households, others destabilize entire economies or global markets.

In this section, we examine a portfolio of cases that span:

- **Proto- and early Ponzis** (Sarah Howe's "Ladies' Deposit," Franklin Syndicate).
- The archetypal case (Charles Ponzi, 1920).
- Macro-scale schemes (MMM Russia, Albania 1997).
- Real-asset wrappers (Woodbridge real estate, DC Solar, Bre-X mining).
- Modern finance and crypto (Madoff, OneCoin, BitConnect, PlusToken, Billions Trade Club Mexico).
- Grey-zone systemic fragilities (Alameda/FTX, Subprime mortgage crisis).

Together, these cases demonstrate how information asymmetries and technological complexity have enabled Ponzi Games across time. Each box below presents the facts, mechanics, red flags, and lessons, followed by a cross-case analysis of their common threads and divergences.



6.1 Proto- and early Ponzis (Sarah Howe's "Ladies' Deposit," Franklin Syndicate)

The earliest documented Ponzi Games reveal the essential mechanics of the typology: guaranteed outsized returns, affinity-based recruitment, and opaque investment narratives. Before Charles Ponzi's postal coupon scheme, operators such as Sarah Howe (Box 1) and William "520%" Miller (Box 2) were already exploiting the same vulnerabilities. Howe's Ladies' Deposit targeted financially excluded women with a charitable veneer, while Miller's Franklin Syndicate leveraged mass advertising and promises of implausible stock market profits. These cases illustrate how Ponzi Games adapt to the institutional environment of their time — exclusion in Howe's case, media expansion in Miller's.

Box 1 – Proto-Ponzi: Sarah Howe's "Ladies' Deposit" (Boston, 1879–1880)

Long before Charles Ponzi gave his name to the phenomenon, Sarah Howe pioneered one of the earliest documented Ponzi Games in the United States. Her "Ladies' Deposit" bank in Boston promised extraordinary monthly interest rates to unmarried women — a demographic largely excluded from mainstream financial institutions at the time. By blending financial exclusion with trust in a seemingly charitable mission, Howe managed to attract more than a thousand depositors in less than two years (Boston Post, 1880).

Case facts and mechanics

- **Promise:** 2% weekly / 8% monthly returns, framed as backed by Quaker philanthropists.
- Mechanics: Pure Ponzi flow new deposits were recycled to pay existing investors.
- Recruitment: Targeted women via word-of-mouth, leveraging affinity and exclusivity.
- Collapse: A press investigation exposed the fraud in 1880, triggering a bank run. Howe was convicted of fraud but later reoffended.

Red flags

- Guaranteed, outsized returns.
- Opaque claims of charitable backing with no proof.
- Absence of regulatory licensing or independent oversight.

The "Ladies' Deposit" highlights that Ponzi Games are not products of modern finance but timeless responses to financial exclusion and trust gaps. Howe's fraud demonstrates how affinity targeting and implausible promises exploit vulnerable demographics. The case also foreshadows recurring themes: opacity, unverifiable claims, and weak oversight.

Source: Bank & Finance synthesis, based on Boston Post (1880); U.S. court records; secondary historical accounts.



Box 2 – Franklin Syndicate (Brooklyn, 1899)

At the turn of the 20th century, the **Franklin Syndicate**, run by William "520%" Miller, became one of the first large-scale retail Ponzi Games in the United States. By promising implausibly high weekly returns from supposed stock speculation, Miller tapped into the optimism of a booming equity market. Within a single year, he drew thousands of small investors — many working-class households — into what was essentially a confidence game.

Case facts and mechanics

- Promise: 10% weekly returns (equivalent to 520% annually).
- Mechanics: Claimed to have "inside tips" and guaranteed profits from stock speculation. Inflows from new investors funded payouts to earlier ones.
- Recruitment: Relied heavily on newspaper advertising and testimonials, which projected credibility.
- Collapse: By late 1899, payouts slowed, and Miller was arrested. Estimated investor losses exceeded USD 1 million (≈USD 35 million today) (New York Times, 1899).

Red flags

- Guaranteed fixed returns far above market levels.
- Opaque trading claims ("insider tips") with no independent verification.
- Personal enrichment by Miller, including lavish spending, while investors were told funds were safely invested.

The Franklin Syndicate illustrates the scaling potential of Ponzi Games in mass markets once advertising and media are leveraged. The scheme showed how retail investors, with limited financial literacy and access to credible oversight, could be mobilized quickly. It also foreshadowed how media credibility and testimonials would become recurring recruitment tools for Ponzi promoters.

Source: Bank & Finance synthesis, based on New York Times (1899); U.S. court records; historical financial fraud literature.

Taken together, Boxes 1 and 2 illustrate the **prototype Ponzi typology**: small-scale, short-lived schemes driven by **personal trust or advertising credibility**. Their failure to generate genuine profits ensured rapid collapse once scrutiny emerged. Yet the psychological levers they employed — exclusivity, affinity, and the illusion of secure returns — continue to underpin larger and more complex schemes today. Proto-Ponzis thus serve as a **template for the recurring dynamics** of financial fraud.



6.2 The archetypal case (Charles Ponzi, 1920)

The scheme orchestrated by **Charles Ponzi** (**Box 3**) in 1920 became the archetype from which all subsequent "Ponzi Games" derive their name. While earlier cases had demonstrated the same logic, Ponzi's postal coupon arbitrage fraud crystallized the essential features into a recognizable model: a **plausible yet impractical investment narrative**, the promise of **guaranteed exponential returns**, and the rapid recycling of new investor money into payouts for earlier participants. Ponzi leveraged the scale of mass media advertising and the credibility of his immigrant success story, making the scheme both iconic and influential.

Box 3 – Charles Ponzi and the Postal Coupon Scheme (Boston, 1920)

The scheme that gave its name to all future "Ponzi Games" was orchestrated by **Charles Ponzi** in Boston in 1920. Promising 50% returns in just 45 days, Ponzi claimed to exploit arbitrage opportunities in international postal reply coupons — small certificates used for prepaying postage in different currencies. Though the arbitrage idea had a kernel of plausibility, the scale Ponzi claimed was impossible. The scheme drew tens of thousands of investors in a matter of months.

Case facts and mechanics

- **Promise:** 50% in 45 days, or 100% in 90 days.
- Mechanics: Ponzi claimed to buy coupons cheaply in Europe and redeem them in the U.S. at higher value. In reality, the arbitrage was impractical; new investors' funds were used to pay earlier ones.
- Recruitment: Extensive newspaper advertising and word-of-mouth among immigrant communities, who trusted Ponzi as an outsider turned success story.
- Collapse: Investigative journalism in the *Boston Post* exposed the inconsistencies. A subsequent audit showed only a tiny number of coupons had ever been purchased. Losses totaled more than USD 20 million (~USD 280 million today) (Boston Post, 1920). Ponzi was arrested in August 1920 and later deported.

Red flags

- Implausible arbitrage given transaction costs and coupon availability.
- Guaranteed, exponential returns.
- Opaque operations with no verifiable trading records.

Ponzi's scheme is remembered not only for its scale but also for its **perfect crystallization of the Ponzi engine**: an appealing narrative with a veneer of plausibility, guaranteed outsized returns, and zero independent verification. The speed of its growth and collapse showed the power of financial illusions when combined with mass advertising and social trust. It remains the archetype against which all later Ponzi Games are measured.

Source: Bank & Finance synthesis, based on Boston Post (1920); U.S. court filings; historical analyses of the Ponzi case.



Ponzi's case demonstrates the shift from **proto-Ponzi schemes (Boxes 1–2)** to a fully fledged archetype, where the typology is unmistakable: reliance on continuous inflows, total absence of real profits, and inevitable collapse once scrutiny intensifies. It also illustrates the critical role of **information asymmetries** — investors lacked the means to verify the feasibility of coupon arbitrage, while regulators reacted too late (Frankel, 2012). The "Ponzi" name endures because his scheme captured, with unusual clarity, the **essence of financial illusions** that repeat in everchanging forms.

6.3 Macro-scale schemes (MMM Russia, Albania 1997)

While early Ponzi Games affected thousands of households, the 1990s introduced a new macro-scale typology: schemes so large they destabilized entire national economies. MMM in Russia (Box 4) and the Albanian pyramid crisis (Box 5) illustrate how Ponzi Games can scale far beyond retail fraud when combined with weak institutions, economic distress, and political complicity. These schemes promised implausible yields — often 10–30% monthly — to millions of participants, drawing savings that in Albania alone reached nearly half of GDP. Their collapse triggered protests, social unrest, and in Albania's case, civil conflict.

Box 4 – MMM (Russia, 1994–1997)

In the turbulent transition economy of post-Soviet Russia, MMM, founded by Sergei Mavrodi, became one of the largest Ponzi Games in history. Promising returns of 30% to over 1,000% through its so-called "investment tickets," MMM drew in millions of Russians desperate for financial opportunity amid hyperinflation, unemployment, and the collapse of state safety nets. At its peak, MMM claimed to involve 5–10 million households, equal to a significant share of the population (IMF, 1990s; Russian press archives, 1994–1997).

Case facts and mechanics

- **Promise:** Returns ranged from 30% monthly to implausible "guaranteed wealth" offers.
- Mechanics: Investors purchased "MMM shares" or "tickets," whose price was arbitrarily set and adjusted by the company itself. Payouts to early investors were made from inflows of new money.
- Recruitment: Massive advertising campaigns on national TV, posters, and billboards, coupled with populist rhetoric ("Today you are poor, tomorrow you are rich").
- Collapse: In 1994, regulators attempted to intervene; MMM defaulted on payments, causing millions to lose savings. The fallout sparked protests and contributed to widespread public distrust of the emerging Russian financial system.

Red flags

- Guaranteed and constantly rising returns with no underlying business activity.
- Self-valuation of "shares" by MMM itself.



- Over-the-top advertising campaigns, unusual for genuine financial products.
- Political complicity: officials were slow to act, fearing social backlash.

MMM demonstrates the **systemic risk potential of Ponzi Games** in fragile institutional contexts. What began as a classic scheme scaled to affect macroeconomic stability, eroding trust in financial markets for years. The case shows how Ponzi Games can evolve from retail scams into **national crises** when financial literacy is low, regulation is weak, and economic stress is high.

Source: Bank & Finance synthesis, based on IMF (1990s) country reports; Russian press archives (1994–1997); secondary analyses of the MMM case.

Box 5 – Albania's Pyramid Crisis (1996–1997)

In the mid-1990s, Albania became the site of one of the most devastating Ponzi collapses ever recorded. Amid the transition from communism to a market economy, at least six large "investment companies" promised returns of **10–25% per month**. With few safe savings vehicles available, as many as two-thirds of Albanian households invested in these schemes. When they inevitably collapsed in early 1997, the financial shock triggered social unrest, the fall of the government, and violent conflict that required international peacekeeping.

Case facts and mechanics

- **Promise:** Double-digit monthly returns, framed as gains from trading, import-export businesses, or construction projects.
- Mechanics: Pure Ponzi flow new deposits recycled as payouts. Some firms created the illusion of real activity by sponsoring local projects or businesses.
- Recruitment: Relied on local word-of-mouth, political endorsements, and widespread advertising.
- Collapse: By early 1997, estimated liabilities equaled 40–50% of GDP (IMF, 1997; World Bank, 1997). As the schemes collapsed, protests escalated into armed conflict. Hundreds of people were killed, and Albania required international intervention (Operation Alba).

Red flags

- Implausibly high and guaranteed yields.
- Absence of effective financial supervision or registry checks.
- Close ties to political figures, which lent false legitimacy.
- Overexposure of households: systemic concentration of savings in the schemes.



The Albanian crisis shows how Ponzi Games can scale from fraud to systemic collapse when they exploit weak institutions, economic desperation, and political complicity. The episode remains a cautionary tale: unchecked Ponzi proliferation can destabilize not just households but entire states (Kindleberger and Aliber, 2011). It underscores the importance of early intervention and macroprudential vigilance in preventing systemic contagion from fraudulent schemes.

Source: Bank & Finance synthesis, based on IMF (1997); World Bank (1997); academic analyses of Albania's transition economy.

Boxes 4 and 5 demonstrate that Ponzi Games are not merely micro-level frauds but can become systemic threats when left unchecked. The macro typology is characterized by: (i) mass retail participation, (ii) state-level political entanglement or inertia, and (iii) macroeconomic fallout upon collapse. These cases underscore the dangers of financial exclusion and weak regulatory capacity, showing how Ponzi Games can erode trust in entire financial systems and destabilize societies.

6.4 Real-asset wrapper cases (Woodbridge real estate, DC Solar, Bre-X mining)

Another recurring typology is the **real-asset wrapper Ponzi**, where tangible projects — real estate, mining, or renewable energy — provide a veneer of legitimacy. Unlike early Ponzis that relied on abstract financial promises, these schemes rooted their narratives in **visible or plausible assets**. **Bre-X (Box 6)** fabricated geological samples to inflate a fictitious gold discovery, **Woodbridge (Box 7)** disguised related-party loans as conservative real-estate investments, and **DC Solar (Box 8)** created fraudulent leases and fictitious green-energy generators. In each case, investors believed they were funding tangible, verifiable projects, when in fact inflows were recycled or assets fabricated.

Box 6 – Bre-X Mining: The Gold that Never Was (Canada/Indonesia, 1993–1997)

In the mid-1990s, Canadian company **Bre-X Minerals Ltd.** claimed to have discovered one of the largest gold deposits in the world at Busang, Indonesia. The supposed find triggered a stock market frenzy, sending Bre-X's valuation soaring to billions of dollars. At its peak, the company was worth over CAD 6 billion, with thousands of investors convinced they were buying into the discovery of the century. In reality, the "gold samples" had been salted with outside gold, and the entire project was a fabrication.

Case facts and mechanics

• **Promise:** Access to the "world's largest gold reserve," with the potential to multiply share value many times over.



- Mechanics: Not a Ponzi in the narrow sense (no cash recycling), but a fraudulent wrapper: fake geological samples and falsified reports created the illusion of vast resources. Inflows from new investors (stock purchases) funded Bre-X insiders who sold at inflated prices.
- Recruitment: Relentless promotion by brokers, speculative media hype, and government endorsement in Indonesia.
- Collapse: In 1997, an independent audit revealed no economic gold deposits (Canadian Securities Commission, 1998). The stock collapsed to pennies, wiping out investor wealth.

Red flags

- Implausible resource size claims unsupported by independent verification.
- Heavy reliance on internal sampling without external geological audits.
- Insider selling at peak valuations.
- Regulatory gaps in disclosure and auditing of exploration companies.

The Bre-X scandal illustrates how real-asset narratives can be manipulated to replicate Ponzilike dynamics, even without classic payout recycling. Investors' belief in a "tangible" project masked glaring information asymmetries. The case underscores the need for independent third-party verification and robust disclosure standards in resource and infrastructure sectors, where frauds can inflict systemic damage on markets and investor confidence.

Source: Bank & Finance synthesis, based on Canadian Securities Commission (1998); academic analyses of Bre-X; contemporary press reports.

Box 7 – Woodbridge Group: The "Secured" Real Estate Loan Ponzi (U.S., 2012–2017)

Between 2012 and 2017, the **Woodbridge Group of Companies**, led by Robert Shapiro, operated one of the largest U.S. real-estate-based Ponzi schemes. Marketed as a safe and "secure" investment, Woodbridge sold promissory notes supposedly backed by loans to third-party real estate developers. In reality, most "borrowers" were Shapiro-controlled shell entities, and new investor money was simply recycled to pay earlier participants. More than **8,400 investors**, many retirees, lost savings totaling over **USD 1.2 billion**.

Case facts and mechanics

- Promise: "Secured" real estate loans yielding 5–10% annually.
- **Mechanics:** Investors purchased notes marketed as conservative lending products. Instead of funding genuine developers, money went to Shapiro's entities; repayments were financed by fresh inflows.



- **Recruitment:** Aggressive sales through an extensive broker-dealer network and glossy marketing materials emphasizing safety.
- Collapse: In 2017, the SEC charged Woodbridge with operating a massive Ponzi scheme (SEC, 2017). Shapiro later pleaded guilty and was sentenced to 25 years in prison.

Red flags

- Promises of steady, above-market returns, framed as "safe."
- Related-party lending disguised as arm's-length transactions.
- Heavy reliance on unregistered brokers incentivized by commissions.
- Lack of independent verification of loan books.

The Woodbridge case shows how real assets can provide a veneer of security that masks fraudulent recycling of funds. By exploiting investor trust in tangible collateral (real estate), the scheme demonstrates the dangers of information asymmetry in private placements, where disclosure standards are weaker and regulatory oversight is limited.

Source: Bank & Finance synthesis, based on SEC (2017) litigation releases; DOJ filings; financial press coverage.

Box 8 – DC Solar: Renewable Energy Leasing Fraud (U.S., 2011–2018)

From 2011 to 2018, California-based **DC Solar** promoted itself as a leader in renewable energy solutions, leasing mobile solar generators (MSGs) and promising investors lucrative federal tax credits. In reality, most generators did not exist, and lease revenues were fabricated. The scheme raised more than **USD 1 billion** from investors and financial institutions before collapsing, making it one of the largest green-energy frauds in U.S. history.

Case facts and mechanics

- **Promise:** Steady returns from leasing mobile solar generators, combined with generous U.S. federal tax credits.
- Mechanics: Fictitious lease agreements and fraudulent circular payments gave the illusion of rental income. Investors received payouts funded by new investor capital. Thousands of non-existent generators were recorded as assets.
- **Recruitment:** Marketed through brokers and financial advisers, with the appeal of "green" impact investing and tax benefits.
- Collapse: In 2018, the FBI raided DC Solar; principals Jeff and Paulette Carpoff later pleaded guilty. Losses exceeded USD 1 billion; hundreds of investors, including major corporations, were defrauded (DOJ, 2018).



Red flags

- Returns heavily reliant on tax incentives, with little proof of genuine rental activity.
- Lack of independent verification of physical assets.
- Circular lease payments among affiliates, rather than from third-party customers.
- Aggressive lifestyle spending by principals, inconsistent with a capital-intensive leasing business.

The DC Solar scandal demonstrates how real-asset narratives can intersect with policy incentives to amplify fraud. By wrapping a Ponzi engine in the language of green investment and tax credits, operators exploited both investor enthusiasm and regulatory blind spots. The case underscores the need for audited verification of physical assets and lease revenues in sectors benefiting from government subsidies.

Source: Bank & Finance synthesis, based on DOJ (2018) indictments; SEC enforcement actions; financial press reports.

Boxes 6 to 8 illustrate how Ponzi operators exploit the illusion of tangibility. Investors assume that mining, real estate, or renewable energy projects are inherently safer, yet these cases show that without independent audits and transparent oversight, "hard assets" can be as fictitious as postal coupons or crypto tokens. The real-asset wrapper typology demonstrates that fraudsters adapt their camouflage to the investment zeitgeist — gold in the 1990s, real estate in the 2010s, and renewable energy in the 2010s — revealing the importance of third-party verification and due diligence to break information asymmetries.

6.5 Modern finance and crypto (Madoff, OneCoin, BitConnect, PlusToken, Billions Trade Club Mexico)

The modern era of Ponzi Games is defined by financial sophistication and digital acceleration. Here, schemes blur the line between retail fraud and institutional finance, often using technical complexity as camouflage. Madoff (Box 9) exemplifies the institutionalized Ponzi, where exclusivity, feeder funds, and fabricated statements deceived global investors for decades. With the advent of blockchain and social platforms, new digital typologies emerged: OneCoin, BitConnect, and PlusToken (Box 10), which wrapped classic Ponzi flows in crypto buzzwords and multi-level marketing. Most recently, in Mexico, Billions Trade Club (Box 11) combined Al and blockchain jargon with aggressive social media marketing, illustrating how local markets are now targeted with global narratives.



Box 9 – Bernard Madoff Investment Securities (U.S., 1960–2008)

The collapse of **Bernard L. Madoff Investment Securities LLC** in December 2008 revealed the largest Ponzi scheme in history. Madoff, a former Nasdaq chairman, promised steady returns through a purported "split-strike conversion" options strategy. For decades, he cultivated an image of trust and exclusivity, attracting high-net-worth individuals, charitable foundations, and institutional investors. At its peak, reported account balances exceeded **USD 65 billion**, though net investor losses were around **USD 18 billion** (SEC, 2009; Markopolos, 2010).

Case facts and mechanics

- **Promise:** Consistent returns of 10–12% annually, regardless of market conditions.
- Mechanics: Claimed use of options strategies to hedge equity investments; in reality, trades were fabricated, and investor statements falsified. Withdrawals were paid from new deposits.
- Recruitment: Relied on feeder funds, hedge funds, and wealth managers who funneled clients into Madoff's firm. Exclusivity ("difficult to access") enhanced credibility.
- Collapse: The 2008 financial crisis led to heavy redemption requests, which Madoff could not meet. His sons reported him to authorities; he was sentenced to 150 years in prison.

Red flags

- Returns were implausibly smooth, lacking volatility even during market downturns.
- No independent custodian or third-party verification of trades.
- Repeated whistleblower alerts (e.g., Harry Markopolos) ignored by the SEC.
- Overconcentration of feeder funds in a single, opaque manager.

The Madoff scandal illustrates how information asymmetry and regulatory complacency can allow even sophisticated investors to be deceived. Unlike small-scale scams, Madoff leveraged reputation, exclusivity, and institutional intermediation to attract billions. The case triggered sweeping regulatory reforms in custody, auditing, and whistleblower protection, and remains the benchmark for modern Ponzi detection failures.

Source: Bank & Finance synthesis, based on SEC (2009) Inspector General report; Markopolos (2010); financial press analyses.



Box 10 - Crypto Case Studies: OneCoin, BitConnect, and PlusToken (2014–2019)

The rise of cryptocurrencies provided fertile ground for new Ponzi Games, where technical jargon and blockchain opacity created powerful information asymmetries. Three of the most notorious cases — **OneCoin**, **BitConnect**, and **PlusToken** — illustrate how promoters wrapped classic Ponzi mechanics in the language of digital innovation.

Case facts and mechanics

- OneCoin (2014–2017, global). Marketed as the "Bitcoin killer," OneCoin raised an estimated €4 billion. Promoters claimed it ran on a proprietary blockchain, but in reality no blockchain existed transactions were recorded in a central SQL database. Early investors were rewarded through multi-level marketing, while new inflows sustained payouts. Lesson: charisma and complexity can mask the total absence of real technology.
- **BitConnect (2016–2018, global).** Offered "guaranteed" returns of 1% daily through a secret "trading bot." Investors exchanged Bitcoin for BitConnect Coin (BCC), whose price collapsed from USD 400 to near zero in days. Total losses exceeded **USD 2.5 billion** (DOJ, 2019; FSB, 2022). **Lesson:** the "black-box bot" narrative shows how opaque algorithms substitute for transparency.
- PlusToken (2018–2019, China/Asia). Promoted as a high-yield crypto wallet with returns of 10–30% monthly, PlusToken attracted 3–4 million users, with inflows of USD 2–3 billion. When withdrawals froze, operators attempted to launder funds, even disrupting Bitcoin and Ethereum markets. *Lesson:* even when transactions are visible on-chain, retail investors lack the tools to verify legitimacy.

Red flags across cases

- Guaranteed yields framed as "crypto arbitrage" or "wallet rewards."
- Opaque technology claims (fake blockchain, unverifiable bots).
- Multi-level marketing and heavy reliance on community promotion.
- Offshore incorporation and fragmented enforcement.

These cases show that **crypto complexity does not reinvent Ponzi Games** — it **accelerates them**. Each scheme replicated the same fragile engine: new money funding earlier payouts, dressed in digital wrappers. Their global scale underscores the urgency of harmonized regulation, on-chain analytics, and platform accountability.

Source: Bank & Finance synthesis, based on DOJ (2019) indictments; FSB (2022); blockchain forensic analyses; financial press reports.



Box 11 – Billions Trade Club (Mexico, 2022–2024)

In July 2024, Mexico's **CONDUSEF** (Comisión Nacional para la Protección y Defensa de los Usuarios de Servicios Financieros) issued a public alert regarding **Billions Trade Club**, an entity promoting itself as an Al-driven crypto investment platform. Promising extraordinary yields through "automated trading" and "blockchain opportunities," the firm aggressively marketed to retail investors in Mexico via social media. Billions Trade Club was **not registered** with Mexican financial authorities and therefore not authorized to offer investment services.

Case facts and mechanics

- **Promise:** High, steady returns through algorithmic trading and crypto strategies.
- **Mechanics:** Investors deposited funds believing they were allocated into AI-managed crypto portfolios. Instead, funds were pooled, and payouts to earlier investors came from new inflows a classic Ponzi engine.
- Recruitment: Relied on digital marketing, messaging app groups, and testimonials promoting early "profits." Buzzwords such as *artificial intelligence* and *blockchain* gave a veneer of credibility.
- Collapse: Following regulatory alerts, confidence eroded, and investors reported being unable to withdraw funds. CONDUSEF emphasized that the company was absent from official registries (CONDUSEF, 2024; Infobae, 2024).

Red flags

- Unlicensed operator, absent from CNBV/SIPRES registries.
- Guaranteed returns framed as technology-driven "risk-free" profits.
- Marketing via social media and referral chains rather than licensed brokers.
- Heavy reliance on jargon (AI + blockchain) to obscure the absence of real operations.

The Billions Trade Club case illustrates how modern Ponzi Games localize global narratives. By borrowing credibility from emerging technologies (AI, blockchain) and exploiting low financial literacy, the scheme adapted a classic model to the Mexican market. The episode highlights the importance of up-to-date registries, rapid regulatory alerts, and platform accountability in emerging markets, where new frauds can spread quickly across retail audiences.

Source: Bank & Finance synthesis, based on CONDUSEF (2024) alerts; Infobae (2024); Mexican financial press coverage.

Boxes 9 to 11 demonstrate how modern Ponzi Games rely less on affinity or tangibility, and more on **technical opacity, reputational endorsements, and digital amplification**. Whether through



Madoff's "split-strike conversion" strategy or BitConnect's "Al trading bot," the typology exploits information asymmetries created by complexity itself. These cases show how trust in institutions, platforms, or technology substitutes for verification, and how cross-border digital ecosystems make containment far harder. The lesson is that digital acceleration and financial sophistication magnify, rather than diminish, Ponzi fragilities.

6.6 Grey-zone systemic fragilities (Alameda/FTX, Subprime mortgage crisis)

Not all financial collapses are legally Ponzis, yet some exhibit **Ponzi-like fragilities**: dependence on new inflows, opacity in fund use, and sudden collapse when confidence evaporates. Two emblematic cases are **FTX/Alameda (Box 12)** and the **subprime mortgage crisis (Box 13)**. In both, the narrative was not of guaranteed returns, but of **sophisticated finance** — custody of customer crypto assets in FTX's case, and AAA-rated mortgage-backed securities in the subprime boom. In reality, both systems relied on continuous inflows and misallocated funds, creating structural fragility akin to a Ponzi engine.

Box 12 – Grey Zone Case: FTX and Alameda Research (2022)

The collapse of FTX, once one of the world's largest cryptocurrency exchanges, and its trading affiliate Alameda Research, is often debated as a Ponzi-like event. While not a textbook Ponzi—there was no explicit promise of fixed, guaranteed returns—the misuse of customer funds created structural dynamics similar to those of classic schemes: opaque fund flows, information asymmetry, and reliance on continuous new deposits to sustain operations.

Case facts and mechanics

- **Promise:** Safe custody of customer assets on FTX's exchange, and sophisticated trading by Alameda. No explicit "yield" was promised, but confidence in the exchange implied funds were secure and liquid.
- Mechanics: Billions in customer deposits on FTX were secretly transferred to Alameda, where they financed speculative bets, venture investments, and political donations. When crypto markets declined in 2022, Alameda incurred large losses, leaving a hole in FTX's balance sheet. Withdrawals from FTX were funded by inflows from new customers until confidence collapsed (SEC, 2022 complaints; BIS, 2023).
- Recruitment: Relied on global branding, high-profile sponsorships (stadiums, sports teams), and endorsements from venture capital funds, which signaled credibility to retail investors.
- Collapse: In November 2022, revelations about FTX's balance-sheet gap triggered a
 "bank run." The exchange froze withdrawals and filed for bankruptcy, with over USD 8–
 10 billion in customer funds missing.



Red flags

- Absence of independent custody or segregation of customer assets.
- Extremely close and opaque links between FTX and Alameda.
- Lack of audited, verifiable financial statements.
- Overreliance on branding and reputational endorsements instead of transparency.

FTX/Alameda demonstrates how Ponzi-like fragilities can emerge even without explicit Ponzi promises. By misappropriating customer deposits and masking losses with new inflows, the scheme shared the same dependence on confidence and continuous liquidity as classic Ponzi Games. The case underscores the need for proof-of-reserves requirements, independent custody, and real-time transparency in digital asset markets, where structural opacity creates systemic vulnerabilities.

Source: Bank & Finance synthesis, based on SEC (2022) complaint; CFTC filings; BIS (2023); U.S. bankruptcy filings; financial press investigations.

Box 13 – Grey Zone Case: The Subprime Mortgage Crisis (2007–2008)

The **subprime mortgage crisis** in the United States (2007–2008) was not a Ponzi scheme in the legal sense, but its systemic dynamics bore strong resemblances. At the heart of the housing bubble, complex mortgage-backed securities (MBS) and collateralized debt obligations (CDOs) depended on a constant inflow of new borrowers and refinancing to sustain valuations. Once inflows slowed, the structure unraveled in a cascading collapse that triggered the global financial crisis.

Case facts and mechanics

- **Promise:** Safe, investment-grade returns on MBS and CDO tranches, marketed as diversified and low risk.
- Mechanics: Mortgage originators extended credit to increasingly risky borrowers, while securitization repackaged subprime loans into "AAA-rated" products. Rising housing prices concealed fragility; as long as new borrowers entered, defaults appeared manageable. When housing prices stalled, defaults surged, and the system collapsed.
- **Recruitment:** Relied on mortgage brokers, securitization chains, and credit rating agencies, which provided a veneer of credibility.
- Collapse: By 2007–2008, defaults on subprime loans spiked, securitization markets froze, and global financial institutions faced insolvency. The crisis destroyed trillions in household wealth and required unprecedented state intervention (U.S. Financial Crisis Inquiry Commission, 2011; Gorton, 2010).



Red flags

- System-wide assumption that housing prices could only rise.
- Misaligned incentives: originators earned fees regardless of loan quality.
- Opaque securitization structures that obscured true risk.
- Overreliance on rating agencies' models, creating false assurance.

The subprime crisis illustrates how **Ponzi-like fragilities can emerge in mainstream finance**, even without explicit fraud. The system depended on ever-rising inflows of new borrowers and refinancing — structurally similar to a Ponzi's dependence on new entrants. The lesson is that **information asymmetries and complexity** are not confined to scams on the financial periphery; they can also appear at the very center of global markets, amplifying systemic risk.

Source: Bank & Finance synthesis, based on U.S. Financial Crisis Inquiry Commission (2011); Gorton (2010); BIS (2023).

Boxes 12 and 13 illustrate a distinct typology: grey-zone systemic fragilities. These are not outright Ponzi Games but mainstream financial structures whose sustainability depended on confidence and continuous inflows. When trust broke — through revelations of misuse of customer funds at FTX, or the stalling of U.S. housing prices in 2007 — collapse was rapid and losses systemic. These cases remind us that Ponzi-like dynamics are not confined to the financial periphery: they can emerge at the very core of global finance, magnified by complexity, leverage, and interconnectedness.

6.7 Cross-Case Comparative Analysis

The fifteen cases reviewed across the thirteen boxes demonstrate that Ponzi Games are neither rare nor new. They are **timeless in design yet highly adaptive in form**, reappearing in different institutional, technological, and cultural settings. From a 19th-century "ladies' bank" in Boston to billion-dollar crypto wallets in Asia, the same cash-flow engine recurs under ever-changing disguises.

Continuity across centuries. The basic mechanics have not shifted since Sarah Howe (1879) and Charles Ponzi (1920): promises of guaranteed returns, opaque strategies shielded from scrutiny, and the recycling of new inflows to pay old investors. Early schemes relied on affinity ties and word-of-mouth; later ones harnessed mass advertising; today they scale through digital platforms — a testament to the enduring power of information asymmetries (Frankel, 2012).

Variation in wrappers. Each period supplied a fresh narrative to cloak the same underlying fraud. In the 1890s it was "insider stock tips"; in the 1920s, postal coupons; in the 1990s, transition-economy shares in Russia and Albania; in the 2000s, real-estate loans and renewable-energy leases; and in the 2010s–2020s, blockchain wallets and Al-driven bots (Kindleberger & Aliber, 2011; BIS, 2023).



Scale and systemicity. Most Ponzis remain retail-level scams, but some have expanded into national or global crises. The Albanian pyramid schemes and MMM Russia absorbed household savings equivalent to a large share of GDP (IMF, 1997; World Bank, 1997), while Madoff and the subprime crisis revealed how Ponzi-like fragilities can sit at the very core of global finance (U.S. Financial Crisis Inquiry Commission, 2011).

Red flags and blind spots. Across all typologies, common warning signs were visible: implausible yields, lack of independent verification, opaque operations, and aggressive promotion. What changed were the blind spots: exclusion of women from formal banking (Howe), weak post-communist institutions (MMM, Albania), misplaced trust in reputation (Madoff), overreliance on rating agencies (Subprime), and technological opacity in crypto and DeFi (SEC, 2009; BIS, 2021).

Regulatory lessons. Each collapse exposed delays in detection and enforcement. Early warnings in Madoff's case were ignored; CONDUSEF's alert on Billions Trade Club came only after losses mounted. Cross-border payment channels and platform intermediaries further slow intervention. These gaps underscore the urgency of real-time oversight, harmonized definitions, and stronger accountability frameworks (FSB, 2022; IOSCO, 2022).

Taken together, these cases confirm that Ponzi Games are less anomalies than **recurring stress tests of financial systems**. They thrive where narratives outpace verification, where confidence substitutes for transparency, and where fragmented regulation creates space for arbitrage.

Figure 7 groups the thirteen case studies into six typologies — from proto-Ponzis (Boxes 1–2), to the archetypal model of Charles Ponzi (Box 3), macro-scale national crises (Boxes 4–5), real-asset wrappers (Boxes 6–8), digitally amplified frauds (Boxes 9–11), and grey-zone systemic fragilities (Boxes 12–13). **Figure 8** complements this by mapping the same cases on a global timeline (1879–2024) against U.S. interest-rate cycles and major financial episodes.

Together, Figures 7 and 8 demonstrate that the form of Ponzi Games evolves, but their DNA does not. Fraudsters adapt to the technologies and narratives of their time, while macroeconomic cycles and regulatory gaps shape the scale and impact of each episode. Recognizing these patterns is essential to anticipating how the next generation of Ponzis will emerge and to designing safeguards that limit their systemic reach (Kindleberger & Aliber, 2011; BIS, 2023).



Figure 7 – Typologies of Ponzi Games Across History

Proto- and early Ponzis

Box 1 - Proto-Ponzi: Sarah Howe's "Ladies' Deposit" (Boston, 1879-1880)

Box 2 - Franklin Syndicate (Brooklyn, 1899)

The archetypal case

Box 3 - Charles Ponzi and the Postal Coupon Scheme (Boston, 1920)

Macro-scale schemes

Box 4 - MMM (Russia, 1994-1997)

Box 5 - Albania's Pyramid Crisis (1996-1997)

Real-asset wrapper cases

Box 6 - Bre-X Mining: The Gold that Never Was (Canada/Indonesia, 1993-1997)

Box 7 - Woodbridge Group: The "Secured" Real Estate Loan Ponzi (U.S., 2012-2017)

Box 8 - DC Solar: Renewable Energy Leasing Fraud (U.S., 2011-2018)

Modern finance and crypto

Box 9 - Bernard Madoff Investment Securities (U.S., 1960-2008)

Box 10 - Crypto Case Studies: OneCoin, BitConnect, and PlusToken (2014-2019)

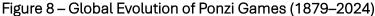
Box 11 - Billions Trade Club (Mexico, 2022-2024)

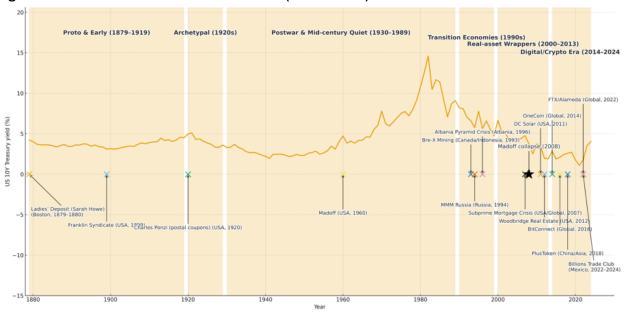
Grey-zone systemic fragilities

Box 12 - Grey Zone Case: FTX and Alameda Research (2022)

Box 13 - Grey Zone Case: The Subprime Mortgage Crisis (2007-2008)

Source: Bank & Finance synthesis, based on case studies (Boxes 1–13); Kindleberger and Aliber (2011); Frankel (2012).





US 10Y Treasury yield (annual avg)

Source: Bank & Finance synthesis, based on historical case studies (Boxes 1–13); Boston Post (1879, 1920); New York Times (1899); IMF (1997); World Bank (1997); U.S. Financial Crisis Inquiry Commission (2011); SEC (2009, 2017, 2022); ESMA (2021); BIS (2021, 2023); IOSCO (2022); OECD (2019); Egmont Group (2020); CONDUSEF (2024). Interest-rate line is the U.S. 10-Year Treasury yield (annual averages). 1879–1961: Robert J. Shiller, Online Data ("Long Interest Rate" series). 1962–2024: Federal Reserve Board, via FRED series DGS10 ("Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity").



7. Scenarios (2025–2027) and Strategy Implications

Ponzi Games will not disappear; they will evolve (Kindleberger and Aliber, 2011). The coming years will likely see **new technological wrappers**, **shifting macroeconomic contexts**, **and varying regulatory responses**. To prepare, we outline three scenarios for 2025–2027: a **Baseline**, a **Downside**, and an **Upside**. Each highlights how Ponzi risks may unfold and what implications this has for regulators, platforms, and investors.

7.1 Baseline Scenario – Continuity with Digital Acceleration

In the baseline outlook, Ponzi Games remain a persistent feature of global finance. They continue at a steady pace, sustained by the virality of social media, the allure of AI-driven trading claims, and the opacity of crypto tokens (FSB, 2022). Regulators strengthen their oversight gradually, but uneven implementation across jurisdictions prevents decisive containment.

In this scenario, retail investors in emerging markets remain particularly vulnerable, as financial literacy and enforcement capacity lag. Platforms introduce limited detection systems, but without clear liability they avoid deeper intervention. Cross-border arbitrage remains prevalent, allowing promoters to exploit gaps in supervision.

The outcome is a steady stream of medium-scale Ponzi losses. These schemes inflict material harm on households but stop short of triggering systemic crises. The implication is that without more proactive intervention, Ponzi Games remain "background noise" — constant, costly, but not catastrophic.

For policymakers and platforms, the baseline underscores the need to institutionalize **early-warning systems** and embed **red-flag literacy tools** for retail investors. Without such measures, persistent medium-scale losses will continue to erode trust in financial innovation, even if systemic stability is not immediately threatened (OECD, 2019; BIS, 2021; FSB, 2022).

7.2 Downside Scenario – Crisis of Confidence

The downside scenario envisions a convergence of economic distress and regulatory inertia. In an environment of high inflation and weak employment, households become more susceptible to promises of effortless wealth. Fraudsters exploit the instability by embedding Ponzi engines into new technological wrappers such as tokenized assets and AI investment platforms (FSB, 2023).

In this scenario, a collapse akin to Russia's MMM or Albania's 1997 pyramid schemes could unfold in a mid-sized emerging economy. The result would be macro-financial instability, spillovers into banking and payments systems if scams intersect with regulated intermediaries, and political backlash against both regulators and platforms for inaction (IMF, 1997; World Bank, 1997).



The outcome is a localized financial crisis with global reputational costs for innovation and financial technology. This downside illustrates how quickly Ponzi Games can evolve from household-level fraud into systemic risk when economic stress combines with weak oversight.

The downside highlights the urgency of **rapid cross-border coordination** and **platform liability**. Delayed intervention, as seen in past cases from Albania and Russia (IMF, 1997; World Bank, 1997; FSB, 2023), risks magnifying local scams into systemic shocks that undermine both financial stability and public trust.

7.3 Upside Scenario – Shorter Lifecycles, Contained Damage

The upside scenario assumes stronger coordination among regulators, platforms, and investors. Global harmonization of definitions, rapid-response protocols, and duties of care imposed on digital platforms shorten the lifecycle of Ponzi Games (IOSCO, 2022; OECD, 2019). Investor education campaigns embed "red flag" checklists into apps and onboarding processes, empowering households to detect suspicious offers earlier.

In this environment, Ponzi schemes still emerge — but they collapse faster, limiting investor losses. Platforms and payment systems act as active gatekeepers, and supervisors deploy Al and blockchain forensics to detect anomalous fund flows before they scale (BIS, 2023; FSB, 2023).

The outcome is that Ponzi Games remain a nuisance but lose systemic potential. Fraud persists, but its ability to destabilize financial systems is contained, much as fireproofing does not eliminate sparks but prevents conflagrations.

The upside scenario demonstrates that harmonized definitions, Al-enabled supervisory tools, and cooperative enforcement protocols can decisively shorten Ponzi lifecycles (IOSCO, 2022; BIS, 2023; FSB, 2023). The policy challenge is therefore to move swiftly from fragmented, reactive oversight to proactive containment, ensuring frauds remain small and manageable.

The three scenarios can be visualized in **Figure 9**, which maps them across five key dimensions: scheme scale, technological complexity, regulatory effectiveness, macro vulnerability, and systemic risk potential. The spider chart highlights how the **baseline scenario** reflects moderate but persistent risks, the **downside scenario** amplifies fragilities into systemic threats, and the **upside scenario** contains Ponzi Games to smaller, short-lived scams.



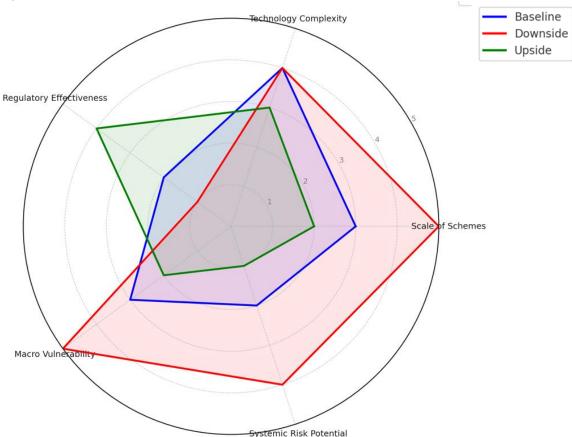


Figure 9 – Scenario Spider Chart (2025–2027)

Source: Bank & Finance synthesis, based on historical Ponzi typologies (Boxes 1–13); IMF (1997); World Bank (1997); FSB (2022, 2023); BIS (2023); IOSCO (2022); OECD (2019).

The figure underscores that the greatest differentiator across scenarios is **regulatory effectiveness**. Where oversight remains weak, as in the downside case, macro vulnerabilities and systemic risks escalate sharply. Conversely, when regulators, platforms, and investors act in coordination, Ponzi Games persist but are reduced to limited retail-level frauds.

8. Conclusions

Ponzi Games are not historical curiosities; they are recurring features of finance that thrive whenever trust outpaces verification and oversight fails to keep pace with innovation. From the Boston "Ladies' Deposit" in 1879 to Charles Ponzi's postal coupon scheme in 1920, through the systemic collapses of MMM and Albania in the 1990s, to the Madoff scandal and the crypto-era implosions of OneCoin, PlusToken, and FTX, the underlying mechanism has remained constant: payouts to existing investors funded by new inflows under the cover of persuasive but ultimately hollow narratives.



Across this wide spectrum, three conclusions emerge. First, behavioral vulnerabilities endure: affinity, exclusivity, and fear of missing out make households susceptible to improbable returns (Blanchard and Watson, 1982; Frankel, 2012; Gorton, 2010). Second, the wrappers evolve: fraudsters repeatedly embed the same cash-flow structure in the innovations of their era from postal coupons to real estate, green energy, and blockchain (Kindleberger and Aliber, 2011; BIS, 2023). Third, systemic risks arise when fragility meets scale: as shown by the Albanian collapse, the MMM boom, and the subprime crisis, Ponzi dynamics can migrate from the periphery into the core of global finance (IMF, 1997; World Bank, 1997; U.S. Financial Crisis Inquiry Commission, 2011).

Unified Definitions and Scope MLMs, tokens, lending). arbitrage across categories. **Public Platform Empowerment Accountability** Investor education **Containment of** Duties of care for social campaigns (red-flag networks, app stores, checklists, app **Ponzi Games** onboarding). and payment rails. Accessible registries and Automated flagging of whistleblower "red-flag" promotions. protection. Rapid-Response **Protocols** Pre-arranged asset freeze and evidencesharing agreements. Blockchain forensic alerts and real-time registry updates.

Figure 10 - Policy Playbook for Containment

Source: Bank & Finance synthesis, based on FSB (2022, 2023); IOSCO (2022); OECD (2019); BIS (2021, 2023); SEC (2009, 2017, 2022); ESMA (2021); Egmont Group (2020); IMF (1997); World Bank (1997); CONDUSEF (2024).



The response must therefore focus on **containment rather than eradication**. Figure 10 summarizes the strategic pillars — unified definitions, platform accountability, rapid-response protocols, and public empowerment — supported by technological and institutional enablers (FSB, 2022, 2023; IOSCO, 2022; BIS, 2021, 2023; OECD, 2019; ESMA, 2021; SEC, 2009, 2017, 2022; Egmont Group, 2020; CONDUSEF, 2024). **Table 4** translates these pillars into a stakeholder-level action framework, while **Box 14**, in Appendix A, details a twelve-point checklist that governments and regulators can operationalize. Taken together, these tools provide both a high-level vision and a practical roadmap.

Table 4 – Action Framework for Containing Ponzi Games

lable 4 – Action Framework for Containing Ponzi Games				
Stakeholder	Core Responsibilities	Key Tools and Actions	Expected Outcome	
Regulators and Supervisors	Harmonize definitions; enforce liability; coordinate globally	- Unified scope for Ponzis across securities, MLMs, tokens, lending (FSB, 2023; IOSCO, 2022) - Custody and audit requirements (SEC, 2009) - Cross-border MoUs and rapid response (Egmont Group, 2020)	Narrower legal loopholes; faster enforcement; reduced cross- border arbitrage	
Platforms (Social Media, PSPs, Exchanges)	Monitor, block, and report fraudulent promotions	 - Duties of care under DSA/MiCA (ESMA, 2021) - Ad library audits and algorithm checks - Transaction monitoring (PSPs, e-wallets) 	Lower reach of scams; fewer victims recruited; earlier detection of suspicious flows	
Financial Institutions and Intermediaries	Strengthen due diligence; avoid acting as feeders	 Enhanced KYC/AML screening (BIS, 2021) Whistleblower incentives Independent custodians for funds (SEC, 2009) 	Lower risk of systemic exposure; reduced institutional complicity	
Public / Investors	Build literacy and resilience; verify before investing	- "Red flag" checklists embedded in apps (OECD, 2019) - Real-time registry checks (licensed vs. unlicensed) - Public alerts via regulators (CONDUSEF, 2024)	Faster recognition of fraud; shorter Ponzi lifecycles; smaller household losses	
International Bodies (FSB, IOSCO, IMF, World Bank, MDBs)	Coordinate standards; support capacity building in EMs	- IOSCO standards on crypto-assets (IOSCO, 2022) - IMF/World Bank technical assistance (IMF, 1997; World Bank, 1997) - MDB financing for supervisory tech	Greater convergence; EM regulators equipped with tools; global oversight gaps narrowed	

Source: Bank & Finance synthesis, based on FSB (2022, 2023); IOSCO (2022); OECD (2019); BIS (2021, 2023); SEC (2009, 2017, 2022); ESMA (2021); Egmont Group (2020); IMF (1997); World Bank (1997); CONDUSEF (2024).



The overarching message is clear: financial markets cannot entirely escape the temptation of Ponzi dynamics, but they can be **disarmed as systemic threats**. By institutionalizing early-warning systems, closing legal and cross-border gaps, and cultivating informed and resilient households, policymakers and market participants can transform recurring fraud from a destabilizing force into a containable risk.

As with other volumes in the **Bank & Finance Deep-Dive Series**, this report seeks not only to analyze vulnerabilities but to convert them into actionable strategies for building more resilient and competitive financial systems.

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10. Appendices

The appendices provide the methodological details, terminology, and source documentation that underpin the analysis in this report. They are intended as reference tools for policymakers, regulators, and investors seeking deeper technical grounding.

Appendix A. Government Playbook for Containing Ponzi Games

While Ponzi Games cannot be eradicated, governments and regulators can shorten their lifecycles, reduce their scale, and limit systemic spillovers. **Box 14** sets out a **12-point government playbook** that translates the high-level strategic pillars of containment into a concrete checklist of actions for supervisors, platforms, and international bodies.

This playbook complements the high-level framework in **Figure 10** and the stakeholder matrix in **Table 4**. Together, they provide governments with both a **strategic vision** and an **operational toolkit**. Embedding these measures into supervisory practice will be critical if financial systems are to contain the next wave of Ponzi Games rather than repeat past crises.



Box 14 – Government Playbook for Containing Ponzi Games

- 1. Unified legal definitions: Harmonize what constitutes a Ponzi scheme across securities, MLMs, tokens, and lending products. Close loopholes that allow promoters to rebrand as "clubs" or "digital assets" to escape regulation (FSB, 2023; IOSCO, 2022).
- **2.** Central registry checks: Maintain real-time, public registries of licensed entities, integrated into apps and onboarding flows, enabling investors to verify legitimacy quickly (OECD, 2019).
- **3. Platform duties of care:** Impose liability on social media, messaging apps, and PSPs that host or promote fraudulent offers, shifting from reactive notice-and-takedown to proactive monitoring (ESMA, 2021).
- **4.** Ad library audits: Require platforms to maintain searchable databases of paid promotions, enabling supervisors and civil society to detect recurring scams.
- **5. Early-warning systems:** Leverage complaints data, suspicious PSP transaction flows, and on-chain anomaly detection to flag red signals before mass losses occur (BIS, 2021; FSB, 2022).
- **6. Whistleblower protection:** Create incentives and safeguards for insiders to expose fraud early, modeled on existing programs in securities regulation (SEC, 2009).
- **7. Proof-of-reserves standards:** Mandate that platforms offering custody or yield products demonstrate reserves through third-party attestations (BIS, 2023).
- **8.** Independent custodianship: Separate client assets from operator accounts to prevent misuse, as revealed in the FTX collapse (SEC, 2022).
- **9. Cross-border rapid response protocols:** Develop pre-arranged procedures for asset freezes, evidence-sharing, and joint investigations that can be triggered within days (Egmont Group, 2020; IMF, 1997).
- **10.** Regional hubs of expertise: Establish centers of forensic and supervisory expertise in emerging markets, with support from MDBs and the G20, to close capacity gaps (World Bank, 1997).
- **11. Financial literacy campaigns:** Integrate "red-flag checklists" into retail apps and national education campaigns to equip households with simple tools to spot scams (OECD, 2019).
- **12. Public alerts and naming-and-shaming:** Ensure regulators issue timely public warnings and maintain accessible scam registries, as practiced by CONDUSEF in Mexico (CONDUSEF, 2024).

Source: Bank & Finance synthesis, based on FSB (2022, 2023); IOSCO (2022); OECD (2019); BIS (2021, 2023); SEC (2009, 2017, 2022); ESMA (2021); Egmont Group (2020); IMF (1997); World Bank (1997); CONDUSEF (2024).



Appendix B. Methodology and Data Sources

This report synthesizes evidence from three complementary sources:

- 1. **Historical case analysis.** Archival research was conducted using press sources (Boston Post, New York Times, Russian press archives, Infobae), court filings, and regulatory enforcement records. Case studies were structured around mechanics, recruitment, collapse, red flags, and lessons learned.
- 2. **Regulatory and policy reviews.** Analysis drew on reports by the BIS, FSB, IMF, World Bank, IOSCO, OECD, ESMA, SEC, CONDUSEF, and DOJ. These sources were used to identify regulatory gaps, cross-border challenges, and evolving frameworks such as MiCA and the Digital Services Act.
- 3. **Analytical synthesis.** Insights from academic literature (e.g., Blanchard and Watson, Kindleberger and Aliber, Frankel, Gorton, Markopolos) were integrated to connect behavioral, macroeconomic, and systemic perspectives.

The case portfolio (Boxes 1–13) was selected to illustrate diversity across eras, geographies, and typologies, ranging from proto-Ponzis in the 19th century to crypto-driven schemes in the 2010s–2020s.

Figures and tables are based on Bank & Finance synthesis of these sources, supported by structured scenario design for 2025–2027.

This methodology reflects Bank & Finance's commitment to integrating historical evidence, regulatory analysis, and forward-looking scenario design. By combining archival research, global policy reviews, and insights from academic literature, the report provides a robust foundation for understanding Ponzi Games as both recurring frauds and systemic risks. The mixed-method approach ensures that findings are not only descriptive but also actionable for regulators, platforms, and institutional investors.

Appendix C. Glossary of Terms

Affinity Fraud: A scam that targets members of identifiable groups, exploiting trust and social ties.

Arbitrage: Buying and selling equivalent assets in different markets to profit from price differences.

Collapse Trigger: The event that exposes the unsustainability of a Ponzi scheme, e.g., slowed recruitment, media scrutiny, or regulatory action.

Containment: Policy strategies aimed at reducing the scale, duration, and systemic impact of Ponzi Games.



Crypto Mixer: A service that obfuscates the origin and destination of cryptocurrency transactions by pooling and redistributing funds.

Extrapolation Bias: A behavioral bias where investors assume recent positive performance will continue indefinitely.

Feeder Fund: An investment vehicle that directs client capital into another manager, often used in large-scale Ponzi schemes (e.g., Madoff).

Grey-Zone Fragility: A structure that is not outright fraudulent but exhibits Ponzi-like dependence on continuous inflows (e.g., subprime mortgage securitization, FTX).

High Yield Investment Program (HYIP): A fraudulent investment promising abnormally high returns, typically short-term.

Information Asymmetry: A condition where one party (e.g., Ponzi operator) has more or better information than another (e.g., investors).

Multi-Level Marketing (MLM): A sales model involving recruitment-based compensation, often overlapping with pyramid or Ponzi dynamics.

Ponzinomics: Circular tokenomics in crypto-based schemes, where token issuance and payouts depend on new inflows rather than economic activity.

Proof-of-Reserves: A mechanism requiring crypto exchanges or platforms to demonstrate they hold sufficient assets to back customer deposits.

Red Flag: A warning signal indicating potential fraud, such as guaranteed returns, opaque strategies, or reliance on testimonials.

Systemic Risk: The potential for an event (including large-scale fraud) to destabilize an entire financial system.

Token Staking: The practice of locking crypto tokens in return for yields, often exploited in Ponzilike structures.

This glossary provides a shared vocabulary that underpins the report's analysis. By clarifying definitions and standardizing usage, it supports regulatory convergence, strengthens public understanding, and helps practitioners recognize recurring patterns of financial fraud with greater precision.

Appendix D. Source-Exhibit Matrix

This appendix provides a consolidated mapping of all figures, tables, and boxes in the report to their primary sources. It highlights the mix of archival research, regulatory reports, press coverage, and academic literature that underpin the exhibits. The aim is to ensure transparency of methodology and to facilitate further research by institutional readers.



I. Figures

Figure	Title	Underlying Sources
Figure 1	Key Highlights of the Report	Bank & Finance synthesis, based on report analysis and historical case evidence
Figure 2	Report Roadmap	Bank & Finance synthesis
Figure 3	The Cash-Flow Engine of a Ponzi Game	Frankel (2012); Blanchard and Watson (1982)
Figure 4	Hype Cycle and Recruitment Dynamics	OECD (2019); historical press archives
Figure 5	Platform Pathways of Digital Ponzis	BIS (2021); FSB (2022); IOSCO (2022); ESMA (2021)
Figure 6	Regulatory Gaps and Cross-Border Flows	SEC (2009, 2017, 2022); ESMA (2021); CNBV; BIS (2021, 2023); IOSCO (2022); Egmont Group (2020)
Figure 7	Typologies of Ponzi Games Across History	Case studies (Boxes 1–13); Kindleberger and Aliber (2011); Frankel (2012)
Figure 8	Global Evolution of Ponzi Games (1879– 2024)	Historical case studies (Boxes 1–13); Boston Post (1879, 1920); New York Times (1899); IMF (1997); World Bank (1997); U.S. Financial Crisis Inquiry Commission (2011); SEC (2009, 2017, 2022); ESMA (2021); BIS (2021, 2023); IOSCO (2022); OECD (2019); Egmont Group (2020); CONDUSEF (2024). U.S. 10-Year Treasury yield (annual averages). 1879–1961: Robert J. Shiller, Online Data ("Long Interest Rate" series). 1962–2024: Federal Reserve Board, via FRED series DGS10 ("Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity").
Figure 9	Scenario Spider Chart (2025–2027)	Case studies (Boxes 1–13); IMF (1997); World Bank (1997); FSB (2022, 2023); BIS (2023); IOSCO (2022); OECD (2019)
Figure 10	Policy Playbook for Containment	FSB (2022, 2023); IOSCO (2022); OECD (2019); BIS (2021, 2023); SEC (2009, 2017, 2022); ESMA (2021); Egmont Group (2020); IMF (1997); World Bank (1997); CONDUSEF (2024)

II. Tables

Table	Title	Underlying Sources	
Table 1	Typology of Ponzi	Case studies (Boxes 1–13); Kindleberger and Aliber (2011);	
	Games	Frankel (2012)	
Table 2	Red-Flag Checklist for	OECD (2019); SEC (2009); CONDUSEF (2024); BIS (2021)	
	the Public		
Table 3	Regulatory Obligations		
	by Product and	SEC; ESMA; CNBV; BIS; IOSCO; FSB; OECD reports	
	Jurisdiction		
Table 4	Action Framework for	FSB (2022, 2023); IOSCO (2022); OECD (2019); BIS (2021,	
	Containing Ponzi	2023); SEC (2009, 2017, 2022); ESMA (2021); Egmont Group	
	Games	(2020); IMF (1997); World Bank (1997); CONDUSEF (2024)	



III. Boxes

Box	Title	Underlying Sources
Box 1	Proto-Ponzi: Sarah Howe's "Ladies' Deposit" (Boston, 1879– 1880)	Boston Post (1880); U.S. court records; secondary historical accounts
Box 2	Franklin Syndicate (Brooklyn, 1899)	New York Times (1899); U.S. court records; historical financial fraud literature
Box 3	Charles Ponzi and the Postal Coupon Scheme (Boston, 1920)	Boston Post (1920); U.S. court filings; historical analyses of Ponzi case
Box 4	MMM (Russia, 1994–1997)	IMF (1990s) country reports; Russian press archives (1994–1997); secondary analyses
Box 5	Albania's Pyramid Crisis (1996–1997)	IMF (1997); World Bank (1997); academic analyses
Box 6	Bre-X Mining: The Gold that Never Was (Canada/Indonesia, 1993–1997)	Canadian Securities Commission (1998); academic analyses; contemporary press reports
Box 7	Woodbridge Group: The "Secured" Real Estate Loan Ponzi (U.S., 2012–2017)	SEC (2017) litigation releases; DOJ filings; financial press coverage
Box 8	DC Solar: Renewable Energy Leasing Fraud (U.S., 2011–2018)	DOJ (2018) indictments; SEC enforcement actions; financial press reports
Box 9	Bernard Madoff Investment Securities (U.S., 1960–2008)	SEC (2009) Inspector General report; Markopolos (2010); financial press analyses
Box 10	Crypto Case Studies: OneCoin, BitConnect, PlusToken (2014– 2019)	DOJ (2019) indictments; FSB (2022); blockchain forensic analyses; financial press reports
Box 11	Billions Trade Club (Mexico, 2022–2024)	CONDUSEF (2024) alerts; Infobae (2024); Mexican financial press coverage
Box 12	Grey Zone Case: FTX and Alameda Research (2022)	SEC (2022) complaint; CFTC filings; BIS (2023); U.S. bankruptcy filings; financial press investigations
Box 13	Grey Zone Case: The Subprime Mortgage Crisis (2007–2008)	U.S. Financial Crisis Inquiry Commission (2011); Gorton (2010); BIS (2023)
Box 14	Government Playbook for Containing Ponzi Games	FSB (2022, 2023); IOSCO (2022); OECD (2019); BIS (2021, 2023); SEC (2009, 2017, 2022); ESMA (2021); Egmont Group (2020); IMF (1997); World Bank (1997); CONDUSEF (2024)

This matrix demonstrates the evidentiary base behind the report's exhibits, systematically linking each figure, table, and box to its supporting sources.