

IVNDX IMPACT VOLATILITY INDEX

1777 1780s 1861-1865 1918-1921s 1954-1968 1965-1975 2003 2020

SOCIAL • INDUSTRIAL • ENVIRONMENTAL • COMMERCIAL • NATIONAL

VALUE QUANTIFICATION 4

An impact economy is the rise of America after its fall. Across North America the public faces all-time high costs from system failures in the trillions: \$1T criminal justice, \$1T in public health, \$1T infrastructure, \$50B+ homelessness. Charity and reform will not solve these alone. They are structural market signals, unpriced high-cost baselines for venture. Value Quantification guides our entry into that national economy as it emerges.

Market Insights:
Private Credit & Value Quantification 4

- I. Value
- II. Volatility
- III. Liquidity
- IV. Dual Alternative
- V. Biomimicry
- VI. National Economy
- VII. Legal

TAXDOLLAR VALUE + SHAREHOLDER VALUE = IMPACT VALUE

TAXDOLLAR VALUE

Discounted Stream of Avoided Public Expenditures: Every USD dollar government avoids spending through verified results is another taxdollar in value created. Avoided public expenditures, deferred liabilities, and the risk taken on by private investors before an outcome payment measures cash savings.

Public-Private Risk Transfer: Private capital takes the early risk before government where payment lies where success is proven + added revenues. Outcomes validator protects the taxpayer the same way an auditor protects shareholders - protections that share the same value.

Convexity in Dollar Depreciation: As the dollar depreciates and public costs accelerate beyond general inflation, healthcare inflating 2-3X the Consumer Price Index, infrastructure repair outpacing construction indices, criminal justice inflating with personnel - Taxdollar Value strengthens. Baseline costs rise faster than social interventions costs, widening the surplus captured. This acceleration is indexed making returns anti-fragile to monetary debasement. Taxdollar Value is denominated in avoided real costs (hospital beds saved, prison beds not built, infrastructure disasters prevented), not in depreciating currency. It appreciates as fiscal strain worsens.

SHAREHOLDER VALUE

Realized Gains on Verified Impact Outcomes: When companies deliver successful public outcomes, cost avoidance, new revenues -> increased revenues, steady cash flows, cheaper borrowing, and impact value from successful outcome delivery reduces risk and lowers cost of capital. Each basis point compounds returns.

Returns: Revenue lift, risk reduction, MOIC, increase in equity pricing and debt costs. Defines whether projects build or destroy value. Successful contract financing can help portfolio company valuations increase and complement traditional exit pathways. Both values are biomimetic cash flow rails like a double helix, linking outcomes back to their capital origination.

VOLATILITY

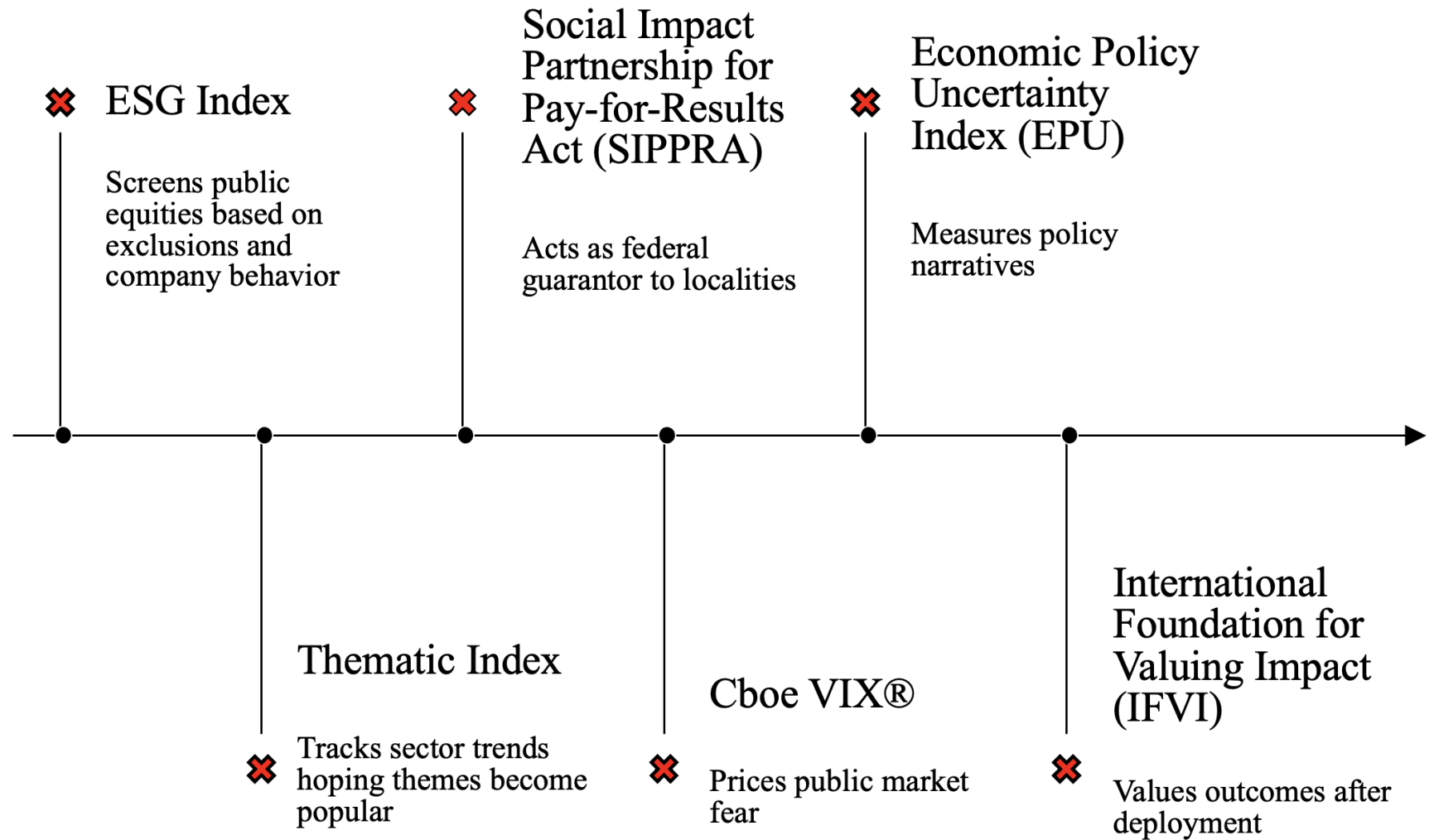
Within the North American and national macroeconomic structures public spending is a market while drawdowns in society, industry, environment, and commerce worsen its costs connecting to entrepreneurs and companies moving the needle in society. There is a blue ocean of bear cycles within all-time-high costs of failure in early child education, public health, infrastructure & utilities, food, air, energy, and more within larger systems and domains. Venture is the driver of **GREEN** bull cycles beneath long-standing inefficiencies.

This opens the window of demand for private capital to finance positive outcomes by indexing fiscal drawdown to taxdollar value accumulating from a decline in industry, health systems failure, energy & grid challenges, and social return on investments that deepen into the **RED** annually. Solutions are closest to where costs are highest. In some buying opportunities, incumbent service providers are failing, and government procurement still contracts these failures in many cause areas, especially **the most socially volatile North American geographies**.

In all markets, picking winners early is key. Impact Liquidity is not determined by public-market volatility, interest rates, or return uncertainty. To systemically identify opportunity density, the **HBIL3C Impact Volatility Index (IVNDX)** is a forward-looking private-market project/contract-finance discovery index that directs capital toward public costs by indexing the acceleration and intensity of society's high-cost baselines and prices those opportunities.

IVNDX indexes the variance, trend analysis and degree of baseline failures across sectors and industries as an investible discovery signal. Unlike other indices measuring uncertainty, IVNDX is upstream market infrastructure, pricing stress gradients across systems and measuring those realities. Volatility undergirds the starting point for all **HBIL3C** indices.

Impact Volatility Index (IVNDX) does not:



IPO → depends on market appetite and sentiment

M&A → depends on strategic buyers & sellers

IL → depends on measurement & verified outcomes

Public/Private Markets VS

- price set by buyers & sellers
- volatility drives exits
- liquidity is optional
- risk priced by sentiment
- Exit: IPO/M&A timing

Impact Liquidity

- price set by contracts
- outcomes drive exits
- liquidity is contractual
- risk price by baselines
- Exit: audited surplus / impact-linked warrants

VOLATILITY \neq RISK

RISK = failure to produce outcomes

RETURN = degree of cost avoidance & impact-linked warrants

Dual (Exit and Market) Alternative

RISK: Underwriting counterparty credit (state/local fiscal capacity analysis), Independent Evaluation (3rd party verifier reduces dispute risks), Commitments (milestone-based payment structures), Biomimetic Hedging (diversify across cause areas, and domains), and Ringfenced Payments (legislative appropriation & budget lines).

RETURN: Venture capital operates on power-law distribution where return profiles are dominated by a small number of outsized winners and are dependent on exit windows. Independent outcomes auditing and benefit-cost analysis are underwriting tools for outcome commitments. IVNDX and Impact Liquidity together function as exits tied to verified changes in value against high-cost baseline entry points.

IMPACT: **Initial Public Offerings** and **Mergers & Acquisitions** rely on sentiment and timing. **Impact Liquidity** exits rely on a standard of evidence that differentiate from ordinary markets through impact-linked warrants on validated outcome indices. SIPPRA seeded municipal frameworks nationally to pay-for-results where liquidity securitizes claims on Impact Value. Impact Liquidity complements, or completes, traditional exit pathways as an alternative when other markets or asset classes are not feasible.

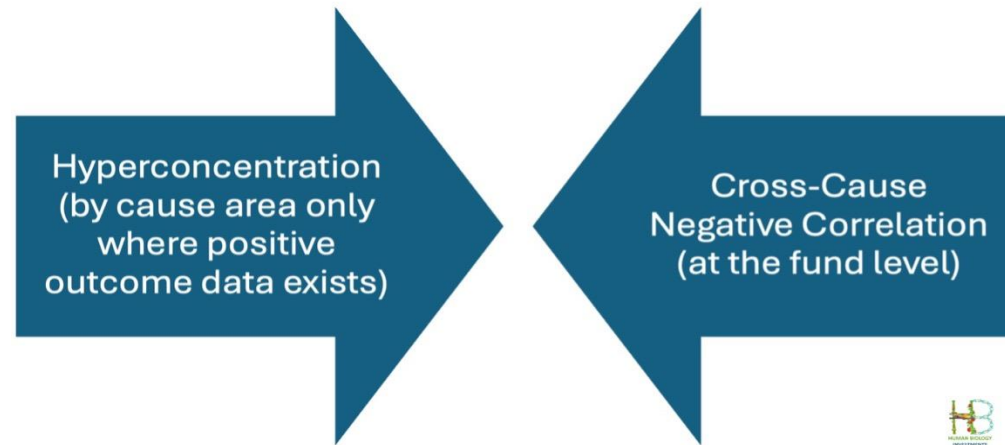
DIMENSION	VENTURE CAPITAL	PRIVATE EQUITY	IMPACT VOLATILITY
Return Mechanism	Hope for unicorn	Operational improvement + Exit	Capture of Public Revenues + Savings Surplus
Dependency	Power-Law	Buyer Availability	Independent Outcomes Auditing
Liquidity	IPO + Sentiment + Economic Cycles	M&A Dividend Recap (buyer dependent)	Positive Contract-Finance & Project-Finance Public-Private Partnerships
IRR	20%-30%	15%-25%	20%-25%
Downturn Recession Scenario	Upside-seeking	Upside-seeking	IVNDX spikes (baselines worsen); Monetizes unavoidable downside priced into budgets
Downside Protection	Control Rights, Tranching Investments	Leverage, Active Management, Improving Cost Structures	Convexity, Public Sector Commitments, Risk Measurement & Management

In nature, BIOMIMICRY is different parts of an ecosystem working and excelling at their roles, individually and as a larger unit for homeostasis within an organism, community or environment. So, it is with public health or [Population Health Bundles](#) in public-private partnerships, otherwise [Health Impact Bonds](#), addressing various social determinants simultaneously for a collective impact. High-cost baselines in other investment domains:

SOCIAL	COMMERCIAL	ENVIRONMENTAL	INDUSTRIAL
States of being	Interconnections and Integrations	EXTRACT to REPLENISH Ratios	Grid Performance & Processes
Quality of life, Condition of life	Manufacturing, Trade, Operational Efficiency Gains, Supply Chains	Agriculture, Water, Commodities & Natural Resources	Utility Infrastructure, Energy

BIOMIMETIC HEDGING: if an intervention in one cause area that returns no capital is counter-moved by success in another. Combine with risk mitigation, hyperconcentrating after the due diligence process on the successful work or track record of portfolio investments:

- Build repeatable success, then double down on what's working.
- Expand into adjacencies with correlation-aware weights.
- Balance impact value cash flows with multiple cause areas instead of using single-cause single-metric outcome contracts.



The due diligence process transacts Impact Liquidity so that private capital funds interventions that hit outcome metrics on the front end, while grants are only for follow on funding on the back end. Programs that multiply invested capital are ones that have been proven through multigenerational studies, vetted through randomly controlled trials, or establish rigorous counterfactuals.

20yr Derivative Path: The Big Long – Short Failure Costs, Long Outcomes



Municipalities > hedge fiscal exposure

Pension Funds > private uncorrelated returns, diversification

Insurance Companies > hedge social cost exposure

Institutional Investors > exposure to rebuilding America

Retail Investors > eventual accessibility via ETFs

Phase 1 - Index Publication & Methodology

- IVNDX biomimicry levels published regularly
- Methodology per-deal licensing to other fund managers
- Institutional & Government data subscriptions

Phase 2 - Over the Counter Products

- **IVNDX Swaps** – bilateral contracts exchanging fixed vs. IVNDX-linked payments
- **IVNDX-linked Notes** - structured & issued by banks
- **Municipal Hedges** - cities hedge budgets overrun risk

Phase 3 – Exchange Traded Derivatives

- **IVNDX Futures** - CME & Intercontinental Exchange
- **IVNDX Options** - index-level Puts & Calls
- **IVNDX ETFs** - funds tracking IVNDX-guided portfolios

Vignette #1: A municipality worried about Medicaid costs buys IVNDX-Health call option. If costs spike beyond budget, option pays out.

The city uses payout to recover shortfall =

FISCAL INSURANCE.

VALUE QUANTIFICATION 4

“...an impact economy is the rise of America after its fall...”

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