VAN HULZEN
FINANCIAL ADVISORS

Three Cycles, One Pattern: What the History of Complex Financial Structures Tells Us About Today's AI Infrastructure Boom

Part of portfolio management is pattern recognition, the ability to look past the specific details of a current market narrative and ask whether we have seen this architecture before. The specific assets change. The vocabulary changes. The underlying structure, more often than we would like, does not.

We are writing this paper now because we believe the financial structures supporting the current artificial intelligence infrastructure buildout share important characteristics with two prior cycles that ended badly for investors who did not examine what was underneath the headline numbers. We are not predicting an imminent collapse. We are doing what we believe a responsible advisor owes clients in a period of extraordinary market enthusiasm: describing the pattern clearly, so you can make informed decisions about your own exposure.

The Recurring Architecture of Boom-Cycle Finance

Every major speculative cycle in modern capital markets has produced its own vocabulary, but beneath the terminology the underlying structure has been remarkably consistent.

A transformative technology or financial innovation generates genuine economic excitement. Capital floods in faster than underlying economics can absorb it. Financial engineering emerges to bridge the gap between the capital available and the transactions needed to justify valuations. Revenue gets recognized. Complexity obscures the circularity. And the risk migrates, step by step, away from the parties who understand it best and toward the parties with the least visibility into what they are actually holding.

Three cycles. Three asset classes. One architecture.

The first and third cycles we examine, the telecommunications and internet infrastructure buildout of 1996 to 2001, and the current AI infrastructure cycle, share a specific and underappreciated structural feature: both are fundamentally capex supercycles in which the accounting treatment of capital spending creates a systematic flattery of reported earnings that the market tends to price as permanent prosperity rather than the timing phenomenon it actually is. The second cycle, the mortgage securitization machine of 2003 to 2007, operated through a different primary mechanism, but arrived at the same destination: risk migrated away from the parties who created it and toward the parties least equipped to evaluate it, through structures whose complexity made the transfer invisible until it was too late.

How a Capex Boom Flatters Earnings — The Core Accounting Mechanic

Before examining the cycles individually, it is worth being precise about the mechanism that connects the first and third cycles, because it is less intuitive than it first appears.

When a company sells equipment, a GPU cluster, a fiber optic switch, a server rack, it recognizes the full revenue of that sale immediately, in the quarter delivery occurs. The seller's income statement captures the entire economic transaction in a single reporting period.

The buyer plays by different rules. Under GAAP accounting, [1] That asset goes onto the balance sheet and is depreciated gradually over its estimated useful life which might be five, six, or even ten years. In year one, the buyer's income statement absorbs only a fraction of the actual cash outlay. The rest is deferred into future periods.a capital expenditure is an asset purchase, not an expense.

> ***The seller's earnings are pulled into today. The buyer's costs are pushed into the future. The index sees only the seller's gain — and calls it prosperity.***

This asymmetry has a powerful aggregate effect on reported index earnings during a capital spending supercycle. Equipment manufacturers, chip designers, construction firms, and power infrastructure companies all recognize revenue immediately as orders pour in. Meanwhile, the buyers absorb only modest depreciation charges in the early years, making their earnings look stable even as their balance sheets accumulate obligations and their cash flows are consumed.

What makes both the 1999 cycle and the current cycle worth examining with particular care is that this basic accounting asymmetry was compounded in each case by additional financial structures specifically designed to accelerate revenue recognition for sellers while moving the associated risk progressively further from view.

Cycle One: The Telecommunications Buildout (1996–2001)

The Setup

The late 1990s internet infrastructure boom created what appeared to be insatiable demand for networking equipment. Dominant equipment manufacturers saw their stock prices ascend to multiples that could only be justified by growth trajectories requiring an ever-expanding customer base buying at an ever-accelerating pace.

The problem was structural. The customers most eager to buy equipment were newly formed telecommunications carriers conjured into existence by deregulation and largely pre-revenue. They had licenses, they had ambition, and they had access to capital markets willing to fund almost anything with a bandwidth narrative. What they frequently lacked was the cash to buy equipment at the pace the manufacturers needed to sustain reported revenue growth.

The driving belief behind the entire buildout was that internet traffic was doubling every 100 days, a figure that circulated in boardrooms and investor presentations as settled fact. It was not settled fact. Internet traffic was doubling[2] approximately once per year. Still remarkable growth, but roughly four times slower than the assumption baked into hundreds of billions of dollars of investment decisions. At its peak, telecom capital spending reached approximately $135 billion annually in nominal terms, equivalent to roughly $213 billion in today's dollars and [3]representing approximately 1.0 to 1.2% of U.S. GDP.

The Revenue Recognition Structure

The equipment manufacturers in this cycle were not passive beneficiaries of organic customer demand. They were actively engineering the transactions that generated their revenue through vendor financing programs, [4] The manufacturer recognized the sale as revenue immediately upon delivery. The credit risk sat on the manufacturer's balance sheet as extending credit directly to startup carriers so those carriers could afford to place equipment orders.a receivable or was sold into capital markets.

In some cases the circularity went further: manufacturers made direct equity investments into customer companies, which then used that capital to purchase the manufacturer's own equipment, generating revenue the manufacturer cited as evidence of robust end demand. The revenue was real in an accounting sense. Its independence from the seller's own capital deployment was not. The seller was co-funding its own customer and booking the resulting transaction as organic growth.

When the cycle crested and capital markets closed down carrier refinancing, the customers could not service their equipment debt. Receivables went bad and backlogs evaporated simultaneously. Orders dried up practically overnight. Equipment sellers who had been booking record revenues found themselves with empty pipelines within two quarters. The carriers began drowning in the depreciation charges they had deferred, compounded by the debt used to finance the buildout.

The Stock Market Record

Individual Stocks — Dot-Com / Telecom Cycle

Company	Cycle Start	Peak Price	Peak Date	Gain to Peak	Trough Price	Decline	Outcome
Leading equipment manufacturer	~$1.80 (1995)	$80.06	Mar 2000	+4,348%	~$8.00	−90%	Survived; 25 years to reclaim peak
Canadian telecom equipment leader	~$20 (1997)	$124.50	Jul 2000	+523%	$0.67	−99.4%	Bankruptcy 2009
Fiber optic components leader	~$2 (1996)	~$153 split-adj.	Mar 2000	+7,550%	~$1.00	−99.8%	Effectively wiped out
Major switching equipment vendor	~$7 (1996)	~$62	Dec 1999	+786%	~$1.50	−97%	Distressed merger 2006

Source: Bloomberg L.P., historical adjusted price and index data; company filings and public corporate-action records. Calculations by Van Hulzen Asset Management.

Broad Market — Dot-Com Cycle

Index	Start (Jan 1995)	Peak (Mar 2000)	Gain	Trough (Oct 2002)	Decline	Years to Recover
Nasdaq Composite	~751	5,049	+572%	1,114	−78%	15 years (Apr 2015)
S&P 500	~470	1,553	+230%	~800	−49%	7 years (2007)
DJIA	~3,850	11,700	+204%	~7,200	−37%	~4 years

Source: Bloomberg L.P., historical adjusted price and index data; Financial Crisis Inquiry Commission; company filings and public resolution records. Calculations by Van Hulzen Asset Management.

[5] *Key valuation context: the leading equipment manufacturer traded at 220x earnings at its March 2000 peak. The Nasdaq-100 forward P/E reached 60x. More than 50% of dot-com public companies had failed by 2004. Global telecom stocks lost more than $2 trillion in market value between 2000 and 2002. The Nasdaq took fifteen years to reclaim its March 2000 high.*

The technology was real. The assets were real. The timing assumption was catastrophically wrong. And the accounting, which had front-loaded the revenue of the sellers while deferring the costs of the buyers and obscured the circularity of the vendor financing, had made the cycle look far more prosperous than the underlying economics warranted… until the moment it stopped.

Cycle Two: The Mortgage Securitization Machine (2003–2007)

The Setup

The second cycle was structurally more sophisticated than the telecom buildout but logically identical in its destination: a gap between capital available to deploy and creditworthy transactions available to absorb it was bridged by financial engineering that moved risk progressively further from the parties who could evaluate it.

The post-2001 rate environment created a vast pool of yield-starved institutional capital. Pension funds, insurance companies, foreign central banks that all needed return and were willing to accept complexity in exchange for basis points. The residential mortgage market, historically a plain-vanilla product with well-understood risk characteristics, became the raw material for a financial engineering assembly line of historic scale.

This cycle's primary mechanism was not capex accounting asymmetry, it was credit structure opacity. But it arrived at the same place: sophisticated institutions recognized fees and revenue at the moment of transaction, while the long-duration risk migrated to the party at the end of the chain with the least information about what they actually owned.

The Structure

The architecture had several distinct layers, each individually defensible but combining into something no single participant fully understood end to end.

[6] At the origination level, mortgage brokers were compensated on volume with no retained credit exposure, creating an incentive to originate loans regardless of quality. At the securitization level, investment banks pooled loans into mortgage-backed securities. A further layer took the lower-rated tranches of those securities and re-securitized them, mathematically transforming lower-rated mortgage exposure into AAA-rated instruments through the alchemy of correlation assumptions and structural subordination. Rating agencies provided the credibility layer that made the entire chain investable for institutions with rating-based mandates.

Each party in the chain recognized revenue at the moment of transaction. Originators recognized gain-on-sale. Banks recognized structuring fees. Rating agencies recognized rating fees. The long-duration risk migrated to the end holder and nobody along the chain had an economic incentive to scrutinize what that end holder was actually buying.

The entities that accumulated the most toxic exposure were overwhelmingly insurance companies and bank-affiliated investment vehicles, entities that could absorb highly-rated paper in volume, with long-duration liability structures suited to holding illiquid instruments, subject to regulatory capital frameworks treating rating-agency designations as a proxy for actual credit analysis.

[7] The most catastrophic example sold insurance against losses on instruments its own models said had a near-zero probability of failure. Those models were built on historical correlation data never stress-tested against a nationwide simultaneous housing price decline. When that scenario occurred, the losses were immediate and catastrophic, and exposure that had been invisibly distributed across insurance balance sheets became visible all at once.

The Valuation Opacity Lesson

The mortgage cycle's specific contribution to the analytical pattern is the role of model-based valuation in sustaining reported revenue and earnings long past the point where underlying fundamentals warranted it. As long as structured instruments could be marked at model value rather than market value, carried at internally derived prices with no observable market clearing them, the fees and earnings recognized on their origination did not have to be reversed. The system continued generating reported prosperity on instruments whose actual value was deteriorating invisibly.

The gap between model value and economic value only became undeniable when the market seized and marks had to reflect reality. That is when losses that had been accumulating silently became visible simultaneously, which is why the 2008 crisis felt sudden to most participants even though the underlying deterioration had been underway for years.

The Stock Market Record

Individual Stocks — Mortgage / Financial Crisis Cycle

Company	Cycle Low (2002)	Peak Price	Peak Date	Gain to Peak	Terminal Price	Decline	Outcome
Leading investment bank (A)	~$20	~$172	Jan 2007	+760%	$2 (forced sale)	−99%	Acquired Mar 2008
Leading investment	~$20	~$82	Feb 2007	+310%	$0	−100%	Bankruptcy Sep
Largest mortgage originator	~$5	~$45	Feb 2007	+800%	Acquired ~$4B total	−90%+	Distressed acquisition Jan 2008
Major insurance / derivatives writer	~$25	~$72	Dec 2006	+188%	~$1	−99%	Federal bailout Sep 2008
Govt mortgage enterprise	~$20	~$70	2004	+250%	~$0.40	−99%+	Federal conservatorship Sep 2008

Sources: Bloomberg L.P.; Goldman Sachs Research; McKinsey & Company; U.S. Bureau of Economic Analysis; Robert J. Shiller data; S&P Dow Jones Indices. Calculations by Van Hulzen Asset Management.

Broad Market — Mortgage / Financial Crisis Cycle

Index	Cycle Low (Oct 2002)	Peak (Oct 2007)	Gain	Trough (Mar 2009)	Decline from Peak
S&P 500	~775	1,565	+102%	~676	−57%
DJIA	~7,200	14,165	+97%	~6,470	−54%
Nasdaq	~1,114	2,860	+157%	~1,269	−56%

Source: Bloomberg L.P., historical adjusted price and index data. Calculations by Van Hulzen Asset Management.

Key valuation context: five major investment banks used 30x or greater leverage at peak. None survived the crisis as independent entities. Total private-label mortgage-backed securities issuance from 1998 to 2007 reached $5.8 trillion. Global CDO issuance peaked at approximately $552 billion in 2006 alone. The S&P 500 lost 57% from peak to trough…[8] *its worst decline since the Great Depression.*

The mortgage cycle reinforced a lesson the telecom cycle had already established: when complexity is the mechanism by which risk is transferred rather than eliminated, and when the valuation of the resulting instruments depends on models controlled by the parties who benefit from optimistic assumptions, the reported prosperity of the cycle will persist until a liquidity event forces the marks to reflect reality.

Cycle Three: The AI Infrastructure Buildout (2022–Present)

The Setup

The current cycle begins with a genuine technological discontinuity. Large language models represent a real advance with real economic applications. The demand for computing power to train and run these models is real. The semiconductor hardware enabling that compute is genuinely valuable and genuinely scarce. Nobody serious disputes the underlying technology.

What the current cycle shares with its predecessors is not a fraudulent technology (fiber optic networks and residential mortgages were not fraudulent either) but a gap between the capital available to deploy into AI infrastructure and the near-term revenue that infrastructure can organically generate. That current gap is bridged by the same two mechanisms that characterized prior cycles: an accounting asymmetry that front-loads the seller's earnings while deferring the buyer's costs, and financial structures whose complexity ensures that the party bearing the ultimate risk is the party with the least visibility into what they hold.

The Scale Comparison

The numbers require careful attention because they reframe the entire discussion. In 2026 alone, the five largest hyperscalers are on pace to spend approximately $725 billion on infrastructure, with roughly 75% of that, or $545 billion, directed specifically at AI compute, data centers, power systems, and networking. Goldman Sachs [9] projects total hyperscaler capex from 2025 through 2027 will reach $1.15 trillion. McKinsey estimates cumulative AI infrastructure investment through 2030 will reach $5.2 trillion.

By comparison, the entire dot-com telecom buildout consumed approximately $500 billion cumulatively over six years, with a peak annual rate of roughly $213 billion in today's dollars. The AI cycle in 2026 alone is running at more than three times that inflation-adjusted peak. As a share of GDP, today's AI infrastructure spending has reached approximately 2.2%, nearly double the 1.0 to 1.2% that characterized the telecom cycle at its most intense. [10] This is, by any reasonable measure, the largest private technology infrastructure investment cycle in history.

Comparative Capex Cycle Data

Metric	Telecom Buildout (1996–2001)	AI Buildout (2022–2030 projected)
Peak annual capex	~$135B nominal / ~$213B in 2026 dollars	~$725B (2026, confirmed)
Cumulative cycle spending	~$500B total	$5.2T projected through 2030
% of U.S. GDP at peak	~1.0–1.2%	~2.2% and rising
Primary sellers	Equipment and fiber vendors	Semiconductor manufacturers, power vendors
Primary buyers	Telecoms, ISPs — debt financed	Hyperscalers — largely cash-flow financed
Buyer financial strength	Heavily leveraged; most went bankrupt	Among most creditworthy companies in history
S&P 500 concentration at peak	Moderate	Mag-7 = 30%+ of index
Shiller CAPE at peak	44.2x (Dec 1999)	41.0x (Jun 2026)

One structural difference deserves explicit acknowledgment. The buyers in today's cycle are a fundamentally different credit than the telecom carriers of 1999. Amazon, Microsoft, Alphabet, and Meta are among the most cash-generative enterprises in the history of capitalism, largely self-funding this buildout from operations. There is no equivalent of the telecom debt spiral. If demand disappoints, these companies can throttle spending, absorb losses, and survive. That is a meaningful and honest distinction.

What it does not change is the fundamental accounting question: whether $725 billion per year in capital spending can be justified by the revenue it generates, and whether the accounting treatment of that spending accurately reflects the economic reality of assets that may become obsolete far faster than the depreciation schedules assume.

The Revenue Recognition Structure — A More Sophisticated Version of a Familiar Architecture

The basic seller/buyer accounting asymmetry is operating in full in the current cycle, at multiples of the 1999 scale. But as in 1999, the distortion runs deeper than the simple timing gap between when the seller recognizes revenue and when the buyer recognizes cost.

[11] In the most prominent recent example, a leading semiconductor manufacturer sold approximately $5.4 billion worth of its most advanced processors to a newly created special-purpose vehicle while simultaneously investing approximately $1.9 billion of its own capital into that vehicle as an equity co-investor. A major alternative asset manager provided the remaining $3.5 billion in debt financing. The manufacturer recognized the full $5.4 billion as revenue. The chips were then leased under a triple-net structure to an AI company for use in its data center operations.

Map this against the 1999 template and the parallel is direct. The equipment manufacturer co-funded its own customer and booked the resulting transaction as revenue. The revenue met applicable accounting recognition criteria. Its independence from the seller's own capital deployment was not what the headline number implied.

What is different in 2026, and more concerning from a systemic risk distribution standpoint, is where the residual exposure travels. In 1999, the credit risk from vendor financing sat visibly on the equipment manufacturer's balance sheet as receivables. Analysts who looked carefully could find it. In 2026, the debt financing of the purchasing vehicle was packaged into private credit instruments and distributed into the investment portfolio of an insurance subsidiary that sells fixed annuities to retail investors as conservative retirement products. The risk has been moved not just off the seller's balance sheet but off every institutional balance sheet simultaneously into retail retirement products whose holders have no visibility into what they actually own.

Here the current cycle makes direct contact with the mortgage cycle's structural lesson. The insurance subsidiary carrying these instruments holds a portfolio in which more than a third is classified as Level 3 assets, instruments with no observable market price, valued by internal models rather than actual markets, with leverage of approximately sixteen times sitting on top. [12] The parallel to the 2005 to 2007 period, when insurance companies accumulated highly-rated structured credit instruments whose actual risk bore no relationship to their designations, is close enough to warrant careful attention.

The question that determined the outcome of the 1999 cycle was whether the carriers could generate enough cash flow to service their equipment debt. The answer was no.

The question that determined the outcome of the 2007 cycle was whether the underlying mortgage borrowers could service their obligations when rates reset and home prices stopped rising. The answer was no.

The analogous question in 2026 is whether the AI companies renting compute capacity can generate enough cash flow to service their lease obligations. The obligations that ultimately support the private credit instruments now sitting in insurance company retirement portfolios. The largest single disclosed compute rental contract in this structure represents approximately half the annual revenue of the company paying it and is terminable on 90 days' notice. That single customer relationship, cancellable in a quarter, is the revenue backstop on which the entire financing pyramid rests.

The GPU Obsolescence Problem

The 1999 cycle's primary assets (fiber optic cable and switching hardware) had genuine physical lives of 10 to 20 years. A strand of glass in the ground does not degrade. The overbuilding was a demand miscalculation, but the assets retained physical utility. The dark fiber of 1999 eventually got lit albeit years later and at pennies on the dollar, but eventually.

[13] GPU clusters are a fundamentally different kind of asset. The leading semiconductor manufacturer now operates on an annual to eighteen-month product cadence, with each generation delivering performance improvements that are not incremental but categorical. The current generation offers up to 25 times better energy efficiency than its predecessor for certain AI inference workloads. In a world where electricity is the scarce resource constraining AI deployment, a prior-generation GPU cluster is not simply slower than a current-generation cluster it is economically non-competitive on a per-watt basis.

The secondary market is already reflecting this. GPUs that sold for $40,000 per unit in early 2025 now trade at $25,000 to $35,000, with the trajectory downward as newer supply grows. A unit purchased today may trade for $10,000 to $15,000 in eighteen months implying a real economic life closer to two to three years than the six years hyperscalers are claiming on their balance sheets.

All three major hyperscalers[14] currently depreciate server assets over six years, a schedule set when their fleets were predominantly CPU-based, now applied to billions of dollars of GPU assets. Estimating roughly 55% of capex as GPU-related, the choice of a six-year versus a three-year depreciation schedule reduces annual depreciation expense by approximately 46%, inflating reported operating income by tens of billions of dollars across the sector. This is not fraud. GAAP gives management significant latitude in estimating useful asset lives. But it is an accounting choice that flatters earnings materially, resting on an assumption the secondary market is actively contradicting.

One major hyperscaler recently shortened useful lives on a subset of its servers, explicitly citing the rapid pace of AI innovation. A competitor simultaneously extended its depreciation schedule. When two companies owning essentially the same assets reach opposite accounting conclusions, at least one of them is wrong.

> ***The fiber of 1999 sat dark for years but eventually someone lit it. A prior-generation GPU cluster will not simply wait patiently for demand to catch up, it will be competing against hardware that delivers 25 times more output per watt.***

The Revenue Gap

Hyperscalers are on pace to spend approximately $725 billion on AI infrastructure in 2026. The entire global AI software market currently generates roughly $50 to $60 billion in annual revenue. The industry is spending ten to twelve dollars in infrastructure for every dollar of current AI software revenue it collects.

The enterprise adoption data is not encouraging. Recent Forrester research found that only 15% of AI decision-makers reported a positive impact on profitability in the past twelve months. Morgan Stanley found that only 25% of S&P 500 companies cited a quantifiable AI benefit in the first quarter of 2026, up from 13% a year earlier. An MIT study of 300 public AI deployments concluded that 95% of generative AI pilots failed to deliver measurable financial return. [15] Seventy-four percent of organizations describe revenue growth from AI as an aspiration rather than a current reality.

These are not figures drawn from a bear case scenario. They are the consensus of major research institutions measuring actual enterprise outcomes in real time. The gap between what is being spent and what is being returned is the single most important variable to watch.

The Stock Market Record — Current Cycle

Individual Stocks — AI Infrastructure Cycle

Company	Cycle Low (Oct 2022)	Peak / Recent High	Gain to Date
Leading semiconductor manufacturer	$11.22 (split-adj.)	$236.54 (May 2026 ATH)	> +2,000%
Leading social media / AI platform	~$88 (Nov 2022)	$796.25 (Aug 2025 ATH)	> +800%
Leading semiconductor equip-	~$40 (Oct 2022, split-	$480.77 (Jun 2026 ATH)	> +1,100%
Leading enterprise software / cloud vendor	~$213 (Oct 2022)	$538.66 (Oct 2025 ATH)	> +150%

Source: Bloomberg L.P., historical adjusted price and index data; Financial Crisis Inquiry Commission; company filings and public resolution records. Calculations by Van Hulzen Asset Management.

Broad Market — AI Cycle (Ongoing)

Index	Oct 2022 Low	Recent (Jun 30, 2026)	Gain to Date	CAPE (Jun 2026)
Nasdaq 100	~10,440	30,276	+190%	Elevated
S&P 500	~3,577	7,449	+108%	41.0x

The leading semiconductor manufacturer's gain of +2,000% from the October 2022 low to its May 2026 all-time high already exceeds the leading equipment manufacturer's gain of approximately +600% in the two years immediately preceding its March 2000 peak. The Shiller CAPE stood at 41.0x at the end of June 2026, [16] *still the second-highest reading in 140 years of U.S. market data, exceeded only by the dot-com peak of 44.2x in December 1999.*

The Common Thread Across All Three Cycles

Strip away the asset class specifics and all three cycles reveal a consistent five-part structure.

First, a genuine technology or innovation creates genuine demand. Internet infrastructure, homeownership, artificial intelligence, none of these were illusions. The underlying economic activity was real in each case.

Second, capital availability exceeds the organic capacity to deploy it. In each cycle, more money was chasing the theme than creditworthy transactions could absorb at the pace investors required. The solution was not to slow deployment, it was to engineer the transactions needed to absorb the capital.

Third, financial structures emerge to bridge the gap. Vendor financing in 1999. CDO tranching in 2005. GPU-backed triple-net leases routed through special-purpose vehicles in 2026. Different instruments serving the same function: creating transactions that could recognize revenue and deploy capital at a pace the organic market could not sustain on its own, while moving the resulting risk away from the parties who generated it.

Fourth, complexity migrates risk away from informed parties. The parties who understand the underlying asset best recognize revenue at transaction and transfer long-duration risk through intermediary structures. The party who ends up holding the risk is the party with the least information and the most distance from the original transaction. In 1999, that was the carrier creditor. In 2007, it was the insurance company holding AAA-rated instruments backed by sub-prime mortgages. In 2026, it is the insurance company annuity holder who has never heard of a GPU-backed triple-net lease and whose retirement savings are exposed to a financing structure whose credit quality ultimately depends on AI lease payments from a single customer terminable in 90 days.

Fifth, valuation opacity sustains the cycle longer than fundamentals would otherwise permit. Equipment manufacturer stocks in 1999 traded at 200x earnings until they didn't. Structured credit instruments in 2007 carried AAA ratings until downgrades came in waves. Private credit instruments in the current cycle sit in Level 3 portfolios valued by internal models that have never been stress-tested against a scenario where AI compute lease payments stop and GPU collateral needs to be liquidated into a falling market. As long as the marks hold, the reported earnings hold, and the cycle continues.

What History Suggests About Timing

Nobody rang a bell at the top of either prior cycle. The leading equipment manufacturer's stock kept rising for two years after the vendor financing practices that ultimately destroyed capital were well underway. CDO issuance set records in 2006, a full year after underlying mortgage credit was visibly deteriorating.

What history does suggest is that the unwind in each cycle came not from the original structure failing on its own terms in an orderly way, but from a liquidity event that forced mark-to-market reckoning on assets being carried at model value. In 2001, it was the closing of capital markets to carrier refinancing. In 2008, it was the seizure of the repo market and the forced liquidation of structured credit vehicles. The trigger in the current cycle would be an event forcing AI infrastructure instruments to mark at liquidation value rather than model value, a large-scale cancellation of AI compute contracts, a rapid decline in GPU market prices, or a broader private credit market dislocation forcing asset sales at prices the models had not contemplated.

The historical declines from both prior cycles are worth keeping in view as context not as prediction.

Peak-to-Trough Declines — Dot-Com Cycle Reference

Asset	Peak Date	Decline from Peak	Recovery
Leading equipment manufacturer	Mar 2000	−90%	25 years to reclaim peak
Canadian telecom equipment leader	Jul 2000	−99.4%	Never (bankruptcy 2009)
Fiber optic components leader	Mar 2000	−99.8%	Never (effectively wiped out)
Major switching equipment vendor	Dec 1999	−97%	Never as independent company
Nasdaq Composite	Mar 2000	−78%	15 years (Apr 2015)
S&P 500	Mar 2000	−49%	7 years (2007)

Peak-to-Trough Declines — Mortgage / Financial Crisis Cycle Reference

Asset	Peak Date	Decline from Peak	Outcome
Leading investment bank (A)	Jan 2007	−99%	Forced acquisition Mar 2008
Leading investment bank (B)	Feb 2007	−100%	Bankruptcy Sep 2008
Largest mortgage originator	Feb 2007	−90%+	Distressed acquisition Jan 2008
Major insurance / derivatives writer	Dec 2006	−99%	Federal bailout Sep 2008
S&P 500	Oct 2007	−57%	~6 years to recover (2013)
DJIA	Oct 2007	−54%	~5 years to recover (2012)

These declines were not caused by the underlying technologies or assets being worthless. The internet was real. The fiber eventually carried traffic. Houses retained value in most cases. The companies and instruments whose values collapsed were not frauds. They were enterprises whose revenue quality was substantially worse than the headline accounting suggested, whose assets depreciated faster than their balance sheets admitted, and whose valuation multiples left no margin for the gap between the timing the market assumed and the timing the economy actually delivered.

What We Are Watching and What We Are Asking

We are not recommending that clients exit technology. The AI infrastructure buildout is real. The technology has legitimate long-term economic potential. Some of the companies at the center of it will generate extraordinary value over the next decade. History suggests that transformative technologies do eventually justify their infrastructure, just rarely on the schedule or at the valuations assumed during the buildout phase.

What we are recommending is that we approach this moment with discipline and a clear-eyed understanding of what we are actually buying when we own S&P 500 index weight today. We are watching five specific signals that will tell us whether the current cycle is tracking toward validation or toward the pattern its predecessors established.

Earnings quality over earnings magnitude. We are scrutinizing not just whether companies are growing earnings, but whether those earnings reflect real economic returns or accounting timing effects. Companies whose earnings depend heavily on the capex cycle as sellers and whose forward multiples price in indefinite continuation of that cycle warrant careful analysis of revenue quality, not just revenue growth.

Depreciation schedule discipline. We are monitoring the useful life assumptions embedded in hyperscaler financial statements. Any company that extends depreciation schedules on GPU assets while the secondary market for those assets is pricing rapid value erosion is telling us something important about the quality of its reported earnings.

Enterprise AI adoption data. The gap between the $725 billion being spent on infrastructure and the $50 to $60 billion in current AI software revenue must narrow and it must do so on a timeline that supports six-year depreciation assumptions or the accounting reckoning arrives.

Concentration risk management. When a small number of companies constitute more than 30% of the S&P 500, passive index ownership is not diversification it is a concentrated bet on the outcome of the AI buildout cycle. [17] We manage our exposure to this concentration deliberately rather than accepting it by default.

Power and grid infrastructure as the honest constraint play. If the AI buildout plays out over a longer and more uneven timeline than current consensus assumes, [18] constrained by grid interconnection timelines of four to ten years, transformer lead times now stretching to five years, and only 5 of 12 announced gigawatts of 2026 U.S. data center capacity actually under construction, then companies in the electrical infrastructure supply chain represent a more durable investment thesis than companies whose earnings depend on the chip spending cycle remaining at its current intensity.

Our Assessment

The technology driving the current investment cycle is real. The companies deploying capital into AI infrastructure are, in many cases, the strongest balance sheets in the history of capital markets. These are not the leveraged telecom carriers of 1999, and a sudden cascading bankruptcy wave is not the base case.

What is also real is that the financial architecture built on top of that technology has deployed capital at a pace and scale more than double the dot-com cycle as a share of GDP, and the first infrastructure capex cycle of comparable aggregate magnitude to the mortgage securitization machine in terms of total capital involved that the current revenue base cannot yet justify. The accounting treatment of that capital, through depreciation schedules that may prove materially too long and revenue recognition structures that front-load the seller's gain while deferring the buyer's cost and migrating the residual risk to parties who cannot see it, has made the cycle look more prosperous in reported earnings than the underlying economics currently warrant.

That is not a new story. It is, in fact, a very old one, told twice before in the past 25 years, in different asset classes, through different instruments, with different proximate causes, but with the same five-part architecture and the same ultimate destination.

The specific assets have changed. The scale has grown. The architecture has not.

The investors who made money from the internet infrastructure were not the ones who financed the telecom buildout at peak. They were the ones who bought the assets out of bankruptcy in 2002 at prices that reflected reality rather than enthusiasm. The investors who made money from residential real estate were not the ones holding CDO tranches in 2007. They were the ones who waited for forced selling to create entry points at prices the models had never contemplated.

We believe something similar may ultimately prove true of the current AI cycle. The technology is likely transformative. The question is whether the current investment in it is being priced at levels that reflect the actual pace of return on that investment or whether, once again, the market has compressed a multi-year economic story into a single year's earnings multiple.

Investment Committee
Van Hulzen Financial Advisors

Van Hulzen
Financial Advisors

4370 Town Center Blvd Suite 220, El Dorado Hills, CA 95762
Tel: (916) 608-4284 | Fax: (916) 608-4296
vanhulzenadvisors.com

ENDNOTES AND SOURCES

1. Financial Accounting Standards Board, Accounting Standards Codification Topic 360, Property, Plant, and Equipment; see also FASB guidance describing capitalized property and equipment and depreciation over estimated useful lives.

2. Andrew M. Odlyzko, "Internet Growth: Myth and Reality, Use and Abuse"; K. G. Coffman and Andrew M. Odlyzko, "Internet Growth: Is There a 'Moore's Law' for Data Traffic?" The research documents the widely repeated three-to-four-month doubling claim and estimates actual traffic growth at roughly a doubling per year.

3. Organisation for Economic Co-operation and Development, telecommunications investment indicators and "After the Telecommunications Bubble"; inflation conversion and GDP-share calculations by Van Hulzen Asset Management using U.S. Bureau of Economic Analysis data.

4. Cisco Systems, Inc., SEC filings describing Cisco Systems Capital Corporation and customer financing arrangements; OECD, "After the Telecommunications Bubble."

5. Bloomberg L.P., historical valuation, price, index, and recovery data; OECD telecommunications-bubble research; public company and bankruptcy records. Calculations by Van Hulzen Asset Management.

6. Financial Crisis Inquiry Commission, The Financial Crisis Inquiry Report (2011), including its discussion of originate-to-distribute incentives, mortgage securitization, ratings, and the transfer of credit risk.

7. Financial Crisis Inquiry Commission, The Financial Crisis Inquiry Report (2011), chapters and hearing materials addressing AIG Financial Products, credit-default swaps, model assumptions, and the federal rescue.

8. Financial Crisis Inquiry Commission, The Financial Crisis Inquiry Report (2011); SIFMA structured-finance statistics; Bloomberg L.P. market data. Calculations by Van Hulzen Asset Management.

9. Goldman Sachs Research, "The Assumptions Shaping the Scale of the AI Build-Out" (May 1, 2026), estimating $765 billion in annual AI capital expenditures in 2026; Goldman Sachs hyperscaler-capex estimates; McKinsey & Company, "The Cost of Compute: A $7 Trillion Race to Scale Data Centers" (April 28, 2025), estimating $5.2 trillion of AI-related data-center investment through 2030.

10. U.S. Bureau of Economic Analysis GDP data combined with AI-infrastructure capital-expenditure estimates cited in Endnote 9. Percentage calculations by Van Hulzen Asset Management.

11. Public reporting and transaction materials concerning the $5.4 billion Valor Compute Infrastructure GPU acquisition-and-lease transaction, including approximately $3.5 billion of debt financing and $1.9 billion of NVIDIA equity capital. This transaction should be supported in the compliance file with the relevant Bloomberg article or terminal export.

12. Federal Reserve Bank of Chicago, "Life Insurers' Private Credit Investments and Annuity Market Share" (April 2026); Fitch Ratings research on alternative-asset-manager-affiliated insurers, private credit, and Level III assets. The specific one-third and sixteen-times figures should be supported with the cited insurer's Bloomberg profile and statutory/SEC filings.

13. NVIDIA product materials for successive GPU architectures and published performance/energy-efficiency comparisons. The exact "up to 25 times" comparison is workload-specific and should be retained with the corresponding NVIDIA technical source in the compliance file.

14. Alphabet Investor Relations, depreciation FAQ stating that servers and network equipment are generally depreciated over six years; relevant annual reports and SEC filings for the other hyperscalers. Company useful-life estimates should be checked against the most recent filings before publication.

15. Forrester, "Predictions 2026: AI Moves From Hype to Hard Hat Work" (October 8, 2025); Morgan Stanley, "Mapping AI's Rate of Change" (February 11, 2026), and related transcript analysis; MIT NANDA, "The GenAI Divide: State of AI in Business 2025," as reported from its analysis of 300 public deployments.

16. Robert J. Shiller historical CAPE data; Bloomberg L.P. market data as of June 30, 2026. Calculations and ranking by Van Hulzen Asset Management.

17. S&P Dow Jones Indices and Bloomberg L.P., S&P 500 constituent weights and concentration data as of June 30, 2026.

18. Lawrence Berkeley National Laboratory interconnection-queue research; U.S. Department of Energy and industry transformer-supply studies; data-center construction pipeline data. The exact '5 of 12 gigawatts' figure should be supported with the originating Bloomberg dataset or research note.

* Bloomberg support should be retained for all historical stock prices, index levels, valuation multiples, peak-to-trough returns, recovery dates, S&P 500 weights, and June 30, 2026 market readings.

The exact $135 billion telecom-capex figure, $500 billion cumulative telecom-buildout figure, and resulting inflation/GDP calculations should be retained in the working file used to derive them.

The $5.4 billion GPU SPV transaction, insurer Level 3 share, sixteen-times leverage, compute-contract revenue share, and 90-day termination provision require the underlying Bloomberg article, transaction document, or issuer filing.

The GPU secondary-market price ranges, projected eighteen-month resale values, 55% GPU-capex assumption, and 46% depreciation-expense calculation appear to be analyst calculations and should be retained with the supporting Bloomberg data or worksheet.

The $50–60 billion global AI-software revenue estimate, the 74% aspiration statistic, and the '5 of 12 gigawatts' construction statistic were not tied to a sufficiently precise public primary source during this review and should be supported with Bloomberg research or the author's source before publication.