

The Bill is Coming Due: A Manifesto of Developmental Debt

By Björn Kenneth Holmström • 12/8/2025

I. The Hook: The Margin Call

If you look at the state of the world today—the gridlocked governments, the fraying supply chains, the ecosystems screaming in feedback loops—it is easy to conclude that we are being led by idiots, sociopaths, or both.

We look at the paralysis of our institutions and we search for a villain. We blame "corruption." We blame "late-stage capitalism." We blame the "woke mind virus" or "fascist creep." We assume that if we could just replace the *people* at the top with better, smarter, more ethical people, the machine would start working again.

We are wrong. The machine isn't broken because the operators are bad. The machine is broken because it is bankrupt.

We are not facing a crisis of leadership. We are facing a civilizational **Margin Call**.

For the last fifty years, we have been running an operating system designed for a world of infinite frontiers (Stage Orange) on a planet with hard physical boundaries. We have purchased our growth, our stability, and our technological marvels on credit. We didn't pay the full cost of extraction at the register; we deferred it. We moved the costs of carbon, inequality, and institutional decay off the balance sheet and called them "externalities."

But in a closed system, there is no "externality." There is only "later."

And "later" has arrived.

Introducing Developmental Debt

In software engineering, there is a concept called "**Technical Debt**." When you write quick-and-dirty code to ship a product fast, you incur a debt. It works for now, but eventually, the code becomes so spaghetti-tangled that you cannot add new features without breaking the whole system. You have to stop building and pay down the debt (refactor), or the software dies.

Civilizations accumulate a similar liability. Let's call it **Developmental Debt**.

Developmental Debt is the cost of using a simple operating system (Tier 1 thinking) to manage a complex reality (Tier 2 problems).

- Every time we prioritized **Order** over **Adaptation**, we incurred debt.
- Every time we prioritized **Profit** over **Resilience**, we incurred debt.
- Every time we prioritized **Consensus** over **Competence**, we incurred debt.

We have been running Stage Orange software—optimized for growth, competition, and extraction—on a planetary hard drive that is now completely full.

The "Polycrisis" is not a mystery. It is simply the compound interest on that debt coming due all at once. The interest payments (climate disasters, war, mental health collapse) are

now exceeding our growth.

We are insolvent. And we have only two options left:

1. **Hard Default:** We let the system crash, paying the debt in blood, chaos, and a reset to a lower level of complexity.
2. **Strategic Restructuring:** We declare Chapter 11 bankruptcy on our old operating systems and reorganize under a new agreement.

This is not a moral lecture. It is an audit.

The bill is on the table. Let's look at what we owe.

II. The Audit: Where is the Debt Hiding?

To understand why the system is seizing up, we need to look at the balance sheet. Our civilization is not failing in one specific way; it is failing in layers. Each stage of our development solved a previous problem but introduced a new, hidden cost—a debt we promised to pay later.

Here is where the liabilities are hiding.

1. The Blue Debt: The Rigidity Tax

The Asset: Stage Blue gave us **Order**. It built the nation-state, the rule of law, and the institutions that allowed strangers to trust each other. It replaced tribal chaos with predictable hierarchy.

The Blindspot: "Order is sacred; adaptation is betrayal."

The Debt Incurred: Every time an institution prioritized its own preservation over the truth, it incurred debt. Every time a church denied science, a bureaucracy crushed a whistleblower, or a legal system ignored changing demographics, it moved a cost off the books. It bought short-term stability by suppressing the signal of change.

The Cost: Institutional Brittleness. Structures that cannot bend must break. By suppressing adaptation for decades, our institutions have lost their elasticity. They are now so rigid that even minor stressors cause them to fracture.

Real-World Default: The total collapse of trust in authority. We are witnessing a "run on the bank" of credibility. Media, government, and academia are bankrupt because they spent their authority protecting the status quo rather than adapting to reality.

2. The Orange Debt: The Externalization Time Bomb

The Asset: Stage Orange gave us **Prosperity**. It unlocked science, capitalism, and individual liberty. It cured diseases, built the internet, and pulled billions out of poverty by optimizing for growth and efficiency.

The Blindspot: "Profit is private; costs are public."

The Debt Incurred: The economic miracle of the 20th century was an accounting trick. We treated the atmosphere, the oceans, and the social fabric as "free sinks" for our waste. Every ton of CO₂, every disrupted ecosystem, and every exploited worker was a cost moved off the corporate balance sheet and labeled an "externality."

The Cost: Systemic Toxicity. We have filled the "Away" container. There is no longer an "Outside" to throw our costs into. The microplastics in our blood, the instability of the jet stream, and the fragility of our supply chains are the compound interest on fifty years of "cheap" growth.

Real-World Default: The Climate Crisis and the Resource Scramble. Nature is now sending the collection agency. The "Vertical Cost Curve" means the price of essentials (food, energy, water) will now rise faster than our ability to innovate, unless we restructure.

3. The Green Debt: The Consensus Tax

The Asset: Stage Green gave us **Sensitivity**. It brought civil rights, environmental awareness, and the recognition that diverse perspectives matter. It softened the cruelty of Orange and the rigidity of Blue.

The Blindspot: "Inclusion is a substitute for competence."

The Debt Incurred: In our rush to be inclusive, we often dismantled the mechanisms of decision-making. We replaced "Hierarchy of Competence" with "Flatland of Consensus." Every time we delayed a critical infrastructure project for years of process, or sacrificed a clear standard to spare feelings, we incurred debt.

The Cost: Coordination Failure. We now have the empathy to *feel* the planetary problems, but we have dismantled the executive function required to *fix* them. We are paralyzed by processing. We have meetings about the fire while the building burns.

Real-World Default: The inability of progressive movements to build physical things. We see endless "awareness raising" and "dialogue," but a catastrophic failure to deploy the clean energy infrastructure, housing, and systems required to actually solve the crisis we care so much about.

Summary of the Ledger:

- **Blue** bankrupted our **Trust**.
- **Orange** bankrupted our **Biosphere**.
- **Green** bankrupted our **Capacity to Act**.

We are now left with a world that is rigid, toxic, and paralyzed.

III. The Methodology: How to Calculate Your Debt

It is easy to feel the weight of this debt as a vague sense of doom. But vague anxiety is useless. To solve the problem, we must move from metaphor to math.

Developmental Debt is not a feeling; it is a liability. And like any liability, it can be calculated.

Whether you are auditing a corporation, a government agency, or your own life, the debt always appears in three specific line items on the balance sheet.

1. The Avoidance Cost

What you are currently spending to ignore reality.

This is the rent you pay to maintain a delusion. It is the energy required to suppress the signal that the system is failing.

- **For a Corporation:** The money spent on lobbying to delay regulations, the PR budget to greenwash a dirty supply chain, or the high salaries paid to retain burnt-out talent in a toxic culture.
- **For a Government:** The subsidies paid to dying industries, the police overtime required to manage social unrest, or the cost of building walls against climate migration.
- **The Metric:** If you stopped paying this cost tomorrow, would the reality you are ignoring crash through the door? If yes, that cost is interest on your debt.

2. The Cleanup Cost

What you will pay to fix the mess later.

This is the "compound interest" accumulating on deferred maintenance. Every problem you ignore today doesn't just wait; it grows.

- **For a Corporation:** The regulatory fines, the cost of recalling a defective product, or the massive restructuring costs when a competitor disrupts your obsolete business model.
- **For the Planet:** The cost of building sea walls is 100x higher than the cost of reducing emissions was in 1990. The cost of scrubbing carbon from the atmosphere is orders of magnitude higher than not emitting it.
- **The Metric:** What is the 10-year projected cost of the problem you are currently ignoring? That future number belongs on today's balance sheet.

3. The Opportunity Cost

What you lost by not adapting sooner.

This is the "phantom asset"—the value that *should* exist but doesn't because you were too rigid to build it.

- **For a Corporation:** The market share captured by a competitor who adapted while you defended the status quo. (Kodak lost the digital camera market not because they couldn't build it, but because they wouldn't cannibalize their film debt).
- **For a Civilization:** The "Energy Dividend" we don't have because we delayed the renewable transition. The "Cognitive Surplus" we don't have because we allowed social media to fragment our attention.
- **The Metric:** What is the value of the market, innovation, or stability you *would* have today if you had upgraded your OS ten years ago?

The Formula

To calculate your total Developmental Debt, sum these three lines:

$$\text{Developmental Debt} = (\text{Avoidance Cost}) + (\text{Projected Cleanup Cost}) + (\text{Lost Opportunity Cost})$$

When you run this calculation for modern civilization, the number is staggering. It exceeds global GDP. We are technically insolvent.

But unlike financial bankruptcy, civilizational bankruptcy cannot be solved by printing money. It can only be solved by restructuring the underlying asset.

IV. The Compound Interest: The Vertical Cost Curve

If you have debt, time is your enemy. But with Developmental Debt, time is not just linear—it is exponential.

We are currently witnessing the terrifying math of compound interest applied to planetary systems.

For decades, the cost of our debt grew slowly. We could ignore the degrading soil, the fraying social trust, and the accumulating carbon because the "interest payments" were small manageable disasters. A heatwave here, a riot there, a financial crash every ten years. We could "bail out" the system by printing money or passing a new law.

But exponential curves have a nasty feature: they look flat for a long time, and then, suddenly, they go vertical.

We have hit the **Vertical Cost Curve**.

The Squeeze

The cost of solving our problems is now rising faster than our capacity to generate resources.

- **Climate:** In 1990, the cost of the green transition was estimated at 1% of global GDP. Today, due to deferred maintenance and locked-in feedback loops, that cost is approaching 5-10%. If we wait another decade, the cost will exceed total global output.
- **Conflict:** In a stable order, diplomacy is cheap. In a collapsing order, re-arming for global war costs everything we have.
- **Mental Health:** We are spending billions treating anxiety and burnout, but the *drivers* of that distress (the disintegration of our social and economic fabric) are accelerating faster than we can train therapists.

We are in a **losing race** between the **Exponential Cost of Chaos** and the **Linear Growth of our Solutions**.

Physics dictates that the exponential curve always wins.

The Tier 1 Trap: Borrowing to Pay the Interest

The tragedy of our current leadership is not that they are doing nothing. It is that they are trying to pay off the debt by borrowing more from the same sources that caused it.

They are applying linear fixes to an exponential problem.

- **The Blue Reaction (Authoritarianism):** Seeing the chaos, the Stage Blue mind tries to borrow more **Control**. "If we just clamp down harder, censor the internet, and close the borders, we can restore Order." *Result:* The pressure builds until the system explodes. You cannot legislate away a complexity crisis.
- **The Orange Reaction (Hyper-Financialization):** Seeing the stagnation, the Stage Orange mind tries to borrow more **Growth**. "If we just lower interest rates, financialize nature, and invent AI, we can grow our way out of the debt." *Result:* We strip-mine the

remaining foundations of the biosphere and society to juice the quarterly numbers. We burn the furniture to heat the house.

- **The Green Reaction (Infinite Processing):** Seeing the suffering, the Stage Green mind tries to borrow more **Empathy**. "If we just have more dialogue, more inclusion, and more awareness, we can heal the trauma." *Result:* We drown in process. We spend our limited energy managing feelings about the collapse rather than building the infrastructure to survive it.

The Hyper-Inflation of Complexity

This is the end state of Tier 1 governance. By trying to solve the problem with the same thinking that created it, we create a **Hyper-Inflation of Complexity**.

We add more laws to fix the old laws. More subsidies to fix the market failures. More committees to manage the gridlock. The system becomes so heavy, so expensive, and so fragile that it consumes all its energy just to maintain itself. It has no energy left to solve problems.

When a system reaches this point, it does not slowly decline. It snaps.

V. The Restructuring: Chapter 11 for Civilization

When a corporation is drowning in debt it cannot pay, it faces a binary choice.

1. **Chapter 7 Bankruptcy (Liquidation):** The company is dissolved. The assets are sold for scrap. The employees lose their jobs. The creditors get pennies on the dollar. The structure ceases to exist.
2. **Chapter 11 Bankruptcy (Reorganization):** The company admits it cannot pay its debts under the *current* terms. It pauses payments, negotiates with creditors, restructures its operations, and emerges as a leaner, more functional entity. The debt is converted into equity in the new system.

Civilizations face the exact same choice.

Option 1: The Hard Default (World 1)

This is the path of **Liquidation**. We refuse to restructure. We cling to our Stage Orange operating system until the bitter end.

- **The Mechanism:** War. When nations cannot pay their ecological or social debts, they try to steal resources from their neighbors. The "Resource Scramble" begins.
- **The Result:** We burn the remaining assets of the planet in a final conflict for dominance. The complexity of civilization collapses. The debt is paid in blood, famine, and a return to the Stone Age.

Option 2: Strategic Restructuring (World 2)

This is the path of **Reorganization**. We admit that the Westphalian / Neoliberal order is insolvent. It cannot solve the problems it created. We declare a "Planetary Chapter 11."

- **The Mechanism:** We adopt a new operating system designed for a closed world (Tier 2). We convert our liabilities (carbon, inequality) into new forms of equity (regeneration, participation).

Glimmers of Restructuring

This is not science fiction. We already see Chapter 11 proceedings beginning in agile corners of the world:

- **Costa Rica** has converted its Orange debt (deforestation) into ecological equity through debt-for-nature swaps.
- **Estonia** has reduced its Blue debt (bureaucracy) through radical digital transparency (X-Road).
- These are proof-of-concept for the global restructuring to come.

The Restructuring Plan: The Global Governance Frameworks (GGF)

The GGF is not a political ideology. It is a bankruptcy restructuring plan. It consists of three specific protocols designed to balance the books.

1. Protocol Omega: Stopping the Bleeding

- **The Problem:** The "Externalization Debt." Actors profit by dumping costs on the commons.
- **The Fix:** A Meta-Sovereign compliance layer. Protocol Omega uses transparency and automated verification to ensure that no actor can "free-ride" on the stability of the whole. It closes the loop. You cannot profit from toxicity anymore.
- **The Result:** The accumulation of new debt stops immediately.

2. Hearthstone: Refinancing the Capital

- **The Problem:** We are running out of physical resources (The Copper Crunch).
- **The Fix:** We move critical planetary assets (Amazon rainforest, Lithium deposits, Soil) into **Global Stewardship Trusts**. Instead of nations fighting to *own* them, they are managed as utilities for the benefit of all.
- **The Result:** We shift from "Extraction Economics" to "Regenerative Economics." The asset base starts to grow again, rather than shrinking.

3. AUBI (Adaptive Universal Basic Income): Protecting the Shareholders

- **The Problem:** The "Social Debt." Precarity and inequality have destroyed the capacity of citizens to adapt.
- **The Fix:** We treat every human as a shareholder in the planetary commons. We provide a **Sovereign Floor**—unconditional security.
- **The Result:** We unlock the "Cognitive Surplus" of humanity. Instead of fighting for survival, billions of minds are freed to help solve the restructuring challenges.

The Creditors Will Object

In any bankruptcy, the old creditors (vested interests) fight the restructuring. They want to be paid *now*, even if it kills the company.

- The Fossil Fuel industry, the Military-Industrial Complex, and the Rentier Class will fight to keep the old operating system.
- **Their objections are entirely valid from within the old accounting system.** But that system no longer balances.

- The laws of physics are the ultimate judge. The court of reality has already ruled: **The old debts cannot be paid.**

The only choice is *how* we default: chaotically or strategically.

VI. The Personal Audit: Your Inner Balance Sheet

Systemic change is fractal. The same debt that is bankrupting our civilization is also hiding in your calendar, your body, and your nervous system.

You cannot lead a Tier 2 restructuring if you are personally drowning in Tier 1 debt. It is time to audit your own inner balance sheet.

Where are you paying interest on old thinking?

- **Your Blue Debt (The Rigidity Tax):** Are you clinging to a routine, a job, or an identity that no longer fits reality because you fear the chaos of change? The energy you spend defending an obsolete version of yourself is the interest payment.
 - *The Cost:* Stagnation and anxiety.
- **Your Orange Debt (The Burnout Tax):** Have you externalized the cost of your ambition onto your body or your relationships? Have you treated sleep, family, and health as "optional" in pursuit of a goal?
 - *The Cost:* Chronic fatigue and the sudden realization that success feels empty.
- **Your Green Debt (The Boundary Tax):** Are you tolerating incompetence or toxicity in your circle because you are afraid to be "judgmental"? Have you dissolved your own boundaries in the name of harmony?
 - *The Cost:* Resentment and the inability to effectively pursue your purpose.

The first step of the Great Restructuring is not to fix the world. It is to stop servicing your own bad loans. You must declare amnesty on your past mistakes and upgrade your own operating system.

VII. Call to Action: The Great Restructuring

The bill is due. The margin call has been issued.

We are currently wasting our remaining energy fighting each other. The Left blames the Right. The Right blames the Left. The people blame the elites. The elites blame the people.

Stop fighting the "Other Side." The Debt is the enemy.

Every moment spent in culture war is a moment we are not restructuring. It is asset stripping while the ship sinks. The IPCC gives us until 2030 to halve emissions. The restructuring must begin this fiscal year.

We invite you to stop being a debtor and become an Auditor.

Your First Move

Don't wait for permission. Start the audit today.

1. **Look at your organization:** Where are you paying the *Avoidance Cost*? What reality are you spending money to ignore?

2. **Look at your community:** Where is the *Cleanup Cost* accumulating? What problem is growing because you are too paralyzed to name it?
3. **Calculate the number:** Put a dollar figure (or a human figure) on it. Make the debt visible.

Join the Salvage

The Global Governance Frameworks (GGF) is building the **open-source architecture** for the reorganization. We are writing the Chapter 11 filing for the Planetary Era.

- **If you are a leader:** We have the **blueprints** to guide your restructuring.
- **If you are a builder:** We need **collaborators** to refine the new foundations.
- **If you are afraid:** That is a rational response to a margin call. Use that fear to drive action.

The window for a strategic restructuring is closing. If we wait too long, the choice will be made for us by the laws of physics.

We can pay this bill together, or we can default alone.

The audit is complete. The numbers don't lie.

Who is ready to restructure?

Download the Developmental Debt Calculator template at
globalgovernanceframeworks.org/tools/developmental-debt